

Creative Cash Flow Reporting

Uncovering Sustainable Financial Performance

Charles W. Mulford
and
Eugene E. Comiskey



JOHN WILEY & SONS, INC.

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*To our parents,
Charles W. Mulford, Sr., and Geraldine L. Mulford,
Joseph B. Comiskey, Jr., and Genevieve E. Comiskey,
for a lifetime of support and guidance.*

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Foreword

Enron. Worldcom. Tyco. Healthsouth. Sunbeam. Cendant.

Just the mention of those names puts a chill and fear in the hearts of investors.

Each represents a recent accounting fraud that burned investors badly.

Shell-shocked investors began to feel helpless, wondering if investing in securities is a loser's game. Is the game rigged? they wondered. If not, how do you win? What's the holy grail of successful investing?

I believe that I have found the holy grail. The new book by Charles Mulford and Eugene Comiskey, *Creative Cash Flow Reporting: Uncovering Sustainable Financial Performance*, points us to it. Find a company's sustainable cash flow from operations. Use it as a means of finding the creators of real value and as a way of confirming reported earnings.

Case in point: Enron. In the year 2000, Enron reported cash flow from operations of \$4.8 billion. In contrast, its legitimate, sustainable cash flow was -\$3.1 billion. That same year, the company claimed that it generated about \$1 billion in profits.

Mulford and Comiskey provide a simple and sensible approach for calculating sustainable cash flow from operations. They show how easily reported cash flow from operations can be inflated by the way items are classified among the operating, investing, and financing sections of the statement of cash flows—typically well within the boundaries of generally accepted accounting principles. Consider, for example, the effect of acquisitions on cash flow. Specifically, cash paid for working capital is shifted to the investment section rather than being shown as a reduction in cash flow from operations.

Many other books on financial analysis focus on techniques that improperly inflate profits by manipulating revenue or expenses. But none, however, points us precisely to the holy grail: sustainable cash flow from operations.

Read this book and begin your journey. This may be the most important book in your investment collection library.

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How to Detect Accounting
Gimmicks and Fraud in
Financial Reports*, and Founder,
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Research & Analysis)

Preface

It is difficult to overstate the importance of cash flow to overall corporate financial health. Indeed, our fundamental concepts of credit quality and valuation are based on projections of cash flow. Typically these projections are of operating cash flow or a closely related metric, free cash flow, which is operating cash flow adjusted for capital expenditures. These measures of cash are viewed as sustainable and discretionary sources that can be used for such designated purposes as debt repayment, new investment, stock buybacks and dividends.

Many investors, burned by the trust they have placed in reported earnings in an era of questionable accounting, have turned their focus to cash flow as the only trustworthy measure of financial performance available. One might hear such statements as

Cash flow is real and not subject to the vagaries of GAAP or the whims of the accountants.

It's virtually impossible to manage cash flow.

Profit is an opinion. Cash is a fact.

Dividends are tangible cash, and therefore impossible to fake.

The balance in cash and the total change in cash from one period to the next are generally not prone to misstatement. These amounts are readily verifiable with banks and other institutions holding reported balances. Unfortunately, however, changes in the components of total cash flow—the operating, investing, and financing components—can be reported in a misleading fashion. Typically, but not always, this is done within the boundaries of generally accepted accounting principles (GAAP) as the guidelines provide much flexibility. Increases in operating cash flow, denoting an improvement in financial performance, are offset with higher disbursements in the investing or financing sections. The net effect: With no difference in total cash flow, apparent operating performance is improved.

Creative Cash Flow Reporting: Uncovering Sustainable Financial Performance provides a guide for adjusting cash flow to remove misreported and misclassified amounts, yielding a more sustainable and meaningful measure of cash flow.

In an era of reduced trust in reported earnings, operating cash flow, properly adjusted, offers a useful means for identifying earnings-related reporting indiscretions.

Increases in earnings obtained through questionable means will not generate operating cash flow. Consider, for example, premature or fictitious revenue. Such reporting ac-

tions result in growing receivables but not cash. Also, steps taken to misstate inventory might boost gross profit and net income, but will not provide cash flow. Similar statements can be made about aggressive cost capitalization and other creative accounting acts. Earnings are boosted but operating cash flow or, more precisely, operating cash flow adjusted using steps described in the book, is not.

Creative Cash Flow Reporting demonstrates how to use adjusted operating cash flow in uncovering earnings that have been misreported using aggressive or fraudulent accounting practices.

Equities are purchased and loans are made based on the perceived ability of a company to generate cash. Cash flow analysis provides an effective look at the financial soul of a company. An important step in cash flow analysis is deciding whether current cash surpluses or shortfalls will continue. It is not unusual for companies to generate ample amounts of cash even as they slide toward extinction. In contrast, a cash shortfall may be an early sign of future success. To be effective, cash flow analysis must find the true meaning in reported cash results.

Creative Cash Flow Reporting provides an effective approach to cash flow analysis that focuses on the fundamental drivers of sustainable cash flow.

Beyond its primary objectives, the book includes certain special features. For example, it includes the results of a study designed to adjust the cash flow statements of the S&P 100 for the years 2000, 2001, and 2002. For many companies included in this sample, we found significant differences between reported and adjusted operating cash flow. Also, to maintain a contemporary and real-world feel, the book's results are illustrated using hundreds of actual and recent company financial reports.

Creative Cash Flow Reporting was written for serious readers of financial statements, including equity analysts or investors, credit professionals, serious individual investors, professional money managers, and anyone interested in uncovering true sustainable cash flow performance.

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About the Authors

Charles W. Mulford is the Invesco Chair and Professor of Accounting and **Eugene E. Comiskey** is the Callaway Chair, Associate Dean, and Professor of Accounting in the College of Management at the Georgia Institute of Technology in Atlanta. Both professors have doctorates in accounting and are professionally qualified as Certified Public Accountants. In addition to their work at Georgia Tech, they actively consult with analysts, money managers, and credit professionals in the United States and abroad. Professors Mulford and Comiskey have published articles on issues of financial reporting and analysis in leading academic and professional journals. Their opinions are often sought by widely read outlets in the financial press and by the broadcast media.

This is the authors' fourth book. Their first book, *Financial Warnings*, published in 1996, identifies the warning signs of future corporate earnings difficulties. Their second book, *Guide to Financial Reporting and Analysis*, published in 2000, seeks to simplify the complexities of current-day generally accepted accounting principles as an aid to practicing financial analysts and other users of financial statements. Their third book, *The Financial Numbers Game: Detecting Creative Accounting Practices*, published in 2002, uncovers the use of aggressive and fraudulent reporting methods in financial statements.

Seeking Sustainable Cash Flow

*Your cash ain't nothin' but trash . . .*¹

It is hard to overstate the importance of operating cash flow and its closely related, carefully watched, and loosely defined metric, free cash flow, to fundamental measures of debt-service capacity and firm valuation. Such cash flow measures are viewed as being sustainable, providing management with discretionary resources that can be used for investment, reductions in principal on outstanding debt, stock buybacks, and dividends. In addition, analysts, investors, and creditors, burned by the trust they have placed in reported earnings in an era of fraud and deceit in financial reporting, have turned their attention to cash flow as a directional beacon guiding them through the uncharted and risky waters of modern financial analysis. The logic is that, while earnings can be manipulated, both within and outside the parameters we know of as generally accepted accounting principles (GAAP), cash flow is more real and less subject to the vagaries of GAAP or the whims of the accountants.

The following quotes, made by respected financial professionals, demonstrate this point quite well:

*It's a lot harder to manipulate cash flow from operations than it is earnings per share.*²

*Cash is fact and accounting profit is opinion.*³

*Unlike some items that can be clouded with financial reporting issues, cash is real, finite, and measurable. Cash is cash.*⁴

*Dividends are tangible cash, and are therefore impossible to fake.*⁵

*In an environment where reported earnings are viewed with some degree of skepticism, cash dividends will provide a very strong signal to investors of true financial strength and of the credibility of earnings reports.*⁶

Financial statement readers can generally accept the balance in cash as reported on the balance sheet and the total change in cash as reported on the statement of cash flows as

reliable amounts. The balance in cash is so easily verified by a reporting company's auditors through bank confirmation that most companies would not even think of purposefully misreporting it. There are, of course, exceptions. Consider, for example, HPL Technologies, Inc.

The company, a Silicon Valley-based software firm, was caught allegedly reporting \$11 million in fictitious sales out of a total of \$13.7 million in the quarter ended March 31, 2002. While such a misstatement is bad enough, the company went further and allegedly reported \$10 million in fictitious cash, which according to a spokesperson for the company was "not now and may never have been in the company's possession."⁷ Such transgressions in reporting cash are rare. Indeed, the exception proves the rule as the fallacy was readily discovered. When asked about the misreported cash, accounting experts were in agreement as to the brazen nature of the company's acts. Various phrases, such as "A scheme that couldn't possibly succeed," "You'd have to wonder what anyone could be thinking of," and "Outrageous bravado," were used to describe the scheme.⁸

Consider also the example of Parmalat SpA, Italy's largest food company. As this chapter is being written we find ourselves scratching our heads in amazement at the mystery of the \$4.8 billion in cash and securities supposedly belonging to a subsidiary of Parmalat that turned up "missing." Allegedly, the company's auditors were able to confirm with Bank of America Corp. the amount reported to be on deposit. It was later determined, however, that the bank never received the confirmation. It was, in fact, intercepted and forged by someone other than a bank officer and returned to the auditors. The money did not exist.⁹

At present we do not know how individuals involved in an apparent fraud at Parmalat were able to intercept a bank balance confirmation from the company's auditors and make it appear as if it were being returned in the affirmative from the bank itself. We hasten to stress, however, that an intercepted and forged bank confirmation—a truly exceptional and seldom-occurring event—was required for such a misstatement of cash to occur. While we empathize with the plight of investors and creditors who were misled by financial statements that reported fictitious cash, it remains our position that cash is typically not an asset that is subject to such deceit.

Although the ending balance in cash and the change in cash from one period to the next are not readily subject to manipulation, the components of total cash flow, the operating, investing, and financing amounts are more susceptible to management. Such steps, collectively referred to here as creative cash flow reporting, may be taken both within and beyond the boundaries of GAAP. Moreover, when financial professionals speak of cash flow and the difficulty of managing or misreporting cash flow, they typically are referring to some measure of operating cash flow or closely related free cash flow. Free cash flow is generally defined as operating cash flow minus capital expenditures and, for companies that pay them, preferred dividends. Thus, while analysts, investors, and creditors might be led to believe that operating cash flow and free cash flow are somehow above the creative accounting fray, that belief is unfounded. Operating cash flow and free cash flow are subject to manipulation, which, unfortunately, occurs often.

Of course we would not go as far as the opening quote to this chapter and title of the once-popular song by the Steve Miller Band from the 1970s and categorically state, "Your cash ain't nothin' but trash." Indeed, even the final line of that song announces "but I sure better get me some more." Our point is that cash flow, in particular operating cash

flow, may not be what it seems. As a result it can give an incorrect impression of a company's sustainable cash-generating capacity.

AN ARTIFICIAL BOOST TO OPERATING CASH FLOW

Two examples are provided for consideration. In the first, Mim Corp. used flexibility found in GAAP for cash flow reporting to boost its operating cash flow. In the second, Dynegy, Inc. went beyond the boundaries of GAAP to provide a near-term increase to operating cash flow. The steps taken by both companies provided only a temporary boost to operating cash flow.

Employing Book Overdrafts

As part of their cash management practices, some companies may maintain minimal checking account balances. Through a prearranged agreement their bank automatically provides any funding needed to cover checks presented for payment.¹⁰ At the end of an accounting period the bank-reported cash balance will be approximately zero. However, due to outstanding checks that have not been presented for payment, the book balance in cash, which consists of the bank balance less any outstanding checks, will be a negative amount. Generally accepted accounting principles are clear in calling for negative book balances in cash to be reclassified as liabilities. That is, the book balance in the overdrawn cash account is marked up from a negative amount to zero, reflecting more cash on hand, and is offset by an increase in a current liability. That liability represents the company's obligation to the bank for financing to cover the company's outstanding checks as they are presented for payment.

During its first quarter ended March 31, 2002, Mim Corp. generated \$12.9 million in operating cash flow. That amount was up substantially from the \$3.9 million generated during the same period in the previous year. A closer look at the company's cash flow statement, however, indicated that an increase in overdrafts provided \$9.7 million of the operating cash flow generated in 2002. Thus, approximately 75 percent of its operating cash flow was not really generated by the company but was instead due to a reclassification of overdrafts.

Generally accepted accounting principles are not definitive in the cash-flow classification of overdrafts. Mim has used this lack of direction to its advantage, boosting operating cash flow in the process. Whether one agrees with the company's approach or not, the nonsustainable nature of cash flow generated by increasing overdrafts should be clear.

A Complex Long-Term Contract

In the year ended December 31, 2001, Dynegy, Inc. reported cash provided by operating activities of \$811 million. That was up from \$438 million in 2000 and \$9 million in 1999. The improvement in operating cash flow appeared to lend credence to the company's growing earnings. Earnings, defined as income from continuing operations, grew to \$648 million in 2001, up from \$501 million in 2000 and \$152 million in 1999. The company's earnings and cash flow results for the years 1999, 2000, and 2001 are summarized in Exhibit 1.1.

Exhibit 1.1 Dynegy, Inc., Selected Financial Results, as Originally Reported, Years Ending December 31, 1999, 2000, and 2001 (\$ millions)

	1999	2000	2001
Income from continuing operations	\$152	\$501	\$648
Cash provided by operating activities	\$ 9	\$438	\$811

Source: Dynegy, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, pp. F-4 and F-5.

Proud of his company's performance in a difficult operating environment, Chuck Watson, Dynegy's chief executive officer, noted:

Despite the extraordinary circumstances, Dynegy generated a 47 percent increase in recurring earnings per share. . . . If our results could be summarized in one word, it is execution. In 2001, the bar was raised on our company more than once and, collectively, our employees cleared it again and again.¹¹

Commenting further on his company's reported financial results, Watson stated:

We remain committed to providing comprehensive and transparent financial disclosures so that our stakeholders have a clear understanding of our operating results and financial position.¹²

These comments were made on March 22, 2002. However, within only a few weeks the company was backtracking on its published results as it announced a Securities and Exchange Commission (SEC) investigation and a planned restatement. In an 8-K Current Report filing, dated April 25, 2002, the company announced that it was going to restate its statement of cash flows, reclassifying amounts reported as operating cash flow to the financing section.

Dynegy's Gas Contract

During April 2001 Dynegy entered into a five-year contract to purchase natural gas from an unconsolidated special purpose entity (SPE), ABG Gas Supply, LLC. The five-year contract was dubbed "Project Alpha." It was unique in that during its first nine months, which ended with Dynegy's 2001 reporting year, Dynegy would be able to purchase natural gas for below-market rates. In turn, Dynegy would sell this gas at market, reaping gains. Across that nine-month time frame those gains amounted to approximately \$300 million and were offset with losses on the books of ABG Gas Supply. ABG financed its losses with a \$300 million loan from Citigroup, Inc. Following that nine-month period and commencing in early 2002, the contract held that for 51 months Dynegy would be required to buy gas from ABG Gas Supply at rates that were above market. During this term of the contract Dynegy would incur losses while ABG Gas Supply would enjoy gains. During this 51-month period, Dynegy's losses and ABG Gas Supply's gains would accumulate to approximately \$300 million. At the end of the five-year contract's life, both parties would be whole.¹³

On the surface this gas supply contract looked like an old-fashioned earnings management tool. It appeared that Dynegy was able to use the agreement to boost profits during 2001 and then offset them with losses in 2002 and beyond. However, that was not the design. This was strictly an operating cash flow management tool.

As is the case with other energy companies, Dynegy's contract with ABG Gas Supply was only one contract in its open book of derivatives. All such contracts were carried at fair value under mark-to-market rules. Gains and losses resulting from mark-to-market adjustments were included in reported net income.

When it was signed, the ABG Gas Supply agreement had no market value. That is, it was a contract to buy gas at market. It just happened to include below-market purchase prices early that were offset with above-market purchase prices later. While in the early going Dynegy purchased gas below market and recognized gains, the company recognized losses during the remaining months of the contract. If the entire contract netted to no gain or loss, then any gain recognized early must have been offset with accompanying losses on the contract's remaining term. These losses were recognized in income as the open gas contract was marked to market. Thus, the contract had no net effect on net income. Gains were offset with losses.

The creativity of the transaction—and in this context “creativity” does not have a positive connotation—was that while the transaction did not increase net income, it did increase operating cash flow. That is, the purchase of natural gas at below-market rates and its accompanying sale at market resulted in profits that were backed by operating cash flow. However, the losses reported as a result of marking the natural gas contract to market were noncash. As a result, operating cash flow was boosted even as net income was unaffected. Of course operating cash flow would be reduced during the later months of the contract when the company began purchasing gas at above-market rates. But such a drain on operating cash flow would occur in subsequent fiscal years. Further, the losses associated with sales of gas purchased at above-market rates would be offset by gains on marking the natural gas contract to market.

The SEC found that Dynegy's agreement with ABG Gas Supply was effectively a financing transaction. Dynegy effectively borrowed \$300 million from Citigroup and used ABG Gas Supply as a conduit to handle loan proceeds and repayment. What was unique about the restatement was that it required Dynegy to change the classification of its cash flow statement without materially altering the total change in cash. The SEC was sufficiently concerned about the proper classification of cash flow to enforce reclassification.

After restatement for this item and other, less material items, Dynegy's operating cash flow was reduced to \$535 million in 2001 from the \$811 million originally reported. Earnings were also restated, although for other reasons. In contrasting Exhibit 1.1 with the revised financial results presented in Exhibit 1.2, it is clear that the company's apparent ability to generate cash and earnings was reduced significantly.

CLASSIFYING CASH FLOW

Generally accepted accounting principles require that the change in cash between two accounting periods be classified into three broad categories: cash provided or used by (1) operating activities, (2) investing activities, and (3) financing activities. The three categories represent three very different sources and uses of cash.

Exhibit 1.2 Dynegy, Inc., Selected Financial Results, as Restated, Years Ending December 31, 1999, 2000, and 2001 (\$ millions)

	1999	2000	2001
Income from continuing operations	\$118	\$494	\$419
Cash provided by operating activities	\$ 40	\$410	\$535

Source: Dynegy, Inc., Form 10-K/A annual report to the Securities and Exchange Commission, February 14, 2003, pp. F-4 and F-5.

Cash provided by operating activities, or more simply operating cash flow, generally reflects the cash effects of transactions that enter into the determination of net income. Included is cash collected from customers for sales made or services provided. Cash payments to employees and suppliers are also included in the calculation of operating cash flow as are all income taxes paid.¹⁴ Cash flows from investing activities include the making and collecting of loans and the acquiring and disposing of debt and equity investments and property, plant, and equipment. Thus, the purchase of inventory by a jeweler is reported as an operating use of cash. However, the payment for a showcase in which the jewelry inventory is displayed is reported as an investing use of cash. Cash flows from financing activities include principal amounts borrowed from and repaid to lenders as well as cash received from the issuance and cash paid for the repurchase of equity. Only debt arising from actual borrowing transactions is reported as financing cash flow. Thus, the use of vendor financing—for example, accounts payable—by the jeweler to postpone payment for inventory purchases would be classified as an operating source of cash.

A helpful way to look at the structure of the cash flow statement is to categorize cash amounts paid to make investments, including purchases of property, plant, and equipment, or cash received from the sale of investments, as investing activities. Any income generated by those investments, such as cash revenue less cash expenses on investments in property, plant, and equipment, interest income on investments in debt securities, or dividend income on investments in equity securities, is included in the calculation of operating cash flow. Although the sale of investments will generate gains and losses, those gains and losses are not reported in the operating section of the cash flow statement. Rather the proceeds from sale, which include recovery of an investment's book value plus a gain on sale or less a loss, are reported in the investing section.

Although proceeds from new borrowings or cash paid to retire debt are reported as financing activities, interest paid on debt is classified as an operating item. In the same way that net income is considered to be earnings available for shareholders, operating cash flow is measured from a shareholder's point of view. That is, net income is measured after interest expense but before dividends. Similarly, operating cash flow is measured after interest is paid but before dividends, which are reported as a financing activity. Exhibit 1.3 provides a summary of the classification of cash flow into operating, investing, and financing activities. The topic is dealt with at greater length in Chapter 2.

Importance of Operating Cash Flow

Cash provided by operating activities is the primary source of sustainable cash flow. It is this source of cash that provides management with money to meet discretionary needs,

Exhibit 1.3 Classifying Cash Flow into Operating, Investing, and Financing Activities

Cash provided or used by operating activities	Cash collected from customers for sales Cash payments to employees and suppliers Interest paid Income taxes paid
Cash provided or used by investing activities	Cash disbursements and collections from making and collecting loans Investments made and proceeds from sales of investments in debt and equity instruments Cash disbursements from the purchase and cash proceeds from the sale of property, plant, and equipment
Cash provided or used by financing activities	Principal amounts borrowed and repaid on debt Proceeds from the issuance and cash disbursed in the repurchase of equity securities Dividends paid

including reinvestment, debt reduction, stock buybacks, and dividends. Unlike cash provided by investing or financing activities, operating cash flow comes from a renewable source, operations.

Consider cash provided by the sale of equipment or the sale of an investment in stock. Such actions represent common sources of cash provided by investing activities. They are, however, one-time events. The cash generated by their sale cannot be expected to recur, as the assets sold are no longer available for resale. Also consider cash provided by a borrowing transaction. To gain new access to borrowed cash a company's management must meet with its lenders, hat in hand. Worse, borrowed cash comes with strings attached—a scheduled maturity date and the need to pay interest. Similarly, financing cash provided by an equity offering is not a sustainable source of cash, as investors must be asked to contribute anew. They can always say no.

A profitable company that generates positive operating cash flow might be viewed as employing a legal cash printing press. Each morning as the firm's lights are illuminated and the wheels of commerce begin to turn, the cash printing presses are switched on and the flow of cash begins for another day. Note that the presses turn and generate cash as long as the company continues to operate. Cash flow is being generated by a renewable source. In addition, because cash is being generated by operations, it need not be repaid to creditors for amounts borrowed outside of operations or returned to investors, unless by design.

The printing press analogy and reference to operating cash as flowing from a renewable source fits Microsoft Corp. well. The company generates prodigious amounts of operating cash flow. In 2003 the amount was \$15,797 million, which is over \$43 million per day, 365 days per year. That was up from \$14,509 million in 2002 and \$13,422 million in 2001. In 2003 the company used \$7,213 million of its operating cash flow primarily for the purchase of investments. Another \$5,223 million was used in the repurchase of common stock and the payment of dividends.

Measured across 2003, Microsoft's cash balance increased by \$3,361 million. That was the first year in several that cash on hand did not decline. Of course, as seen in Exhibit 1.4, overall declines in cash during 2001 and 2002 were not representative of the company's cash flow performance. Rather, it was its generation of positive operating cash flow or, if one were to subtract capital expenditures, its free cash flow that were more representative of Microsoft's cash flow performance in each of those years.

Contrast Microsoft's recent cash flow performance with that of Lucent Technologies, Inc. presented in Exhibit 1.5. In 2003 Lucent used \$948 million in cash from continuing operations. However, although the company consumed operating cash flow in 2003, investing activities, primarily from the disposition of manufacturing operations, provided \$758 million in cash flow. Financing activities also provided cash, \$1,117 million, primarily from the issuance of convertible preferred shares and from borrowings. For the year 2003, after factoring in the effect of exchange rate changes on cash, Lucent's cash balance actually increased by \$927 million as a result of continuing operations. In fact, the balance in cash related to continuing operations has increased for all three years, 2001, 2002, and 2003.

During 2003, Lucent's operating performance was showing signs of improvement. Although on its income statement the company reported a loss from continuing operations of \$770 million, that was much better than a loss of nearly \$12 billion in 2002 and over \$14 billion in 2001. Reflecting expectations of continued improved performance, during 2003, the company's share price began to show signs of life. However, unless the company can demonstrate an ability to generate positive operating cash flow and not simply a growing balance in cash resulting from asset dispositions, preferred stock offerings, and borrowed amounts, that incipient improvement in its share price may be short-lived.

Exhibit 1.4 Microsoft Corp., Cash Flow Data, Years Ending June 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Cash provided by operating activities	\$13,422	\$14,509	\$15,797
Cash used by investing activities	(8,734)	(10,845)	(7,213)
Cash used by financing activities	(5,586)	(4,572)	(5,223)
Net change in cash	\$ (898)	\$ (908)	\$ 3,361

Source: Microsoft Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 21.

Exhibit 1.5 Lucent Technologies, Inc., Cash Flow Data—Continuing Operations, Years Ending September 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Cash used by operating activities of continuing operations	\$(3,421)	\$(756)	\$(948)
Cash provided by investing activities of continuing operations	1,951	757	758
Cash provided by financing activities of continuing operations ^a	2,629	503	1,117
Net change in cash from continuing operations	\$ 1,159	\$ 504	\$ 927

^a Includes effects of exchange rate changes on cash of \$4, \$35 and \$66, respectively, in 2001, 2002, and 2003.

Source: Lucent Technologies, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. F-35.

SUSTAINABLE CASH FLOW

In the subtitle of this book, we speak of uncovering sustainable financial performance. In particular, our interest, which is shared by both equity investors and creditors, is in uncovering sustainable sources of cash flow. Equity investors make projections of such cash flow and assign an appropriate risk-adjusted discount rate in computing their present value. This present value provides an estimate of a company's current fair or intrinsic value. Lenders, interested in having interest and principal on loans repaid, seek sustainable cash as a source of repayment.

Sustainable cash flow is recurring cash and is derived from a company's profitable operations, which is a renewable source. Positive operating cash flow can be generated in the near term and on occasion over extended periods, even in the absence of profitable operations. However, to produce sustainable cash flow, profitable operations are a must.

Witness the extended demise of Eastern Airlines, Inc., through the late 1980s. Before it was liquidated, the company thrashed about for several years losing money on a regular basis. It stayed in business and at times actually generated positive operating cash flow even as it reported losses. The operating cash it generated was the result of significant noncash expenses, such as depreciation on its equipment, the liquidation of working capital accounts, and its ability to convince certain employee groups to accept equity claims, typically preferred stock, in return for services. An end to operations was ultimately necessary as the company's inability to generate any meaningful profits finally eliminated any prospect it had of meeting its obligations.

Even operating cash flow supported by profitable operations may not be sustainable. For example, operating cash derived from an outsized decline in accounts receivable or a wholesale liquidation of inventory cannot be maintained. Similarly, extending the time

period taken to pay vendors will provide an increase in operating cash flow. However, that increase in cash flow is not derived from a recurring source as vendors ultimately will balk at ever-increasing payment periods and demand more timely payment.

Potential problems notwithstanding, among the three classifications on the statement of cash flows (operating, investing, and financing), operating cash flow is derived from a more sustainable source. Moreover, operating cash flow is clearly disclosed and readily accessible in financial statements. Accordingly, operating cash flow is our starting point for identifying sustainable cash flow. It must be stressed, however, that operating cash flow is only our starting point. Numerous adjustments for misclassifications and nonrecurring cash flow items are needed, as discussed in the paragraphs and chapters that follow.

Equity Investors and Cash Flow

Equity investors are naturally interested in sustainable cash flow that might be distributed to them. As residual interest holders, common shareholders have the last claim on cash flow. Lenders and preferred shareholders come before them.

As a starting point in computing cash available for common shareholders, operating cash flow is a useful metric because it is calculated after interest payments have been deducted. Such disbursements represent required cash payments to lenders. However, equity investors typically are interested in making other subtractions from operating cash flow as well. A deduction for capital expenditures is common. As discussed at length in Chapter 10, there is no general agreement on the measure of capital expenditures to be deducted. For example, some investors would argue that gross capital expenditures, which exclude any proceeds from capital equipment disposals, should be used. Others would argue that net capital expenditures is the more realistic measure.

There is also disagreement concerning whether replacement capital expenditures or capital expenditures needed to support expected growth should be used. Replacement capital expenditures are amounts needed to replace productive capacity consumed during a reporting period. That is, before cash can be paid to shareholders, a company needs to maintain its productive capacity. Failure to do so would mean an eventual end to operations. Replacement capital expenditures are designed to reflect just such a charge. Of course, estimating replacement capital expenditures is not straightforward. Depreciation is often used as an approximation. However, because it is based on older equipment costs, it tends to understate replacement capital expenditures.

Because replacement capital expenditures permit only the maintenance of current productive capacity, capital expenditures needed to grow the business are not taken into account. Many would argue that if a certain rate of growth is assumed in valuing a company's shares, then capital expenditures adjusted for growth are more meaningful than replacement capital expenditures.

Estimating capital expenditures needed to maintain growth is also a challenging endeavor. Many would use actual capital expenditures for this purpose or possibly a normalized measure of actual capital expenditures: for example, an average of actual capital expenditures made over the most recent two- or three-year period.

As an example, consider Lowe's Companies, Inc. During the company's fiscal year ended January 31, 2003, Lowe's generated \$2,696 million in operating cash flow. Using depreciation as an estimate, replacement capital expenditures that year totaled \$626 million, yielding free cash flow of \$2,070 million. However, if net new capital expenditures

made during the year of \$2,318 million were used to represent replacement and growth-related capital expenditures, free cash flow would be only \$378 million. These calculations, together with amounts for 2001 and 2002, are presented in Exhibit 1.6.

As can be seen in the exhibit, measures of free cash flow are very dependent on the definition of capital expenditures employed. Using replacement capital expenditures, Lowe's free cash flow has been positive for all three years presented. However, using actual capital expenditures as an estimate of replacement and growth-related capital expenditures, free cash flow turned positive, but only marginally, in 2003.

At this point, we are not arguing for or against either measure of free cash flow. That will come later in Chapter 10. We simply want to stress that operating cash flow is a useful starting point for computing free cash flow.

Besides capital expenditures, any claim on cash flow that is superior to the claims of common shareholders and that has not been previously deducted in arriving at net income should be subtracted from operating cash flow in computing free cash flow. In particular, dividends on preferred stock are such a claim. Just as preferred dividends are subtracted from net income in computing earnings available for common shareholders, preferred dividends paid, which are reported in the financing section of the cash flow statement, also should be subtracted from operating cash flow in computing free cash flow. Lowe's did not have preferred stock outstanding and, accordingly, paid no preferred dividends.

Exhibit 1.6 Lowe's Companies, Inc., Free Cash Flow Calculated Using Estimates of Replacement and Growth-Related Capital Expenditures, Years Ending February 2, 2001, February 1, 2002, and January 31, 2003 (\$ millions)

	2001	2002	2003
Free cash flow computed using replacement capital expenditures:			
Cash provided by operating activities	\$ 1,130	\$1,613	\$2,696
Minus replacement capital expenditures ^a	-409	-517	-626
Free cash flow	\$ 721	\$1,096	\$2,070
Free cash flow computed using growth-related capital expenditures:			
Cash provided by operating activities	\$ 1,130	\$1,613	\$2,696
Minus growth-related capital expenditures ^b	-2,261	-2,157	-2,318
Free cash flow	\$(1,131)	\$(544)	\$ 378

^a Estimated using depreciation.

^b Estimated using actual capital expenditures, net of proceeds from disposals of \$71, \$42, and \$44 in 2001, 2002, and 2003, respectively.

Source: Lowe's Companies, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 31, 2003, p. 29.

Lenders and Cash Flow

Lenders' claims on cash flow precede those of equity investors. Because it is tax deductible, interest is paid with operating cash flow computed before interest and before income taxes are subtracted. EBITDA, earnings before interest, taxes, depreciation, and amortization, is a crude approximation of such preinterest, pretax operating cash flow.¹⁵ It is referred to as a crude measure of cash flow because although it is calculated before two key noncash expenses, depreciation and amortization, it does not adjust for other noncash items, especially changes in working capital accounts. As such, it is really more a measure of working capital, current assets minus current liabilities, generated by operations before interest and taxes.

Working capital generated by operations is not cash generated by operations. Increases in sales that go uncollected contribute to EBITDA by the associated increase in earnings. However, such sales would not increase operating cash flow. Similarly, cash paid to purchase inventory, which remains on hand, would not reduce EBITDA but would reduce operating cash flow. Thus, unless a lender actually is willing to accept accounts receivable or inventory in payment of interest and principal on a loan, EBITDA does not provide an accurate measure of debt-service capacity. Of course, in order to get access to cash, a lender might be able to force a borrower to liquidate its receivables and inventory. However, there is a risk of loss in such a liquidation process.

Returning to the Lowe's example, in its year ended January 31, 2003, the company reported net earnings of \$1,471 million. Adding back interest expensed during the year of \$195 million, income taxes of \$888 million, and depreciation and amortization of \$645 million, EBITDA of \$3,199 million is obtained. This amount is significantly higher than amounts reported earlier for operating cash flow of \$2,696 million or for free cash flow, depending on its calculation, of \$2,070 million or \$378 million. As noted, the primary reasons for the difference are that EBITDA is calculated before interest expense and income taxes while operating cash flow and free cash flow are computed after interest and income taxes. Plus, EBITDA excludes changes in working capital accounts, such as accounts receivable, inventory, and accounts payable, which, when growing, collectively reduce operating and free cash flow. The details of the calculations of EBITDA for Lowe's for 2001, 2002, and 2003 are presented in Exhibit 1.7. A closer look at EBITDA is provided in Chapter 2.

Equity Investors and EBITDA

During the 1990s, many equity investors became enamored with EBITDA. Companies reporting their results were all too happy to oblige and began reporting pro-forma earnings measures that were based on EBITDA. These moves were understandable as valuations appeared to be less rich when earnings were calculated before interest, taxes, depreciation, and amortization. However, any shareholders who believe the value of a share of stock is a function of EBITDA are misleading themselves. Earnings before interest, taxes, depreciation, and amortization are not earnings that are available for shareholders. There are key expenses that must be paid before EBITDA-based earnings can be distributed to shareholders. If EBITDA was useful for equity valuation, that use would stem from a positive correlation it may have with reported earnings and to a lesser extent with operating cash flow.

Exhibit 1.7 Lowe's Companies, Inc., Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA), Years Ending February 2, 2001, February 1, 2002, and January 31, 2003 (\$ millions)

	2001	2002	2003
Net earnings	\$ 810	\$1,023	\$1,471
Plus interest expense ^a	198	203	195
Plus income taxes	472	601	888
Plus depreciation and amortization	410	534	645
Earnings before interest, taxes depreciation and amortization (EBITDA)	\$1,890	\$2,361	\$3,199

^a Excludes interest income and is net of interest capitalized.

Source: Lowe's Companies, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 31, 2003, pp. 24–28, 40.

EBITDA is an earnings-based, modified cash flow metric. It is not a true measure of cash flow. We include it in our discussion because it is used in analysis by lenders and equity investors. However, our focus here is in uncovering sustainable sources of cash flow. Accordingly our discussion of EBITDA will not be as extensive as the attention we afford other cash flow measures.

An Unexpected Problem with EBITDA Because it is an earnings-based measure, EBITDA suffers from many of the same kinds of creative accounting problems that plague net income. These include premature or fictitious revenue recognition, aggressive cost capitalization, and understated accruals, among others.¹⁶ However, Global Crossing, Inc. employed an accounting tactic that lowered earnings even as it raised EBITDA. Moreover, on the surface the company's accounting move actually sounded conservative because it raised reported debt levels.

In 2001, without a change in its underlying lease or credit agreements, Global Crossing modified its accounting for certain of its outstanding operating leases to capital-lease treatment. What the change meant was that operating lease commitments that were heretofore carried off-balance sheet were brought onto the balance sheet along with associated leased assets. Because liabilities were increased with no accompanying increase in shareholders' equity, balance sheet measures of financial leverage were raised as well.

On the income statement, rent expense on operating leases was replaced with interest expense and amortization on capital leases. In the early years of the company's outstanding lease terms, such a step would reduce net income. However, because EBITDA is measured before interest and amortization, that measure was actually increased. The company's motive was to avoid violation of certain debt agreements that carried covenants based on EBITDA. Even though the accounting move altered EBITDA by little more than 1 percent, that was enough to avoid important covenant violations.

Lease classification is supposed to be established when a lease is signed. It is not subject to unilateral change later without alterations to the terms of the underlying lease. That

rule did not stop the company, however. Commenting on the tactic, one forensic accountant noted, “It immediately smacks of an attempted manipulation of the financial results.”¹⁷

Lenders and the Uniform Credit Analysis® Approach

Rather than using EBITDA exclusively in their analysis, many lenders use what is referred to as the Uniform Credit Analysis® (UCA®) approach to cash flow analysis.¹⁸ Unlike EBITDA, which is an earnings-based, modified cash flow metric, UCA®-defined cash flow is a stricter definition of cash flow. The UCA® format cash flow statement begins with collections resulting from sales made and services provided. From that opening amount, labeled cash from sales, disbursements are deducted based on their importance to operations and priority of cash flow claim. As each disbursement is subtracted from cash collected, a subtotal is calculated that communicates whether cash collections were sufficient to cover that particular disbursement.

For example, disbursements subtracted first from cash from sales are payments for purchases and production of inventory, referred to as cash production costs. Service firms would include payments for services provided in this caption. The remaining subtotal, gross cash profit, measures cash available after all payments for inventory sold or held for sale and services provided are covered. Subtracted from gross cash profit is cash operating expense, which includes sales and marketing, general and administrative, and research and development expenditures. The remaining subtotal, cash after operations, indicates whether a company’s pretax core operations are generating positive operating cash flow.

Cash after operations is adjusted for other cash income or disbursements and income taxes to yield net cash after operations, which for lenders is a key measure of cash flow performance. This subtotal, reported before interest paid, represents operating cash flow that is available for debt service, including interest and principal. A summarized version of the UCA® cash flow statement format through net cash after operations is provided in Exhibit 1.8.

Net cash after operations, the key subtotal indicating debt service capacity as reported on the UCA® cash flow statement, is calculated very much like cash provided by operating activities as disclosed in GAAP-format cash flow statements. The only material difference is that net cash after operations (per Exhibit 1.8) is reported before interest paid but cash provided by operating activities (i.e., GAAP format), more commonly referred to as operating cash flow, is reported after interest paid.

A variation on the UCA® format cash flow, a statement we will refer to as a cash flow analysis statement, is a useful analysis tool for equity investors as well as lenders. This point will be developed more thoroughly in Chapter 9.

Other Measures of “Cash Flow”

Numerous other measures are referred to as cash flow. Like EBITDA, many of them are not actual cash flow measures but rather earnings-based amounts that have some of the features of actual cash flow measures. For example, net income plus depreciation has been referred to by some as “traditional” cash flow. Net income plus depreciation, which also typically includes amortization, is cash flow only to the extent that it is calculated before

Exhibit 1.8 Uniform Credit Analysis® Cash Flow Statement Format, Summarized Version with Balance Sheet Changes, Presented through Net Cash after Operations

<i>Sales</i>
+/- Change in receivables
Cash from sales
<i>Cost of goods sold</i>
+/- Change in inventory
+/- Change in payables
Cash production costs
Gross cash profit
<i>SG&A expenses</i>
+/- Change in prepaids
+/- Change in accruals
Cash operating expense
Cash after operations
+/- Other cash income (expense)
– Income taxes paid
Net cash after operations

®Uniform Credit Analysis is a registered trademark of the Risk Management Association, Philadelphia, Pennsylvania.

certain important noncash expenses. However, there are other noncash expenses that are not accounted for, including deferred tax expense, for example. In addition, net income plus depreciation does not include changes in working capital accounts in its calculations.

A popular measure of cash flow in the real estate industry, especially for real estate investment trusts (REITs), is funds from operations (FFO). The National Association of Real Estate Investment Trusts defines FFO as net income or loss computed in accordance with GAAP excluding gains or losses from debt restructuring and sales of property, plus depreciation and amortization of real estate assets. Thus, FFO, like EBITDA, is not a comprehensive cash flow measure. In fact, BRE Properties, Inc., a real estate investment trust specializing in apartment properties, notes that “FFO does not represent cash generated from operating activities . . . and therefore should not be considered a substitute for . . . cash flow from operations as a measure of liquidity.”¹⁹

Funds from operations is effectively a measure of net income plus depreciation and, accordingly, is more of a measure of earnings than of cash flow. Alluding to this point and to measurement problems with FFO, R. Scott Sellers, chairman and CEO of Archstone-Smith Trust, another apartment REIT, notes:

Our industry is finally moving to the use of an audited performance measurement, earnings per share. This is a tremendous improvement of the substantially flawed funds from operations (FFO). I believe that a performance metric that ignores depreciation—like FFO does—encourages management to make sub-optimal investment decisions and diminishes credibility with investors.²⁰

Although Sellers is focusing his attention on earnings and not cash flow, his comments do raise an important point for cash flow measurement. Even though depreciation is a noncash expense, there is a cash disbursement associated with the use of fixed assets in operations. That disbursement, capital expenditures, is reported as an investing item on the cash flow statement and is not a deduction in computing operating cash flow. If he were speaking in terms of cash flow, Sellers would be referring to free cash flow, which is reported net of capital expenditures. It is because of observations like Sellers's that we have devoted a chapter to free cash flow.

A variation on net income plus depreciation that captured investors' attention during the stock market bubble of the late 1990s was cash earnings, computed by adding goodwill amortization to net income. This calculation dated to a time, before the Financial Accounting Standards (SFAS) Board No. 142, "Goodwill and Other Intangible Assets," when goodwill was still amortized.²¹ SFAS No. 142, which was effective in 2002, discontinued the amortization of goodwill and other intangible assets with indefinite lives.

During the 1990s, many firms had grown rapidly through acquisition. As a result, their balance sheets carried significant amounts of goodwill, the amortization of which provided a significant earnings drag. That amortization was added back to net income because it was a noncash expense and was not a recurring cost of operations. The resulting cash earnings, however, was not a measure of cash flow but rather net income excluding one particular expense amount. Accordingly, cash earnings was really more a measure of earnings and not cash flow.

The attraction of cash earnings, especially during a time when share prices generally were richly priced, can be seen in this passage describing the acquisition of Hannaford Brothers Co. in 1999 by Food Lion, Inc:

The rich price tag and the accounting treatment being used would reduce Food Lion's earnings per share about 19% in 2000 and about 4% in 2001. . . . The company forecast that cash earnings per share—excluding goodwill amortization from purchase accounting—will grow 15% in the second year after closing.²²

EBITDA, net income plus depreciation, funds from operations, and cash earnings are all earnings-based measures that have been referred to as cash flow at one time or another. As noted, none of them is truly a cash flow measure. Accordingly, their use in analysis will not be a focus for this book. However, because of their continuing though declining use in practice and in an effort to provide more perspective on the subject of cash flow reporting, we turn to them again in Chapter 2.

Using Sustainable Cash Flow as an Early-Warning Indicator

In summarizing his firm's concerns about earnings at Sysco Corp., Eni Tan, an analyst at the Center for Financial Research and Analysis (CFRA), noted, "Whenever you see a de-

terioration in cash flow [in conjunction with rising net income] it raises a question about the quality of the earnings.”²³ The analyst listed many reasons to be concerned about earnings at Sysco for the six months ended December 28, 2002. However, Tan’s point about cash flow was that rising earnings in the absence of rising cash flow suggests the firm may be taking aggressive steps to boost earnings artificially. Such earnings are the result of accrual accounting techniques and do not increase cash flow. Instead, other balance sheet accounts get boosted. If those accounts are not ultimately realized, write-offs may be necessary.

It is important to note that operating cash flow reported by Sysco actually increased faster than earnings for the period in question. However, according to Tan, nonrecurring tax deferrals added significantly to operating cash flow. In the absence of those temporary deferrals, operating cash flow would have declined.

As another example, reported operating cash flow at Xerox Corp. grew from \$479 million in 1994 to \$1,224 million in 1999, an increase of 156 percent. During that same time period, reported income from continuing operations grew from \$794 million to \$1,424 million, an increase of 79 percent. Evidence of the company’s record of earnings and cash flow growth, using amounts as originally reported, is presented in Exhibit 1.9.

We now know that Xerox improperly overstated its earnings in several of the years presented here.²⁴ Once restated, income from continuing operations in 1999 was reduced to \$844 million.²⁵ Potential problems with the company’s earnings would not have been apparent if one were to compare the growth in reported earnings with the growth in reported operating cash flow. A drop in cash provided by operating activities in 1998 notwithstanding, through 1999, reported operating cash flow was growing faster than reported earnings. Using the reasoning applied by the CFRA analyst, high operating cash flow growth would imply that earnings at Xerox were of high quality.

However, reported cash flow in 1999 included the proceeds from a securitization of finance receivables in the amount of \$1,495 million. Although such a sale of receivables is properly included with operating cash flow in accordance with GAAP, sale proceeds represent cash that would have been collected in subsequent years. The company was effectively borrowing operating cash flow from future reporting periods. Subtracting securitization proceeds of \$1,495 million from reported operating cash flow of \$1,224 million yields an adjusted operating cash flow figure of negative \$271 million.²⁶

Exhibit 1.9 Xerox Corp., Earnings from Continuing Operations and Cash Provided by Operating Activities, as Originally Reported, Years Ended December 31, 1994–1999 (\$ millions)

	1994	1995	1996	1997	1998	1999
Income from continuing operations	\$794	\$1,174	\$1,206	\$1,452	\$ 585	\$1,424
Cash provided by operating activities	\$479	\$ 599	\$ 324	\$ 472	\$(1,165)	\$1,224

Source: Xerox Corp., Form 10-K annual reports to the Securities and Exchange Commission, December 31, 1996, pp. 26 and 42, December 31, 1999, pp. 42 and 44.

Operating cash flow at Xerox really was not growing faster than income from continuing operations. In fact, adjusted operating cash flow was declining even as earnings were registering notable growth. Such a disconnect between earnings growth and sustainable cash flow growth is an early-warning indicator of problems with reported earnings. However, the warning would not have been sounded if reported operating cash flow had been used in analysis.

As explained more carefully in Chapter 8, operating cash flow can be a useful early-warning indicator for future earnings problems. However, before operating cash flow can be used in this manner, it must be adjusted to remove nonrecurring items to obtain a sustainable measure of cash flow. The CFRA analyst employed such an adjustment to remove nonrecurring tax deferrals from operating cash flow. Such a step would also be needed before operating cash flow could be used in effectively evaluating Xerox's earnings performance.

The Focus: Operating Cash Flow

Although many definitions of cash flow from an operating source exist in practice, only one is defined by GAAP. That measure, cash provided by operating activities, often referred to as operating cash flow or cash provided by operations, is carefully defined and clearly disclosed in corporate financial statements. Accordingly, throughout this book, GAAP-defined operating cash flow will be our starting point in deriving sustainable cash flow.

However, the focus in this book will not be on operating cash flow to the total exclusion of all other performance measures. In particular, free cash flow is a useful tool, and it will be examined at length. Most calculations of free cash flow begin with operating cash flow. Accordingly, the usefulness of free cash flow is dependent on the quality and sustainability of operating cash flow, giving us reason to sharpen our focus on that measure even further.

CREATIVE CASH FLOW REPORTING

Creative cash flow reporting refers to any and all steps used to create an altered impression of operating cash flow and, in the process, provide a misleading signal of a firm's sustainable cash-generating ability. Steps employed to misrepresent a firm's sustainable cash-generating ability may employ reporting flexibility within the boundaries of GAAP. Alternatively, steps may be taken that extend beyond the boundaries of GAAP. Finally, amounts may be reported properly as operating cash flow but do not have the sustainable qualities normally expected of operating cash flow. Clearly the adjective "creative" is used here in a pejorative sense. The following paragraphs provide some examples of how cash flow reported in a creative manner misrepresents sustainable cash flow.

Employing GAAP Flexibility

Generally accepted accounting principles are reasonably clear in their definition of operating cash flow. There is, however, considerable flexibility permitted in its calculation. Some firms have demonstrated a willingness to ply this flexibility in an effort to boost

amounts reported as operating cash flow. Although such steps raise operating cash flow, they do not increase sustainable cash flow.

Consider the Mim Corp. overdraft example presented earlier. The company included an increase in overdrafts in operating cash flow. Those overdrafts provided approximately 75 percent of the company's operating cash flow during the first quarter of 2002. That cash flow, however, was not generated by a sustainable source. Amounts borrowed in that manner ultimately would need to be repaid.

There are many other examples of cash flow classification decisions that artificially boost operating cash flow. Some involve investing items that get reclassified to the operating section. Others, like the Mim Corp. overdraft example, involve financing items that get reported as operating cash flow.

GAAP Flexibility: Is It Operating or Investing Cash Flow?

Examples of cash flow classified as investing activities include both capital expenditures made to boost future operating cash flows and cash parked in debt and equity securities awaiting future needs. Except for capital expenditures that are included in the calculation of free cash flow, cash provided or used in investing activities is not considered to have the same recurring quality as operating cash flow. Accordingly, to the extent that creative steps can be taken to boost operating cash inflows by increasing investing cash outflows, an appearance can be communicated of a strengthened cash-generating capability. Two areas for such a cash flow misclassification that are representative of the opportunities afforded by the flexibility found in GAAP are investments classified as trading securities and capitalized operating costs. A third area, acquisitions, can also use investing activities to creatively boost operating cash flow.

Investments Classified as Trading Securities Investments in debt and equity securities may be classified as held for trading purposes or as available for sale. In addition, because they have fixed maturity dates, a third classification, held to maturity, can also apply to debt securities.

As the title suggests, trading securities are held to take advantage of very short-term price swings. Holding periods are very short, at times possibly even less than a day. Debt securities that are classified as held to maturity are investments for which a firm has the intent and ability to hold until maturity. The plan is to collect the debt instrument's principal amount at maturity. All other investments are classified as available for sale, a default classification that can include both short-term and long-term investment positions.

The classification of investments as trading, held to maturity, or available for sale directly affects the classification of cash flows associated with their purchase or sale. When investments are classified as held to maturity or available for sale, the use of cash in their purchase or the proceeds generated by their sale are classified as cash flow from investing activities. In contrast, cash used to purchase or cash provided by the sale of investments classified as trading securities is reported as operating cash flow.

Rules for classifying investments as trading, held to maturity, or available for sale are malleable. This flexibility provides an opportunity for companies to alter reported operating cash flow. For example, cash flows associated with investments in short-term debt instruments classified as held to maturity would be reported as investing cash flow.

However, changing their classification to trading would result in the same cash flows being classified as operating cash flow.

Financial institutions—companies such as banks, insurance companies, and brokerage firms—routinely trade financial instruments. It is part of what they do. Cash flows associated with this activity are properly included with operating cash flow. However, when nonfinancial companies classify investments as trading securities, cash used to purchase the investments or cash provided by their sale does not fit the operating designation. At a minimum, such cash flows are not sustainable and will stop when an investment portfolio has been liquidated.

Consider the effects of investments on the cash flow performance of Nautica Enterprises, Inc. In its fiscal years ended February 28, 1998, and February 27, 1999, the company added a total of \$55.1 million to its short-term investment portfolio. That amount was reported as short-term investments on the company's balance sheet at fiscal year end February 1999. At the time, these investments were classified as available for sale. Accordingly, on the company's cash flow statement, disbursements made to build the portfolio were reported as investing uses of cash.

During its fiscal year ended March 4, 2000, Nautica began liquidating its investment portfolio. Proceeds from these sales of short-term investments generated \$21.1 million. These proceeds were reported as a source of cash in the investing section of its cash flow statement for the year ended March 4, 2000.

In its fiscal year ended March 3, 2001, Nautica changed the classification of its short-term investments to a trading designation. Now any proceeds generated by liquidating its short-term investments would be reported as an operating source of cash. In fact, during that year a significant liquidation of its trading portfolio added \$28.4 million to operating cash flow, increasing it by 57 percent.

In the company's March 2001 annual report, Nautica reclassified its cash flow statement for the year ended March 4, 2000. Proceeds from the sale of securities from its short-term investment portfolio were moved to the operating section from the investing section, where they had been reported originally. The cash flow statement for that year as it appeared originally and as it appeared on a restated basis is quite instructive. The statement, as shown in Exhibit 1.10, demonstrates the significant effect that the classification of investments can have on the operating and investing sections of the cash flow statement.

As seen in the exhibit, the change in classification of the company's short-term investments to a trading designation from an available-for-sale classification boosted reclassified operating cash flow by \$21.1 million. A continued liquidation of the portfolio added \$28.4 million to operating cash flow in the fiscal year ended March 3, 2001.

It is impossible to know the true motivation for the company's change in its investment classification. Whatever the reason, it provided a significant short-term boost to operating cash flow. Cash flow generated in this manner is not sustainable. In fact, by the end of the company's March 2001 fiscal year, its short-term investment portfolio was reduced to \$5.5 million from \$55.1 million in 1999. There were few investments remaining to add to operating cash flow. That was clear from the company's cash flow statement for the year ended March 2, 2002, where an increase in the short-term investments portfolio actually reduced operating cash flow by \$804,000.

Capitalized Operating Costs Generally accepted accounting principles offer flexibility in deciding whether certain operating costs are capitalized or expensed. A common ex-

Exhibit 1.10 Nautica Enterprises, Inc., Cash Flow Data, Year Ending March 4, 2000, as Reported in March 4, 2000 Annual Report and as Reclassified in March 3, 2001 Annual Report (\$ thousands)

	As Reported	As Reclassified
Cash provided by operating activities	\$62,685	\$83,801
Cash used by investing activities	(12,450)	(33,566)
Cash used by financing activities	(38,590)	(38,590)
Net change in cash	\$11,645	\$11,645
Difference between operating and investing cash flow in reported and reclassified statements	\$21,116	\$21,116

Source: Nautica Enterprises, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 4, 2000, p. F-7, and March 3, 2001, p. F-7.

ample is software development costs. Capitalization of additional costs is required once technological feasibility is reached. However, because of the use of judgment in deciding when that benchmark is attained, there is a high degree of variation across companies in the amounts of software costs being capitalized.

When expensed, software development costs reduce net income and operating cash flow. However, capitalized software development costs are reported as disbursements in the investing section of the cash flow statement and do not reduce operating cash flow. Both earnings and operating cash flow are increased.

When a software company reaches a steady state, where the amortization of software development costs capitalized in prior periods is approximately equal to new costs capitalized in the current period, the earnings effect of capitalization approaches zero. At this point analysts need not be as concerned about the effects on earnings of the company's capitalization policy. However, even then amounts capitalized continue to be reported as investing uses of cash. Thus, even when there is no earnings effect, capitalization has a cash flow effect, boosting operating cash flow for new amounts capitalized.

The effects of capitalization on operating cash flow are especially apparent when a company changes its capitalization policy. Consider the software capitalization statistics and cash flow data for American Software, Inc., provided in Exhibit 1.11.

During 2001, American Software cut in half the percentage of software costs capitalized from approximately 50 percent in 1999 and 2000 to approximately 25 percent. As a result, a larger proportion of software costs incurred were accounted for as direct reductions in operating cash flow, contributing to its decline, even as software development costs incurred were reduced.

Acquisitions and Operating Cash Flow When one company acquires another, operating results for the acquired company from the date of acquisition are included with reported amounts for the acquiring company. Thus, an acquisition can serve to boost both reported earnings and operating cash flow. However, beyond these more obvious effects of an acquisition on operating results, there is a lesser-known impact that provides a non-recurring boost to operating cash flow.

Exhibit 1.11 American Software, Inc., Cash Flow Data and Software Capitalization Statistics (\$ thousands, except percentages)

	1999	2000	2001
Software development costs capitalized	\$10,902	\$10,446	\$ 3,949
Software development costs incurred	\$22,413	\$20,121	\$15,573
Capitalization percentage (Costs capitalized divided by costs incurred)	48.6%	51.9%	25.4%
Cash provided by operating activities	\$14,179	\$13,779	\$ (322)

Source: American Software, Inc., Form 10-K annual report to the Securities and Exchange Commission, April 30, 2001.

The accumulation through operations of working capital accounts such as accounts receivable, inventory, and prepaid expenses, less accounts payable and accrued expenses payable, serves to reduce operating cash flow. Operating cash flow is increased when these working capital accounts are liquidated.

When working capital is acquired in an acquisition, its cost is reported as an investing and not as an operating use of cash. However, the subsequent liquidation of working capital, even when acquired through an earlier business acquisition, is reported as an operating source of cash. In effect, through an acquisition a company can “acquire” operating cash flow.

During the years ended December 31, 1999, and 2000, AutoNation, Inc., expended a cumulative \$1.2 billion on acquisitions. In the process the company acquired approximately \$500 million in inventory that was reported as an investing use of cash. Then during 2001 the company liquidated a substantial portion of its inventory. That liquidation was reported as an operating source of cash and provided \$544.7 million.

Note the mismatch. Inventory picked up through acquisition is reported as an investing use of cash. The liquidation of that inventory, however, is reported as an operating source of cash.

During 2001, AutoNation also changed the classification of its floor-plan notes payable to an operating designation from a financing one. Those notes, the principal on which was reduced along with the reduction inventory, consumed \$514.4 million in operating cash flow during 2001, offsetting much of the positive cash impact of the inventory liquidation undertaken that year. The change would, however, benefit the operating cash flow of future years, when balances in inventory and floor-plan notes payable began growing again.

Investing activities that can be used to boost operating cash flow within the boundaries of GAAP include short-term investments classified as trading activities, capitalized operating costs, and acquisitions. More details of these and other ways that investing activities can be used to boost operating cash flow are provided in Chapter 3.

GAAP Flexibility: Is It Operating or Financing Cash Flow?

Financing cash flow includes amounts borrowed and raised through the issuance of capital stock as well as debt repayments, stock buybacks, and dividends. Like cash flow re-

ported in investing activities, financing cash flow is not considered to have the same sustainable qualities as operating cash flow. Flexibility in GAAP can be used to boost operating cash flow that is offset by uses of cash in the financing section.

A case in point is the book overdraft example at Mim Corp. The company classified an increase in current liabilities resulting from its use of overdrafts as an operating and not as a financing source of cash.

Xerox's use of transactions to securitize its finance receivables is another example where cash flow that is ostensibly related to financing transactions is reported as operating cash flow. According to GAAP, proceeds from an outright sale of receivables are reported as operating cash flow. However, when receivables are pledged as security for a loan, any proceeds received are reported as financing activities. The substance of the difference between securitization and pledging transactions is not that great. Indeed, the chief financial officer of Lear Corp., a company that has securitized receivables, noted, "Sales of receivables and operating cash flow are entirely separate events. . . . We see sales of receivables as a low-cost financing method; it shouldn't generate operating cash flow."²⁷

Increased Vendor Financing Vendor financing is a form of financing that, in accordance with GAAP, is properly reported as operating cash flow. Consider the cash flow results for Home Depot, Inc. During the company's fiscal year ended February 3, 2002, operating cash flow increased to \$6.0 billion from \$2.8 billion during the previous year. Then during its fiscal year ended February 2, 2003, reported operating cash flow remained strong at \$4.8 billion. However, contributing significantly to operating cash flow during both years was an outsized increase in accounts payable.

Increases in the length of time taken to settle accounts payable, a vendor financing of sorts, can be an effective corporate finance tool for managing working capital. However, incremental sources of cash generated in this manner are not sustainable.

During the year ended February 3, 2002, Home Depot increased the length of time taken to settle accounts payable to approximately 34 days from 22 days in 2001. That 12-day increase added approximately \$1.1 billion to operating cash flow in the year ended February 3, 2002. Then during the year ended February 2, 2003, the company increased the length of time taken to settle accounts payable another 7 days to 41 days, adding an additional \$800 million to operating cash flow. Such operating cash flow cannot be duplicated without adding yet again to the settlement period for accounts payable.

Overdrafts classified as operating cash flow, securitized accounts receivable, and extended vendor payment terms are three examples of financing-related activities that ply the flexibility of GAAP to boost operating cash flow. More details of these and other similar actions are provided in Chapter 4.

Beyond the Boundaries of GAAP

Some companies move beyond the boundaries of GAAP, reporting as operating cash flow amounts that are clearly nonoperating in nature. In the case of Dynegy, Inc., mentioned earlier, a complex long-term purchase contract for natural gas was used to gain access to \$300 million in financing from Citigroup, Inc. The proceeds from that financing, which were borrowed across 9 months and were to be repaid over 51 months, were reported as operating cash flow.

There are many other examples of steps taken by companies beyond the boundaries of GAAP that artificially boost cash flow. Some involve a misclassification between the operating and investing sections of the cash flow statement. Others, like Dynegy, Inc., involve a financing cash flow reported as cash provided by operating activities.

Beyond GAAP: Is It Operating or Investing Cash Flow?

When taken to extremes, many of the same actions that might be viewed as plying the flexibility of GAAP in the classification of cash flow are considered to have moved beyond the boundaries of GAAP. A restatement made to correct prior-period errors in cash flow classification is compelling evidence of a GAAP-boundary violation. Such a restatement may or may not be in response to alleged fraudulent conduct.

A Misclassified Investment Consider Enron Corp. and Project Nahanni, a transaction entered into with Citigroup, Inc. A court-appointed examiner in Enron's bankruptcy filing charges that Project Nahanni was "designed solely to permit Enron to record \$500 million in cash flow from operating activities for the year. Through Nahanni, Enron borrowed \$500 million, bought Treasury securities with it, sold them, recognized \$500 million of operating cash flow, and repaid the loan."²⁸

The Nahanni transaction involved a misclassification of investing proceeds as cash provided by operations. According to the examiner, it was one of Enron's "clearest violations of GAAP."²⁹

Capitalized Operating Costs There are numerous examples of companies breaking GAAP rules through their overzealous capitalization of operating costs. In these instances, firms not only boost reported income incorrectly, but operating cash flow also is increased in error. The increase in operating cash flow occurs because amounts expended are reported as investing and not operating uses of cash.

There are some notorious names on the list of companies making this infraction. Chambers Development Co., Inc., Comptronix, Inc., and WorldCom, Inc., would all fit into this category.

The practices at WorldCom were arguably the most egregious of the group. The company capitalized billions of operating lease costs and reported amounts expended as part of its capital expenditures. As capitalized operating costs were increased, management cut back on normal capital expenditures so that reported amounts would be consistent with analyst expectations.

Beyond GAAP: Is It Operating or Financing Cash Flow?

Dynegy's use of loan proceeds to boost operating cash flow through its long-term natural gas supply contract with a special purpose entity is an excellent example of misreporting financing cash flow as cash provided by operating activities. Enron Corp. entered into similar transactions, also with Citigroup, Inc., and used financing proceeds to boost operating cash flow. The Securities and Exchange Commission forced Dynegy to restate its cash flow statement. At the time of this writing, a restatement of Enron's financial statements is pending.

Nonrecurring Operating Cash Flow

Even when companies maintain their financial statements within the boundaries of GAAP and do not employ flexibility in the rules to boost operating cash flow, amounts may be reported as operating cash flow that are nonrecurring. In such instances operating sources of cash do not provide the sustainable supply of cash that is normally expected of operations.

For example, a cash collection resulting from a one-time litigation settlement may be included with operating cash flow. Similarly, operating cash payments associated with restructuring events are, in most instances, nonrecurring uses of cash. There are many other examples of nonrecurring operating cash flow.

Consider General Electric Co. For the nine months ended September 30, 2002, the company reported that cash flow from operations declined to \$5.7 billion, a drop of 51 percent from the same period in the previous year. The precipitous drop in operating cash flow during 2002 was more a function of outsized collections made during the previous year than any real change in the company's operating performance.

As another example, consider Tyco International, Ltd. Normally during its first quarter the company paid executive bonuses related to the most recently completed fiscal year. However, a delay in the payment of bonuses during the first quarter ended December 31, 2002, helped to boost operating cash flow during that period. According to the company, \$200 million in bonuses that would normally have been paid during the first quarter ended December 31, 2002, were delayed, boosting operating cash flow.³⁰ Nonetheless, operating cash flow excluding the effects of discontinued operations declined to \$828 million for the quarter ended December 31, 2002, from \$939 million during the same period of the previous year.³¹

Misleading Cash Flow Classifications under GAAP

Collectively, all steps taken to misrepresent the sustainable nature of operating cash flow are referred to here as creative cash flow reporting. Those steps may be taken within the boundaries of GAAP or beyond those boundaries, or may be the result of nonrecurring sources of operating cash flow. Each of them results in operating cash flow that is not sustainable.

Beyond what is referred to as creative cash flow reporting, there are specific items, especially in the cash flow classification of income taxes, where GAAP state clearly that nonoperating items should be included in operating cash flow. Such items may add to or subtract from operating cash flow and create misleading amounts.

Taxes and Operating Cash Flow

All transactions that result in income or expense, gains or losses, have income tax implications. According to GAAP, except for one proposed exception, the cash disbursements or receipts related to all such taxes are reported with operating cash flow.³² An operating designation was chosen because of the complexity and arbitrary nature of allocating taxes to operating, investing, and financing classifications depending on the nature of the underlying item.

When taxes relate to income or expense items included in operations, those taxes

should be included in the calculation of operating cash flow. It is a proper grouping of like items. However, when taxes relate to investing or financing items, their inclusion in operating cash flow clouds that measure.

Taxes and Investment-Related Gains For example, on November 15, 2001, Bristol-Myers Squibb Co. sold its Clairol business to Procter & Gamble Co. for approximately \$5.0 billion in cash. As a result of the sale the company recorded a pretax gain of \$4.2 billion. Taxes due on the sale totaled \$1.7 billion. Bristol-Myers reported the full pretax proceeds from sale, \$5.0 billion, in the investing section of its cash flow statement. Taxes due on the sale were deducted from operating cash flow when paid in early 2002. In fact, due primarily to a cash drain resulting from the payment of taxes on the Clairol gain, the company reported negative operating cash flow of \$1.1 billion in the first quarter of 2002. That was down considerably from the positive operating cash flow of \$900 million generated during the same period of the previous year.

Tax Benefits from Stock Options The exercise of stock options generates a financing source of cash equal to the exercise price on the underlying options. Option holders pay the company an amount equal to the exercise price times the number of options being exercised. To the company, this is cash received for the sale of stock. It is a financing source of cash and is reported as such on the cash flow statement.

When the holders of nonqualified options, typically company officers and employees, exercise their options, the company receives a tax deduction equal to the difference between each option's exercise price and the market price of the underlying stock times the number of options exercised. The option-related tax deduction can be quite substantial and provide tax benefits, a source of cash, which can run into the hundreds of millions or even billions of dollars.

Consistent with the treatment of taxes generally, tax benefits from stock options are reported as operating cash flow. However, because the sale of stock that gave rise to the tax benefits is a financing event, its related tax benefits are not truly part of operations.

Historically, Microsoft Corp. reported tax benefits from stock options as a financing source of cash. However, Emerging Issues Task Force (EITF) Statement No. 00-15 clarified the cash flow classification of tax benefits from stock options forcing the company to restate its cash flow statements.³³ In the restatement, tax benefits from stock options were reclassified to the operating section.

Exhibit 1.12 provides summary versions of Microsoft's cash flow statement for the two years ended June 30, 1999, as originally reported and as restated. The original cash flow statements report tax benefits from stock options in the financing section. The restated cash flow statements move those tax benefits to the operating section. Note the increase in operating cash flow on the restated cash flow statements for each of the two years. Reclassifying tax benefits from stock options to operating cash flow boosted that measure by \$1,553 million, or 23 percent, in 1998 and by \$3,107 million, or 31 percent, in 1999.

One may consider tax benefits from stock options as being properly included with operating cash flow. They are, after all, the result of a form of incentive compensation, an operating cost. However, whether tax benefits from stock options are classified as operating or financing cash flow, there is no question as to their lack of sustainability. Tax benefits from stock options are directly linked to the excess of the market price of a com-

Exhibit 1.12 Microsoft Corp., Summarized Statements of Cash Flows, as Reported and as Restated, Years Ending June 30, 1998, and 1999. As Reported Includes Tax Benefits from Stock Options in Financing Activities, as Restated Includes Tax Benefits from Stock Options in Operating Activities (\$ millions)

	As Reported ^a		As Restated ^b	
	1998	1999	1998	1999
Cash provided by operating activities	\$6,880	\$10,030	\$8,433	\$13,137
Cash (used) by investing activities	(7,272)	(11,191)	(7,272)	(11,191)
Cash provided (used) by financing activities	554	2,245	(999)	(862)
Net change in cash	\$ 162	\$ 1,084	\$ 162	\$ 1,084
Tax benefits from stock options	\$1,553	\$ 3,107	\$1,553	\$ 3,107

^a Includes tax benefits from stock options in financing activities.

^b Includes tax benefits from stock options in operating activities.

Source: Microsoft Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 1999, p. 2002, Exhibit 13.4, and June 30, 2000, Exhibit 13.4.

pany's stock over the exercise price of its options on the date of exercise. As stock prices have declined since 2000, so have tax benefits from stock options. As an example, after peaking at over \$5 billion in 2000, the tax benefits from stock options at Microsoft declined to \$2.1 billion in 2001, \$1.6 billion in 2002, and \$1.4 billion in 2003.

Recently, the FASB proposed that tax benefits received arising from tax deductions related to the exercise of nonqualified stock options that exceed the amount of option-related compensation expense reported on the income statement should be classified as financing cash flow. Such a change in classification would be more in keeping with the financing nature of such tax benefits.³⁴

The Motivation

Managers are well aware of the importance placed by analysts, investors, and creditors on operating cash flow. Cash flow is the life-blood of any organization. A boost in operating cash flow, even as total cash flow remains unchanged, communicates enhanced financial performance. Consider, for example, the hypothetical cash flow statements presented in Exhibit 1.13.

As reported in both statements, cash on hand increased \$10 million. However, in Statement 1, the company consumed \$14 million in cash from operations. Those operating cash needs together with cash needs for investing activities of \$36 million were covered with new financing cash flow in the amount of \$60 million.

In Statement 2, the company generated positive operating cash flow of \$44 million. The company invested \$66 million in the business and obtained \$32 million in new financing to help meet its cash flow needs.

Exhibit 1.13 Statements of Cash Flows (\$ thousands)

	Statement 1	Statement 2
Cash provided (used) by operating activities	\$(14,000)	\$ 44,000
Cash (used) by investing activities	(36,000)	(66,000)
Cash provided by financing activities	60,000	32,000
Increase in cash	\$ 10,000	\$ 10,000

The company represented by Statement 2 is doing a better job of generating what would appear to be sustainable cash flow. That company is apparently investing more heavily and relying less on new financing to support its operating and investing activities.

What we now know, however, is that the company represented by Statement 2 may be no different from the company represented by Statement 1. For example, proceeds from the sale of investments may have been used to boost operating cash flow. Similarly, proceeds from new borrowings may also have been reported as operating cash flow. The net result is the appearance of improved financial performance. In the absence of careful scrutiny, this apparent improvement in financial performance might have a positive impact on a firm's share price, its borrowing costs, and the incentive compensation paid its executives.

Share Price Effects

As expectations for sustainable cash flow are increased, so is the present value of that cash flow stream, boosting share-price prospects. Share prices can be influenced to the extent that managers can increase the perception, and not the reality, that their firm is generating more sustainable cash flow. This point was not lost on the executives at companies such as Dynegy, Inc., and Enron Corp. Their managers went to extraordinary lengths to boost operating cash flow in an effort to increase or maintain their share prices.

Executives may also have an incentive to report less volatile cash flows, imparting an impression of lower firm risk. The perception of lower risk could move investors to lower their risk-adjusted discount rates. Lower discount rates would boost the present value of future cash flows and potentially raise share prices.

Borrowing Cost Effects

Interest and principal on loans are repaid with cash flow. Increases in operating cash flow may translate into perceived improvements in debt-service capacity. The net effect may translate into higher borrowing capacity, lower interest costs, less onerous loan covenants, fewer guarantees, or, possibly, less loan collateral. Returning to the Enron Corp. example, lenders may have been less willing to keep funding the company's operations had they known that the company was not, in fact, generating positive operating cash flow.

Incentive Compensation Effects

To the extent that steps taken to boost operating cash flow translate into higher share prices, managers compensated with stock options will enjoy increased compensation.

Beyond such equity-based arrangements, however, some managers may be paid cash bonuses linked directly to improvements in earnings or in operating cash flow. Consider Tyco International, Ltd., a company that has been accused of artificially boosting operating cash flow.³⁵ As described below, the company's bonus plan was based, at least in part, on improvements made in operating cash flow: "The cash bonus for the Chief Executive Officer and the Chief Financial Officer has two performance based criteria: (i) increase in earnings before non-recurring items and taxes and (ii) improvement in operating cash flow."³⁶

Adjustments for Sustainable Cash Flow

All of the factors highlighted in this section can and do lead to misleading operating cash flow amounts. These factors consist of:

- Using GAAP flexibility in cash flow classification
- Taking actions that extend beyond the boundaries of GAAP
- Benefiting from nonrecurring sources of operating cash flow
- Reporting taxes related to nonoperating items as operating cash flow

Reported operating cash flow should be adjusted for all of these items in determining sustainable cash flow.

IGNORING THE STATEMENT OF CASH FLOWS

It is not unusual for analysts to calculate their own measures of sustainable cash flow without using a company-provided cash flow statement. In such an approach, income statement results are adjusted for noncash expenses, such as depreciation and amortization, and for changes in working capital accounts taken from the beginning and ending balance sheets. Additional adjustments are made for changes in property, plant, and equipment accounts if a measure of free cash flow were desired.

Consider this quote: "Cash flow—revenue less operating expenses excluding depreciation and amortization, less investment in working and fixed capital—is a much better measure of a company's worth."³⁷ In substance, there is nothing wrong with this calculation of free cash flow made without use of the cash flow statement. However, it works better in theory than in practice.

On the surface, such a direct calculation of sustainable cash flow, whether operating cash flow or free cash flow, would appear to avoid the many problems of cash flow statements described here. That is, why worry about classification issues that affect the statement of cash flows when one can avoid them altogether by not using the cash flow statement? Why not steer clear of potential cash flow problems, such as a misclassification of overdrafts or investments reported as trading securities? Why not sidestep borrowed amounts reported as operating cash flow or nonsustainable contributions from securitized accounts receivable by just skipping the statement of cash flows altogether? Because these same problems plague the balance sheet and must be taken into account when one calculates cash flow using net income adjusted for noncash expenses and selected balance sheet changes.

Consider the overdraft item. Our research, as discussed more in Chapter 4, indicates

that most companies that employ overdraft financing include cash overdraft amounts in accounts payable. Accounts payable is a current liability and fulfills GAAP requirements stipulating only that overdrafts on the balance sheet should be reported as current liabilities. Yet by including overdrafts in accounts payable, any cash flow calculation that includes the change in accounts payable in operating cash flow will automatically include overdraft financing there. Thus, an income statement and balance sheet change approach, a method for calculating cash flow that uses net income adjusted for noncash expenses and changes in balance sheet accounts, does not bypass the problem.

Similarly, changes in investment positions classified as trading securities are included with operating cash flow. Such sources or uses of cash, derived from liquidating or adding to an investment position, are not sustainable. When using an income statement and balance sheet change approach, care must be taken to exclude changes in trading positions, properly reported as a working capital account, from calculations of sustainable cash flow.

Early in the chapter an example of Dynegy's misclassification of operating cash flow was provided. The company included borrowings from Citigroup, Inc., in operating cash flow. The company used a long-term purchase contract for natural gas as its vehicle for misclassifying borrowed amounts as operating cash flow. Recall that because the company was purchasing natural gas at below-market rates, it was able to report operating profits and cash flow. However, those profits were offset by losses on the remaining term of the contract. Those losses appeared in the company's open book of derivatives contracts and, because they had not been settled, were noncash losses. Accordingly, they were reported on Dynegy's balance sheet as an operations-related liability. As the losses grew, so did the liability account. If the balance sheet were used to calculate cash flow, increases in this derivatives-related liability would appear as an operating source of cash.

Finally, consider the case of securitized receivables. As noted, Xerox Corp. boosted its operating cash flow in 1999 by \$1,495 million through the sale of financing receivables. Generally accepted accounting principles stipulate that sales of receivables, which include properly structured securitization transactions, are to be included in operating cash flow. However, increases in cash flow derived in this manner are not sustainable. When sold or securitized, the balance in receivables declines. Thus, using the change in receivables from the balance sheet to calculate cash flow would improperly include this nonrecurring source.

Although there are problems with using an income statement and balance sheet change approach to calculate sustainable cash flow, such an approach has its place. Indeed, the Uniform Credit Analysis® approach discussed earlier also uses changes in the balance sheet in its calculations. However, just as reported operating cash flow must be adjusted to reclassify certain operating items and remove nonrecurring items before being used in analysis, misclassifications on the balance sheet must also be considered if an income statement and balance sheet change approach to cash flow calculation is employed.

CASH FLOW ANALYSIS

Cash flow analysis entails a search for the fundamental drivers that underlie a company's cash flow stream. The preparation of what we refer to as a cash flow analysis statement, a variation of the UCA® format referred to earlier, is a very useful starting point. The cash flow analysis statement is an income statement and balance sheet change approach

to preparing a cash flow statement. Exhibit 1.14 presents the cash flow analysis statement up to the line item referred to as adjusted cash flow from operations.

The cash flow analysis statement is useful in clarifying sustainable sources and uses of cash. However, before completing the statement, it is important to carefully review the financial statements and footnotes to identify misclassified and nonrecurring items, discussed earlier, that may lead to misguided cash flow calculations. Where needed, adjustments and reclassifications should be made to the items presented on the cash flow analysis statement to ensure that the statement format highlights sustainable and nonsustainable sources and uses of cash. Preparation and use of the cash flow analysis statement is discussed in Chapter 9.

Cash Flow Drivers

The next step is to identify the fundamental drivers that underlie a company's operating cash flow. In particular, our interest is in determining the sustainability of the factors comprising cash flow from operations.

Exhibit 1.14 Cash Flow Analysis Statement, through Cash Flow from Operations

Revenue

Change in operating receivables

Change in deferred revenue

Cash from revenue

Cost of revenue (excluding depreciation & amortization)

Change in inventory

Change in operating payables

Cash cost of revenue

Cash gross margin

Selling, general and admin. expense (excluding depreciation & amortization)

Research and development expense (excluding depreciation & amortization)

Capitalized operating expense

Change in prepaids

Change in accruals

Cash operating expense

Core operating cash flow

Other cash income (expense)

Income taxes paid

Cash flow available for debt service

Total interest paid

Cash flow from operations

The sustainability of these drivers or factors comprising cash flow from operations is a function of a company's growth and changes in its underlying profitability and efficiency. For example, a better understanding of whether an increase in cash gross margin will be sustained can be gained by determining whether changes in items such as cost of revenue or inventory are due to growth, to a change in gross margin, or to a change in the number of days inventory is carried before sale. The cash effects of growth are sustainable provided a company's growth rate is maintained. However, there are inherent limits to the cash effects of changes in profitability and efficiency. For example, one cannot expect gross margin to increase beyond 100 percent. Similarly, the number of days inventory is carried for sale cannot be reduced below zero.

At this point we will not identify all of the factors that should be considered in analyzing cash flow from operations. Rather, we direct the reader's attention to Chapter 9, where the topic of cash flow analysis is developed more carefully.

PLAN OF THIS BOOK

We opened with a series of quotations from some respected financial professionals. By now the reader should be well aware that reported cash flow is not necessarily what it seems. Like earnings, cash flow can be managed in an effort to put a more positive spin on operating results. Even investors who think that dividends are a sign of real profitability should note that Enron Corp. paid out over half of its reported earnings in dividends. We now know that those earnings were, in fact, fabricated. The company actually borrowed the cash it needed to pay its dividends while reporting those borrowed amounts as operating cash flow.

The objective of this book is to help the analyst, investor, and creditor uncover sustainable sources of cash flow.

In Chapter 2, "Structure of the Statement of Cash Flows," we give some historical perspective on cash flow reporting. We present different cash flow formats used in the United States and abroad and identify some of the advantages and disadvantages of each. We also take a closer look at different definitions of cash flow, including EBITDA, FFO, and cash earnings, and highlight their strengths and weaknesses.

Chapters 3 and 4 address the topic of creative cash flow reporting. In Chapter 3, "Is It Operating or Investing Cash Flow?" we look at items that are misclassified between the operating and investing sections of the cash flow statement. Chapter 4, "Is It Operating or Financing Cash Flow?" focuses on misclassifications between the operating and financing sections. Both chapters include flexibility in GAAP and steps that are taken beyond the boundaries of GAAP as reasons for misreported cash flow.

In Chapter 5, "Income Taxes and the Statement of Cash Flows," the focus turns to the reporting of the cash effects of income taxes. Here we look at the effects on operating cash flow of the requirement in GAAP that all taxes must be reported in the operating section.

Chapter 6, "Nonrecurring Sources and Uses of Operating Cash Flow," seeks to identify cash flow items that are properly reported but that are derived from nonrecurring sources. In Chapter 7, "Measuring Sustainable Operating Cash Flow," we provide selected cases that demonstrate the adjustment techniques for calculating sustainable cash flow advocated here.

In Chapter 8, “Using Operating Cash Flow to Detect Earnings Problems,” we demonstrate how to use calculated sustainable cash flow in identifying companies that may have been aggressive in their reporting of earnings. Chapter 9, “Analyzing Operating Cash Flow,” provides guidance for uncovering the underlying drivers of sustainable cash flow. The book concludes with Chapter 10, “Understanding Free Cash Flow.” Because of the focus placed by analysts, investors, and creditors on free cash flow, it is important to afford that topic special attention.

SUMMARY

The current chapter establishes an organization for the entire book. Eleven key points were raised:

1. Like earnings, cash flow can be managed, creating a misleading signal of sustainable financial performance.
2. Among the three cash flow classifications—operating, investing, and financing—operating cash flow is the primary source of sustainable cash flow.
3. Sustainable cash flow is important to both equity investors and lenders.
4. Because it is carefully defined and readily available, cash provided by operating activities or operating cash flow is a useful starting point for deriving sustainable cash flow. However, adjustments to reclassify operating items and to remove nonrecurring items are often needed.
5. Free cash flow can be calculated from operating cash flow.
6. Popular alternative measures of cash flow—including earnings before interest, taxes, depreciation, and amortization (EBITDA), funds from operations (FFO) and cash earnings—are actually earnings-based, modified cash flow metrics and are not true measures of cash flow.
7. Creative cash flow reporting refers to any and all steps used to misrepresent the sustainability of operating cash flow. Creative cash flow reporting is effected by plying reporting flexibility in GAAP or by employing steps that extend beyond the boundaries of GAAP.
8. Misleading classifications under GAAP, especially in the reporting of income taxes, may also misrepresent sustainable cash flow, as will the inclusion of other nonrecurring sources and uses of cash.
9. Motivations to manage operating cash flow are provided by share price effects, borrowing cost effects, and incentive compensation effects.
10. An income statement and balance sheet change approach to calculating sustainable cash flow is a useful complement to computing it using a company’s reported operating cash flow.
11. An analysis of operating cash flow entails identifying the fundamental drivers underlying operating cash flow.

NOTES

1. C. Calhoun., “Your Cash Ain’t Nothin’ But Trash,” *The Joker* (New York: Capitol Records, 1973). The song was recorded by the Steve Miller Band.

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4. D. Harrison, "Business Valuation Made Simple," *Strategic Finance*, February 2002, p. 46.
5. J. McKinnon, "Are Tax-Free Dividends the Best Medicine?" *The Wall Street Journal*, January 17, 2003, p. A4.
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8. Ibid.
9. A. Galloni and D. Reilly, "How Success Story at Parmalat Got a Very Sour Final Chapter," *The Wall Street Journal*, December 22, 2003, p. A1.
10. A bank overdraft occurs when checks are presented for payment that exceed a company's cash balance held by its bank. A book overdraft becomes a bank overdraft when outstanding checks are presented for payment.
11. Dynegy, Inc., annual report, December 2001, pp. 4–5.
12. Ibid., p. 6.
13. As described, the transaction excludes a cost of funds. Presumably, provisions for interest were included in the agreement.
14. One exception has been proposed for income tax benefits related to nonqualified stock options. Refer to Financial Accounting Standards Board, *Exposure Draft, Share-Based Payment, an Amendment of FASB Statements No. 123 and 95* (Norwalk, CT: FASB, March 2004).
15. A popular variation on EBITDA is EBITDAR, which is EBITDA measured before rent expense.
16. There are many others. Refer to C. Mulford and E. Comiskey, *The Financial Numbers Game: Detecting Creative Accounting Practices* (Hoboken, NJ: John Wiley & Sons, 2002).
17. E. Douglass, "Global Probe Focusing on 2001 Practices," *Los Angeles Times*, October 14, 2002, p. C1. The quote is of Carr Conway, a forensic accountant with Dickerson Financial Investigation Group, Inc.
18. Refer to R. Beach, "Cash Flow vs. 'Cash Flow,'" *Commercial Lending Review*, Winter 1985–1986, pp. 48–52. Uniform Credit Analysis® and UCA® are registered trademarks of the Risk Management Association, Philadelphia, Pennsylvania.
19. BRE Properties, Inc., annual report, December 2001, p. 23.
20. Archstone-Smith Trust, annual report, December 2001, p. 7.
21. Statement of Financial Accounting Standards, *Statement No. 142, Goodwill and Other Intangible Assets* (Norwalk, CT: FASB, June 2001).
22. R. Berner and S. Lipin, "Food Lion Agrees to Acquire Hannaford," *The Wall Street Journal*, August 19, 1999, p. A3.

23. K. Brown and J. Eisinger, "Sysco Is Pulled into the Shadow over Food Firms," *The Wall Street Journal*, March 6, 2003, p. C1.
24. Earnings from 1997 to 2001 were restated. Refer to Xerox Corp., Form 10-K/A amended annual report to the Securities and Exchange Commission, January 27, 2003, p. 13.
25. *Ibid.*, p. 50.
26. In its restatement of results for 1999, Xerox also restated cash provided by operating activities to \$551 million. That amount included proceeds from the sale of accounts receivable and finance receivables of \$576 million. Once adjusted for the sale of receivables, restated cash provided by operating activities was a use of cash of \$25 million.
27. H. Sender, "Cash Flow? It Isn't Always What It Seems," *The Wall Street Journal*, May 7, 2002, p. C1.
28. H. Timmons, E. Thornton and L. Woellert, "Building a Case for Fraud in 2,000 Pages?" *Business Week*, March 24, 2003, p. 76.
29. *Ibid.*
30. Tyco International, Ltd., Form 10-Q quarterly report to the Securities and Exchange Commission, December 31, 2002, p. 40.
31. *Ibid.*, p. 3.
32. The one exception is for income tax benefits related to nonqualified stock options.
33. Emerging Issues Task Force, *Statement No. 00-15, Classification in the Statement of Cash Flows of the Income Tax Benefit Received by a Company upon Exercise of a Non-qualified Employee Stock Option* (Norwalk, CT: EITF, July 2000).
34. Financial Accounting Standards Board, *Exposure Draft, Share-Based Payment, an Amendment of FASB Statements No. 123 and 95*, (Norwalk, CT: FASB, March 2004).
35. M. Maremont, "How Is Tyco Accounting for Its Cash Flow?" *The Wall Street Journal*, March 19, 2002, p. C1.
36. Tyco International, LTD., Form Def 14A, Definitive Proxy Statement report to the Securities and Exchange Commission, January 29, 2001, p. 20.
37. A. Rappaport, "How to Avoid the P/E Trap," *The Wall Street Journal*, March 10, 2003, p. R2.

Structure of the Statement of Cash Flows

Since the issuance of FAS 95, the cash flow statements have been much less useful to analysts than we might have expected.¹

For many financial professionals, access to a statement of cash flows that is based on generally accepted accounting principles (GAAP) has always been part of their experience. The presentation of the statement is currently mandated, and its construction guided, by Statement of Financial Accounting Standards (SFAS) No. 95, “Statement of Cash Flows.”² However, 30 Accounting Principles Board (APB) Opinions and 94 Financial Accounting Standards Board (FASB) Standards were issued before the cash flow statement finally became a GAAP requirement.³ The value of cash flow information had long been recognized in the financial community, but the requirement for this major financial statement (income statement, balance sheet, and statement of cash flows) was a long time coming.

The delay in mandating the statement of cash flows may be linked to earlier ongoing efforts to transition more completely to a full accrual, as opposed to a mixed cash and accrual, basis of accounting. The development of cash measures of performance was seen as potentially undermining the preeminent role accorded net income as a measure of financial performance. This position was highlighted in the 1961 American Institute of Certified Public Accountants (AICPA) Accounting Research Study, “Cash Flow Analysis and the Funds Statement.”

For years a long struggle has been going on to develop the accrual basis of accounting, and the struggle still goes on. In essence the accrual basis of accounting itself developed and is developing in an effort to overcome the shortcomings of cash movements as indicators of the results of operations. And yet the newer emphasis on “funds flows” and “cash flows” seems to run counter to the movement to perfect accrual accounting.⁴

The initial focus of this chapter is on the historical background and developments that led to the current requirement that firms provide a statement of cash flows as part of their financial reporting package. A succession of GAAP pronouncements and other

developments, which began in the early 1960s and ended in 1987 with SFAS No. 95, are discussed. Beyond this, the initial discussion of the statement of cash flows provided in Chapter 1 is broadened and further technical background and detail are provided. Moreover, alternatives to GAAP operating cash flow, which currently are being employed by firms on a discretionary basis, are reviewed. Finally, some current differences between U.S. GAAP requirements for the statement of cash flows and those of the International Accounting Standards Board (IASB), as well as selected other foreign countries, are identified and discussed.

Prior to the issuance of SFAS No. 95, the word “funds” was the most common label used for statements that disclosed the effects of earnings and changes in balance sheet accounts on either working capital or cash. Most of these funds statements were organized around explaining the changes in working capital during a period of time. Funds statements designed to explain changes in cash were rather uncommon until the early 1980s.⁵ Use of the funds statement label prior to the issuance of SFAS No. 95 could indicate a statement that explained changes in either working capital or cash. An examination of the statement itself was required to determine which the case was.

The current statement of cash flows is the product of an evolutionary process spanning over a century. However, the quote that opens this chapter suggests that the current statement is not without its detractors. Some possible shortcomings will be identified here, but more extensive analysis centered on problematic classifications between operating cash flow and investing and financing cash flow, respectively, is provided in Chapters 3 and 4.

HISTORICAL BACKGROUND

As noted, the structure and content of what is currently known as the statement of cash flows has been evolving for over a century.⁶ The predecessors to the current statement of cash flows had a variety of titles: statement of source and use of working capital; statement of source and application of funds; statement of changes in working capital; and statement of changes in financial position. In most cases the use of the term “funds” referred to working capital, that is, current assets minus current liabilities, and not to cash.

Formats varied, but the statement usually opened with net income or loss and then included adjustments for nonfund, that is, non-working capital, revenues, and expenses. Following this, changes in balance sheet accounts that affected working capital were incorporated into the statement. The funds flow statement was designed to provide information about the flow of financial resources, or funds, beyond that provided by the income statement and balance sheet alone. The earliest discussions of the funds statement were inclined to focus more on details of construction and much less on the objectives or potential uses of the statement.

Early Funds Flow Statements

Some accounting scholars identify the origin of the funds flow statement as being as far back as the middle of the nineteenth century. However, it is very difficult to locate actual financial statements or annual reports from this period. Although it is unlikely to have been the first, the earliest funds flow statement that we could locate was included in the first annual report (1902) of United States Steel Corporation. The company, or its predecessor, may have produced this report, referred to as Summary of Financial Operations, for internal use even before 1902. The report is provided in Exhibit 2.1.

Exhibit 2.1 United States Steel Corp., Summary of Financial Operations of All Properties, Year Ended December 31, 1902 (Showing the Net Resources for the Year and Disposition Thereof)

Resources

Profit and Loss Surplus for the year, per Income Account		\$34,253,656.75
Net Receipts appropriated from Earnings for Bond Sinking, Depreciation, and Improvement Funds	\$27,814,389.47	
Less Payments therefrom to Trustees of Bond Sinking Funds	\$3,604,064.43	
Expended for Extraordinary Expenditures	7,926,792.60	11,530,857.03
		\$16,283,532.44
Net receipts account Insurance and Contingent Funds during the year		804,319.35
Balance of Receipts for year included in Fund Accounts		17,087,851.79
Bonds and Mortgages issued		2,370,338.35
Sundry Miscellaneous Receipts		5,920.98
Total Net Resources		\$53,717,767.87

Payments Made from Above

Expended for Additional Property and Construction	\$16,586,531.77	
Bonds and Mortgages paid (not including bonds redeemed with sinking funds)	1,697,577.33	
Purchase Money Obligations, Bills Payable, and Special Deposits paid off	13,652,367.94	
		31,936,477.04
Balance of Net Resources for the year, accounted for below		\$21,781,290.83
<i>Increase in Current Assets, viz.:</i>		
In Sundry Securities and Investments	\$3,193,604.83	
In Accounts and Bills Receivable in excess of Accounts Payable	9,595,635.15	
In Inventories and Miscellaneous Accounts	12,625,946.02	
		\$25,415,186.00
Less: Decrease in Cash on hand December 31, 1902, as compared to preceding year	3,633,895.17	
Balance as above		\$21,781,290.83

Source: First Annual Report of the United States Steel Corporation and Subsidiary Companies, December 31, 1902, p. 26. This report was generously made available to the authors by the Library of the Krannert Graduate School of Management, Purdue University.

Funds Statements at the Turn of the Twentieth Century

The United States Steel *Summary of Financial Operations* documents a very early interest in a statement that attempted to add information by linking income statement items with changes in balance sheet accounts. The title used by United States Steel—Summary of Financial Operations—implies an interest in a statement that captures something more than periodic financial performance, the income statement, or financial position, the balance sheet. The initial motivation for this type of statement or summary appears to be driven by the needs of management and not by the desire to inform shareholders. However, the presence of this funds flow statement in its initial annual report indicates that the company believed that the information would also be informative for its shareholders.

Financial accounting and reporting in 1902 was a good deal different from current practice. However, the basic elements of the funds flow statement are present in the United States Steel *Summary of Financial Operations*. Total fund or resource inflows were about \$53.7 million in 1902. The information in the resources section on receipts appropriated for various funds is not found in current practice. The \$16.3 million of net receipts appropriated—internally allocated but not distributed—added to total resources inflows because they were deducted earlier. This is analogous to having deducted depreciation in computing earnings and then adding it back to earnings in computing funds or cash flow.

The funds used—that is, payments made—amounted to about \$31.9 million. This resulted in the net addition to funds of \$21,781,290.83 (\$53,717,767.87 – \$31,936,477.04). This increase is linked to the associated net change in working capital balances (\$21,781,290.83) in the last section of the summary.

The separation of the decrease in cash on hand of \$3,633,895.17 gives the statement the appearance of a cash flow statement. However, this is simply due to the fact that the cash on hand was the only working capital balance that declined (asset declines are treated as fund sources) during the year. The 1903 statement displays the change in cash, an increase in this case, along with the 1903 increases in both accounts receivable and inventories. Working capital and not cash is the measure of funds that United States Steel used in this very early funds statement.

The principal subtotals included in the United States Steel *Summary of Financial Operations* can be reorganized to create a highly simplified statement of cash flows. The rationale for making this presentation is to highlight the fact that the information in the summary in Exhibit 2.1 includes everything required to construct a statement of cash flows. This simplified statement is provided in Exhibit 2.2.

**Exhibit 2.2 Simplified Cash Flow Statement Using United States Steel Data,
Year Ended December 31, 1902**

Total net resources	\$53,717,767.87
Payments made from total net resources	(31,936,477.04)
Increase in net current assets	(25,415,186.00)
Decrease in cash on hand	\$ 3,633,895.17

Source: Data in Exhibit 2.1.

Funds Statements in the Early to Mid-Twentieth Century

Beginning in 1939, a series of Accounting Research Bulletins (ARBs) were issued by the Committee on Accounting Procedure (CAP) of the American Institute of Certified Public Accountants (AICPA). The last ARB was issued in 1959, when the Accounting Principles Board (APB) of the AICPA replaced the CAP. Prior to 1939, generally accepted accounting principles were mainly just what the words implied: treatments that were commonly found in practice. Sample funds statements were found in some of the leading accounting textbooks of the day.

Professor H. A. Finney was a prominent author of accounting textbooks for decades, and his earliest textbooks were published in the 1920s. He was also a proponent of the funds statement. Some early samples of funds flow statements can be found in his books. As accounting professors Rosen and DeCoster note: “In the late 1910s and for most of the 1920s H. A. Finney led a drive to advocate adoption of a third major financial report—one showing the causes of a change in working capital.”⁷

Exhibit 2.3 presents a Statement of Sources and Applications of Funds that is representative of the funds statement provided by firms in the 1920s. It is consistent with the format advanced by Professor Finney in his textbooks during this period.

The statement in Exhibit 2.3 is in a balanced format, that is, the total funds provided of \$1,230,000 equal the total funds applied of \$1,230,000. A common alternative format would show total funds provided of \$1,230,000 minus funds applied of \$1,025,000 (\$1,230,000 minus \$205,000), yielding the change in working capital of \$205,000.

Note that individual changes in working capital accounts are not included in the body of the funds statement. Instead, the focus is on making adjustments for (a) non-working-capital expenses and (b) those increases or decreases in noncurrent assets, liabilities, and shareholders' equity accounts that affect working capital. However, it would be common for a separate schedule of the detailed changes in working capital to be provided.

The acquisition of a machine by signing a long-term note payable would not appear in the funds statement because working capital is not affected, that is, neither the machine nor the note payable account is a current asset or a current liability. However, acquisition of the same machine by recording an account payable would appear as a use of funds in the statement. The increase in accounts payable reduces working capital.

By current standards, the absence of any classification of sources and uses of funds, beyond simply provided versus applied, is a notable feature of the funds statement in Exhibit 2.3. With the possible exception of a measure of funds from operations, the absence of classification largely persisted until the 1988 implementation of SFAS No. 95. In later years, it was common to refer to the \$1,000,000 subtotal in the exhibit, net income plus depreciation and the patent write-off, as *cash flow*. The changes in the working capital accounts, with the exception of the change in cash, would now appear as part of the determination of cash flows from operating activities under SFAS 95. The other items in the funds statement would be classified in the investing and financing sections of a current, SFAS 95, statement of cash flows.

A detailed schedule of the changes in working capital was presented with the example in Exhibit 2.3, but is not reproduced above. It shows an increase in working capital for the year of \$3,020. Even in the absence of a classification scheme, the information in the funds statement does help to clarify how working capital grew by \$3,020 in the face of no new financing, a net profit of only \$2,370, and dividend distributions of \$10,000. Net

Exhibit 2.3 Statement of Sources and Applications of Funds, Year Ending December 31, 1925
Funds provided by

Earnings:		
Net income		\$ 700,000
Add non-fund charges:		
Depreciation	250,000	
Write-off of patent	50,000	300,000
		<hr/>
		1,000,000
Disposition of fixed assets:		
Building	100,000	
Machinery and equipment	50,000	
Issuance of common stock	80,000	230,000
		<hr/>
Total Funds Provided		\$ 1,230,000

Funds applied to

Acquisition of fixed assets:		
Machinery	\$500,000	
Land	250,000	
Repayment of long-term debt	150,000	
Payment of dividend	125,000	\$ 1,025,000
		<hr/>
Increase in working capital		205,000
Total Funds Applied		\$ 1,230,000

profit of \$2,370 plus \$9,550 of charges not requiring funds, along with \$1,100 received from the sale of fixed assets, yielded \$13,020 of funds—that is, working capital. Subtraction of the dividend distribution of \$10,000 from the funds produced of \$13,020 exactly explains the \$3,020 increase in working capital. This insight into changes in financial position is much more readily achieved in this case with a funds flow statement than if only an income statement and balance sheet were available.

The absence of documentation on financial reporting practices during the 1930s and 1940s makes it difficult to systematically monitor changes in the format of funds flow statements at this time. These were years dominated by the Depression of the 1930s, the world war of the late 1930s to the mid-1940s, and the Korean conflict of the early 1950s. A good deal of accounting attention during and immediately after World War II was given to matters unique to the war environment. We do know that there were no official GAAP releases on the funds flow statement until 1963. Hence, dramatic changes in the nature of the statement seem unlikely, although the number of firms providing a funds statement increased. Fortunately, the emergence in the 1950s of an annual survey of financial reporting practices, which is conducted by the AICPA, provides valu-

able insight into the evolution of practice up to the point at which standard setters became active.

Funds Flow Statements in the Late 1950s to Early 1960s

During the 1950s, the funds statement received scant attention in the annual survey of financial statements conducted by the AICPA and published in the annual volume, *Accounting Trends and Techniques*. For example, the twelfth edition (1958) simply included four funds flow statements as examples of funds flow practice along with some associated exhibits. Three of these statements (Meredith Publishing, Endicott Johnson, and Scott Paper, each 1956/1957 statements) were organized around explaining changes in working capital. However, the fourth, that of the Gillette Company, was linked to the change in cash and marketable securities. There are some interesting contrasts between the 1930s funds statement in Exhibit 2.3 and the Gillette statement in Exhibit 2.4.

Some Differences between Funds Statements in the 1930s and 1950s

Unlike the statement in Exhibit 2.3, two of the four statements included in the 1958 issue of *Accounting Trends and Techniques* included an *operations* subtotal as the first section of the statement. The Gillette operations subtotal in Exhibit 2.4 is an early form of cash flow from operations.

Gillette's provision of a funds statement with a subtotal for funds from operations was clearly discretionary because there was still no official GAAP covering the funds statement in the mid-1950s. However, Gillette's operations section deviated from current requirements on two key dimensions:

1. The operations subtotals for 1956 and 1957 are on a pretax basis. Estimated income taxes have been added back to net income. The actual cash tax payments are then listed among the "funds applied." Current practice opens the operations section with profit on an after-tax basis and would make tax-related adjustments for changes in deferred income taxes as well as income taxes payable and receivable.
2. The changes in working capital accounts (e.g., accounts receivable and inventories) have not been incorporated into the determination of cash flow from operations.

Statement 2 is based on the assumption that the \$64,406,065 and \$55,246,742 in 1956 and 1957, respectively, are intended to be approximations of cash from operations. These measures are not labeled. However, it has been common over the years to see net income plus depreciation and other noncash charges labeled as cash flow. To be consistent with current GAAP, Gillette's operations measure would need to include the cash tax payments as well as the changes in working capital accounts.

The only classification in the Gillette funds flow statement was for operations, as was common practice for decades. Investing and financing cash flows were simply listed among funds available and funds applied. For example, the funds sources in 1956 and 1957 from "Issuance of common stock under stock option plan" are financing cash flows.

Exhibit 2.4 Gillette Company, Statements of Source and Application of Funds, Years Ending December 31, 1956 and 1957

	1956	1957
Funds Became Available from:		
Operations:		
Net income as reported	\$31,544,304	\$25,940,570
Reversal of charges (credits) not involving cash outlay (inflow):		
Adjustment of foreign earnings to current accrual basis	(837,232)	(858,064)
Depreciation	2,644,367	3,084,485
Amortization of retirement prepayments	554,626	579,751
Estimated U.S. and foreign income taxes	30,500,000	26,500,000
	64,406,065	55,246,742
Decrease (increase) in accounts receivable	(5,285,257)	3,408,190
Increase in current liabilities	883,622	328,972
Issuance of common stock under stock option plan	661,503	298,616
Other sources	410,716	—
	\$61,076,649	\$59,282,520
These Funds Were Applied to:		
Pay U.S. and foreign income taxes	31,153,075	31,271,318
Increase inventories	3,964,769	1,383,432
Treasury stock transactions—net	973,531	(62,743)
Add to fixed assets	6,848,496	4,988,212
Acquisition cost of patents, trademarks & goodwill	934,944	—
Pay dividends on common stock	20,865,734	20,873,892
Payments on bank loan	4,500,000	1,500,000
Prepayments under retirement plan	639,336	118,673
Other items	—	376,177
	69,879,885	60,448,961
Resulting In:		
A decrease in cash and marketable securities	\$ 8,803,236	\$ 1,166,441

Source: *Accounting Trends and Techniques* (New York: AICPA, 1958), p. 213.

The applications of funds in both 1956 and 1957 to “Add to fixed assets” are investing cash flows. Removing the application of funds to pay income taxes from the determination of funds from operations is also at odds with current GAAP.

The absence of GAAP guidance up to the early 1960s left considerable room for the application of creativity in the design of the funds statement. For the first time in the 1960s, this diversity in practice began to receive the attention of the standard setters.

Standard Setters Come to Life

As a growing number of firms included the statement in their annual reports, there was a rising sense in the 1950s that guidance on format and construction of the funds statement was needed. This led the AICPA to commission a study of cash flow analysis and the funds statement in 1960. The director of research of the AICPA, Maurice Moonitz, provided some of the motivation for the study in his director's preface to the published report. He pointed to "ferment and experimentation that is going on with respect to financial statements" as well as "the increased use of the statement of source and application of funds and the recent emergence of an amorphous concept known as cash flow."⁸

This concern remained somewhat muted as long as only a minority of firms provided a funds statement, and the statement was clearly not seen as on a par with the income statement and balance sheet. However, the nineteenth edition of *Accounting Trends and Techniques* revealed that 90 out of 600 companies included a funds statement in their 1963 annual reports.⁹ This number almost doubled to 177 companies in 1964 following the issuance in 1963 of Accounting Principles Board Opinion No. 3, the first GAAP pronouncement on the funds statement.¹⁰

A First Cautious Step: APB No. 3

The Accounting Principles Board came into existence in 1959, replacing the Committee on Accounting Procedure, which had functioned between 1939 and 1959. The Financial Accounting Standards Board in turn replaced the APB in 1973. The primary mission of the APB was to establish appropriate accounting practices as well as to reduce the range of differences encountered in practice. There was, in fact, a good deal of diversity in practice in the case of the funds statement.

Groundwork for APB No. 3: Accounting Research Study No. 2 A key feature of the APB is that its decisions were to be based on, where possible, research conducted by the AICPA. The AICPA Accounting Research Study, "Cash Flow Analysis and the Funds Statement" (ARS No. 2) played a role in the crafting of APB No. 3. The central conclusions and recommendations of this study are summarized in Exhibit 2.5.

Items 1 to 7 in Exhibit 2.5 are summaries of the conclusions and recommendations found in ARS No. 2. The key recommendations are items 5 and 6. These called for providing a funds flow statement and also for it to be covered by the auditor's report. In addition, a broader concept of funds, which is not limited to working capital, was called for. Beyond this, opposition was registered against the provision of "isolated" cash flow statistics.

It is notable that specific uses of cash flow are identified in item 2 of Exhibit 2.5. These were to meet debt requirements, maintain dividends, and fund asset replacements and expansion. Discussion of tailoring measures of cash flow to meet these varying uses is found in Chapter 10.

The key features in APB No. 3 are listed in Exhibit 2.6 and are contrasted with the conclusions and recommendations of ARS No. 2 found in Exhibit 2.5.

The Accounting Principles Board, in APB Opinion No. 3, recommended, but did not require, that a funds statement be provided as supplementary information in financial reports. Moreover, if a funds statement were provided, APB No. 3 did not call for it to be

Exhibit 2.5 Accounting Research Study No. 2: Key Conclusions and Recommendations

1. Depreciation is not a source of funds.
2. In financial analysis, cash flow is net income after adding back noncash expenses and in some cases deducting noncash income. Cash flow can be used to judge the ability to meet debt requirements, to maintain dividends, and to fund replacement and expansion costs.
3. Fixed asset replacements are assumed to be financed principally with *retained funds* associated with depreciation accounting.
4. Cash flow is neither an improvement on nor a substitute for net income as a measure of the results of operations.
5. A funds statement should be treated as a major financial statement, should be required in all annual reports, and should be covered by the auditor's report.
6. A broad concept of funds should be employed, and the statement should not simply explain the changes in working capital or funds during the period.
7. Isolated comments or statistics concerning cash flow should be avoided since they are generally meaningless and often misleading.

Source: P. Mason, *Accounting Research Study No. 2, Cash Flow Analysis and the Funds Statement* (New York: AICPA, 1961), pp. 42–43.

Exhibit 2.6 Key Features of APB No. 3, *The Statement of Source and Application of Funds*

1. Recommended, but did not require, that firms present a statement of source and application of funds as supplementary information. Coverage of the funds statement by the independent accountant's report would also not be mandatory.
2. Determined that the funds concept used in the statement should be broader than working capital and would include nonfund transactions, for example, issuance of common stock for fixed assets.
3. Recommended use of statement titles such as "Statement of Resources Provided and Applied" and "Statement of Source and Application of Funds."
4. Declared a preference for an initial presentation of funds from operations (net income or loss adjusted for nonfund items of revenue or expense) in the funds statement.
5. Identified items that if material should be disclosed in the funds statement: increases or decreases in capital stock, except if due to stock dividends or stock splits, noncurrent liabilities, and noncurrent assets.

Source: Accounting Principles Board, *Opinion No. 3, The Statement of Source and Application of Funds* (New York: AICPA, October 1963), paragraphs 8–15.

covered by the report of the independent accountant. Both of these positions were sharply at odds with the principal recommendations, especially item 5 in Exhibit 2.5, of ARS No. 2. ARS No. 2 not only recommended that a funds flow statement be required but held that it should be considered to be a major financial statement and not simply as supplementary information.

APB Opinion No. 3 did agree with the ARS No. 2 recommendation that construction of the funds statement should use a concept of funds broader than working capital. The measure used should be one that could properly be “characterized or defined as all financial resources.”¹¹ Beyond this, APB Opinion No. 3 strongly endorsed the cautionary views in ARS No. 2 on the presentation and use of cash flow information. APB Opinion No. 3 warned against use of cash flow information without reference to the full funds flow statement or viewing funds from operations as a substitute for net income. The last two sentences of the APB Opinion No. 3 focused on further concerns about the possible misuse of cash flow information:

Cash flow and related terms should not be used in annual reports in such a way that the significance of net income is impaired, and *cash earnings*, or other terms with a similar connotation should be avoided. The Board regards computations of *cash flow per share* as misleading since they ignore the impact of cash expenditures for renewal and replacement of facilities and downgrade the significant economic statistic of *earnings per share*.¹²

The position taken by the APB in Opinion No. 3 was somewhat surprising given the strong recommendation in ARS No. 2 to make the funds statement mandatory.¹³ The board simply may have been exercising an abundance of caution since it had been organized only in 1959 and had issued only two previous opinions. In addition, the board was in the midst of a major dispute over APB Opinion No. 2, “Accounting for the Investment (Tax) Credit.”¹⁴ The board expressed the view that a funds flow statement should be presented, but it did not make this mandatory. The board may have seen this strategy as safer than mandating the provision of a funds statement only to have the requirement rejected by the Securities and Exchange Commission.¹⁵

Although not required by APB No. 3, the number of firms that included a funds statement in their annual reports continued to grow. The flexibility in the form and content of the funds statement permitted under APB No. 3 no doubt contributed to a good deal of diversity in practice. The widespread voluntary presentation of the funds statement along with considerable differences in practice prompted the board to revisit the subject of the funds statement. The outcome was the issuance eight years later of APB No. 19, “Reporting Changes in Financial Position.”¹⁶

A Funds Statement Is Mandated: APB No. 19

APB No. 19, “Reporting Changes in Financial Position,” was issued in March 1971. This APB opinion called for the presentation of a funds statement. By the time this opinion was issued, the widespread voluntary presentation of funds statements made opposition to the required presentation of a funds statement unlikely. Moreover, its positioning in the annual report along with the other conventional statements made it clear that the funds statement was already seen as a key financial statement. The primary requirements of APB No. 19 are outlined in Exhibit 2.7.

Exhibit 2.7 Key Features of APB No. 19, Reporting Changes in Financial Position

1. Called for firms to provide a Statement of Changes in Financial Position (SCFP) when financial statements that purport to present both financial position and results of operations (a balance sheet and income statement) are issued.
2. The scope of the SCFP was to be broad and incorporate financing and investing activities, even if neither cash nor other components of working capital were involved.
3. Broad flexibility was permitted in terms of form and content, in recognition of the need to meet objectives in a range of different individual firm circumstances.
4. Working capital or cash from operations was to be disclosed, with the effects of extraordinary items reported separately. Both the indirect and direct methods of arriving at working capital or cash from operations were permitted.
5. Net changes in each element of working capital were to be disclosed either within the SCFP or in an associated schedule.

Source: Accounting Principles Board, *Opinion No. 19, Reporting Changes in Financial Position* (New York: AICPA, March 1971), paragraphs 7–14.

The key distinction between APB No. 19 and its predecessor, APB No. 3, is the requirement that a funds statement “should” be presented. APB No. 3 held that providing a funds statement was optional. However, in APB No. 19 the board stated that:

When financial statements purporting to present both financial position (balance sheet) and results of operations are issued, a statement summarizing changes in financial position *should* (emphasis added) also be presented as a basic financial statement for each period for which an income statement is presented.¹⁷

APB No. 19 also supported the broad concept of funds that was recommended in APB No. 3 and called for the inclusion of noncash or non-working capital investing and financing transactions *within* the funds statement. Some examples of this latter requirement are provided in Exhibit 2.8.

The items in Exhibit 2.8 appeared within the body of the funds statement. As the dollar amount of the sources and uses were the same, the net effect on the explanation of changes in funds is zero.

Disclosure of a subtotal for working capital or cash from operations was required under APB No. 19. APB No. 3 expressed a preference for a statement format that begins “with funds derived from operations (net income plus or minus non-fund adjustments).”¹⁸ APB No. 19 called for the inclusion of financing and investing transactions in the funds statement, but did not require their classification into separate financing and investing categories. Both APB No. 3 and No. 19 provided a good deal of flexibility in terms of form and content of the funds statement. A comparison of the two funds statement opinions reveals a good deal of similarity. Key changes introduced by APB No. 19 included moving the funds statement to required status and bringing nonfund financing and investing transactions into the body of the funds statement.

Exhibit 2.8 Nonfund Investing and Financing Activity in the Funds Statement

Company		Nonfund Investing and Financing
Acme Cleveland, Corp. (1979)	Source:	Common shares issued on conversion of preferred
	Use:	Conversion of preferred shares
FMC Corp. (1979)	Source:	Common stock issue on debt conversion
	Use:	Conversion of debt into common stock
Giant Food, Inc. (1979)	Source:	Additions to obligations under capital leases
	Use:	Capitalization of leased property

Source: *Accounting Trends and Techniques*, 38th edition, ed. Jack Shohet (New York: AICPA, 1980), pp. 356 and 368.

APB No. 19 was the authoritative statement on reporting the flow of funds under GAAP for about 17 years. Early in this interval, 1973, the Financial Accounting Standards Board replaced the APB. There was a growing embrace of cash as the most relevant measure of funds in the funds statement early in the life of the FASB. The “cash is king” mantra rose quite dramatically across the U.S. financial and business community. Therefore, it was no surprise when the FASB issued a new statement, SFAS No. 95, “Statement of Cash Flows,” in 1987 that required a statement of cash flows.¹⁹

ARRIVAL OF THE STATEMENT OF CASH FLOWS

The structure and content of the current statement of cash flows is the evolutionary product of a long line of funds statements that go back to at least the early twentieth century. A growing emphasis on cash as the measure of funds developed in the years following the issuance of APB No. 19. This movement was accelerated in the early 1980s by the activities of the FASB, the SEC, and the Financial Executives Institute (FEI).²⁰ The FASB issued a document in 1981 that supported the use of cash flow in the funds statement.²¹ The FEI also encouraged a shift to a cash-basis funds statement.²² In January 1983 the commissioner of the SEC published an article that recommended a focus on cash flow reporting.²³

Presentation of a cash-based funds statement accelerated dramatically in the early 1980s. The movement was no doubt influenced by the activities cited above. Survey results on the presentation of cash versus working capital funds statements for the years 1980 through 1983 are provided in Exhibit 2.9. These results are based on the 600 companies covered in annual surveys of financial reporting practices conducted by the AICPA.

Purpose and Uses of the Statement of Cash Flows

The primary purpose of the statement of cash flows, as well as its usefulness to investors, creditors, and others is stated in SFAS No. 95: “The primary purpose of a statement of cash flows is to provide relevant information about the cash receipts and payments of an

Exhibit 2.9 Movement to a Cash-Based Funds Statement, 1980 to 1983

	1980	1981	1982	1983
Working capital as funds	541	466	346	286
Cash as funds	59	134	254	314
Totals	600	600	600	600

Source: Accounting Trends and Techniques, 38th edition, ed. Jack Shohet (New York: AICPA, 1984), p. 366.

enterprise during a period.”²⁴ Further detail outlined how the statement was expected to help investors, creditors, and others to:

- Assess a firm’s ability to generate future net cash flows.
- Assess the ability of the firm to meet its obligations, pay dividends, and to judge its needs for external financing.
- Assess reasons for differences between net income and operating cash receipts and payments.
- Assess the effects on financial position of cash and non-cash investing and financing activities during the period.²⁵

SFAS No. 95 called for a number of features in the required statement of cash flows that were not found in either APB No. 3 or APB No. 19.

Key Features of SFAS No. 95, “Statement of Cash Flows”

The key features of SFAS No. 95 are outlined in Exhibit 2.10.

In brief, SFAS No. 95 mandated the use of single funds concept, that is, cash and cash equivalents. According to the standard, “Cash is the most useful concept of funds because decisions of investors and creditors, and others focus on assessments of future cash flows.”²⁶ Moreover, a classification scheme that included investing and financing cash flows was also required.

Two approaches to the determination of operating cash flow were permitted, direct and indirect, but the direct method was recommended. Both methods are illustrated in this chapter. The effect of exchange rate changes on foreign-currency cash balances was also to be included in a reconciliation of beginning and ending cash balances.

The separate disclosure of noncash investing and financing activity was required. This disclosure differs from APB No. 19, where the concept of all financial resources required inclusion of all noncash investing and financing activities within the body of the statement of changes in financial position.

Definition of Cash and Cash Equivalents

The concept of cash in the standard goes beyond cash as such and includes highly liquid investments that are readily convertible into cash. The standard defines cash equivalents

“as short-term, highly liquid investments that are both (a) readily convertible to known amounts of cash and (b) so near to their maturity that they present insignificant risk of changes in value because of changes in interest rates.”²⁷

Some examples of cash equivalents are Treasury bills, commercial paper, and money market funds. Investments are to be treated as cash equivalents only if their original maturity to the holder is three months or less. Exhibit 2.11 presents some typical disclosures of accounting policies for cash and cash equivalents.

Exhibit 2.10 Key Features of SFAS No. 95, Statement of Cash Flows

1. A cash flow statement was required.
2. Either the direct or indirect method of computing cash flow from operating activities could be used, but the direct method was recommended.
3. If the direct method was used, then a reconciliation of net income before extraordinary items to cash flow from operating activities, that is, the indirect method, must also be provided. That is, cash flow from operating activities must be presented using both the direct and indirect formats.
4. Cash flow must be classified into three categories: operating, investing, and financing.
5. Non-cash financing and investing activity must be disclosed, but outside of the body of the statement of cash flows.
6. The effects of foreign currency rate changes on cash held in foreign currencies are to be included as part of the reconciliation of beginning and ending cash balances.

Source: Financial Accounting Standards Board, *Statement of Financial Accounting Standards No. 95, Statement of Cash Flows* (Norwalk, CT: FASB, November 1987), paragraph 5.

Exhibit 2.11 Some Examples of Cash and Cash Equivalents

FoneFriend, Inc. (2003)

Cash and cash equivalents consist of cash and highly liquid investments with maturity dates of three months or less at the date of purchase. These items are carried at cost, which approximates fair value due to their short-term maturity dates.

Travelshorts.Com, Inc. (2003)

All highly liquid investments purchased with an original maturity of three months or less are considered to be cash equivalents.

Unify Corp. (2003)

Cash equivalents are highly liquid investments with original maturities of three months or less when purchased and are stated at cost. Cash equivalents consist primarily of demand deposits with banks, certificates of deposit, money market funds, and corporate debt securities.

Sources: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

Restricted Cash

On occasion, cash or cash equivalents may be restricted to use for an identified purpose. These amounts are not to be included in cash and cash equivalents on the balance sheet. Rather, they are listed as a separate account balance. Some examples of cash restrictions are provided in Exhibit 2.12.

The common theme in the examples in Exhibit 2.12 is that cash restrictions provide a degree of payment or performance assurance to another party.

Alternative Statement Formats

Two cash flow statement formats, direct and indirect, are permitted under SFAS No. 95. However, the statement encourages firms to use the direct format. In spite of this recommendation, recent survey data reveal that only about 1 percent of firms present the statement of cash flows in the direct format.²⁸ The two formats differ only in how cash flow from operating activities is developed. The direct statement employs gross operating cash receipts and payments to arrive at operating cash flow. The indirect approach begins with net income or loss and then makes adjustments for noncash revenues and expenses and changes in working capital balances to arrive at operating cash flow. If the direct format is used, then SFAS No. 95 requires that operating cash flow also be presented using the indirect method. That is, operating cash flow is computed once for firms using the indirect method but twice for firms using the direct method. This latter requirement may partially explain why so few firms use the direct method. The presentation of investing and financing cash flows are identical under each method.

Direct Statement of Cash Flows

The FASB position is that “the principal advantage of the direct method is that it shows operating cash receipts and payments.”²⁹ Gross operations-related cash receipts and payments are used in arriving at cash flow from operating activities. This computation of operating cash flow is comparable to a cash-basis income statement. A great strength of this format is its simplicity. For example, the computation of operating cash flow for Reconditioned Systems under the direct method, presented in Exhibit 2.13, required only four line items.³⁰

Exhibit 2.12 Examples of Cash Restrictions

The Singing Machine Co. (2003)

A separate, restricted, account balance must be maintained in connection with a letter of credit facility and a short-term loan.

Todd Shipyards Corp. (2003)

Restricted cash will be released when contracted work is completed.

Translational Financial Networks, Inc. (2003)

Restricted cash balances are maintained on deposit with warehouse lenders. They are not available for general corporate purposes.

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

**Exhibit 2.13 Direct Statement of Cash Flows, Reconditioned Systems, Inc.,
Years Ended March 31, 2002, and 2003**

	2002	2003
Cash Flows from Operating Activities:		
Cash received from customers	\$ 8,948,330	\$ 10,787,900
Cash paid to suppliers and employees	(8,975,076)	(11,114,442)
Income taxes received/(paid)	(72,305)	336,186
Interest received	49,336	22,631
Net cash provided/(used) by operating activities	(49,715)	32,275
Cash Flows from Investing Activities:		
Investments in short-term notes receivable	(100,000)	—
Purchase of property and equipment	(254,900)	(132,938)
Other	(32,028)	(571)
Net cash used by investing activities	(386,928)	(133,509)
Cash Flows from Financing Activities:		
Purchase of treasury stock	(31,925)	(2,904)
Transfers to/from ESP plan	6,518	1,036
Net cash used by financing activities	(25,407)	(1,868)
Decrease in cash and cash equivalents	(462,050)	(103,102)
Cash and cash equivalents at beginning of period	1,839,284	1,377,234
Cash and cash equivalents at end of period	\$ 1,377,234	\$ 1,274,132

Source: Reconditioned Systems, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, pp. 13–14.

Computation of cash from operating activities under the indirect method typically requires many additional line items. Operating cash flow for Reconditioned Systems under the indirect method is presented in Exhibit 2.14.

Operating Cash Flow under the Direct versus Indirect Method The direct method produces the operating cash flow with only a few line items. Application of the indirect method to Reconditioned Systems, presented in Exhibit 2.14, required about twice as many lines as the direct method, presented in Exhibit 2.13. However, these extra line items often provide additional information about operating cash flow, as well as earnings, which could not be discerned from the direct format alone.

The direct format simply shows cash received from and paid for operating items—cash from customers, cash paid to suppliers and employees, and so on. However, the direct display for Reconditioned Systems does reveal information about a cash inflow from

Exhibit 2.14 Indirect Computation of Cash Flow from Operating Activities, Reconditioned Systems, Inc., Years Ended March 31, 2002, and 2003

	2002	2003
Reconciliation of Net Income/(Loss) to Net Cash Provided/(Used) by Operating Activities:		
Net Income/(Loss)	\$(284,095)	\$ 50,277
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	115,641	205,462
Provision for doubtful accounts	(16,500)	22,000
Noncash portion of officer note buy-out	(5,100)	—
Changes in assets and liabilities:		
Accounts receivable	618,311	(745,935)
Inventory	26,396	64,766
Prepaid expenses and other assets	149	(37,376)
Income taxes receivable	(293,508)	338,249
Deferred income taxes receivable	(62,982)	14,697
Accounts payable and accrued expenses	(148,027)	120,135
Net cash provided by operating activities	\$ (49,715)	\$ 32,275

Source: Reconditioned Systems, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 14.

a tax refund during 2003. The refund is related to losses incurred in previous years and should be seen as a nonrecurring source of operating cash flow. Absent the tax refund, Reconditioned Systems would have experienced a sharp increase in its use of cash in operations. Instead, the refund swung the company to a small positive operating cash flow.

The indirect format provides information that helps readers identify the sources of changes in cash flow as well as highlighting reasons for the differences between earnings and operating cash flow. The addition of noncash depreciation expense to 2003 net income is a major factor in explaining differences between earnings and operating cash flow. Similarly, the list of changes in assets and liabilities provides information that is central to the determination of cash flow from operating activities. This information also helps the reader to understand operational aspects of the business.

A reduction in accounts receivable of \$618,311 during 2002 benefited operating cash flow, but an increase of \$745,935 in 2003 reduced operating cash flow. Revenue decreased by 43 percent for Reconditioned Systems in 2002, but increased by 39 percent in 2003. Hence, the decrease followed by an increase in accounts receivable is not surprising. Further detail on analyzing such changes in working capital accounts relative to changes in revenue is provided in Chapter 9.

The management of Reconditioned Systems found some of the information located in the indirect computation of operating cash flows to be useful in explaining its liquidity

position. This discussion is an SEC-required component of management's discussion and analysis of financial condition and results of operations (MD&A). Among other items, management cited changes in several of its working capital accounts as playing a role in explaining its liquidity position. Each of these items is displayed in the indirect format presentation of operating cash flows but not in the direct format.

Beyond issues of cash flow, the indirect format often reveals items that would be considered to be nonrecurring items of revenue, gain, expense, or loss. This is because nonrecurring items are included in net income but frequently are either noncash or nonoperating in nature. Both such items will be adjustments in reconciling net income to operating cash flow. As a result, they will be disclosed as part of the indirect-format computation of operating cash flow.

Indirect Statement of Cash Flows

As noted earlier, about 99 percent of U.S. firms elect to provide an indirect statement of cash flows in complying with the requirements of SFAS No. 95. The indirect statement of cash flows of Krispy Kreme Doughnuts, Inc., is presented in Exhibit 2.15.

Krispy Kreme's reported profits as well as its operating cash flow are growing rapidly. However, in 2003 cash from operations was insufficient to fund its investment outlays, which amounted to a net of \$95 million. The financing section reveals that \$44 million of new long-term borrowings funded this shortfall of about \$44 million, \$95 million minus \$51 million of cash flow from operations. Another \$10 million was also raised by a variety of other financing activities.

A review of the components of cash flow from operations highlights several items of interest. Krispy Kreme's rapid growth consumed cash flow because of growth-related investments in key working capital components. For example, 2002 increases in accounts receivable and inventory consumed \$17.3 million of cash. This was offset in turn by cash flow benefits from an \$8.0 million buildup in accounts payable and accrued expenses. The overall increase of \$14.8 million in operating cash flow in 2003 was also a product of the growth in profits and tax benefits from the exercise of stock options, offset by about \$15.4 million of a cash-consuming change in "assets and liabilities."

The full cash flow statement helps to understand how Krispy Kreme is dealing with the substantial cash requirements of its rapid growth. In 2003, its cash requirements were covered by \$51 million of cash from operations combined with net financing of \$54 million.

Also of interest in the operating activities section are the cash benefits from the exercise of stock options of about \$10 and \$14 million, respectively, in 2002 and 2003. These benefits represent a material portion of cash from operating activities in both years. However, these benefits are the result of financing transactions, the purchase of common shares on the exercise of stock options, and they are unlikely to be a predictable or sustainable component of operating cash flow in the future. More about the cash benefits of options as well as the sustainability of cash flow will be found in Chapters 5 and 6.

The last section of the Krispy Kreme statement of cash flows discloses a number of noncash investing and financing transactions. Most of these items originate from the use of Krispy Kreme shares, as opposed to cash, to acquire various assets.

Although not disclosed within the body of an indirect statement of cash flows, SFAS No. 95 calls for the disclosure of cash paid for income taxes and interest. Most firms

Exhibit 2.15 Krispy Kreme Doughnuts, Inc., Statements of Cash Flows, Years Ended January 28, 2001, February 3, 2002, and February 2, 2003 (\$ thousands)

	2001	2002	2003
Cash Flow from Operating Activities:			
Net income	\$ 14,725	\$ 26,378	\$ 33,478
Items not requiring cash:			
Depreciation and amortization	6,457	7,959	12,271
Deferred income taxes	1,668	2,553	1,632
Loss on disposal of property and equipment, net	20	235	934
Compensation expense related to restricted stock awards	22	52	67
Tax benefit from exercise of nonqualified stock options	595	9,772	13,795
Provision for store closings and impairment	318	—	—
Minority interest	716	1,147	2,287
Equity loss in joint ventures	706	602	2,008
Change in assets and liabilities:			
Receivables	(3,434)	(13,317)	(7,390)
Inventories	(2,052)	(3,977)	(7,866)
Prepaid expenses	1,239	(682)	(331)
Income taxes, net	902	(2,575)	571
Accounts payable	2,279	3,884	(33)
Accrued expenses	7,966	4,096	(9,296)
Arbitration award	—	—	9,075
Other long-term obligations	(15)	83	(166)
Net cash provided by operating activities	32,112	36,210	51,036
Cash Flow from Investing Activities:			
Purchase of property and equipment	(25,655)	(37,310)	(83,196)
Proceeds from disposal of property and equipment	1,419	3,196	701
Proceeds from disposal of assets held for sale	—	—	1,435
Acquisition of franchise markets, net of cash acquired	—	(20,571)	(4,965)
Investments in unconsolidated joint ventures	(4,465)	(1,218)	(7,869)
Purchases of investments	(41,375)	(10,128)	(32,739)
Proceeds from investments	6,004	18,005	33,097
Increase in other assets	(3,216)	(4,237)	(1,038)
Net cash used for investing activities	(67,288)	(52,263)	(94,574)
Cash Flow from Financing Activities:			
Borrowings of long-term debt	—	4,643	44,234
Repayment of long-term debt	(3,600)	—	(2,170)
Net (repayments) borrowings from revolving line of credit	(15,775)	345	(121)
Repayment of short-term debt—related party	—	—	(500)
Debt issue costs	—	—	(194)

(continues)

Exhibit 2.15 (Continued)

Proceeds from exercise of stock options	104	3,906	7,140
Proceeds from stock offering	65,637	17,202	—
Book overdraft	(941)	3,960	2,268
Collection of notes receivable	198	648	3,612
Minority interest	401	227	(432)
Cash dividends paid	(7,005)	—	—
Net cash provided by financing activities	39,019	30,931	53,837
Net increase in cash and cash equivalents	3,843	14,878	10,299
Cash and cash equivalents at beginning of year	3,183	7,026	21,904
Cash and cash equivalents at end of year	\$ 7,026	\$21,904	\$32,203
Supplemental schedule of non-cash investing and financing activities:			
Issuance of stock in conjunction with acquisition of franchise markets	\$ —	\$4,183	\$ 8,727
Issuance of stock in conjunction with acquisition of additional interest in area developer franchisee	—	—	22,248
Unrealized gain (loss) on investments	609	(111)	(385)
Issuance of stock options in exchange for services	—	—	150
Issuance of stock to Krispy Kreme Profit-Sharing Stock Ownership Plan	3,039	—	—
Issuance of restricted common shares	210	50	—
Issuance of stock in exchange for employee notes receivable	—	879	—

Source: Krispy Kreme Doughnuts, Inc., Form 10-K annual report to the Securities and Exchange Commission, February 2003, p. 48.

make this disclosure as part of the notes to the financial statements; others provide this information at the bottom of the statement of cash flows. Tax payments usually are disclosed as part of the income tax note if they are not listed at the bottom of the statement of cash flows.³¹

The items listed in the three sections of the Krispy Kreme statement of cash flows are quite standard and conform to the definitions of operating, investing, and financing cash flows discussed in Chapter 1.

Classification of Cash Flows

Chapter 1 provided initial definitions and illustrations of the cash flow classifications required by SFAS No. 95. Additional attention is given to problematic cash flow classifications in Chapters 3 and 4. The goal in this chapter is to provide, along with some commentary, a broader range of examples of the items reported in the operating, investing, and financing sections of the statement of cash flows. The discussion begins with Exhibits 2.16 to 2.18, which focus on items included in the reconciliation of net income or net loss to operating cash flows.

Exhibit 2.16 Additions and Deductions of Noncash Expense and Income

Item	Company
Additions	
Bad debt expense	Abiomed, Inc. (2004)
Amortization of loan closing costs	AKI Holding Corp. (2003)
Deferred tax provision	Alliant Techsystems, Inc. (2004)
Write-off of fixed assets	ATC Healthcare, Inc. (2004)
Recognition of loss on derivatives	Aurora Foods, Inc. (2003)
Loss on disposition of capital assets	Blue Coat Systems, Inc. (2003)
Noncash litigation charges	California Amplifier, Inc. (2004)
Impairment of goodwill	DITECH Communications Corp. (2003)
Tax benefit from stock options	H&R Block, Inc. (2003)
Reserves for returns	John Wiley & Sons, Inc. (2003)
Cumulative effect of accounting change	Keystone Automotive, Inc. (2003)
Amortization of debt discount	Measurement Specialties, Inc. (2004)
Equity in losses of affiliated companies	NDCHealth Corp. (2003)
Pension expense, net of contributions	Piccadilly Cafeterias, Inc. (2003)
Issuance of stock for services and fees	Powerhouse Technologies Group, Inc. (2003)
Impairment of seismic data library	Seitel, Inc. (2002)
Provision for restructuring charges	Stratex Networks, Inc. (2004)
Unrealized loss on interest-rate contract	The Fairchild Corp. (2003)
Provision for inventory losses	The Singing Machine Co., Inc. (2003)
Depreciation and amortization	Tommy Hilfiger Corp. (2003)
Minority interest expense	Stewart Information Services Corp. (2002)
Payment in kind (PIK) interest	US Home & Garden, Inc. (2003)
Amortization of bond premiums	Value Line, Inc. (2003)
Deductions	
Amortized sale and leaseback gains	Air Tran Holdings, Inc. (2002)
Noncash pension settlement gain	Albemarle Corp. (2002)
Equity earnings of affiliates, less dividends	Fuji Xerox Co., Ltd. (2002)
Foreign currency transaction gains	Mentor Corp. (2003)
Forgiveness of debt	Orion Diversified Technologies, Inc. (2003)
Deferred income tax benefit	Q.E.P. Co., Inc. (2004)
Interest earned on U.S. Treasury bills	Skyline Corp. (2003)
Paid-in-kind interest income	The Fairchild Corp. (2003)
Repositioning charge reversals	The Finish Line, Inc. (2003)
Amortization of deferred licensing revenues	Tully's Coffee Corp. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

Reconciling Net Income or Loss to Operating Cash Flow

The reconciliation of net income or loss to operating cash flow involves undoing the accrual process used in the measurement of earnings. Many items do not appear in the reconciliation because their recognition as revenues, gains, expenses, or losses in the income statement coincide with an associated cash inflow or outflow. The additions and deduc-

tions to be discussed do not have this symmetrical relationship between the timing of cash movement and recognition in the income statement.

The additions to and deductions from net income that are required to compute operating cash flow can be broken down into three principal categories. The first category, included in Exhibit 2.16, highlights noncash expense or income items that are added to or deducted from net income in arriving at operating cash flow.

Cash Outflow in the Past A number of the entries in Exhibit 2.16 represent items for which there was a cash outflow in the past, but not in the current or future periods. This is true of the depreciation and amortization of Tommy Hilfiger Corp. and the provision for inventory losses of The Singing Machine Co. The payment of cash in the past for the acquisition of fixed assets by Tommy Hilfiger Corp. would have been treated as an investing cash outflow. However, the inventory acquisition by The Singing Machine Co. would have been classified as an operating cash outflow.

Cash Outflow or Inflow in the Future Other items do not involve a current cash flow, but a cash inflow or outflow would be expected in the future. The excess of the Piccadilly Cafeterias' "pension expense, net of contributions" probably will require future cash payments. The same is likely to be true for some or all of the "provision for restructuring charges" of Stratex Networks. The "foreign currency transaction gains" of Mentor Corp. have not yet been realized. However, a cash inflow may result if the gains are realized in the future.³²

It is common to see expenses added back to net income in computing operating cash flow referred to as noncash charges. For example, California Amplifier, in Exhibit 2.16, included an addition in computing operating cash flow labeled "non-cash litigation charges." However, the company's disclosures suggest that most of these noncash charges will require future cash payments.³³ The term "noncash" often refers to the current period only.

No Cash Flow, Ever A limited number of revenue, gain, expense, and loss items never involve a cash inflow or outflow. An expense example from Exhibit 2.16 is the "issuance of stock for services and fees" by Powerhouse Technologies Group. The issuance of stock as a means of payment will never require a cash outflow. The "impairment of goodwill" in the case of DITECH Communications would not involve a cash outflow if common stock were issued in the acquisition transaction that originally gave rise to the goodwill. An income example from the exhibit is provided by the gain on the "forgiveness of debt" of Orion Diversified Technologies. This gain is deducted from net income because, although the debt forgiveness did increase net income, the company will never receive any cash.

The second category of additions and deductions, included in Exhibit 2.17, is required to ensure that the cash flow effects associated with gains and losses on investing and financing transactions are not included in operating cash flow.

The "early extinguishments of debt expense" of Lawson Software, in Exhibit 2.17, involved a cash payment that exceeded the carrying value of the debt. This excess cash payment is an expense, and it was deducted in computing Lawson Software's net income. However, the addition of this expense to net income is necessary so that operating cash flow is not burdened by the cash payment associated with a financing transaction. The

Exhibit 2.17 Additions and Deductions for Nonoperating Gains and Losses

Item	Company
Additions	
Early extinguishments of debt expense	Lawson Software, Inc. (2003)
Purchased in-process R&D	Quantum Corp. (2003)
Extraordinary loss on debt extinguishment	Sealed Air Corp. (2003)
Loss on derivative instruments	Willis Lease Finance, Inc. (2003)
Loss on ineffective swap	Workflow Management, Inc. (2003)
Deductions	
Gain on insurance recovery	Great Lakes Aviation, Ltd. (2002)
Gain on extinguishment of debt	Gunther Intl., Ltd. (2003)
Gain on sale of discontinued units	Measurement Specialties, Inc. (2004)
Gain on sale of property and equipment	Skyline Corp. (2003)
Gain on settlement of interest rate swaps	Southern Union Co. (2003)
Gains on sales of trading securities	Value Line, Inc. (2003)
Gain on sale of water rights	Western Water Co. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

total payment made to extinguish this debt, including the portion associated with the debt extinguishment expense, must be classified as a financing cash outflow.

The “gain on insurance recovery” of Great Lakes Aviation, Ltd., in the exhibit, is included in its net income. The gain represents the excess of the insurance benefit received over the carrying value of two aircraft destroyed in a hangar fire. All of the cash received must be classified in investing cash flows. Therefore, the gain on the insurance recovery is deducted from net income so that operating cash flow is not overstated.

The third category of reconciling items includes changes in operating-related assets and liabilities. Examples of these items are provided in Exhibit 2.18. Most of these changes are in items that are current assets and current liabilities and are, therefore, part of working capital (i.e., the difference between current assets and current liabilities).

Lawson Software, in Exhibit 2.18, disclosed an addition to net income resulting from a decrease in accounts receivable. However, Medtronic disclosed a deduction from net income in arriving at operating cash flows because its accounts receivable increased during the year. The addition in the Lawson case means that cash has been collected in excess of the revenues that were recognized and included in the determination of net income for the year. Alternatively, Medtronic collected less cash than the amount of revenue it recognized in determining net income for the year. The excess and shortfall of cash collected in relationship to revenues recognized are equal to the decrease and increase, respectively, in accounts receivable.

In the case of liability changes, Oracle Corporation, in Exhibit 2.18, disclosed an addition to net income in arriving at operating cash flow from an increase in its deferred revenue, a liability account. However, Value Line disclosed a deduction from net income due

Exhibit 2.18 Additions and Deductions for Changes in Operating-Related Assets and Liabilities

Item	Company
Additions	
Sale of trading securities	Barra, Inc. (2003)
Due from factor	Collins & Aikman Floor Co. (2003)
Collections on notes receivable	DrugMax, Inc. (2003)
Decrease in advances to models	Famous Fixins, Inc. (2002)
Decrease in deferred costs	Harleysville National Corp. (2002)
Decrease in accounts receivable	Lawson Software, Inc. (2003)
Increase in deferred revenues	Oracle Corp. (2003)
Increase in customer deposits	Prab, Inc. (2002)
Self-insurance reserves in excess of payments	Publix Super Markets, Inc. (2002)
Increase in accrued warranty liability	Quantum Corp. (2003)
Decrease in refundable income taxes	Spartan Stores, Inc. (2004)
Increase in bank overdraft	The Singing Machine Co., Inc. (2003)
Accrued interest payable	Transnational Financial Network, Inc. (2003)
Deductions	
Decrease in billings in excess of costs	Abrams Industries, Inc. (2003)
Purchase of trading securities	Barra, Inc. (2003)
Payment on amounts due to related party	Bluebook International Holdings Co. (2003)
Decrease in customer deposits	Prab, Inc. (2002)
Additions to trading securities	H&R Block, Inc. (2003)
Capitalized development costs	Fonefriend, Inc. (2003)
Decrease in other accrued liabilities	John Wiley & Sons, Inc. (2003)
Restructuring costs paid	Norstan, Inc. (2003)
Cash overdraft	Peabody's Coffee, Inc. (2003)
Increase in accounts receivable	Medtronic, Inc. (2003)
Increase in rental merchandise inventory	Rent-A-Center, Inc. (2002)
Increase in restricted cash	The Singing Machine Co., Inc. (2003)
Decrease in unearned income	Value Line, Inc. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

to a decrease in its unearned income—an account comparable to Oracle's deferred revenue. The increase in the deferred revenue account of Oracle means that cash, in an amount equal to the increase, was collected during the current period that had not yet been recognized as revenue in the income statement. The opposite is true with Value Line. The decrease in unearned income results from the current recognition of income for which cash was collected in an earlier period. These adjustments are necessary to ensure that operating cash flow includes the actual cash collected during the period and not simply the amount that was earned during the period.

A simple classification scheme to aid in the interpretation of the cash flow effects of changes in operating-related assets and liabilities as well as the other two categories of reconciliation items is provided in Exhibit 2.19. All three categories of items included in the reconciliation of net income or loss to operating cash flow are included in this exhibit.

Investing Cash Flows

A sample of items classified as investing cash sources is provided in Exhibit 2.20 and of investing cash uses in Exhibit 2.21.

Investing cash flow is defined as cash receipts and payments associated with long-term assets, making and collecting loans, and acquiring and disposing of investments and property, plant, and equipment.³⁴ Most of the items in Exhibits 2.20 and 2.21 fit this definition well. However, there are several items classified as investing cash flow whose classification is less obvious.

For example, payments received by Western Water Co. from collections of notes re-

Exhibit 2.19 Classification Scheme for Cash Flow Effects

Addition to Net Income or Loss Increases Operating Cash Flow	Deduction from Net Income or Loss Decreases Operating Cash Flow
Decrease in operating-related assets	Increase in operating-related assets
Increase in operating-related liabilities	Decrease in operating-related liabilities
Noncash expenses	Noncash income
Nonoperating losses	Nonoperating gains

Exhibit 2.20 Items Classified as Investing Cash Sources

Item	Company
Proceeds from sale of discontinued operations	Barra, Inc. (2003)
Net cash received in purchase acquisitions	DITECH Communications Corp. (2003)
Proceeds from sale/leaseback transactions	Federal Express Corp. (2003)
Proceeds from insurance recovery	Great Lakes Aviation, Ltd. (2002)
Proceeds from casualty gain	Holiday RV Superstores, Inc. (2002)
Decrease in restricted cash	Powerhouse Technologies Group, Inc. (2003)
Proceeds from sale of equity securities	Quantum Corp. (2003)
Dividends from 50%-owned company	Reliance Steel & Aluminum Co. (2002)
Proceeds from sale of interest rate swaps	Southern Union Co. (2003)
Distributions received from investees	Sports Arenas, Inc. (2003)
Proceeds from sales of trading securities	Value Line, Inc. (2003)
Proceeds from sale of trademark	VPGI Corp. (2003)
Payments received on notes receivable	Western Water Co. (2003)
Payments received on direct finance leases	Willis Lease Finance Corp. (2002)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

Exhibit 2.21 Items Classified as Investing Cash Uses

Item	Company
Additions to patents	Abiomed, Inc. (2004)
Cash paid for acquisitions, net	DrugMax, Inc. (2003)
Purchase of certificates of deposit	Earl Scheib, Inc. (2003)
Purchase of bank-owned life insurance	Harleysville National Corp. (2002)
Deposits made for equipment purchases	Milastar Corp. (2003)
Theater productions in development	Momentum Holdings, Inc. (2002)
Investment in lease contracts	Norstan, Inc. (2003)
Purchase of U.S. Treasury bills	Odyssey Marine Exploration, Inc. (2004)
Purchases of available for sale securities	Paychex, Inc. (2003)
Brand development costs	Peabody's Coffee, Inc. (2003)
Investments in short-term notes receivable	Reconditioned Systems, Inc. (2003)
Cash invested in seismic data	Seitel, Inc. (2002)
Website development costs	Skyline Multimedia Entertainment, Inc. (2003)
Distributions to holders of minority interest	Sports Arenas, Inc. (2003)
Capital costs of internal use software	TDI Holding Corp. (2003)
Software development costs	Tech Data Corp. (2003)
Business acquisitions net of cash acquired	Tommy Hilfiger Corp. (2003)
Net increase in restricted cash	Transnational Financial Networks, Inc. (2003)
Additions to intangible assets	Tully's Coffee Corp. (2003)
Additions to land	Western Water Co. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

ceivable are classified as an investing inflow because the notes originated from the sale of fixed assets. On occasion, notes receivable will be received in place of accounts receivable that were recorded on a regular product or service sale. In such cases the receipt of payments on the notes is classified as an operating cash inflow.

Great Lakes Aviation, in Exhibit 2.20, received insurance proceeds as the result of a hangar fire that destroyed two aircraft. The proceeds are associated with assets whose acquisition and disposition normally would be classified as investing cash flows. As a result, the insurance proceeds also were classified as investing cash flow.

The proceeds from the Federal Express Corp. sale and leaseback transactions were classified as investing cash flows. However, it is more common to see such proceeds classified as financing cash flows. The logic is that a sale and leaseback usually is viewed as a form of financing.

The sale and leaseback transaction is a good example of the presence of a degree of flexibility and diversity in the classification of cash flows. More attention is given to this classification flexibility in Chapters 3 and 4.

Financing Cash Flows

A sample of items classified as financing cash sources and uses is provided in Exhibits 2.22 and 2.23, respectively. Cash flows classified as financing usually result from

Exhibit 2.22 Financing Cash Inflows

Item	Company
Sale-leaseback transactions	American Airlines, Inc. (2002)
Net proceeds from exercise of warrants	Aura Systems, Inc. (2003)
Contribution of capital	Avery Sports Turf, Inc. (2003)
Proceeds from initial public offering	Lawson Software, Inc. (2003)
Proceeds from exercise of stock options	Mentor Corp. (2003)
Issuance of notes payable	Odyssey Marine Exploration, Inc. (2004)
Proceeds from terminated interest rate swaps	Pall Corp. (2003)
Proceeds from stock subscriptions	Powerhouse Technologies, Inc. (2003)
Tax benefit of stock options exercised	Reliance Steel & Aluminum Co. (2002)
Proceeds from short-term debt	The Finish Line, Inc. (2003)
Issuance of common stock	3COM Corp. (2003)
Borrowings on subordinated debt	Translational Financial Network, Inc. (2003)
Checks drawn in excess of bank balances	Tully's Coffee Corp. (2003)
Release of restricted cash	Western Water Co. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

Exhibit 2.23 Financing Cash Outflows

Item	Company
Payments for incurred IPO costs	Align Technology, Inc. (2002)
Increase in restricted cash	DrugMax, Inc. (2003)
Increase in deferred financing costs	DrugMax, Inc. (2003)
Payments of life insurance loans	Earl Scheib, Inc. (2003)
Purchase of treasury shares	John Wiley & Sons, Inc. (2003)
Repayment of secured note	Measurement Specialties, Inc. (2004)
Settlement of forward contract credit	Medtronic, Inc. (2003)
Dividends paid	Mentor Corp. (2003)
Financing fees paid	Spartan Stores, Inc. (2004)
Net cash settlement of put options	3COM Corp. (2003)
Payments on line of credit	Trans-Century Resources, Inc. (2002)
Payments on settlements payable	Translational Financial Network, Inc. (2003)
Payments to minority interest stockholders	Unify Corp. (2003)
Stock issue costs	US Dataworks, Inc. (2003)
Payments on capital lease obligations	US Dataworks, Inc. (2003)
Preferred stock dividends	Western Water Co. (2003)
Debt issue costs	Willis Lease Finance Corp. (2002)
Purchase of derivative instruments	Willis Lease Finance Corp. (2002)
Cash settlement of interest-rate swap	Workflow Management, Inc. (2003)
Payment of litigation payable	XDOGS, Inc. (2003)

Source: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated.

borrowings and repayments as well as the issuance and repurchase or retirement of equity instruments. Cash dividends are also classified as financing outflows.³⁵

Some of the financing cash flows in Exhibits 2.22 and 2.23 involve items other than normal financings and associated repayments. For example, Tully's Coffee Corp. reports "checks drawn in excess of bank balances," a book overdraft, as a form of financing. Western Water Co. reports an increase in restricted cash as a financing inflow, and Drug-Max, Inc., reports an increase in restricted cash as an outflow. Willis Lease Finance Corp. reports capitalized debt issue costs as a financing use of cash while both Willis Lease and 3Com Corp. included outflows related to financial derivatives.

The classification of cash flow associated with derivatives is based on the specific application of the derivative.³⁶ Cash flow associated with derivatives that are used to hedge financings and investments are classified with financing and investing cash flow, respectively. Derivatives used to hedge operating assets and liabilities are classified with operating cash flows.³⁷ These classification issues and others are revisited in Chapters 3 and 4, where problematic classifications are analyzed.

Special Income Statement Items and the Statement of Cash Flows

U.S. GAAP requires that three items be displayed on an after-tax basis in the income statement: (1) discontinued operations, (2) extraordinary items, and (3) the cumulative effect of changes in accounting principle. All three offer unique cash flow reporting issues that are not addressed by SFAS No. 95. If presented in an income statement format, items of other comprehensive income, for example, unrealized gains and losses on available for sale securities and foreign currency translation adjustments, are also displayed on a net of tax basis. Items of other comprehensive income typically are reported in shareholder's equity and seldom involve cash flows. As a result, the discussion here is limited to the three items just listed. A review of reporting practices for these three items provides insight into their typical treatment in the statement of cash flows.

Discontinued Operations

Treatment as a discontinued operation requires that a unit qualify as a *component of an entity*. A component of an entity "comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity."³⁸ Discontinued operations include operating results and gains or losses on the disposition of assets of the discontinued operations. Although not required, many firms separate the operating cash flow of continuing operations from that of discontinued operations. However, others are not as forthcoming. Examples from the disclosures of 3Com Corp., Seitel, Inc., and Quantum Corp. are provided in Exhibits 2.24, 2.25, and 2.26, respectively.

As noted in Exhibit 2.24, 3Com simply sets out the loss from discontinued operations in the operating activities section of the statement of cash flows, along with the loss from continuing operations. The company then reconciles these amounts to cash provided by operating activities. Nothing else related to discontinued operations appears in the balance of the statements of cash flows. What is lacking is the specific contribution of discontinued operations to net cash provided or used in operations. Disclosure of the loss from discontinued operations alone is unlikely to provide an accurate indication of operating cash flow associated with their discontinued operations.

Exhibit 2.24 3Com Corp., Disclosure of Discontinued Operations in the Statement of Cash Flows, Years Ended May 30, 2001, May 31, 2002, and June 1, 2003 (\$ thousands)

	2001	2002	2003
Cash flow from operating activities:			
Loss from continuing operations	\$(790,166)	\$(453,652)	\$(275,540)
Loss from discontinued operations	(175,210)	(142,298)	(8,214)

Source: Form 10-K annual report to the Securities and Exchange Commission, June 1, 2003, p. 49.

Exhibit 2.25 Seitel, Inc., Disclosure of Operating Cash Flow of Discontinued Operations, Years Ended December 31, 2000, 2001, and 2002 (\$ thousands)

	2000	2001	2002
Cash flow from operating activities:			
A. Net loss	\$(2,509)	\$(14,993)	\$(212,440)
B. Income (loss) from discontinued operations, operations, net of tax	(3,602)	24,573	62,709
C. Net cash provided by operating activities of continuing operations	69,534	30,767	21,716
D. Net cash provided by discontinued operations	4,370	4,354	26,428

Source: Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. F-6.

Truncated information from the Seitel statements of cash flow for 2000 to 2002 is provided in Exhibit 2.25. Seitel, Inc., adds net losses from discontinued operations and subtracts net income (line B in the exhibit) to its net losses for 2000 to 2002 (line A in the exhibit) in computing cash from continuing operations (line C). Cash from discontinued operations is then presented on a single line item (line D) just before the net increase (decrease) in cash and cash equivalents—not shown here. The Seitel, Inc., display of cash flow information improves on that of 3Com Corp. by setting out the net cash provided by its discontinued operations.

The Quantum Corp. cash flow display, presented in Exhibit 2.26, improves still further the cash flow presentation of discontinued operations. Each cash flow classification—operating, investing, and financing—of the discontinued operations is displayed. Such detail provides a more useful basis for projecting future cash flow. Of the three classifications reported by Quantum Corp., the operating cash flow from continuing operations is the most important. Assessing the sustainability of operating cash flow is much more difficult if it is an amalgamation of cash from both continuing and discontinued operations. More attention is given to identifying the sustainable portion of cash flows in Chapters 6 and 7.

Exhibit 2.26 Quantum Corp., Disclosure of Operating, Investing, and Financing Cash Flow for Discontinued Operations, Years Ended March 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Cash flow from operating activities:			
Income (loss) from continuing operations	\$197,828	\$(49,000)	\$(226,386)
Net cash provided by operating activities of continuing operations	299,260	57,629	33,983
Net cash used in discontinued operations	(120,978)	(17,790)	(16,358)
Net cash used in investing activities of continuing operations	(71,102)	(81,393)	(108,689)
Net cash provided (used) in investing activities of discontinued operations	(46,942)	(12,218)	4,709
Net cash used in financing activities of continuing operations	(111,509)	(1,165)	(35,886)
Net cash provided (used in) financing activities of discontinued operations	(66,431)	2,278	97

Source: Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 60.

Extraordinary Items

Extraordinary items are defined as items of revenue, gain, expense, and loss that are “distinguished by their unusual nature and by the infrequency of their occurrence.”³⁹ The joint requirements of unusual and infrequent have proved to be an increasingly difficult hurdle to overcome. As a result, extraordinary items have become increasingly rare in recent years. Until very recently, almost all extraordinary items were the result of debt repayments that gave rise to either gains or losses.⁴⁰ The most recent AICPA survey data show a total of 78 extraordinary items out of 600 companies in the annual survey.⁴¹ Of these, 70 were the result of debt extinguishments. However, some firms continue to classify gains and losses on debt extinguishments as extraordinary even though it is now no longer required. This classification would be based on the company’s judgment that the gains and losses are both unusual and infrequent in their occurrence.

In computing operating cash flow on an early debt retirement, a gain is deducted from net income while a loss is added back. Any cash payment made to discharge the debt is listed as a cash outflow in the financing activities section of the statement of cash flows.

The classification of any cash flow associated with other extraordinary items will depend on the specific character of the gains and losses. For example, consider a gain from insurance proceeds received due to damage sustained to a corporate headquarters building by an earthquake. Assume that the gain is classified as extraordinary. The gain would be deducted from net income in computing operating cash flow, and the cash received would be reported as investing cash inflow.

Cumulative Effects of Changes in Accounting Principles

Most current accounting changes occur when firms adopt a new accounting standard issued by the FASB. Less frequently, changes in accounting principles result from firms making discretionary changes from one existing acceptable accounting principle to another. Examples would include a switch from the completed contract method of accounting for long-term contracts to the percentage-of-completion method or from the use of accelerated to straight-line depreciation.

Most accounting changes are implemented using the cumulative effect method. This requires that a gain or loss be recorded in the income statement in the year of the change for the amount by which earnings in prior years would have been affected if the new method had been in use. The cumulative effect always is included in the income statement on an after-tax basis.

Unlike changes in computing taxable income, the effects on net income of changes in accounting principles do not affect cash flow. Accordingly, an accounting change that reduces net income is simply added back to net income, and a change that increases net income is subtracted in computing cash flow from operating activities.

The example for Keystone Automotive Industries, Inc., provided in Exhibit 2.27, is typical of the cash flow treatment afforded the cumulative effect of a change in accounting principle. Keystone adopted a new accounting standard in its fiscal year 2002. Its adoption of SFAS No. 142, "Goodwill and Other Intangibles Assets," required the company to record an after-tax impairment charge of \$28.7 million.⁴²

NON-GAAP MEASURES OF CASH OPERATING PERFORMANCE

Cash flow from operating activities, computed according to SFAS No. 95, is the only GAAP measure of cash operating performance. However, it is common for firms to provide alternative measures of cash flow that serve as supplements to GAAP operating cash flow. Typically, firms that use these measures will disclaim that they are designed to rep-

Exhibit 2.27 Keystone Automotive Industries, Inc., Partial Operating Activities Section, Years Ended March 30, 2001, March 29, 2002, and March 28, 2003 (\$ thousands)

	2001	2002	2003
Operating Activities:			
Net income (loss)	\$ (477)	\$ (22,033)	\$14,747
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Cumulative effect of a change in accounting principle (net of tax)	—	28,691	—
Depreciation and amortization	5,249	5,189	4,982

Source: Form 10-K annual report to the Securities and Exchange Commission, March 28, 2003, p. 28.

resent an alternative measure of cash flow. However, the noncash character of many of the adjustments made in computing these measures undermines somewhat the claim that they are not designed to be measures of cash operating performance.

EBITDA

One of the most common non-GAAP measures of cash operating performance is earnings before interest, taxes, depreciation, and amortization (EBITDA). EBITDA is used frequently in setting financial covenants in debt and credit agreements. Its calculation, especially in cases where it is employed in a financial covenant, often deviates from the simple EBITDA formula. In such cases it is common to see the expression “adjusted EBITDA” being employed. A reconciliation of net income to EBITDA for ICON Health and Fitness, Inc., is presented in Exhibit 2.28 for the years ended May 31, 2001, 2002, and 2003. Also presented is cash flow from operating activities computed on a GAAP basis.

As seen in Exhibit 2.28, there are significant differences between EBITDA and operating cash flow. In the case of ICON Health and Fitness, the primary reasons for these differences are the addition to net income of interest and taxes. EBITDA is reported before interest and taxes, while both items are subtracted in computing operating cash flow. The primary reasons for the differences between EBITDA and operating cash flow in the ICON Health and Fitness case are the addition to net income of interest and taxes. The other two add-backs, depreciation and amortization, would already have been added back to net income to arrive at cash flow from operating activities.

The remaining differences between EBITDA and cash from operating activities are explained by the changes in operating assets and liabilities, principally working capital accounts, which are not included in computing EBITDA. These changes reduced operating cash flow by approximately \$20 million in 2001, zero in 2002, and \$16 million in 2003.

Potential shortcomings of EBITDA as a measure of financial performance are

Exhibit 2.28 ICON Health & Fitness, Inc., Reconciliation of Net Income to EBITDA, Years Ending May 31 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Net income	\$13.3	19.4	\$ 26.7
Add back:			
Depreciation and amortization	17.4	19.2	19.2
Provision for income tax	3.4	0.4	17.6
Interest expense	34.8	26.2	25.1
Amortization of deferred financing fees	3.2	3.1	1.2
EBITDA	\$72.1	\$68.3	\$ 89.8
Cash flows from operating activities	\$12.4	\$37.5	\$31.6

Source: ICON Health & Fitness, Inc., Form 10-K annual report to the Securities and Exchange Commission, May 31, 2003, pp.18–19.

enumerated in a wide range of sources. An excellent summary is found in a speech made by a senior vice president of Moody's Investors Service: "Putting EBITDA in Perspective—Ten Critical Failings of EBITDA as the Principal Determinant of Cash Flow."⁴³ Some of the failings of EBITDA that are most relevant to the thrust of this book include:

1. EBITDA ignores changes in working capital and overstates cash flow in periods of working capital growth.
2. EBITDA can be a misleading measure of liquidity.
3. EBITDA does not consider the amount of required reinvestment.
4. EBITDA ignores distinctions in the quality of cash flow resulting from differing accounting policies.⁴⁴

The GAAP measure, in relation to point 1, of operating cash flow incorporates changes in working capital and therefore registers the effect of the growth or decline of working capital. The first point is a perfect example of how EBITDA can be a misleading measure of liquidity (point 2). The failure of EBITDA to incorporate required reinvestment, point 3, is dealt with by the free cash flow measure discussed in Chapter 10. Accelerated revenue recognition can cause EBITDA to overstate the cash quality of earnings, the concern expressed in point 4. That is, two firms could have comparable amounts of EBITDA and yet have dramatically different cash flow.

A Google search on "EBITDA" reveals a torrent of commentary on the pros and cons of EBITDA.⁴⁵ EBITDA is clearly not a very good proxy for operating cash flow.

Adjusted EBITDA

Adjusted EBITDA is computed after making a variety of adjustments to an initial EBITDA measure. The additional adjustments usually represent revenues, gains, expenses, and losses that are noncash, nonrecurring, or both. Such adjustments presumably are designed to create a measure of financial performance that is both more cashlike and more sustainable. The logic underlying the individual adjustments is seldom outlined. Adjusted EBITDA will also be a more reliable base on which to base projections of future adjusted EBITDA because it has been purged of some nonrecurring as well as non-cash items.⁴⁶

Exhibit 2.29 presents the computation of adjusted EBITDA for Fairpoint Communications, Inc.

For Fairpoint Communications, adjusted EBITDA is greater than EBITDA in each of the years shown, 2000, 2001, and 2002. The primary reason is because the largest adjustments in each year are nonrecurring or noncash charges, which would not be made in computing EBITDA. The stock-based compensation and investment impairments are each noncash items. However, they also can be seen to be nonrecurring or irregular in amount. Each of these two items also would have been an addition to net income in arriving at reported cash flow from operating activities.

EBITDA often is characterized as a measure of cash flow or as a measure of the capacity to service debt. In this simple form, it is obvious that it deviates from the GAAP measure of operating cash flow by its failure to adjust for changes in operations-related assets and liabilities. It also does not adjust for a variety of noncash or nonoperating items of revenue, gain, expense, and loss. Further, the addition of interest expense introduces a large source of divergence, especially in the case of very highly leveraged firms. As a

Exhibit 2.29 Fairpoint Communications, Adjusted EBITDA for the Years Ended December 31, 2000, to 2002 (\$ thousands)

	2000	2001	2002
Loss from continuing operations	\$ (13,169)	\$ (23,349)	\$ (6,261)
Adjustments:			
Interest expense	59,556	81,053	79,796
Provision for income taxes	5,607	431	518
Depreciation and amortization	47,070	56,064	47,060
EBITDA	99,064	114,199	121,113
Adjustments:			
Interest rate swaps	—	8,134	(698)
Noncash stock based compensation	12,323	1,337	924
Impairment of investments	—	—	12,568
Other	16	(106)	(1,222)
Adjusted EBITDA	\$111,403	\$123,564	\$132,685
GAAP cash flow from operating activities	\$ 48,110	\$ 38,757	\$ 58,752

Source: Fairpoint Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 17.

measure of financial performance, EBITDA is a blend of accrual and cash basis accounting. In most cases the development of EBITDA goes beyond its strict definition to include a number of adjustments. The key characteristics of these additional adjustments are that they are either nonrecurring or noncash, or both. As currently measured, neither EBITDA nor adjusted EBITDA is a measure of cash flow that is comparable to the GAAP measure of cash flow from operating activities.

Funds from Operations

Funds from operations (FFO) is a widely used measure of financial performance for real estate investment trusts (REITs). FFO begins with net income and then adds back real estate depreciation and also removes gains and losses on the sales of some real estate. The major adjustment in developing FFO has always been the add-back of real estate depreciation. The logic is that conventional depreciation does not properly reflect changes in the value of real estate assets.⁴⁷

With depreciation as the most important adjustment, FFO is similar to the traditional measure of cash flow that was simply net income plus depreciation. However, the National Association of Real Estate Investment Trusts (NAREIT) White Paper on FFO, *White Paper on Funds from Operations*, is insistent that FFO should not be seen as a measure of cash flow from operations:

Importantly, FFO was also not intended to be used as a measure of the cash generated by a REIT nor of its dividend paying capacity. NAREIT feels that the statements of cash flows provided by GAAP financial statements are adequate for analysts to assess the cash generated and used by REITS.⁴⁸

An example of an FFO calculation for Acadia Realty Trust for the years ended December 31, 2000, 2001, and 2002, is provided in Exhibit 2.30.

In addition to depreciation and amortization, the calculation of FFO for Acadia Realty also adjusts for the minority interest in the profits of subsidiaries, gains on sales of real estate properties, impairment of real estate, an extraordinary item, and the effect of a change in accounting principles. These additions to and deductions from net income in arriving at FFO share the characteristics of noncash or nonrecurring, or both. This was also the case with the additions to and deductions from EBITDA made in computing adjusted EBITDA.

A possible rationale for these adjustments is found in the statement that “NAREIT’s intent in the creation of FFO was to try to produce a measure of consolidated operating performance that is recurring in nature.”⁴⁹ NAREIT backed off somewhat from this position in the *2002 White Paper* when it reduced the scope of items that could be excluded from FFO on the basis of their nonrecurring character.⁵⁰

FFO shares some of the features of EBITDA, and both have many similarities to reported cash flow from operating activities. However, under GAAP the statement of cash flows has cash as its singular focus. Both FFO and EBITDA make adjustments that are comparable to those required to compute GAAP cash flow from operating activities. Examples include adjustments for depreciation and amortization, asset write-downs, and gains and losses on selected assets. However, adjustments for changes in operating assets and liabilities are not made in computing either FFO or EBITDA. Both FFO and EBITDA should be seen as hybrids, measures that appear designed to make adjustments driven by issues of cash flow as well as those designed to produce sustainable measures of performance. They are, in a sense, neither fish nor fowl.

Exhibit 2.30 Acadia Realty Trust, Reconciliation of Net Income to Funds from Operations for the Years Ended December 31, 2000, 2001, and 2002 (\$ thousands)

	2000	2001	2002
Net income	\$19,907	\$ 9,802	\$19,399
Depreciation of real estate and amortization of leasing costs	19,950	19,049	15,967
Income attributable to minority interest	5,674	2,221	2,928
Gain on sale of properties	(13,742)	(17,734)	(9,089)
Impairment of real estate	—	15,886	197
Extraordinary item—loss on extinguishment	—	140	—
Cumulative effect of change in accounting principle	—	149	—
Funds from operations	\$31,789	\$29,513	\$29,402
Net cash provided by operating activities	\$19,197	\$20,521	\$24,918

Source: Acadia Realty Trust, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 19-20.

Free Cash Flow

Another non-GAAP measure of cash operating performance is free cash flow. Free cash flow is the focus of Chapter 10 and is discussed only briefly here. Free cash flow usually is defined as GAAP cash flow from operating activities minus capital expenditures. However, it is important to determine exactly how individual firms define free cash flow because there is much variation in practice.

Some common variations in the calculation of free cash flow include: (1) basing the calculation on EBITDA instead of cash flow from operating activities; (2) deducting dividends as well as capital expenditures from cash flow from operating activities; and (3) making selected adjustments to cash flow from operating activities.

Traditional Cash Flow

A brief reference should be made to what is sometimes referred to as *traditional* cash flow. In its most common form, traditional cash flow is computed simply by adding depreciation and amortization back to net income. For a firm that is not growing, traditional cash flow may approximate current GAAP operating cash flow. The absence of growth should result in minimal changes in working capital. Hence, net income plus depreciation and amortization could yield a measure of cash flow that is very close to GAAP operating cash flow.

With the exception of the no-growth firm, traditional cash flow typically will be quite different in amount from GAAP operating cash flow. In spite of this, references to cash flow defined as net income plus depreciation and amortization continue to be quite common.

INTERNATIONAL DIFFERENCES IN THE STATEMENT OF CASH FLOWS

There is a reasonable degree of international diversity in the construction of the statement of cash flows. However, there is a narrowing of these differences as a result of the growing influence of the International Accounting Standards Board (IASB). The IASB has an ongoing program—begun under its predecessor, the International Accounting Standards Committee (IASC)—that is aimed at harmonizing reporting practices on a global basis. It is increasingly common for firms to reference the fact that their financial statements conform to the statements issued by the IASB.⁵¹ The IASC issued a revised standard on the statement of cash flows in 1992, “Cash Flow Statements.”⁵² This standard continues in effect with the IASB now issuing international standards.

The statements issued by the IASC are referred to as International Accounting Standards (IAS). The statements issued by the IASB are referred to as International Financial Reporting Standards (IFRS). Beginning in 2005, the European Union will require that the financial statements of most listed companies follow the IASB standards. A guide to IFRS produced by Deloitte Touche Tohmatsu reports that “other countries have adopted policies approving IFRS word-for-word as their national GAAP.” Examples provided include Australia, Hong Kong, and Singapore.⁵³ The current and prospective influence of the IASB argues for a comparison of its cash flow standard, IAS No. 7, with the U.S.

standard, SFAS No. 95.⁵⁴ After a review of U.S. and IASB differences, some attention is also given to some differences between U.S. GAAP for the statement of cash flows and that of other selected countries.

Differences between IAS No. 7 and U.S. GAAP

The statement of cash flows called for by IAS No. 7 is closer to U.S. GAAP than to the local-country GAAP of many countries—especially the United Kingdom. The principal features of IAS No. 7 are summarized in Exhibit 2.31. These include permitting the classification of interest received and paid as operating, financing, or investing cash flows and the classification of some taxes paid in operating, financing, or investing cash flows. All interest paid and received as well as all taxes paid are classified in operating cash flow under U.S. GAAP.⁵⁵

Other Selected U.S. and Foreign GAAP Differences

A variety of differences exist between U.S. GAAP for the statement of cash flows and that of other countries. A selection of these differences is presented in Exhibit 2.32. Presumably, most of these differences will be eliminated when the pronouncements of the IASB become GAAP for member countries of the European Union.

SUMMARY

This chapter has provided historical background on the evolution of the statement of cash flows. In addition, a comprehensive outline of the current structure of the statement of

Exhibit 2.31 Key Features of IAS No. 7, Cash Flow Statements

1. Requires a cash flow statement that classifies cash flows into the same three categories as are required by SFAS No. 95. The cash flow statement is organized around explaining changes in both cash and cash equivalents. Bank overdrafts repayable on demand are also included, as an offset, in computing cash and cash equivalents. SFAS No. 95 also permits the use of either cash or cash and cash equivalents.
2. The characterizations of the three cash flow classifications are very similar to SFAS No. 95. However, key differences include a provision that permits interest and dividends received and paid to be classified as operating, investing, or financing cash flows.
3. Unlike SFAS No. 95, income taxes, while typically classified in operations, may be classified in financing and investing cash flows if they can be specifically identified with financing and investing activities.
4. Noncash investing and financing transactions are to be disclosed, but not within the body of the statement of cash flows.
5. As with SFAS No. 95, the direct method is recommended but the indirect method is also permitted.

Source: International Accounting Standard, *No. 7, Cash Flow Statements* (London: IASC, December 1992).

Exhibit 2.32 Selected Differences in Cash Flow Statement GAAP: United States and Other Countries

Company	Country	Selected Differences
Altadis Group	Spain	The funds statement is organized around explaining the changes in working capital and not cash. Funds from operations are presented in a separate schedule.
Athlon Groep N.V.	Netherlands	Cash flow from operating activities includes a deduction for dividends paid.
Bayer AG	Germany	Interest and dividends received are included in investing cash flows. Interest paid is included in financing cash flows.
CSM NV	Netherlands	Proceeds from surplus pension funds are treated as a financing inflow. Cash flow from business operations is before taxes and interest paid.
Michelin Group	France	A subtotal labeled “cash flow” is presented with no adjustments for changes in working capital accounts. Net cash from operating activities is then presented after working capital adjustments.
Orkla ASA	Norway	Free cash flow is set out on the face of the statement as cash flow from operating activities plus cash from sale of tangible assets and minus replacement expenditures.

Sources: Annual reports to shareholders for 2002 fiscal years.

cash flows has been provided. Non-GAAP measures of cash operating performance and some international differences in the statement of cash flows have also been identified and discussed. Ten key points raised in the chapter include:

1. Predecessors to the statement of cash flows go back to at least the early twentieth century. These statements usually focused on explaining changes in working capital and not cash.
2. Little official guidance on the structure and content of the funds flow or cash flow statement was available until the early 1960s.
3. There was a good deal of resistance to moving from a working capital to a cash-based funds statement. This resistance was due in part to an ongoing effort to move from a cash basis to an accrual basis of accounting and the belief that a statement with a focus on cash flow might undermine this effort.
4. A funds statement was encouraged during the early 1960s but not mandated until 1971. A good deal of flexibility was permitted in the construction of this statement, and a cash-based statement was not required. Noncash investing and financing transactions were required to be incorporated into the body of the statement.

5. Although not then required by existing GAAP, the presentation of a funds statement based on cash as opposed to working capital increased dramatically in the early 1980s. This dramatic shift from working capital to cash was due to a growing emphasis on cash flow within firms as well as in the investment community.
6. Through the middle 1980s, funds statements included little or no classification beyond working capital or cash provided by operations.
7. A statement of cash flows was mandated in 1987 by SFAS No. 95. Classification of cash flows by operating, investing, and financing was required. Continued disclosure of noncash investing and financing transactions was called for, but outside the body of the statement.
8. SFAS No. 95 recommended the presentation of the statement of cash flows in the direct method format, but only about 1 percent of firms provided this format as of 2004. This low response to the recommendations of the FASB may be explained by the requirement to present cash flow from operating activities on both a direct and an indirect basis if the direct format is selected. Moreover, the complexity of accumulating the cash flow information required by the direct format may be a factor.
9. A number of non-GAAP measures of cash operating performance have emerged in the last two decades. These include measures such as EBITDA, FFO, and free cash flow. Current SEC Regulation G requires that such measures be reconciled to their nearest GAAP measure—usually taken to be cash flow from operating activities or in some cases net income. These measures are widely used in financial covenants, valuation analysis, and incentive compensation plans.
10. U.S. GAAP for the statement of cash flows is very similar to the cash flow reporting standard of the International Accounting Standard Board. However, there remains considerable variation in the cash flow statements of firms in countries that are not following IASB standards.

NOTES

1. P. Knutson, *Financial Reporting in the 1990s and Beyond* (Charlottesville, VA: Association of Investment Management and Research, 1993), p. 65.
2. Financial Accounting Standards Board, *SFAS No. 95, Statement of Cash Flows* (Norwalk, CT: FASB, November 1987). The effective date of this standard was for fiscal years ending after July 15, 1988.
3. It is also of interest to note that of the approximately 450 issues handled by the Emerging Issues Task Force (EITF) of the FASB, from 1984 through 2003, fewer than 10 focused on cash flow statement issues.
4. P. Mason, Accounting Research Study No. 2, *Cash Flow Analysis and the Funds Statement* (New York: AICPA, 1961), p. xi. The quoted statement is from the director's preface to this study. Maurice Moonitz was the director of research of the AICPA when the study was conducted and published.
5. *Accounting Trends and Techniques* is an annual survey of 600 companies conducted by the AICPA. Its thirty-fifth edition (1981), p. 374, reported that the funds statement of only 59 of the 600 companies surveyed included a statement that explained changes in cash or cash equivalents.

6. Several examples of funds statements that appeared prior to the beginning of the twentieth century are identified in an excellent paper by L. Rosen and D. DeCoster, "Funds Statements—A Historical Perspective," *Accounting Review* (January 1969): 124–136.
7. *Ibid.*, p. 128. W. M. Cole is also recognized as one of the early proponents of the funds flow statement.
8. Mason, *Cash Flow Analysis and the Funds Statement*.
9. *Accounting Trends and Techniques*, 19th ed. (New York: AICPA, 1965), p. 230
10. Accounting Principles Board, *APB Opinion No. 3, The Statement of Source and Application of Funds* (New York: AICPA, October 1963).
11. *Ibid.*, para. 9.
12. *Ibid.*, para. 15. The emphasis given to selected words, such as cash flow and cash earnings, was present in the original quoted material.
13. It is well to note that ARS No. 2 had a single author whereas the Accounting Principles Board had 20 voting members.
14. Accounting Principles Board, *APB Opinion No. 2, Accounting for the Investment Credit* (New York: AICPA, December 1962).
15. In APB No. 2, the board recommended that only one of two alternative methods of accounting for the investment tax credit be used. Subsequently, the Securities and Exchange Commission issued an Accounting Series Release (ASR) in which it indicated that it would accept financial statements that used either of the two methods. *Accounting Series Release No. 96, Accounting for the Investment Credit* (Washington, DC: SEC, January 10, 1963).
16. Accounting Principles Board, *APB Opinion No. 19, Reporting Changes in Financial Position* (New York: AICPA, March 1971).
17. *Ibid.*, para. 7.
18. Accounting Principles Board, *APB Opinion No. 3, The Statement of Source and Application of Funds* (New York: AICPA, October 1963), para. 11.
19. Statement of Financial Accounting Standards No. 95.
20. Discussion of these activities can be found in A. Seed, *The Funds Statement: Structure and Use* (New York: Financial Executives Research Foundation, 1984), pp. 173-180.
21. *Reporting Income, Cash Flows, and Financial Position of Business Enterprises* (Norwalk, CT: FASB, November 1981), para. 36.
22. Financial Executives Institute, *Alert*, December 14, 1981.
23. B. Thomas, "Deregulation and Cash Flow Reporting," *Financial Executive* (January 1983): 20–24.
24. FASB No. 95, para. 4.
25. *Ibid.*, para. 5.
26. *Ibid.*, para. 51.
27. *Ibid.*, para. 8.
28. *Accounting Trends and Techniques*, 56th ed. (New York: AICPA, 2002), p. 570. Six hundred companies are covered in this annual survey.
29. FASB No. 95, para. 107.
30. Although there are only a limited number of line items, the efforts required for reporting

firms to accumulate information on cash receipts and payments can be very substantial. This fact may also contribute to the limited number of firms that use the direct method.

31. See *Accounting Trends and Techniques*, 56th ed., p. 570, for survey details on the location of these disclosures.
32. Additional cash will be realized in the amount of the transaction gain if, for example, Mentor holds a euro account receivable and the euro has appreciated in value.
33. Payments to date on this legal settlement have been in cash. However, California Amplifier reported that it had the option of making the final payment in either cash or in its own common stock. Form 10-K annual report to the Securities and Exchange Commission, February 28, 2002, n. 12.
34. FASB No. 95, para. 15–17.
35. Ibid., para. 18–20.
36. The Willis derivatives were employed as cash flow hedges of variable rate debt. 3COM had acquired put options on its own common shares.
37. An interest rate derivative might be used to hedge the value of a fixed rate bond investment. A foreign currency derivative might be used to hedge an account receivable denominated in a foreign currency. These matters are discussed in E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2000), Chapters 6 and 7.
38. Financial Accounting Standards Board, *FASB No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets* (Norwalk, CT: FASB, August 2001), para. 41.
39. Accounting Principles Board, *APB Opinion No. 30, Reporting the Results of Operations* (New York: AICPA, June 1973), para. 20.
40. The requirement to classify gains and losses on debt retirements as extraordinary was eliminated by *SFAS No. 145, Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections* (Norwalk, CT: FASB, April 2002), para. 7(a).
41. *Accounting Trends and Techniques*, 56th ed., p. 450.
42. Keystone Automotive Industries, Inc., Form 10-K annual report to the Securities and Exchange Commission, p. 18.
43. P. Strumpp, *Putting EBITDA in Perspective—Ten Critical Failings of EBITDA as the Principal Determinant of Cash Flow* (New York: Moody's Investors Services, June 2000).
44. Ibid., p. 1.
45. Another source for discussion of EBITDA is C. Mulford and E. Comiskey, *The Financial Numbers Game—Detecting Creative Accounting Practices* (Hoboken, NJ: John Wiley & Sons, 2002), pp. 318–330.
46. See Chapter 6 of C. Mulford and E. Comiskey, *Financial Warnings* (Hoboken, NJ: John Wiley & Sons, 1996), for a similar treatment of earnings. That is, earnings as reported are adjusted so as to remove nonrecurring items, yielding a sustainable earnings base. This base is likewise seen to be a more reliable starting point from which to develop forecasts of future sustainable earnings.
47. An extensive presentation on FFO is found in *White Paper on Funds from Operations* (Washington, DC: National Association of Real Estate Investment Trusts, April 2002).
48. Ibid., p. 3.

49. Ibid., p. 4. This statement is based in turn on the 1995 NAREIT White Paper on FFO.
50. Ibid.
51. The International Accounting Standards Committee predated the International Accounting Standards Board . The IASC issued International Accounting Standards. The standards now issued by the IASB are International Financial Reporting Standards.
52. International Accounting Standards Board, *International Accounting Standard No. 7, Cash Flow Statements* (London: IASB, December 1992).
53. “IFRS in Your Pocket” (New York: Deloitte Touche & Tohmatsu, May 2003), p. 3. This booklet is an excellent summary of the international standards issued by both the IASC and the IASB.
54. *IAS No. 7, Cash Flow Statements* (London: IASC, December 1992).
55. An exception to the classification of all taxes in operations will result if the proposed new FASB statement on stock options becomes effective.

Is It Operating or Investing Cash Flow?

Shares of Hewlett-Packard Co. traded lower Thursday . . . after the company restated its operating cash flow for its recently ended first quarter.¹

In its restatement, Hewlett-Packard Co. said that operating cash flow was \$647 million for the quarter ended January 31, 2003, 18 percent lower than the \$791 million that had been reported previously. According to analysts, the error was caused by a misallocation of the proceeds from an investment disposition. Instead of being reported as an investing source of cash, proceeds from an investment's sale were improperly included with operating cash flow. The company's total cash flow for the quarter and the balance in cash at the end of the quarter were left unchanged.

In Exhibit 3.1, the effects of the restatement on declining trends in Hewlett-Packard's operating cash flow are apparent. Operating cash flow was reduced by \$144 million and was offset by a reduction in the amount of cash used in investing activities. Instead of declining from \$1,721 million to \$791 million between the quarters ended January 31, 2002, and 2003, respectively, operating cash flow declined to \$647 million in the quarter ended January 31, 2003.

Hewlett-Packard's mistake was apparently an honest one, devoid of malicious intent. Nonetheless, investors were not pleased about the development, shaving approximately 7 percent off the company's share price on the day of the announcement on above-average volume. Such a negative reaction attests to the importance of operating cash flow to investment valuation. Because they are derived from less sustainable sources, investing cash inflows are not valued as highly as operating cash inflows.

The Hewlett-Packard case is representative of a whole range of examples of cash flow misclassifications that can be made between the operating and investing sections of the cash flow statement. Although Hewlett-Packard's misstatement of operating and investing cash flows was apparently unintentional, in many other instances, classification decisions that affect operating and investing cash flows are by design. Such classification

Exhibit 3.1 Hewlett-Packard Co., Selected Financial Results, Quarters Ended January 31, 2002, and 2003, as Originally Reported and as Restated (\$ millions)

	As Reported		As Restated	
	2002	2003	2002	2003
Net cash provided by operating activities	\$1,721	\$ 791	\$1,721	\$ 647
Net cash provided by (used in) investing activities	558	(473)	558	(329)
Net cash provided by financing activities	507	1,131	507	1,131
Increase in cash and cash equivalents	\$2,786	\$1,449	\$2,786	\$1,449
(Reduction) in 2003 restated net cash provided by operating activities				(\$144)
Reduction in 2003 restated net cash used in investing activities				\$ 144

Note: Results for 2002 are as reported by the company and do not include the effects of the acquisition of Compaq Computer Corp., dated May 3, 2002.

Source: Hewlett-Packard Co. Form 10-Q quarterly report to the Securities and Exchange Commission, January 31, 2003, p. 5, and Form 8-K current report to the Securities and Exchange Commission, February 25, 2003

decisions may ply the flexibility of generally accepted accounting principles (GAAP) and result in the reporting of cash flows that is well within their boundaries. Consider AmeriCredit Corp.

AmeriCredit's primary line of business is the financing of automobile purchases. The company purchases automobile finance receivables at a discount and then either sells those receivables at a profit or proceeds to collect them, over time, with interest. For its year ended June 30, 2001, the company reported operating cash flow of \$272.1 million, up from \$70.9 million the year before—a noteworthy improvement. In both years, all of the cash generated by operations together with significant sums of borrowed cash were plowed into investments. Summarized cash flow statements for both years are presented in Exhibit 3.2.

An investor who casually reviewed AmeriCredit's performance on a cash flow basis for 2001 would likely be pleased. The company was generating positive operating cash flow and trends were definitely moving in the right direction.

When the company reported its cash flow results for 2002, however, changes were made in the classification of certain cash flows. As seen in Exhibit 3.3, operating cash flow for 2001, which had been reported as \$272.1 million, was now reported to be a use of cash in the amount of \$990.4 million, a decline in operating cash flow of over \$1.2 billion. Even worse, although originally operating cash flow appeared to improve in 2001, on a restated basis it was declining. Restated operating cash flow for 2000 was a use of cash in the amount of \$530.6 million and worsened to a use of cash of \$990.4 million in 2001. Such a swing in operating cash flow is enough to frustrate any analyst interested in determining a company's actual cash flow performance.

Exhibit 3.2 AmeriCredit Corp., Summarized Statements of Cash Flows, Years Ended June 30, 2000, and 2001 (\$ millions)

	2000	2001
Net cash provided by operating activities	\$ 70.9	\$ 272.1
Net cash (used in) investing activities	(550.5)	(1,304.4)
Net cash provided by financing activities	501.3	1,066.4
Increase in cash and cash equivalents	\$ 21.7	\$ 34.1

Source: AmeriCredit Corp. Form 10-K annual report to the Securities and Exchange Commission, June 30, 2001, pp. 30 and 31.

Exhibit 3.3 AmeriCredit Corp., Summarized Statements of Cash Flows, as Restated, Years Ended June 30, 2000 and 2001 (\$ millions)

	2000	2001
Net cash (used in) operating activities	\$ (530.6)	\$ (990.4)
Net cash (used in) investing activities	(21.0)	(98.9)
Net cash provided by financing activities	573.3	1,123.4
Increase in cash and cash equivalents	\$ 21.7	\$ 34.1

Source: AmeriCredit Corp. Form 10-K annual report to the Securities and Exchange Commission, June 30, 2001, pp. 30 and 31.

The primary reason for the change in AmeriCredit's cash flow performance was a change in how it classified changes in its automobile finance receivables. Historically, AmeriCredit reported the purchase of automobile finance receivables as an investing use of cash. The proceeds received on the sale of those receivables and the collection of principal on outstanding receivable balances were reported as investing sources of cash. In 2002, the company changed its classification of cash flows associated with the purchase and sale of automobile finance receivables and of collections of principal on them from investing to operations. As a result, in 2000 a use of cash of approximately \$602 million (\$70.9 million + \$530.6 million) was shifted to the operating section of the cash flow statement from the investing section. In 2001, the use of cash shifted to the operating section was over \$1.2 billion (\$272.1 million + \$990.4 million). As a result, in both years the company's cash flow statements reported a use of operating cash flow.

As part of its restatement, in 2000 and 2001 the company also reclassified a small amount of borrowings out of the operating section of its cash flow statement. Those borrowings, \$72 million in 2000 and \$57 million in 2001, were reclassified to the financing section. It is because of the reclassification of this borrowing item that financing cash flows reported in Exhibit 3.2, \$501.3 million in 2000 and \$1,066.4 million in

2001, differ from financing cash flow reported on a restated basis in Exhibit 1.3, \$573.3 million in 2000 and \$1,123.4 million in 2001.

Should AmeriCredit have changed the cash flow reporting of changes in the balances of its automobile finance receivables for purchases, sales, and collections? It is an interesting question and one that emphasizes the flexibility found in GAAP for cash flow reporting.

Statement of Financial Accounting Standards No. 95, "Statement of Cash Flows," indicates that investing activities include cash flows associated with the making and collecting of loans.² Thus, banks report loan originations and collections in the investing section of the cash flow statement. Unlike a bank, AmeriCredit does not originate its finance receivables or loans. For the most part, AmeriCredit purchases receivables and resells them.

Increases in loans held for sale at banks are reported as operating uses of cash and not as investing. Proceeds from the sale of such loan packages are reported as operating sources of cash. Thus, AmeriCredit seemingly has changed its cash flow reporting to be more consistent with that of other financial institutions, such as banks, that buy and sell loans.

An operating designation for the purchase and sale of receivables makes sense. It is more of a core operating activity, like the purchase and sale of inventory, whose related cash flows are reported in the operating section.

Household International, Inc., however, provides an interesting contrast. It emphasizes even more the flexibility in GAAP for cash flow reporting. Household International is also in the consumer loan business. Although much of Household's business entails loan origination, like AmeriCredit, the company also purchases and sells receivables. Yet Household classifies cash flows from its purchase and sale of receivables in the investing section of its cash flow statement.

The AmeriCredit case provides an informative look at the effects of the flexibility in GAAP for cash flow reporting. Without breaking the rules, that flexibility can be used to create a misleading signal about a firm's ability to generate sustainable cash flow. In other cases, companies may go beyond the boundaries of GAAP. They may improperly report operating cash expenditures as investments, boosting operating cash flow in the process. Consider the unfolding saga of HealthSouth Corp.

As this book is being written, we are reminded each day of the lengths to which some corporate managers may go in an effort to misrepresent their company's financial performance. During the 1980s and 1990s, HealthSouth grew rapidly, providing outpatient surgical, diagnostic, and rehabilitative health services. In less than 20 years, the company grew from a business start-up to an enterprise with over \$4 billion in revenue. Profits and the company's share price followed right along.

In early 2003, we learned that much of HealthSouth's financial performance was actually fabricated. Although the facts of the case are still unfolding, it appears that over many years, and under the watch of several different chief financial officers, a systematic fraud was effected. At regular meetings of top corporate officers, before actual results were made public, differences between preliminary estimates of actual earnings and analyst expectations of the company's results were identified. These differences were referred to as "gaps" or "holes" that needed to be filled before the company went public with its results. Managers then were assigned the task of finding "dirt" to fill the holes so

that actual earnings would meet the expectations of analysts. That so-called dirt included fictitious adjustments to increase net revenues and assets and reduce expenses. Fictitious journal entries then were posted to the company's accounts and, at times, allegedly included the generation of fictitious supporting documentation.³

Net revenues were overstated by understating third-party payor discounts, a contra account, or reduction in revenue. Estimating the amount of such discounts requires considerable judgment and thus is open to manipulation. Overstated assets included property, plant, and equipment. By overstating such assets, operating expenses could be understated, boosting profits. Curiously, cash also was allegedly overstated. How the company was able to misstate cash and not be caught by its auditors is still a mystery. As noted by Dan Guy, a prominent author of auditing textbooks, "I'm shocked that cash is manipulated and overstated, because the darn stuff is so easy to count."⁴

For our purposes we are particularly interested in the overstatement of property, plant, and equipment. In overstating property, plant, and equipment, HealthSouth also overstated capital expenditures, an investing use of cash, by including operating expenses in their total. By reporting operating expenses as capital expenditures, or increases to property, plant, and equipment, cash expenditures that would have reduced operating cash flow were reported as investing uses of cash. Operating cash flow was correspondingly boosted.

Exhibit 3.4 provides summarized cash flow information as originally reported by HealthSouth. We hasten to point out that the figures presented in the exhibit ultimately will be restated. Yet we wanted to show what the company's statement of cash flows looked like based on reported amounts.

As seen in the exhibit, in the 1999 through 2001 time period, HealthSouth reported that it was able to generate ample amounts of operating cash flow. Most of that cash was plowed into net new investments, which consisted primarily of capital expenditures. In 2001, operating cash flow exceeded net cash used in investing activities by a significant amount. During that year the company received \$215 million from the sale of certain "non-strategic assets."⁵ In two of the three years presented, 1999 and 2001, the company was able to use cash generated by operations to cover net cash used in investing activities and also to pay down debt and buy back stock. Such transactions are reflected in Exhibit 3.4 as cash (used in) financing activities.

**Exhibit 3.4 HealthSouth Corp., Summarized Statements of Cash Flows,
Years Ended December 31, 1999, 2000, and 2001 (\$ millions)**

	1999	2000	2001
Net cash provided by operating activities	\$704.5	\$796.8	\$670.4
Net cash (used in) investing activities	(620.8)	(778.4)	(399.3)
Net cash provided by (used in) financing activities	(93.1)	32.5	(174.8)
Increase (decrease) in cash and cash equivalents	\$ (9.4)	\$ 50.9	\$ 96.3

Source: HealthSouth Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, p. 42.

Our point is that on an as-reported basis, HealthSouth's cash flow statement looks healthy. By allegedly shifting operating expenditures to the investing section, the company was able to boost operating cash flow and portray a stronger picture of health without actually affecting total cash flow. Of course, as noted, other steps were taken, including a misstatement of cash itself. So it is anybody's guess as to what the company's real cash flow results looked like. Collectively, it is not difficult to understand how many analysts who use such cash flow numbers to evaluate the quality of the company's earnings may have been misled.

As seen, operating cash flow can provide misleading signals of a company's ability to generate sustainable cash flow because of steps taken within the boundaries of GAAP or steps taken that extend beyond the boundaries of GAAP. This chapter looks at both approaches to creative cash flow reporting as they affect classifications of cash flow in the operating and investing sections.

INVESTING CASH FLOW

Companies expend resources on investments to generate returns. Those returns come in the form of income from operations and operating cash flow. Cash expended on investing activities might include the origination of loans that generate interest income. The granting and collecting of loan principal are reported as investing cash activities. Cash interest collected is reported as operating cash flow. Investments in debt and equity securities also are reported as investing cash flow. Purchases of investments are investing uses of cash; proceeds from sale are investing sources. Cash income from those investments, including interest and dividends, are operating cash activities.

Typically the greater portion of cash used in investing activities is in the purchase of property, plant, and equipment. Such disbursements, known more commonly as capital expenditures, provide the asset base from which a company conducts its operations. Cash expended in the purchase of such assets is reported as an investing use of cash. Proceeds from their sale are investing sources of cash. It is important to note that proceeds from sale, whether of investments in securities or of property, plant, and equipment, include recovery of book value plus any gain or less any loss on sale. Thus, gains and losses from sales of investments or property, plant, and equipment are not included in operating cash flow.⁶

The investing section of the statement of cash flows for Intel Corp. is provided in Exhibit 3.5. Note the significance of capital expenditures, referred to here as additions to property, plant, and equipment. Across the three years presented, 2001, 2002, and 2003, the company expended \$7,309 million, \$4,703 million, and \$3,656 million, respectively, on additions to property, plant, and equipment. Other investing activities included cash expended on acquisitions and purchases and sales of available-for-sale investments. In 2003, as additions to property, plant, and equipment declined below prior-year levels, cash expended for new available-for-sale investments totaled \$11,662 million and exceeded by a significant amount the \$8,488 million in proceeds received from maturities and sales of available-for-sale investments.

Understanding the classification of investing cash flow is important in gaining more insight into how an operating item might be classified as an investing item, or vice versa. Generally, if an expenditure can be characterized as an investment or as the purchase of

Exhibit 3.5 Intel Corp., Investing Section of the Statement of Cash Flows, Years Ended December 29, 2001, December 28, 2002, and December 27, 2003 (\$ millions)

	2001	2002	2003
Net cash provided by (used in) investing activities:			
Additions to property, plant and equipment	\$(7,309)	\$(4,703)	\$(3,656)
Acquisitions, net of cash acquired	(883)	(57)	(61)
Purchases of available-for-sale investments	(7,141)	(6,309)	(11,662)
Maturities and sales of available-for-sale investments	15,398	5,634	8,488
Other investing activities	(395)	(330)	(199)
Net cash (used in) investing activities	\$ (330)	\$(5,765)	\$(7,090)

Source: Intel Corp. Form 10-K annual report to the Securities and Exchange Commission, December 27, 2003, p. 54.

an asset to be used in operations, an investing classification is appropriate. Assets purchased for sale—that is, inventory—are assigned an operating designation.

Restricted Cash

The cash flow classification of restricted cash fits within these general rules. Restricted cash is set aside for a particular purpose. The restriction may be a legal one, for example, a compensating balance where a bank requires that a portion of a bank balance must be set aside to support an existing borrowing arrangement or where proceeds from a borrowing must be employed specifically for the construction of a building. Restrictions also may be informal, such as cash set aside for the payment of a dividend.

Cash flow statement classification of restricted cash depends on the nature of the restriction. For example, the bank of Shopsmith, Inc., required the company to maintain a restricted cash account for use in funding any customer-related, “credit card returns or chargebacks that may occur.”⁷ At March 31, 2002, the company reported \$152,000 in restricted cash on its balance sheet. The restriction was lifted during the company’s fiscal 2003, and the entire \$152,000 restricted cash balance was reported as operating cash flow.

In contrast, in 2001 Homasote, Inc., received \$2,039,286 in proceeds from its insurance carrier for equipment damaged by a fire. The company agreed with its lender that \$330,814 of the insurance proceeds should be restricted for replacement of the damaged equipment under the terms of its loan agreement with the New Jersey Development Authority.⁸ Because it related to equipment, changes in the balance of the company’s restricted cash account were reported in investing cash flow.

Assets Acquired for Use in Operations and for Sale

While expenditures for inventory that is held for sale are reported as operating uses of cash and purchases of assets acquired for use are reported as investing uses of cash, what

if merchandise that is acquired for use is also held for sale? A good example is provided by the cash flow reporting practices by companies in the short-term rental business.

Several companies in this industry purchase furniture, appliances, and consumer electronics and hold these assets for sale, for short-term rental, or on a rent-to-own basis. One example is Aaron Rents, Inc.

At Aaron Rents, all rental merchandise is subject to depreciation. Merchandise on lease is depreciated over its estimated useful life. For merchandise that is on hand and available for sale or lease, no depreciation is recorded until an ownership agreement is signed. However, depreciation of the merchandise is begun if an agreement has not been signed after one year.

Through its year ended December 31, 2002, Aaron Rents reported all purchases of rental merchandise as investing uses of cash. This was a curious treatment because there was very little difference between what the company considered to be its merchandise held for sale or lease and merchandise inventory available for sale at any retailer. Aaron Rents might have argued that because it sold its merchandise on a rental contract, its transactions were inherently different from those of other, more traditional retailers. However, in substance, such a rent-to-own agreement might be viewed more as an installment purchase contract. In that light, Aaron Rents' rent-to-own transaction would be considered the sale of inventory, and an operating designation for the purchase of that inventory would have been viewed as more appropriate.

Interestingly, in 2003, Aaron Rents changed its classification for additions to its rental merchandise pool from an investing to an operating designation. The change made the company's presentation format more consistent with other firms in the industry. Statements of cash flows for prior years were reclassified to conform to this new presentation. As seen in Exhibit 3.6, the effects of the change on the company's statement of cash flows and especially on its reported operating cash flow were dramatic.

As noted in the exhibit, Aaron Rents' change in the cash flow classification for purchases of rental merchandise from an investing to an operating designation was the primary reason for a reduction in operating cash flow from \$189.4 million and \$221.7 million, as originally reported in 2001 and 2002, respectively, to \$66.1 million and \$10.1 million, respectively, as reclassified. Financing cash flow was not affected by the reclassification, nor was the overall change in cash.

Demonstrating flexibility in the reporting of cash flow, one company in the rent-to-own industry that continues to classify purchases of merchandise as investing cash flow is Bestway, Inc. In the years ended July 31, 2002 and 2003, Bestway reported operating cash flow of \$10,210,071 and \$12,110,730, respectively. However, reported among the company's investing activities were purchases of rental units and equipment for \$9,593,006 and \$10,565,857 in 2002 and 2003, respectively. If the company were to report purchases of this rental merchandise in the operating section of the statement of cash flows, operating cash flow would be reduced significantly.⁹

Capitalized Operating Costs

Bestway's cash flow classification of rental merchandise purchases is one example that demonstrates how an investing designation might be afforded a disbursement that otherwise would have been classified as an operating use of cash. Another example is the characterization of operating expenditures as long-lived assets. When operating costs are capitalized, or reported as assets, the cash expenditure made often is reported as an in-

Exhibit 3.6 Aaron Rents, Inc., Operating and Investing Cash Flows, Years Ended December 31, 2001, and 2002, as Originally Reported and as Reclassified (\$ millions)

	2001	2002
As Originally Reported:		
Net cash provided by operating activities	\$189.4	\$ 221.7
Net cash (used in) investing activities:		
Net additions to property, plant and equipment	(28.2)	(25.2)
Net additions to rental merchandise	(122.4)	(211.0)
Other investing activities	(12.1)	(14.0)
Net cash (used in) investing activities	(162.7)	(250.2)
Net cash provided (used in) financing activities	(26.7)	28.5
Increase (decrease) in cash	\$ 0	\$ 0
As Reclassified:		
Net cash provided by operating activities	\$ 66.1	\$ 10.1
Net cash (used in) investing activities:		
Net additions to property, plant and equipment	(27.3)	(24.6)
Other investing activities	(12.1)	(14.0)
Net cash (used in) investing activities	(39.4)	(38.6)
Net cash provided (used in) financing activities	(26.7)	28.5
Increase (decrease) in cash	\$ 0	\$ 0

Source: Aaron Rents, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, Item 8, and December 31, 2003, Item 8.

vesting use of cash. We have already seen examples of this in Chapter 1, where American Software, Inc., reported capitalized software development costs as investing uses of cash. As the company reduced the proportion of software costs capitalized, its operating cash flow declined as greater amounts of software costs incurred were reported in the operating section. Although it is a more extreme case, HealthSouth Corp. also demonstrates how capitalization decisions can boost operating cash flow.

Investments in Debt and Equity Securities

Beyond assets used in operations, investments in debt and equity securities also are classified as investing cash flows. If these investments are characterized as investments in trading securities, however, then cash expended in their purchase and proceeds from their sale are reported as operating cash flow.

In Chapter 1 we looked at Nautica Enterprises, Inc. Traditionally, the company classified investment securities as available for sale. Cash expended in making investments was reported as an investing use of cash. Around the time the company carried a substantial sum in its portfolio, it changed the classification of its investments to a trading

designation. Over the next few years as it liquidated its investment portfolio, the cash proceeds generated were reported as operating sources of cash.

No Simple Rule

The purpose of these examples is to give background and perspective to the classification of investing cash flows. On the surface, GAAP for classifying investing cash flow is reasonably straightforward. Cash expended for loans, investments in securities, except for trading investments, and purchases of property, plant, and equipment are reported as investing cash flow.

However, beyond this simple expression of investing activities, there is no simple rule for predicting consistently where investment-related cash expenditures will be reported. Certainly balance sheet classification plays a role. Everything else being equal, cash expenditures resulting in assets classified as noncurrent tend to be reported as investing uses of cash. Purchases of buildings and equipment fit this rule well. However, even this simple rule will not work consistently.

For example, investments in marketable securities classified as current, excluding trading investments, still will be reported as investing cash flow. On the other end of the spectrum are investments in noncurrent assets reported as operating cash flow. Consider the case of Pre-Paid Legal Services, Inc.

Pre-Paid Legal Services, Inc., sells what are effectively insurance policies to cover the need for future legal services. The company refers to its policies as memberships. For an annual fee, members are afforded legal representation through a network of independent law firms that are under contract with Pre-Paid Legal Services. At the time a membership is sold, an advance is made, with certain limitations and restrictions, to the sales agent for approximately three years' worth of commissions to be earned on the sale.

As of December 31, 2000, Pre-Paid Legal Services reported capitalized commission advances, which it titled membership commission advance receivables, of \$156.1 million. Of this total, \$45.6 million was reported as a current asset and \$110.5 was reported as a noncurrent asset. At the time, these capitalized costs represented 63 percent of the company's total assets.¹⁰ Starting in 2001, the company changed its accounting for membership commission advances and began expensing them. The financial statements for 2000 and prior years were restated, and membership commission advance receivables were removed from the balance sheet.

Interestingly, even though the majority of amounts reported as membership commission advances were noncurrent assets that were amortized against income, the company reported commission advance payments as *operating* uses of cash. Thus, the restatement and the company's new accounting policy for membership commission advances reduced earnings and assets reported on the balance sheet. However, the accounting change did not impact the cash flow statement.

Beyond balance sheet classification, industry-wide practices are also important in cash flow classification. For example, capitalized software development costs are generally, but not always, reported as investing uses of cash.

Yet even beyond these classification guidelines, there remains an unexplained component where cash flow reporting practices are company specific and can lead to unexpected results. Such unexpected cash flow reporting practices attest to the inherent flexibility of GAAP for cash flow reporting.

GAAP FLEXIBILITY: IS IT OPERATING OR INVESTING CASH FLOW?

Given the flexibility that exists in GAAP for cash flow reporting, managers who have an interest in doing so can ply that flexibility to boost operating cash flow. The objective is to put a more positive spin on operating results.

Several examples related to the cash flow classification of operating and investing items are provided next. Some of the examples are designed to help the reader better understand how cash flows are reported. Others are provided because we found them to be both interesting and potentially misleading.

Capitalized Operating Costs: A Closer Look

When it is determined that costs incurred will benefit future periods, those costs are capitalized or reported as assets. The capitalized costs are then amortized or systematically written off with an expense charge against earnings in the future periods that benefit from these expenditures. In this way, benefits derived in the form of revenues or cost savings are charged with an expense for those costs.

In recent years, GAAP have reduced the kinds of costs that firms may capitalize. For example, start-up costs, which consist of costs related to such one-time activities as opening a new facility, introducing a new product or service, commencing activities in a new territory, or pursuing a new class of customer, may no longer be capitalized. Also, the Securities and Exchange Commission (SEC) has restricted when advertising costs known as direct-response advertising may be capitalized. Direct-response advertising consists of costs incurred to elicit sales to customers who can be shown to have responded specifically to that advertising. Such costs may be capitalized when persuasive historical evidence permits formulation of a reliable estimate of the future revenue that can be obtained from incremental advertising expenditures. The SEC has interpreted capitalization guidelines for such costs in a limited way. Companies in new, evolving, and unstable industries may not capitalize such costs. This was learned by America Online, Inc., a company that in 1996 was required to take a special \$385 million pretax charge to write down direct-response advertising costs that had been capitalized previously.¹¹

Yet even with newer limitations, numerous kinds of costs may be, and in some cases must be, capitalized. Some relate to firms across all industries, including, for example, capitalized interest costs, where capitalization is required when certain conditions are met. Others are costs incurred within specific industries, including software development and motion picture development costs.

This section looks at the cash flow classification of several different kinds of capitalized costs. In particular, our interest is in determining whether these costs are reported as operating activities or investing activities in the statement of cash flows.

Customer Acquisition Costs

Although the costs carry different names, many companies in varying industries incur costs related to increasing their customer base. Qwest Corp. describes customer acquisition costs in this way:

Customer Acquisition Costs. We defer the initial direct costs of obtaining a customer to the extent there is sufficient revenue guaranteed under the arrangement to ensure the realizability of the capitalized costs. Deferred customer acquisition costs are amortized over the longer of the contract or the expected life of the customer relationship.¹²

Qwest's policy describes the nature of these costs well. Customer acquisition costs consist of incremental direct costs incurred in adding new customers. For example, such costs may include direct-response advertising. They also may include commissions paid to sales personnel, similar to the membership-commission advances paid by Pre-Paid Legal. Administrative costs incurred in signing up new customers may be included with customer acquisition costs as well.

Pre-Paid Legal describes its accounting policy for such administrative costs, which it capitalizes, in this way:

Member and Associate Costs. Deferred costs represent the incremental direct and origination costs the Company incurs in enrolling new Members and new associates. . . . Deferred costs for enrolling new members include the cost of the Membership kit and salary and benefit costs for employees who process Membership enrollments. Deferred costs for enrolling new associates include training and success bonuses paid to individuals involved in recruiting the associate and salary and benefit costs of employees who process associate enrollments. Such costs are deferred to the extent of the lesser of actual costs incurred or the amount of the related fee charged for such services.¹³

The company carries these capitalized costs in both the current and noncurrent asset sections of the balance sheet. Classification depends on the amortization period for the capitalized costs, which, in turn, is linked to the term of the related new membership.

Subscriber Acquisition Costs

Pegasus Communications Corp. provides direct broadcast satellite and cable television services. The company refers to the costs incurred in signing up new customers as subscriber acquisition costs and describes its accounting policy for these costs in this way:

These costs consist of the portion of programming costs associated with promotional programming provided to subscribers, equipment related subsidies paid to distributors and applicable costs incurred by us, installation costs and related subsidies paid to dealers, dealer commissions, advertising and marketing costs, and selling costs.¹⁴

The company expenses these costs. However, it capitalizes certain subscriber acquisition costs that it capitalizes, as described next.

We also have subscription plans for our DIRECTV programming that contain minimum service commitment periods. These plans have early termination fees for subscribers should service be terminated by subscribers before the end of the commitment period. Direct and incremental subscriber acquisition costs associated

with these plans is deferred in the aggregate not to exceed the amounts of applicable termination fees. . . . Direct and incremental subscriber acquisition costs consist of equipment costs and related subsidies not capitalized as fixed assets, installation costs and related subsidies, and dealer commissions.¹⁵

These costs are amortized over a 12-month period and are carried on the balance sheet as current assets.

Policy Acquisition Costs

Customer acquisition costs typically are capitalized in the insurance industry, where they are referred to as policy acquisition costs. Miix Group, Inc., which provides professional liability insurance products to the medical profession, describes its accounting method for policy acquisition costs in this way:

Deferred Policy Acquisition Costs. Policy acquisition costs (primarily commissions and premium tax expenses), that vary with and are directly related to the production of business, are capitalized and amortized over the effective period of the related policies.¹⁶

Miix Group does not classify its balance sheet into current and noncurrent asset sections. The company simply reports assets in a single section of its balance sheet. Accordingly, deferred policy acquisition costs are not separated from current assets, such as cash or accounts receivable, or noncurrent assets, such as goodwill or property, plant, and equipment. Nonetheless, given that their amortization period generally extends beyond one year, they should be considered to be long-lived in nature.

Aetna, Inc., a health-insurance provider, expenses acquisition costs related to its pre-paid health and health indemnity contracts. The company does, however, capitalize acquisition costs related to its long-term care policies. Those costs are carried in other long-term assets on the company's balance sheet.

Direct-Response Advertising

The primary line of business of CPI Corp. is to operate portrait studios within Sears, Roebuck & Co. retail stores. Certain of the costs incurred by the company in marketing its services to consumers are capitalized as direct-response advertising. The policy is described in this way:

The Company expenses costs involved in advertising the first time the advertising takes place, except for direct-response advertising, which is capitalized and amortized over its expected period of future benefits.

Direct-response advertising consists of direct mail advertisements, which include coupons for the Company's products, and of certain broadcast costs. The capitalized costs of the advertising are amortized over the expected period of future benefits following the delivery of the direct mail in which it appears.

Total advertising reported as a capitalized cost for direct-response advertising and classified with other assets for 2001 and 2000 was \$1.3 million and \$1.2 million, respectively.¹⁷

The capitalized direct-response advertising costs of CPI Corp. are carried with other assets, a noncurrent asset, on the company's balance sheet.

Direct-response advertising is very important to companies in the direct-to-consumer catalog sales business. Consider this disclosure made by Lillian Vernon Corp.

Catalog costs are deferred and amortized over the estimated productive life of the catalog, generally three months. Such deferred costs are considered direct-response advertising . . . and are reflected as long-term assets in the accompanying balance sheets.¹⁸

Lillian Vernon, which uses catalogs to market miscellaneous merchandise, including gift, household, kitchen, and gardening products, incurs direct-response advertising costs when it mails catalogs to consumers. Although the company notes that a three-month amortization period is used for such costs, capitalized catalog costs are reported as a non-current asset on its balance sheet.

In its membership shopping and time-share sales programs, Cendant Corp. also incurs advertising costs that are considered to be direct-response advertising. As described in the next note, however, the company generally expenses such costs as incurred:

Advertising costs, including direct response advertising related to membership and timeshare sales programs, are generally expensed in the period incurred.¹⁹

Cash Flow Classification of Customer Acquisition Costs The discussion in the previous section reveals that customer acquisition costs include a wide range of expenditures carrying different names. Depending on the company and the industry, such titles as customer acquisition costs, subscriber acquisition costs, policy acquisition costs, and direct-response advertising are used. The costs are all designed to add to a company's customer base.

Among the many companies surveyed, capitalization of customer acquisition costs was common but not universal. There was, however, no consistency in the balance sheet treatment of assets resulting from cost capitalized. Some companies reported them as current assets and others as noncurrent assets. Companies that did not classify their balance sheets simply reported unamortized customer acquisition costs among their listed assets.

Although differences were noted in the balance sheet treatment of capitalized customer acquisition costs, there was little disagreement in the cash flow treatment of these costs. Regardless of the balance sheet classification employed, capitalized customer acquisition costs were reported as an operating use of cash. On this item we found consistent treatment. As seen in the case of Cendant Corp., operating treatment also was afforded direct-response advertising costs that were expensed as incurred.

Tyco International, Ltd. and Purchased Customer Accounts

Tyco International, Ltd., historically touted its financial strength as evidenced by its ability to generate what it termed free cash flow, defined by the company as "cash generated by operations, minus dividends and capital expenditures."²⁰ In fact, at one point, the company's chief financial officer told investors to "forget reported earnings and instead focus

on cash-flow generation as a percentage of net income, to ‘show that our quality of earnings is good.’”²¹

The company, with operations in security and fire-protection services, among other areas, would spend significant amounts each year adding to its customer base. Although not disclosed in its regulatory filings, the company admitted in response to analyst questions that during 2001 it spent some \$830 million buying roughly 800,000 individual customer contracts for its security-alarm business from a network of 2,300 independent dealers. These dealers were agents of Tyco who sold security services on the company’s behalf. They did not, however, work as employees of the company but as independent contractors.

Had the independent dealers worked for Tyco, costs incurred in adding customer accounts would have been a form of customer acquisition cost. The company would have faced the question of whether to capitalize some portion of these costs. However, whether capitalized or not, expended amounts would have reduced operating cash flow and the company’s definition of free cash flow.

Tyco, however, classified cash payments made to acquire customer contracts from its independent dealers as acquisitions. They were reported in the investing section of the cash flow statement. As acquisitions, these cash payments did not reduce the company’s free cash flow. Other intricacies of the company’s accounting for purchased customer accounts boosted free cash flow even further.

As alleged, Tyco might pay \$1,000 for a hypothetical customer account that generated \$30 per month in revenue for security monitoring. The company would not write a check for \$1,000, however. Instead it would deduct \$200 as a connection fee and pay the dealer \$800 for the new account. That \$200 was accounted for as a reduction in operating expenses, which boosted net income.²²

Thus, even though Tyco was out of pocket \$800 for the purchase of this hypothetical customer account, it reported \$200 of up-front income and operating cash flow. That operating cash flow was actually the company’s own money. It was the difference between what was reported as a \$1,000 acquisition and the actual \$800 that was paid to acquire the account. No wonder the company reported so much operating and free cash flow. On an operating cash flow basis, new accounts were effectively without cost and added immediately to cash flow results.

After intense scrutiny was focused on these questionable actions, the company changed its accounting for acquired customer accounts and its definition of free cash flow. As Tyco noted, “In determining free cash flow under this new definition, the Company will include the effect of spending on ADT dealer account acquisitions,”²³ Indications were that this change would reduce free cash flow during 2003 by about \$750 million, or approximately 27 percent.²⁴

Capitalized Interest

We normally think of interest as being expensed as incurred. However, when an asset requires an extended period of time to get it ready for its intended use, interest incurred during that preparation time should be capitalized, that is, added to the cost of the asset.²⁵

An extended period of time to prepare an asset for its intended use might entail the construction period for a property or equipment item. Examples include the construction of a building or other real estate project and the manufacture of aircraft or cruise ships,

all intended for a company's own use. It might also entail assets intended for sale or lease that are constructed as discrete projects. Examples here include residential homebuilding and other real estate projects, barreled whiskey, and tobacco inventories.²⁶

Interest to be capitalized represents avoidable interest, that is, the interest that could have been avoided if the asset were not constructed. When specific borrowings can be identified with a particular project, then interest incurred on those borrowings during the construction period should be capitalized. If specific borrowings do not cover the entire funding requirements of the project, then interest incurred on other borrowings should be capitalized based on a weighted average interest rate. That interest rate is applied to average expenditures accumulated on a project during a reporting period over and above the amount of any specific borrowings related to the project. Interest capitalization ceases when an asset is ready for use or sale.

Delta Air Lines, Inc., capitalizes interest on aircraft and ground facilities that are under construction. Consider this disclosure about the company's accounting policy for capitalized interest:

We capitalize interest on advance payments for the acquisition of new aircraft and on construction of ground facilities as an additional cost of the related assets. Interest is capitalized at our weighted average interest rate on long-term debt or, if applicable, the interest rate related to specific asset financings. Interest capitalization ends when the equipment or facility is ready for service or its intended use.²⁷

For assets that are classified as property, plant, and equipment, capitalized interest is part of the asset's cost and adds to depreciation expense over its useful life. For discrete inventory projects, capitalized interest adds to inventory cost and increases cost of goods sold upon sale. Thus interest capitalization shifts the timing of expense from when the interest is incurred until later when the associated asset is depreciated or sold.

In terms of cash flow, when interest is expensed as incurred, it is reported as an operating use of cash. In contrast, depending on whether it is capitalized into property, plant, and equipment or inventory accounts, capitalized interest may be reported as an investing item or an operating item. When assets whose cost includes capitalized interest are added to property, plant, and equipment, the amount of interest capitalized is reported as part of capital expenditures in the investing section of the cash flow statement. When added to discrete inventory projects, capitalized interest is reported as an operating use of cash.

Disclosures of capitalized interest vary depending on the nature of the company and materiality of the interest that has been capitalized. Most companies that are adding capitalized interest to property, plant, and equipment accounts report the amount of interest capitalized during a reporting period in a simple footnote comment. Delta, for example, provided this disclosure:

Capitalized interest totaled \$12 million, \$15 million and \$32 million for the years ended December 31, 2003, 2002 and 2001, respectively.²⁸

Companies with more material amounts of capitalized interest, especially where interest becomes a component of inventory, tend to provide more extensive disclosures of capitalized interest. Consider KB Home.

KB Home capitalizes interest into its inventory of homes, lots, improvements, and land under development. In its annual report the company provided a summary of interest incurred and expensed and of interest capitalized into inventory. Summarized data taken from that disclosure for 2001, 2002, and 2003 are provided in Exhibit 3.7.

During the three years ended November 30, 2001, 2002, and 2003, KB Home capitalized \$62.0 million, \$68.4 million, and \$95.0 million, respectively, of interest incurred into inventory. Although amounts capitalized will await sale to be transferred to expense in the form of cost of goods sold, total interest incurred reduced operating cash flow when paid.

Software Development Costs

For software companies that sell, lease, or license new software applications, costs incurred in developing that software are expensed until technological feasibility is reached. At that point, and until the software is available for distribution, software development costs incurred are capitalized. Technological feasibility is defined as the point at which all of the necessary planning, designing, coding, and testing activities have been completed to the extent needed to establish that the software application can meet its design specifications. Once technological feasibility is reached, the software company has a more viable product and a higher likelihood of being able to realize its investment in the software through future revenue.²⁹ Because the financial realizability of software development can be assessed more readily than spending on more traditional research and development projects, accounting standards embrace capitalization of software development costs. As noted by a financial executive in a software company, “The key distinction between our spending and R&D is recoverability. We know we are developing something we can sell.”³⁰

PeopleSoft, Inc. describes its accounting policy for software development costs in this way:

The Company accounts for the development cost of software intended for sale in accordance with Statement of Financial Accounting Standards No. 86, “Accounting for Costs of Computer Software to be Sold, Leased, or Otherwise Marketed” (“SFAS 86”). SFAS 86 requires product development costs to be charged to expense

Exhibit 3.7 KB Home, Interest Incurred, Expensed, and Capitalized into Inventory, Years Ended November 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Interest incurred	\$103.0	\$101.1	\$118.8
Interest expensed	(41.0)	(32.7)	(23.8)
Interest capitalized	\$ 62.0	\$ 68.4	\$ 95.0

Source: KB Home, Form 10-K annual report to the Securities and Exchange Commission, November 30, 2003, p. 69.

as incurred until technological feasibility is attained. Technological feasibility is attained when the Company's software has completed system testing and has been determined viable for its intended use.

It would seem that waiting until system testing has been completed before technological feasibility is reached is rather late in the software development process. However, as long as a software firm has a detailed program design or a detailed step-by-step plan for completing the software, software costs may be capitalized once the detailed program design is complete and high-risk development issues have been resolved.

There is one additional limit on whether software development costs may be capitalized and by how much: the software's expected commercial viability. Capitalized software costs may not be greater than the expected net realizability of the software product once it is commercialized. Accordingly, even if a detailed program design is prepared, costs may not be capitalized when commercial viability of the product is questioned.

In practice, these various decision points and constraints on capitalization mean that substantial flexibility is afforded software firms for deciding whether software development costs are to be capitalized. Development of a detailed program design early in the software-writing process, assuming the product is expected to be commercially viable, can result in an increase in the proportion of software development costs capitalized. Postponement of a detailed program design means that capitalization must await system testing. Consider this policy statement from PeopleSoft, Inc.

The time between the attainment of technological feasibility and completion of software development has been short with immaterial amounts of development costs incurred during this period. Accordingly, the Company did not capitalize any development costs in 2002 or 2001. . . .

Apparently the company did not complete a detailed program design. As a result, technological feasibility was postponed until system testing was finished. That stage was sufficiently late in the software development process that any remaining development costs were immaterial. As a result, the company capitalized no software development costs.

As a result of management judgment and GAAP flexibility, capitalization practices vary significantly across the spectrum of software companies. In a research paper, Ely and Waymire examined the software capitalization practices of a sample of 342 software firms in 1998. Of this sample of firms, 175 firms expensed all software development costs incurred. The remaining 167 firms capitalized at least some portion, averaging 26 percent of software costs incurred.³¹

Analysts have understandable concern regarding the proportion of software costs capitalized by a firm. Capitalization boosts earnings. Later, when capitalized amounts are amortized, earnings are reduced. When amounts capitalized exceed software costs amortized, the net effect on earnings is a positive one and is offset with an increase in net capitalized software costs on the balance sheet. The risk is that these capitalized costs will not be realized and a future write-down may be needed.

The effects on earnings of a software firm's capitalization policy are minimized when amortization of software costs equals new amounts capitalized. At this steady state, analysts' concerns about a firm's capitalization policy are somewhat assuaged. The continuing effects of a firm's capitalization policy on operating cash flow still exist, however.

Most companies report capitalized software development costs as an investing use of cash. There are exceptions, however. Consider, for example, the cash flow data presented for Activision, Inc., in Exhibit 3.8.

Unlike most of its peers, Activision classifies capitalized software development expenditures as operating uses of cash. It is a conservative treatment. The company could boost operating cash flow markedly by following other software firms and reporting capitalized software development expenditures as investing uses of cash.³²

Software costs that are expensed as incurred are also operating uses of cash. Thus, not only are there differences across firms in the amount of software costs capitalized, there are significant differences in the cash flow treatment of software costs. Accordingly, even when new software costs capitalized equal amounts amortized and the effects on earnings of a firm's capitalization policy are minimal, software capitalization continues to boost operating cash flow when capitalized costs are reported as investing uses of cash. Consider A.D.A.M., Inc., for example.

A.D.A.M, Inc., produces health-related educational software. During the year ended December 31, 2002, the company generated a net loss of \$1,530,000. On a cash flow basis, however, the company's performance was better. Reported operating cash flow during 2002 was \$1,022,000.

A.D.A.M.'s accounting for software development costs had little effect on its earnings during 2002. Software development costs capitalized were \$527,000; amounts amortized were \$599,000. Capitalized software development costs were, however, reported as an investing use of cash. Had they been reported in the operating section, operating cash flow would have been correspondingly reduced.

Capitalized Internal-Use Software Development Costs Beyond the software firms, all companies are subject to capitalization rules when developing software for internal use. Here the accounting rules also allow managers considerable leeway in deciding the amount of software costs to capitalize. In particular, costs incurred in developing software for internal use are to be capitalized once the preliminary project stage is complete. At that point, the company has completed its conceptual formulation, design, and testing stage. Also, by that time a software vendor has been chosen, if one is to be used. Costs are capitalized until the project is completed. Capitalized costs are reported as long-lived assets and are amortized over their expected economic life.³³ Amounts capitalized

Exhibit 3.8 Activision, Inc., Operating Cash Flow and Capitalized Software Development Expenditures, Years Ended March 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Net cash provided by operating activities	\$81.6	\$111.8	\$91.0
Capitalized software development expenditures included in net cash provided by operating activities ^a	\$(66.0)	\$(77.0)	\$(151.6)

^a Includes purchased intellectual property licenses.

Source: Activision, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. F-5.

appear as investing uses of cash versus an operating designation if the costs were not capitalized.

DeVRY, Inc., provided the next disclosure for internal-use software development costs incurred:

The Company capitalizes certain internal software development costs that are amortized using the straight line method over the estimated lives of the software not to exceed five years. Capitalized costs include external direct costs of materials and services consumed in developing or obtaining internal-use software and payroll and payroll related costs for employees who are directly associated with the internal software development project. Capitalization of such costs ceases no later than the point at which the project is substantially complete and ready for its intended purpose. Capitalized software development costs for projects not yet complete, which are included as Equipment in the Land, Buildings and Equipment section of the Consolidated Balance Sheets, were \$6,862,000 and \$2,381,000 as of June 30, 2002 and 2001, respectively.

The company reports capitalized internal-use software development costs in the investing section of its cash flow statement. During 2002, a total of \$4,481,000 (\$6,862,000 – \$2,381,000) in costs were capitalized. Were these costs expensed, operating cash flow would have been reduced by approximately 4 percent.

Film Production Costs

Producing a modern motion picture can be an expensive undertaking. Just the compensation paid to an actor might run \$20 million or more if top-line talent, such as Tom Hanks, Julia Roberts, or Tom Cruise, is sought. And that compensates only a single actor. Other production costs include costs to obtain an original screenplay or for film rights to books or stage plays and to adapt those works to a screenplay; compensation of other cast members, directors, producers, extras, and other staff; costs of set construction and operations, wardrobe, and accessories; costs of sound synchronization; on-location rental facilities; postproduction costs such as music, special effects, and editing and an allocation of corporate overhead for individuals or departments with significant responsibility for film production. Because the costs incurred create an asset that is acquired for the purpose of benefiting future periods, those costs are capitalized. Once capitalized, film production costs then are amortized to expense as film revenues are generated.

Because capitalized film production costs benefit future periods, they are a long-lived asset, similar to property, plant, and equipment. In general, motion picture production firms do not classify their balance sheets. That is, assets are not separated into current and noncurrent categories. Nonetheless, because of an amortization period that extends beyond one year, capitalized film production costs should be considered to be long-lived assets.

Given their long-lived nature, one would expect that capitalized film production costs incurred during a reporting period would be classified as investing uses of cash on the cash flow statement. Yet GAAP requires motion picture companies to report capitalized film production costs as an operating and not as an investing use of cash.³⁴ As an example, consider Metro-Goldwyn-Mayer, Inc.

MGM incurred losses in both 2001 and 2002. In its year ended December 31, 2002, the company's net loss from continuing operations was \$142.2 million. That loss was actually larger than the previous year, when the company reported a loss of \$55.7 million from continuing operations. On an operating cash flow basis the company's performance also worsened during 2002. That year MGM used \$88.8 million in cash from operations while generating positive cash from operations of \$3.8 million in 2001.

Charged against operating cash flow in 2002 was \$468.1 million in film production costs that MGM termed "additions to film costs, net." That amount actually was up from \$391.6 million in 2001. Interestingly, had the company reported its capitalized film costs as an investing activity, operating cash flow would have been little changed in 2002 from 2001, even though its net loss had grown markedly.

Exhibit 3.9 presents selected balance sheet, income statement, and cash flow information for MGM. Note the lack of classification of assets on the balance sheet. Also note how much more operating cash flow the company apparently would have generated had capitalized film development costs been reported as investing uses of cash.

Exhibit 3.9 Metro-Goldwyn-Mayer, Inc., Selected Financial Statement Information, Years Ended December 31, 2001, and 2002 (\$ millions)

	2001	2002
From the balance sheet:		
Assets:		
Cash and cash equivalents	\$ 2,698	\$ 593,131
Short-term investments	—	6,488
Accounts and contracts receivable, net	458,010	590,637
Film and television costs, net	2,035,277	1,870,692
Investments in and advances to affiliates	845,042	620,132
Property and equipment, net	38,837	41,397
Goodwill	516,706	516,706
Other assets	26,594	29,791
Total assets	\$3,923,164	\$4,268,974
From the income statement:		
Loss from continuing operations	\$ (142,247)	\$ (55,740)
From the cash flow statement:		
Net cash provided by (used in) operating activities	\$3,815	\$ (88,779)
Additions to film costs, net included in operating cash flow	\$ (391,633)	\$ (468,083)

Source: Metro-Goldwyn-Mayer, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 57, 58, and 60.

Consistent with GAAP, other motion picture studios also report capitalized film production costs as operating uses of cash. Included are such firms as Pixar and Fox Entertainment Group, Inc., as well as smaller firms including Film Roman, Inc., and Lions Gate Entertainment Corp.

The cash flow classification practices of capitalized film production costs by motion picture companies contrast with the treatment afforded software development costs. In both cases, expenditures create long-lived assets that benefit future periods, similar to property, plant, and equipment. Those capitalized costs are amortized over the future periods benefited. Yet while cash flow classification practices in the software industry have led most firms to report cash expenditures for software development as investing uses of cash, the motion picture companies classify costs incurred for the development of motion pictures as operating uses of cash. These are industry practices that point to the care that must be taken by readers of financial statements in understanding exactly what is included in operating cash flow.

Oil Exploration Costs

Depending on whether oil exploration costs are capitalized, they may be reported as operating or investing cash flow. Under what is termed the full-cost method, oil exploration firms may capitalize all costs incurred in exploring for reserves. Costs even may be capitalized on wells that prove to be nonproductive provided those costs can be realized from future revenues to be derived from the firm's global reserves. Consider this disclosure provided by Anadarko Petroleum Corp.:

The Company uses the full cost method of accounting for exploration and development activities as defined by the SEC. Under this method of accounting, the costs for unsuccessful, as well as successful, exploration and development activities are capitalized as properties and equipment. This includes any internal costs that are directly related to exploration and development activities but does not include any costs related to production, general corporate overhead or similar activities.³⁵

The company includes capitalized exploration expenditures with its property, plant, and equipment accounts. Capitalized amounts are reported as investing uses of cash.

Under what is termed the successful-efforts method, oil exploration costs generally are expensed. Development costs, consisting of costs to drill and equip successful wells, are capitalized, but are charged to expense if proved reserves ultimately are not found. Consider this disclosure from Amerada Hess Corp., a successful-efforts firm:

The Corporation uses the successful efforts method of accounting for oil and gas producing activities. Costs to acquire or lease unproved and proved oil and gas properties are capitalized. Costs incurred in connection with the drilling and equipping of successful exploratory wells are also capitalized. If proved reserves are not found, these costs are charged to expense. Other exploration costs, including seismic, are charged to expense as incurred. Development costs, which include the costs of drilling and equipping development wells, are capitalized.³⁶

Unlike capitalized oil exploration costs, which are reported as investing uses of cash, oil exploration costs that are charged directly to expense reduce operating cash flow. Ac-

cordingly, companies that employ the full-cost method will report higher operating cash flow than companies that use the successful-efforts method. That higher operating cash flow will continue even when earnings are later reduced for the amortization of capitalized exploration costs.

Cost Capitalization Summary

A vast array of operating costs may be capitalized. For purposes of cash flow analysis, it is important to determine whether such capitalized costs are being reported as operating or investing uses of cash. That cash flow classification will depend on the nature of the cost item, the company's industry, and management discretion.

Generally, capitalized costs that are added to the property, plant, and equipment category of the balance sheet are reported as investing uses of cash. Costs that are capitalized into inventory or other current operating accounts typically are reported as operating uses of cash. However, as we saw with firms in various industries, for example, software and motion picture production, such distinctions are not always accurate. Accordingly, it is important to examine carefully the operating and investing sections of the statement of cash flows together with related footnotes to determine how capitalized costs have been classified on the cash flow statement.

Investments in Securities

When investments in debt securities are classified as held to maturity, or when investments in debt or equity securities are classified as available for sale, the purchase amount of the investment or the proceeds from its sale are classified on the cash flow statement as investing cash flow. In contrast, cash paid to purchase or proceeds received from the sale of investments in debt or equity securities held for trading purposes is reported as operating cash flow. Dividends and interest received from investments, whether classified as held to maturity, available for sale, or trading, are included in operating cash flow.

Companies take positions in trading securities for the purpose of profiting from short-term swings in price. For example, debt securities might be purchased in the morning with the expectation of selling them in the afternoon because of an expected positive impact on price caused by an anticipated decline in interest rates during the day.

The trading desks of financial institutions regularly take short-term trading positions in debt and equity securities. An operating designation for the cash flow related to such investments is appropriate because trading activities comprise an important line of business for these firms. Consider SunTrust Banks, Inc. For the years ended December 31, 2001, 2002, and 2003, the bank generated trading profits and commissions of \$95.7 million, \$103.2 million, and \$109.9 million, respectively. These profits comprised 4.7, 5.7, and 5.8 percent, respectively, of the bank's pretax income for the years indicated.³⁷

An operating designation for the cash flow associated with short-term investments is not appropriate, however, when purchases and sales of short-term investments are not part of an active trading business. Although certain short-term investments might meet the nominal definition of trading securities—that is, investments made with the objective of generating profits on short-term swings in price—such investments often are not fundamentally trading positions. This is especially true for many nonfinancial companies where marketable securities often are used to carry excess cash balances. Classifying such investments as trading positions results in the reporting as operating, cash flows that

are clearly investment-related. At a minimum, their inclusion in operating cash flow clouds that important measure with cash flows that are inherently nonrecurring.

Consider Acacia Research Corp. In the year ended December 31, 2001, a portion of the company's investments in high-grade corporate bonds, commercial paper, money market accounts, and other marketable securities were classified as held for trading purposes. That year, the cash used for the purchase of these investments, \$4.1 million, was reported as an operating use of cash. Then in 2002, the company sold these investments and reported the proceeds from sale, \$4.1 million, as an operating source of cash. Both amounts were inherently nonrecurring and helped to detract from the sustainable nature of operating cash flow.

Attesting to the nonrecurring nature of cash flows related to purchases and sales of investments classified as trading securities, consider WHX Corp. For the nine months ended September 30, 2001, the steel company reported operating cash flow of \$89.6 million, up from \$41.2 million for the same period in 2000. If an investor thought that improvements in operating cash flow for 2001 represented actual improved operating performance, he or she would have been disappointed. Included in the company's operating cash flow for 2001 was cash provided from the sale of short-term investments classified as trading securities in the amount of \$69.3 million. Three months later, for the year ended December 31, 2001, the company reported that it consumed operating cash flow of \$46.9 million. That is a big swing in operating performance in only three months. A major reason for the apparent reversal of fortune was the fact that the company's year-end operating cash flow was reduced by \$64.6 million for the purchase of short-term investments net of margin borrowings.

In each of the three years ended December 31, 2000, 2001, and 2002, Nstor Technologies incurred losses. The company also reported that it consumed cash from operations in the amount of \$9.4 million, \$10.3 million, and \$451,000 in 2000, 2001, and 2002, respectively. However, helping to improve the company's operating cash flow performance in 2001 and 2002 were the proceeds from the sale of marketable securities. In 2001 the company reported an operating source of cash in the amount of \$1 million from the sale of marketable securities. In 2002, operating cash flow provided by the sale of securities totaled \$3.1 million. A clearer picture of the company's operating cash flow performance would exclude these investment proceeds.

There are numerous other examples of companies that have included the purchase and sale of short-term investments in the operating section of the cash flow statement. For example, in 2000 and 2001, the automotive division of Ford Motor Co. reported an operating source of cash from the sale of trading securities in the amount of \$6.9 billion and \$1.1 billion, respectively. Then in 2002, the division consumed operating cash flow by purchasing trading securities in the amount of \$6.2 billion. Also, as reported in Chapter 1, in 2001 Nautica Enterprises, Inc., boosted operating cash flow by approximately 57 percent by classifying short-term investments as trading securities. Finally, Curtiss-Wright Corp. reported that it generated \$41.5 million of operating cash flow during the year ended December 31, 2002; however, \$89.0 million of operating cash flow was provided from the proceeds of sale of trading securities.

We cannot say that any of these companies purposefully classified short-term investments as trading securities as a way of artificially manipulating operating cash flow. We do know that the classification rules for short-term investments offer ample opportunity for such manipulation if corporate managers were so inclined.

Notes Receivable

Amounts due from customers, accounts receivable, are reported as a component of operating cash flow. A sale made on open account boosts net income but does not provide operating cash flow until the related account receivable has been collected.

A question arises, however, when customers are offered more formal payment terms in the form of notes receivable. Are the resulting receivables, often referred to as financing receivables, components of operating cash flow, or should they be reported as investing activities? If an increase in financing receivables is reported as a use of cash in the investing section of the cash flow statement, then cash flow provided by operations would be reported correspondingly at a higher amount.

SFAS No. 95, "Statement of Cash Flows," notes the problematic classification but concludes that such receivables are components of operating cash flow. Quoting from the statement:

A somewhat difficult classification issues arises for installment sales . . . for which cash inflows . . . may occur several years after the date of the transaction. . . . The Board agreed that all cash collected from customers or paid to suppliers from the sale or purchase of inventory should be classified as operating cash flows.³⁸

In the telecom equipment industry, Motorola, Inc., offers its customers extended payment terms. The resulting long-term finance receivables, which the company includes with other assets on its balance sheet, ballooned to \$2.5 billion at December 31, 2000, and that was after subtracting an allowance for uncollectible accounts in the amount of \$239 million. Attesting to difficulty the company had in collecting these receivables, by December 31, 2002, the allowance for uncollectable accounts had been increased to \$2.3 billion, leaving a net receivable balance included in other assets of \$381 million.

Consistent with GAAP for such customer-based receivables, Motorola classifies changes in the balances of these receivables in operating cash flow. Increases in the balance, resulting from uncollected sales, reduce operating cash flow; decreases in the balance, resulting from collections of the receivables, increase operating cash flow.

Also in the telecom industry, Qualcomm uses long-term receivables to finance customer purchases. At September 30, 2002, the company reported finance receivables of \$831 million, after subtracting an allowance for doubtful receivables of \$51 million. Those balances were after a write-off during 2002 of \$622 million in finance receivables from Globalstar L.P. Like Motorola, Qualcomm reports changes in its finance receivables in the operating section of the cash flow statement.

Nortel Networks Corp. also provides its customers a financing arrangement in the form of what it refers to as long-term receivables. These receivables have been a problem for the company, leading it to reserve 80 percent of their book value at December 31, 2001, and 95 percent of their book value at December 31, 2002. Notwithstanding such credit problems with its customers, the company has continued to extend new customer credit using this financing arrangement and has reported some collections.

In the last few years, the cash operating performance of Nortel Networks has declined. In the years ended December 31, 2000, and 2001, the company reported cash provided by continuing operations of \$824 million and \$425 million, respectively. In 2002, the company consumed cash from continuing operations of \$589 million.

Confounding the reported operating cash flow, however, is the company's approach to reporting its long-term receivables. Changes in the balances of these receivables have been reported consistently as investing and not operating cash flow. Had the company reported changes in its long-term receivables as operating cash flow, its operating cash flow performance still would show a decline; however, the size of that decline would have been changed significantly.

More specifically, if long-term receivables had been reported in the operating section of the cash flow statement instead of the investing section, an increase in their balance would have caused operating cash flow in 2000 and 2001 to appear to be much worse. In contrast, a slight decline in the balance of long-term receivables would have resulted in a small improvement in operating cash flow in 2002. Consider the findings reported in Exhibit 3.10.

As seen in the exhibit, if Nortel had reported long-term receivables in the operating section of the cash flow statement instead of the investing section, cash provided by continuing operations would have been \$466 million, \$191 million, and a use of cash of \$554 million, respectively, for the years ended December 31, 2000, 2001, and 2002. These adjusted operating cash flow amounts are in contrast to the cash sources of \$824 million and \$425 million and the use of cash of \$589 million, respectively, as originally reported.

In contrast to Nortel Networks, and consistent with Motorola and Qualcomm, Lucent Technologies, Inc., reports all of its customer-based receivables in the operating section of the cash flow statement. However, like many companies, Lucent sells its receivables through a securitization financing facility. Although such sales of receivables are properly reported in the operating section of the cash flow statement, initial securitization transactions and increases in amounts securitized provide nonrecurring boosts to operating cash flow. We address the topic of securitized receivables in Chapter 4.

Nortel is not alone in classifying financing receivables as investing cash flow. Outside the telecom industry, Harley-Davidson, Inc., follows a similar approach. Harley's finance arm, Harley-Davidson Financial Services, Inc., offers wholesale and retail financial services to its dealer network. The financial services company provides wholesale financing

Exhibit 3.10 Nortel Networks Corp., Summarized Statements of Cash Flows, Years Ended December 31, 2000, 2001, and 2002 (\$ millions)

	2000	2001	2002
<i>Reported:</i> Net cash provided (used) by continuing operations	\$824	\$425	\$(589)
<i>Reported:</i> Net cash provided (used) by the net change in long-term receivables reported as investing activities	(358)	(234)	35
<i>Adjusted:</i> Net cash provided (used) by continuing operations adjusted for the net change in long-term receivables	\$466	\$191	\$(554)

Source: Nortel Networks Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. F-5.

of dealer inventory through a floor-plan arrangement. Retail financing provided by the entity covers customer purchases of inventory from the dealer.

All of Harley's finance receivables, wholesale and retail, are reported in the investing section of the cash flow statement. For the retail accounts, an investing classification would appear to be appropriate because these are not receivables from Harley's customers but rather the customers of Harley's customers, that is, the retail purchasers. Harley invests its cash flow in these receivables. However, an operating designation would appear to be more appropriate for the finance receivables from Harley's customers, the dealers.

The bulk of Harley's receivables are in the form of these finance receivables. At December 31, 2001, and 2002, the company reported finance receivables of \$1,036 million and \$1,446 million, respectively. Of these amounts, the wholesale finance receivables totaled \$568.3 million and \$707.9 million at 2001 and 2002, respectively. At these same dates, accounts receivable, which primarily represents open amounts due from foreign motorcycle dealers, were \$118.8 million and \$108.7 million, respectively.

In the year ended December 31, 2002, Harley Davidson reported operating cash flow of \$779.5 million, up from \$756.8 million in 2001. Had the company classified its wholesale receivables as operating as opposed to investing cash flow, operating cash flow actually would have declined to \$639.9 in 2002 from \$645.4 million in 2001.³⁹

Sales-Type Lease Receivables

Closely related to finance receivables are lease receivables arising from sales-type leases. Sales-type leases afford an up-front profit component to a manufacturer or a dealer as well as a source of finance income to be earned over the lease term. An operating cash flow designation would appear to fit such lease receivables, just as an operating designation is proper for certain finance receivables.

Xerox Corp. offers financing to its customers by selling equipment through sales-type lease arrangements. The resulting lease receivables together with finance receivables arising from installment sales arrangements are reported in the operating section of its cash flow statement. In contrast, Cisco Systems Corp. classifies its sales-type lease receivables as investing cash flow.

The position taken by the FASB in SFAS No. 95—that collections on receivables from customers, even long-term installment receivables, are to be reported as operating cash flow—has not resulted in consistent treatment across reporting companies. Although our research indicates that operating cash flow is the classification of choice by most public companies, a nontrivial number of firms use an investing classification.

Other Investing Activities

Insurance Settlements

Few Americans will forget the anthrax scare that gripped the nation soon after the September 11, 2001, bombing of the World Trade Center in New York. At the center of the developments was American Media Operations, Inc., based in Boca Raton, Florida. An employee of the company died from inhalation anthrax. On October 7, 2001, authorities closed the company's building when anthrax was discovered on a computer keyboard there.

The company's insurance carrier ultimately provided reimbursement for its losses. Some of the insurance proceeds were designed to cover the costs of maintaining the contaminated facility before it could be disposed of. Other proceeds were designed to cover the cost of a replacement building.

For the year ended March 31, 2003, American Media reported the insurance proceeds received to replace its contaminated facility as a source of cash in the investing section of its cash flow statement. Such treatment is appropriate and is tantamount to the cash flow treatment that would be afforded a sale of the building for cash. There is a certain symmetry here where cash received for an old building and cash paid for a new one would appear as an investing source of cash and an investing use of cash, respectively.

There are, however, numerous examples of companies that have reported similar insurance settlements for damaged or destroyed items of property, plant, and equipment as operating cash flow. One representative example is Gulfport Energy Corp.

Gulfport Energy Corp. experienced significant losses as a result of Hurricane Lili, which struck the Gulf Coast of Louisiana in 2002. The company described the event in this way:

Hurricane Lili hit the southern gulf coast of Louisiana on October 3, 2002 with estimated sustained winds over 120 miles per hour and a 9-foot tidal surge. The eye of the hurricane came on shore directly East of Gulfport's WCBB field. The storm caused significant damage to the Company's production facilities and the WCBB field.

Gulfport's insurance carrier agreed to pay it \$3.5 million to restore production to the damaged oil field. The company received \$1 million of this reimbursement in 2002; it received the remaining \$2.5 million during the first quarter of 2003.

Gulfport reported the cash received to reimburse it for the sustained damages as an operating source of cash. Cash paid to replace the damaged production facilities was reported as an investing use of cash. As a result of the hurricane, the company's operating cash flow was boosted temporarily.

The boost to Gulfport's operating cash flow results for the first quarter of 2003 was significant. In the quarter ended March 31, 2003, Gulfport reported operating cash flow of \$6.5 million, which was up significantly from the \$658,000 in operating cash flow reported for the same period in 2002. However, contributing to the company's significant improvement in operating cash flow during the first quarter of 2003 was receipt of the \$2.5 million from its insurance carrier. That same quarter, Gulfport reported in the investing section of its cash flow statement the disbursement of \$536,000 in cash for progress payments on replacement production facilities.⁴⁰ Thus, as reported, the net effect of the hurricane was to boost operating cash flow offset with an increase in investment spending. An investing classification for the insurance proceeds received for the replacement of destroyed equipment would appear to have been more appropriate.

Cash Surrender Value of Life Insurance

The cash surrender value of life insurance offers interesting flexibility in classifying cash flows between the operating and investing sections of the cash flow statement. Corporations may take out life insurance policies on corporate personnel to help defray the costs associated with an unexpected loss. Policies that are ordinary life or limited payment life

have a cash surrender value, an investment of sorts, that the company may liquidate or borrow against in the future.

Insurance premiums paid, net of the increase in an underlying policy's cash surrender value, are operating uses of cash. The increase in a policy's cash surrender value would be reported as an investing use of cash. If the increase in a policy's cash surrender value exceeds any premium paid, the full amount of the premium would be reported as an investing use of cash. Moreover, on an indirect-method statement of cash flows, because the increase in cash surrender value over the premium paid increased net income but did not provide any cash, a subtraction would be needed in reconciling net income to operating cash flow.

Collections of cash surrender value through policy cancellations or through borrowings would be reported as investing sources of cash. Borrowing against a policy is more a return of a company's investment than incremental debt financing.

During the year ended December 31, 2002, increases in the cash surrender value of life insurance at Albany International Corp. apparently were greater than the premiums paid on its policies. That year, premiums paid on the company's life insurance policies were reported as investing uses of cash. In addition, the company subtracted from net income the increase in the cash surrender value of its policies in excess of the premiums paid. This latter item was needed because the increase in cash surrender value had boosted net income but did not provide a corresponding amount of operating cash flow.

Consider also the cash flow treatment of cash surrender value of life insurance at Dyna Group International, Inc. During the year ended December 31, 2002, the company reported an increase in the cash surrender value of its policies as an investing use of cash. This treatment is consistent with the view that the policies are an investment. That same year, however, Dyna Group also reported a decrease in the cash surrender value of its life policies as an operating source of cash. That is, the company showed a decrease in cash surrender value as an operating source of cash and an increase in cash surrender value as an investing use of cash.

Unfortunately, the company did not disclose what the decrease in cash surrender value represented. If the company used the cash surrender value on certain policies to cover any premiums due, then an operating designation, which reflects the noncash nature of the underlying premium-related expense, would appear to be appropriate. If, however, the decrease in cash surrender value represented any cash taken out of the policy, then an investing designation of the cash received would have been more in keeping with the underlying nature of the cash received. The company did not respond to our request for clarification.

A Book Overdraft and Investing Cash Flow

As is discussed in Chapter 4, a company may have prearranged for its bank to provide automatic short-term financing to cover any checks presented for payment in excess of available cash balances. With such overdraft protection, the firm would need to carry little or no cash in low-yielding checking accounts. At the end of a reporting period the company would report a book overdraft, a current liability, for the excess of outstanding checks over bank cash balances. Over a reporting period, a change in the balance of a firm's book overdraft would constitute cash flow from financing activities.

In its 2000 report, Amgen reported the existence of book overdrafts. In this case,

however, the company would transfer funds from a short-term investment account to cover any checks presented for payment. Amgen described the arrangement in this way:

Under the Company's cash management system, the bank notifies the Company daily of checks presented for payment against its primary disbursement accounts. The Company transfers funds from short-term investments to cover the checks presented for payment. This system results in a book cash overdraft in the primary disbursement accounts as a result of checks outstanding. The book overdraft, which was reclassified to accounts payable, was \$101.2 million and \$43.9 million at December 31, 2000 and 1999, respectively.

Amgen reported the change in its book overdraft in operating cash flow. During 2000, the balance in book overdrafts increased \$57.3 million, resulting in an operating source of cash. Because the company covered its book overdrafts with transfers from a short-term investment account, an investing classification would appear to have been more appropriate.

Acquisitions and Operating Cash Flow

Increases through operations in such working capital accounts as accounts receivable, inventory, and prepaid expenses, less accounts payable and accrued expenses payable, are reported as operating uses of cash. The liquidation through operations of such working capital accounts is reported as an operating source of cash.

An increase in working capital resulting from an acquisition is reported as an investing use of cash and not as an operating use. However, the subsequent liquidation of working capital acquired as part of a business acquisition still is reported as an operating source of cash. As a result, a company can use an acquisition to give operating cash flow a short-term boost that exceeds the amount that one might expect from the simple addition of the operating cash flow of two combining companies.

As discussed in Chapter 1, during the years ended December 31, 1999, and 2000, AutoNation, Inc., expended a cumulative \$1.2 billion on acquisitions. Among the assets purchased in the acquisitions was approximately \$500 million in inventory that was reported as an investing use of cash.

During 2001, the company liquidated a substantial portion of its inventory, providing \$544.7 million in operating cash flow. However, offsetting that operating cash flow was a reclassification of the company's floor-plan notes payable to the operating section of the cash flow statement from the financing section. A reduction in those notes that accompanied the inventory reduction in 2001 consumed \$514.4 million in operating cash flow.

During the year ended December 31, 2002, Advanced Power Technology, Inc., reported a net loss of \$3.7 million. That disappointing performance was after reporting net income of \$1.8 million in 2001. Operating cash flow at the company, however, improved markedly during 2002. That year cash provided by operations improved to \$5 million from only \$1.1 million during 2001. During 2002 Advanced Power reported an investing use of cash in the amount \$26.6 million for acquisitions. One should expect that operating cash flow may have been boosted temporarily. Indeed, in a refreshingly candid statement the company did note in its 2002 Management's Discussion and Analysis that "a

large portion of cash from operations resulted from a lowering of the inventory levels at our newly acquired companies.”⁴¹

To better see how acquisitions affect operating cash flow, consider the next example, which was constructed using assumed amounts. During 2005, Operations Co. purchases \$100 of inventory as part of operations. During 2006 the purchased inventory is sold for \$100 and cash is collected. In contrast, during 2005, inventory at Acquisitions Co. increases by \$100 as part of an acquisition. During 2006, the acquired inventory is also sold for \$100 and cash is collected. No other transactions took place at either company during 2005 or 2006. The two companies operated at break-even in both years. Exhibit 3.11 presents the cash flow statements for Operations Co. and Acquisitions Co. in 2005 and 2006.

As seen in the exhibit, inventory purchased by Operations Co. during 2005 was reported as a use of cash in the operations section of the cash flow statement. Acquisitions Co. also purchased inventory during 2005 but did so as part of a corporate acquisition. As a result, the increase in inventory was reported as an investing use of cash. For both companies, the sale of inventory in 2006 resulted in an operating source of cash.

In calculating operating cash flow, the statement of cash flows reports an increase in inventory net of the effects of acquisitions. As seen in the exhibit, even though inventory at Acquisitions Co. increased by \$100 during 2005, that increase in inventory was reported as an investing use of cash. Thus, the change in inventory on the balance sheet would not equal the change in inventory reported in the operating section of the statement of cash flows.

Companies that complete acquisitions on a regular basis routinely report changes in working capital accounts in the operating section of the statement of cash flows that do not equal the change in those same accounts when calculated using the beginning and ending balance sheets. Consider again the case of Advanced Power Technology, Inc., presented in Exhibit 3.12.

In reviewing the exhibit, it can be seen that during 2002, as reported on the balance sheet, working capital related to operations, in particular, accounts receivable, inventories,

Exhibit 3.11 Contrasting Cash Flow Classifications for Inventory Purchases

	Operations Co.		Acquisitions Co.	
	2005	2006	2005	2006
Cash provided (used) by operating activities:				
Net income	\$ 0	\$ 0	\$ 0	\$ 0
(Increase) decrease in inventory, net of the effect of acquisitions	(100)	100	0	100
Cash provided (used) by operating activities	(100)	100	0	100
Cash provided (used) by investing activities:				
Cash (paid) for acquisition	0	0	(100)	0
Change in cash	\$(100)	\$100	\$(100)	\$100

Exhibit 3.12 Advanced Power Technology, Inc., Balance Sheet and Cash Flow Statement Excerpts, Years Ended December 31, 2001, and 2002 (\$ thousands)

Balance Sheet Excerpts	2001	2002	Increase (Decrease)
Current assets:			
Accounts receivable	\$ 3,493	\$ 6,899	\$ 3,406
Inventories	9,307	11,949	2,642
Prepaid expenses and other current assets	3,422	2,521	(901)
Current liabilities:			
Accounts payable and accrued expenses	3,909	5,348	1,439
Increase (decrease) in working capital related to operations			\$ 3,708
Cash Flow Statement Excerpts:		2002	
Cash provided by operating activities:			
Net (loss)			\$(3,687)
Adjust for noncash and nonoperating income and expense, net			5,597
Changes in operating assets and liabilities, net of effects of acquisitions:			
(Increase) in accounts receivable			(835)
Decrease in inventories			1,626
Decrease in prepaid expenses and other current assets			2,718
(Decrease) in accounts payable and accrued expenses			(345)
(Increase) decrease in working capital related to operations, net of effects of acquisitions			3,164
Net cash provided by operating activities			\$ 5,074

Source: Advanced Power Technology, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. F-2 and F-5.

prepaid expenses, and other current assets, less accounts payable and accrued expenses increased \$3,708,000. In the absence of an acquisition, the increase in working capital related to operations would be reported as an operating use of cash. During the same period, however, the operating section of the company's cash flow statement indicates that working capital related to operations, net of the effects of acquisitions, actually declined by \$3,164,000. Such a decline in working capital related to operations is an operating source of cash. Acquired components of working capital were transferred to the investing section of the cash flow statement from the operating section.

A measure of the amount of operating working capital purchased in the company's acquisitions is the difference between the *use* of cash, \$3,708,000, implied by the increase in these accounts as reported on the balance sheet, and the *source* of cash, \$3,164,000, indicated by their decline as reported on the statement of cash flows. The total difference between the two amounts, a use of cash of \$3,708,000 and a source of cash of \$3,164,000, is \$6,872,000 ($\$3,708,000 + \$3,164,000$) and serves as an estimate of the amount of operating working capital purchased in its acquisitions.⁴²

In the year of an acquisition, operating cash flow is increased at an unsustainable rate because it consists of the operating cash flow of two combining companies. Prior-year results do not reflect combined amounts. However, operating cash flow can be increased further through the liquidation of acquired operating working capital. That was the case at Advanced Power, where the company noted that operating cash was boosted in 2002 through the liquidation of inventory added through acquisitions. The company was not breaking any accounting rules. The acquisitions simply offered an opportunity to gain a short-term boost to operating cash flow.

Another way that acquisitions might be used to boost operating cash flow is by artificially limiting the operating cash flow of a target firm during the period between the announcement of a deal and when it closes. Consider Tyco International, Ltd.

During the late 1990s and the early part of this decade, the financial performance of Tyco International was one to be envied. The company's sales and earnings grew markedly and with them its stock price. Yet many analysts were unconvinced that the company's earnings were real, alleging that aggressive practices were used to boost its results. However, management of the company often pointed to its strong operating cash flow as a sign that the company's earnings were of high quality.

An important component of Tyco's business model was growth through acquisition. In at least one year the company consummated over 100 separate acquisitions. Such a stream of acquisitions gave the company ample opportunity to boost operating cash flow in an unsustainable manner. A boost to operating cash flow in this way would not attest to high earnings quality but rather could be associated with a proclivity to manage operating cash flow much like earnings might be managed.

In a story in *Fortune* we received an inside look into how the company allegedly used its acquisitions to boost operating cash flow.⁴³ In one acquisition in 1999, Tyco agreed to purchase Raychem Corp. As reported in *Fortune*, according to certain former employees of Raychem, in the period after the deal was announced in May but before it closed in August, Tyco managers converged on Raychem's headquarters with specific instructions. These managers were instructed to accelerate the payment of open accounts and hold back the deposit of cash receipts. Such actions would minimize accounts payable and maximize accounts receivable, reducing Raychem's operating cash flow. Then after the deal closed, when Raychem's operating cash flow became that of Tyco, Raychem managers would be expected to deposit the undeposited checks. That would boost Tyco's operating cash flow. Of course, any disbursements to vendors would reduce operating cash flow. However, because payment on these accounts was accelerated earlier, there was less of a drag on operating cash flow.

Tyco's alleged cash flow actions were certainly not in the interests of the company's shareholders. What shareholders lost was the time value of money.

When companies complete acquisitions, operating cash flow typically will receive an unsustainable boost. Operating cash flow for two companies will be combined as if it

were the operating cash flow of one. The cash flow statements of previous years will not be restated, meaning that they cannot be used for comparison purposes. In addition, acquisitions offer an opportunity to boost operating cash flow further by providing increases to operating working capital, reported as investing uses of cash, which can later be liquidated, providing an operating cash source. Acquisitions also can be used to boost operating cash flow by limiting the operating cash flow of a target between the time a deal is announced and when it closes.

Careful scrutiny of the cash flow statement of a target, if available, in the years and quarters leading up to an acquisition should help to isolate any boost provided to operating cash flow of the combined entity. An unexpected decline in the operating cash flow of a target in the period leading up to the acquisition may indicate that operating cash flow has been “shifted” to the combined entity.

What would be especially helpful to financial statement users would be a requirement for companies to report on a pro-forma basis operating cash flow for a company assuming an acquisition had been in effect for all years presented in an annual report. Analysts then would be in a better position to compare current-year operating cash flow for the combined entity with that of prior years. Such a disclosure requirement would provide pro-forma information similar to that currently required for revenue and net income when an acquisition is made.

BEYOND THE BOUNDARIES OF GAAP

Generally accepted accounting principles offer considerable flexibility in the classification of cash flow between the operating and investing categories. Although one or more of the examples provided may appear to involve misclassification, most were not deemed to be a sufficiently material GAAP violation to warrant restatement. However, other examples of violations of GAAP in the classification of cash flows between the operating and investing categories have been sufficiently material to warrant restatement. Comptronix Corp. is one such example.

A Carefully Crafted Charade

Few financial frauds involved the extensive detail that surrounded the deceit at Comptronix Corp. During the period 1989 to 1992, management at the small Alabama-based electronics manufacturer took a variety of steps to boost profits and net assets. Inventory was increased and cost of sales was reduced to boost gross profit. To better hide fake inventory, amounts were shifted to property, plant, and equipment and reported as capital expenditures. Fake invoices were prepared to support the equipment purchases. Fictitious sales, supported with phony invoices and accounts receivable, were recorded to boost revenue.

Outsiders did not discover the fraud at Comptronix. Rather, management confessed to its existence. What helped to hide the fraud from view was management’s careful attention to cash flow. Managers at Comptronix knew that analysts would be looking for growth in operating cash flow to accompany the growth reported in sales and profits. It is a warning sign to analysts when growth in operating cash flow lags profit growth. Thus, the company had to demonstrate actual collections of its fictitious sales and phony ac-

counts receivable. By adding this piece to the puzzle, the fraud could be better sustained. But how does one collect nonexistent accounts receivable and show cash flow in the process? In the case of Comptronix, what was needed was a special arrangement with the company's bank.

To show fictitious cash flow, management at Comptronix wrote checks to what were likely fictitious vendors for nonexistent purchases of equipment. These checks were taken to the local bank and, although not endorsed by the vendors, were credited to their respective bank accounts. However, because Comptronix was also supposedly owed money by these same vendors, the checks were then charged against the vendors' accounts and credited back to Comptronix's bank balance.⁴⁴ Whew!

When asked about this unusual arrangement, a spokesperson for the bank said that the deposit arrangement was used for a legitimate business purpose when a customer of Comptronix was also a vendor to the company. In those cases, a special account was used to reconcile the difference.

What this deposit arrangement meant was that the company could report operating cash inflows for collections on customer accounts and investing cash outflows for purchases of new equipment. Operating inflows were offset with investing outflows—a natural development for a growth company. Moreover, these cash flows could be reported without changing the balance in cash reported on the balance sheet. It was the perfect arrangement and meant that Comptronix's fraud could be kept under wraps for a longer period of time.

Capitalized Operating Costs

Misstatements of cash flow that involve the operating and investing sections and extend sufficiently beyond the boundaries of GAAP to warrant restatement often entail capitalized operating costs. Earlier in this chapter, HealthSouth Corp. was mentioned as a prominent example. The lessons learned from that fraud are of sufficient merit to warrant a closer look.

At HealthSouth, regular operating expenses were capitalized or added to property, plant, and equipment. Examples include sponsorship of "the Erie Otters junior-league hockey team in Pennsylvania" and others such as "newspaper advertisements."⁴⁵ The individual expenses that were capitalized were small in amount, typically \$4,999 and less, so that the auditors would be less likely to examine them. When the auditors did ask for documentation, management prepared fake invoices to support the purchases. In the end, over \$1 billion was transferred to property, plant, and equipment in this manner, meaning that over 200,000 entries for bogus purchases had to be made.

HealthSouth's moves boosted operating cash flow by reclassifying operating expenditures to the investing section. We have seen similar actions on numerous occasions. For example, Chambers Development Co., Inc., maintained target profit margins by transferring to its landfill development costs, a component of property, plant, and equipment, operating expenses that exceeded some predetermined level.⁴⁶ The steps taken to boost earnings and operating cash flow at Chambers Development were followed rather closely at WorldCom.

In terms of absolute dollar amounts, the financial fraud at WorldCom probably will set a high water mark for years to come. While the fraud involved billions of dollars of misreported earnings, one particular scheme, the capitalization of operating costs, boosted

pretax earnings and operating cash flow by approximately \$3.8 billion. What WorldCom capitalized were “charges paid to local telephone networks to complete calls.”⁴⁷ Such expenditures are clearly related to operations and should have been expensed as incurred, reducing net income and operating cash flow. Instead, the company reported them as capital expenditures or increases to property, plant, and equipment.

Misclassified Investment Proceeds

The example of the Project Nahanni transaction entered into between Enron Corp. and Citigroup, Inc., provided in Chapter 1 is a good example of an erroneous classification of an investing source of cash as operating. Through this project Enron borrowed \$500 million and used the proceeds to purchase Treasury securities. The securities were then sold, providing \$500 million of operating cash flow. The proceeds of sale should have been reported as investing cash flow. According to the court-appointed examiner in Enron’s bankruptcy, Project Nahanni was “designed solely to permit Enron to record \$500 million in cash flow from operating activities.”

Another example of misclassified investment proceeds relates to the investment disposition made by Hewlett-Packard Co. reported in the opening section of this chapter. Hewlett-Packard erroneously included \$144 million in proceeds from the sale of an investment in operating cash flow and was forced to restate its cash flow statement. As a result of the restatement, operating cash flow in the quarter ended January 31, 2003, was reduced to \$647 million from the \$791 million originally reported.

SUMMARY

This chapter examines misclassifications of operating and investing cash flow. Nine key points were raised:

1. Due to flexibility within the boundaries of generally accepted accounting principles, operating cash flow may provide misleading signals regarding a company’s ability to generate sustainable cash flow.
2. Flexibility in GAAP notwithstanding, some companies extend their reporting practices beyond the boundaries of GAAP and use investing items to exaggerate operating cash flow.
3. Investing cash flow consists of cash employed by investments in and cash generated by liquidations of positions in debt and equity securities and investments in property, plant, and equipment. Income on those investments is reported as operating cash flow.
4. Capitalized operating costs are often, but not always, reported as investing cash flow. Examples include interest capitalized into property, plant, and equipment, capitalized software development costs in most cases, and capitalized oil exploration costs. Recurring examples of capitalized costs reported as operating cash flow include customer acquisition costs, interest capitalized on discrete inventory projects, and capitalized film production costs.
5. Investments in debt and equity securities, classified as held to maturity or available for sale, are reported as investing cash flow. Investments in securities classified as trading are reported as operating cash flow.

6. Changes in customer-related long-term receivables typically are reported as components of operating cash flow. However, there are exceptions noted in practice.
7. The cash flow classification of insurance settlements tends to be consistent with the underlying insured item.
8. Acquisitions can give nonrecurring boosts to operating cash flow as acquired operating-related working capital accounts are liquidated.
9. Some of the more egregious examples of the misclassification of cash flow that extend beyond the boundaries of GAAP entail improperly capitalized operating costs.

NOTES

1. Associated Press Newswires, March 13, 2003.
2. Statement of Financial Accounting Standards Board, *SFAS No. 95, Statement of Cash Flows* (Norwalk, CT: FASB, 1987).
3. Details provided in a U.S. Department of Justice Press Release, "Former HealthSouth Chief Financial Officer Agrees to Plead Guilty in Probe of Corporate Fraud Conspiracy" (Washington, DC: Department of Justice, March 19, 2003).
4. J. Weil, "Did Ernst Miss Key Fraud Risks at HealthSouth?" *The Wall Street Journal*, April 10, 2003, p. C1.
5. HealthSouth Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, p. 42.
6. Numerous other examples of investing cash flow items can be found in Chapter 2.
7. Shopsmith, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 11.
8. Homasote, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, footnote 11.
9. Bestway, Inc., Form 10-K annual report to the Securities and Exchange Commission, July 31, 2003, p. 26.
10. Pre-Paid Legal Services, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, Item 8.
11. Accounting and Auditing Enforcement Release No. 1257, *In the Matter of America Online, Inc.*, Respondent (Washington, DC: Securities and Exchange Commission, May 15, 2000).
12. Qwest Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, p. 33.
13. Pre-Paid Legal Services, Form 10-K annual report to the SEC.
14. Pegasus Communications Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. F-15–F-16.
15. *Ibid.*, p. F-16.
16. Miix Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. F-9.
17. CPI Corp., Form 10-K annual report to the Securities and Exchange Commission, February 2, 2002, p. 46.

18. Lillian Vernon Corp., Form 10-K annual report to the Securities and Exchange Commission, February 23, 2002, p. F-7.
19. Cendant Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. F-14.
20. M. Maremont, "Tyco Hails Its Cash Flow, but a Close Look Shows That Accounting for It Can Be Complex," *The Wall Street Journal*, March 5, 2002, p. C1.
21. Ibid.
22. Ibid.
23. Tyco International, Ltd., Form 8-K Current Report to the Securities and Exchange Commission, March 13, 2003, Exhibit 99.1.
24. M. Maremont, "Tyco Says It Is Likely to Change Its Main Cash-Flow Definition." *The Wall Street Journal*, February 3, 2003, p. C13.
25. *SFAS No. 34, Capitalization of Interest* (Norwalk, CT: FASB, December 1979).
26. Discrete inventory projects exclude inventories that are routinely manufactured or otherwise produced in larger quantities on a repetitive basis.
27. Delta Air Lines, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. F-16.
28. Ibid.
29. *SFAS No. 86, Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed* (Norwalk, CT: FASB, August 1985).
30. D. Kieso, J. Weygandt, and T. Warfield, *Intermediate Accounting* (Hoboken, NJ: John Wiley & Sons, 2001), p. 623.
31. K. Ely and G. Waymire, *Application of Software Cost Capitalization: Does It Fulfill the Intent?* Working Paper (Atlanta, GA: Georgia Institute of Technology, March 11, 2003).
32. Another example of a company that reports capitalized software development expenditures as operating uses of cash is Take Two Interactive Software, Inc.
33. American Institute of Certified Public Accountants, *Statement of Position No. 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use* (New York: AICPA, 1998).
34. American Institute of Certified Public Accountants, *Statement of Position No. 00-2, Accounting by Producers or Distributors of Films* (New York: AICPA, 2000).
35. Anadarko Petroleum Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 44.
36. Amerada Hess Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 23.
37. SunTrust Banks, Inc., 2003 annual report, December 31, 2003, pp. 59 and 89.
38. SFAS No. 95, paras. 93–95.
39. Wholesale finance receivables were reported at \$456.9 million, \$568.3 million, and \$707.9 million, respectively, at December 31, 2000, 2001, and 2002. If the increase in these wholesale receivables, \$111.4 million in 2001 and \$139.6 million in 2002, were treated as operations-related, it would reduce operating cash flow.
40. Gulfport Energy Corp., Form 10-Q quarterly report to the Securities and Exchange Commission, March 31, 2003, p. 7.

41. Advanced Power Technology, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 16.
42. Other factors, for example, the effects of exchange rate fluctuations on the working capital accounts of foreign subsidiaries, can complicate the calculation.
43. H. Greenberg, "Does Tyco Play Accounting Games?" *Fortune*, April 1, 2002. p. 83.
44. Although unclear from available case documentation, it would appear that to avoid detection, Comptronix would have had to set up phony accounts at the bank for fictitious vendors.
45. C. Mollenkamp, "An Accountant Tried in Vain to Expose HealthSouth Fraud." *The Wall Street Journal*, May 20, 2003, p. A1.
46. Securities and Exchange Commission, *Accounting and Auditing Enforcement Release No. 764, In the Matter of Richard A. Knight, CPA*, (Washington, DC: SEC, February 27, 1996).
47. J. Sandberg, D. Solomon, and R. Blumenstein, "Disconnected: Inside WorldCom's Unearthing of a Vast Accounting Scandal Internal Auditor Discovered An Unorthodox Treatment of Long-Distance Expenses." *The Wall Street Journal*, June 27, 2003, p. A1.

Is It Operating or Financing Cash Flow?

Citigroup, Inc. and J.P. Morgan Chase & Co. agreed to pay a total of \$305 million to settle actions related to loans and trades made with Enron Corp. and Dynegy Inc. . . . Both banks loaned billions of dollars . . . but structured the loans as complex transactions that seemed to boost . . . [operating] cash flow, while concealing the added debt.¹

In the late 1990s, revenues and profits at Enron Corp. were growing. The company exuded a certain new-economy energy and approach to business—limit asset ownership and make money through trading—that others sought to emulate. The price of the company's shares moved ever higher, making officers of the company and many other shareholders rich.

Of course, as we now know, much of the company's apparent financial fortunes were fabricated, created through transactions with controlled off-balance sheet entities known at the time as special purpose entities. These so-called SPEs were financed with bank loans that were guaranteed by Enron.²

Although the off-balance sheet entities apparently fulfilled the criteria for exclusion from consolidation on Enron's financial statements (equity ownership by outside investors equal to at least 3 percent of the entity's total assets), in actuality, they did not.³ Often Enron officers owned the equity in the SPEs, or Enron itself had secretly guaranteed the equity investments of outside investors, protecting them from loss. Yet Enron accounted for the entities as if they were separate, independent companies. As such, Enron could record profits on sales to the entities of such assets as underutilized and value-impaired electric generating plants or unused fiber optic cable.

There was, however, a developing problem. Although these transactions generated profits for Enron, they did not generate operating cash flow. Without operating cash flow to support the company's earnings, analysts were becoming nervous. They knew that eventually confirmation of a company's growing earnings had to come in the form of growing operating cash flow. At Enron, however, that was not the case. As a result, ana-

lysts began to question the company's business and accounting. Why was profit growth not being converted into cash flow growth at the same rate?

To better understand the qualms of analysts about Enron Corp. that were beginning to develop during the late 1990s, consider the results provided in Exhibit 4.1, which details Enron's reported net income from continuing operations and operating cash flow for the four years ended December 31, 1999.

In reviewing the exhibit, it can be seen that earnings, as measured by net income from continuing operations, increased by over 75 percent, from \$584 million in 1996 to \$1,024 million in 1999. Such earnings growth was much faster than was considered the norm for a utility-like company. During that same time period, operating cash flow, adjusted for proceeds from the sale of investments, declined dramatically from \$1,076 million in 1996 to *negative* \$162 million in 1999. The more income the company reported, the less operating cash flow it generated.

Adding to analysts' concerns in 1999 was a nearly \$1 billion increase in trade receivables, which was at a rate that was two-thirds faster than the rate of increase in revenue. Analysts were concerned that the company might not get paid for significant portions of its recognized revenues.

Aware that analysts' concerns about cash flow could derail the company's share-price advance, managers at Enron, with help from investment bankers at Citigroup, Inc., and J.P. Morgan Chase & Co., devised a trading scheme whose sole purpose was to boost operating cash flow.

Special purpose entities were created and funded with loans for hundreds of millions of dollars from Citigroup and J.P. Morgan. The title Yosemite was used to name the SPEs funded with loans from Citigroup. Mahonia was the name chosen for the J.P. Morgan-funded SPEs. Although the entities themselves had no credit history to justify the loans, they did not need it as Enron guaranteed repayment.

The SPEs used the cash received in the form of bank loans to purchase oil from Enron.

Exhibit 4.1 Enron Corp., Net Income from Continuing Operations and Operating Cash Flow, Years Ended December 31, 1996, 1997, 1998, and 1999 (\$ millions)

	1996	1997	1998	1999
Net income from continuing operations	\$ 584	\$105	\$703	\$1,024
Adjusted cash flow provided by operating activities ^a	\$1,076	\$180	\$927	\$ (162)

^a Downward adjustments in reported operating cash flow were made for proceeds from the sale of investments in the amount of \$31 million in 1997, \$713 million in 1998, and \$1,390 million in 1999. An upward adjustment for the purchase of investments was made for \$192 million in 1996. As discussed in Chapter 3, such proceeds from sale are more appropriately classified as cash provided by investing activities.

Source: Enron Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 1996, pp. F-3 and F-6; December 31, 1997, pp. F-3 and F-6; December 31, 1998, pp. F-3 and F-6; and December 31, 1999, pp. F-3 and F-6.

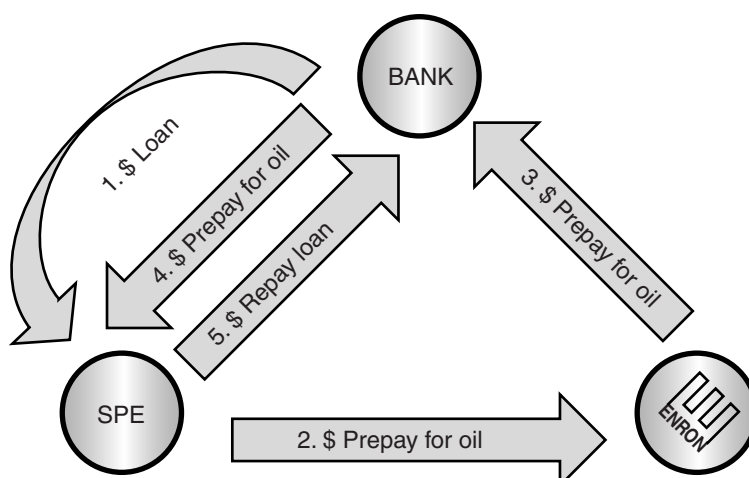
A prepay agreement was used where the SPEs paid Enron for oil to be delivered on a future date. Enron accounted for the amounts received in advance of delivery as customer deposits, a deferred-revenue account. Enron later entered into another prepay agreement with Citigroup or J.P. Morgan and transferred the funds there. The bank then entered into a similar agreement with the original SPE where the cash was transferred one last time before the SPE used it to repay the original loan.

Oil was never delivered. The contracts were for the future delivery of oil and were settled before that delivery date arrived. In effect, all that happened was that hundreds of millions of dollars were funneled from Citigroup and J.P. Morgan through an SPE to Enron and back to the banks. Because the cash received by Enron was accounted for as a customer deposit, an operating account used in their trading operations, all collections were afforded an operating designation. Payments back to the banks also were reported as operating cash activities, in this case, uses of cash. However, the operating cash payments occurred after year-end and were not a drag on current-year operations. Exhibit 4.2 demonstrates the steps employed to carry out the cash transfers.

The exhibit shows a five-step process used to transfer cash from one of the banks through Enron and back. In step 1, a bank loan is made to the SPE. Step 2 shows the purchase of oil in a prepay agreement by the SPE from Enron. In step 3, Enron transfers the cash to the bank as part of another prepayment agreement for oil. In step 4, the bank transfers the cash back to the SPE, in effect settling the open contract. The SPE uses the cash received from the bank to repay the loan in step 5.

In 2000, Enron reported net income from continuing operations of \$974 million. That year, however, the company reported its highest operating cash flow total ever, \$4.8

Exhibit 4.2 Enron Corp., Bank Financing Funneled through an Off-Balance Sheet Special Purpose Entity and Reported as Operating Cash Flow



billion. Contributing to that cash flow total were proceeds labeled “other operating activities” that totaled \$1.1 billion, which was up over 1,000 percent from prior years, and an out-of-line increase in vendor financing of over \$4 billion. Both of these so-called operating sources of cash were from nonrenewable sources and should be considered to be non-recurring. In addition, increases in net customer deposit liabilities reported on the balance sheet suggest that the company’s special bank and SPE-related financing transactions contributed as much as \$2 billion to operating cash flow in 2000. Taken together, these special but nonrecurring sources of operating cash flow were apparently enough to assuage, at least temporarily, the developing concerns of analysts.

What is especially interesting about the company’s special bank and SPE-related financing is that although it provided operating cash flow in 2000, it drained operating cash flow in early 2001 as borrowed amounts were repaid to the lending bank. As a result, the company reported negative operating cash flow of \$1.3 billion during the six months ended June 30, 2001, the last financial information available before a bankruptcy filing that occurred in the fall of that year.

The Securities and Exchange Commission (SEC) carefully scrutinized these transactions and decided that they were really loans from the banks to Enron and that the cash changing hands should have been reported as financing as opposed to operating cash flow. In substance, the transactions were nothing more than borrowing arrangements disguised to look like trading activities.

The Dynegy, Inc., example also mentioned in the introductory quote to this chapter was discussed at length in Chapter 1. Like Enron, Dynegy disguised a financing arrangement to look like an operating transaction. Here an off-balance sheet SPE, financed with \$300 million in borrowed funds, sold natural gas to Dynegy at below-market rates. As a result, the SPE reported cash losses of \$300 million across 9 months in 2001. The agreement held that during the ensuing 51 months, Dynegy would purchase natural gas from the SPE at above-market rates as a way of repaying the previously borrowed \$300 million. However, because the funded \$300 million was part of an apparent trading arrangement, as in the Enron case, it too was reported as operating cash flow. Here again the SEC determined that the substance of the transaction was a financing and forced the company to restate its cash flow statement, reporting the \$300 million in receipts as a financing source of cash.

Both Citigroup and J.P. Morgan maintained that they were not responsible for the misleading nature of the Enron and Dynegy cash flow transactions. Their position was that they could not dictate to Enron and Dynegy how to account for these special financing arrangements. They were simply arranging structured financings on their behalf.

Although one may find merit in such an argument, the SEC disagreed. According to the commission, in the absence of the supporting role played by Citigroup and J.P. Morgan Chase, Enron Corp. and Dynegy would not have been able to misreport operating cash flow as they did.

The financial fine levied against the two banks was not particularly onerous. The firms were put on notice, however, that the SEC would be scrutinizing their future actions.

One important development that is likely rooted in the Enron and Dynegy cash flow cases is Financial Accounting Standards Board (FASB) Statement No. 149, “Amendment of Statement 133 on Derivative Instruments and Hedging Activities.”⁴ Among the rules contained in that accounting standard is the requirement that cash flows of derivative in-

struments that contain financing elements must be reported as financing activities on the statement of cash flows. If previously there existed any equivocation in accounting standards for cash flows associated with financing-related derivatives, they were eliminated by SFAS No. 149.

Enron Corp. and Dynegy are extreme examples of how a misclassification of financing cash flow can be used to overstate cash flow from operating activities. The companies employed accounting practices that extended beyond the boundaries of generally accepted accounting principles (GAAP) and were punished for their indiscretions. This chapter looks at many other methods, typically within the boundaries of GAAP, for boosting operating cash flow with amounts that could be viewed as financing related.

FINANCING CASH FLOW

Cash flows provided by financing activities include principal amounts borrowed from lenders and cash received from shareholders in the issuance of shares. Repayments of debt principal and repurchases of previously issued shares of stock as well as dividends on outstanding shares are reported as cash used by financing activities.

As an example, the financing section of the cash flow statement for Intel Corp. for 2001, 2002, and 2003 is presented in Exhibit 4.3.

As seen in the exhibit, in each of the years 2001, 2002, and 2003, Intel Corp. used cash in its financing activities in the amount of \$3,465 million, \$3,930 million, and \$3,858 million, respectively. Most of that cash was used to repurchase and retire the company's stock and to pay dividends to its shareholders. Offsetting these uses of cash was cash received from the issue of stock related to employee stock plans. Cash provided and used from the issue and repayment of short-term debt and long-term debt were, in relative terms, minimal in amount.

Exhibit 4.3 Intel Corp., Financing Section of the Statement of Cash Flows, Years Ended December 29, 2001, December 28, 2002, and December 27, 2003 (\$ millions)

	2001	2002	2003
Net cash provided by (used in) financing activities:			
Increase (decrease) in short-term debt, net	\$ 23	\$ (101)	\$ (152)
Additions to long-term debt	306	55	—
Repayment of long-term debt	(10)	(18)	(137)
Proceeds from sales of shares through employee stock plans and other	762	681	967
Repurchase and retirement of common stock	(4,008)	(4,014)	(4,012)
Payment of dividends to stockholders	(538)	(533)	(524)
Net cash (used in) financing activities	<u>\$(3,465)</u>	<u>\$(3,930)</u>	<u>\$(3,858)</u>

Source: Intel Corp. Form 10-K annual report to the Securities and Exchange Commission, December 27, 2003, p. 54.

Stock Options

In Exhibit 4.3, Intel reports as financing cash flow “proceeds from sales of shares through employee stock plans and other.” Thus, financing cash flow includes proceeds received from the issue of shares resulting from the exercise of stock options. Financing cash flow also would include proceeds received from the sale of stock options, stock warrants, or other rights to purchase stock.

Some companies with a policy of regular stock repurchases have used stock options as a way of limiting the costs of those buybacks. The use of options in this manner is considered to be part of financing cash flow. Consider this footnote disclosure provided by 3Com Corp.:

In July 2000, we initiated a program of selling put options and purchasing call options on our common stock. These were “European” style options that, in the case of put options, entitle the holders to sell shares of 3Com common stock to us on the expiration dates at specified prices and, in the case of call options, entitle us to purchase our common stock on the expiration dates at specified prices. The option contracts gave us the choice of net cash settlement or physical settlement . . . in shares of our common stock. These options were accounted for as permanent equity instruments.⁵

As noted in the footnote, 3Com initiated a program to sell put options, which gave purchasers of those options the right to sell to the company their shares at a preestablished exercise price. Such a transaction would be a share purchase for 3Com. The company also began purchasing call options on its own stock, giving it the right to purchase its own shares at a preset exercise price. The double option arrangement—the sale of put options and the simultaneous purchase of call options—effectively locked in the price at which the company could purchase its own shares and did so while minimizing the cost of the arrangement.

If the company’s share price were to rise, the holders of the put options would not exercise their options, permitting the 3Com to pocket the option premium with no required action on its part. That option premium would help defray the cost of the purchased call options. 3Com could then exercise its call option and purchase its shares at the exercise price. If the company’s share price were to fall, the call option would expire worthless, although the put option holders would sell their shares to the company at the put option’s exercise price. Of course, as described in the footnote disclosure, the company had the right to effect a cash settlement of the put options, paying cash without purchasing the shares. If the company’s share price were to remain unchanged, both the put options and the call options would expire worthless, although 3Com would still be in a position to purchase its shares at a price that had remain unchanged.

3Com described the ultimate settlement of the option arrangement in this way:

During fiscal 2001, 1.2 million shares of common stock were repurchased through exercised puts for a cumulative purchase price of \$19.9 million. In addition, we elected net cash settlement for the remaining 15.3 million put options outstanding, and related call options, which was recorded as a reduction of common stock in the amount of \$140.7 million. As of June 1, 2001, there were no put options or call options outstanding.⁶

During fiscal 2001, the company's share price declined. As a result, 1.2 million shares were repurchased through the exercise of put options. The purchase of those shares, a Treasury stock transaction, was reported as a financing use of cash. The company also elected cash settlement for 15.3 million outstanding options. The resulting payment, \$140.7 million to avoid the repurchase of shares, was also reported as a financing use of cash in a manner consistent with the share repurchase.

Shareholder Loans

Consistent with the cash flow treatment of borrowed amounts generally, proceeds from loans provided by shareholders and the repayment of such amounts are reported as financing cash flow. Unexpectedly, on its cash flow statement for the six months ended June 30, 2003, The Bluebook International Holding Co. reports a payment on amounts due shareholders as an operating use of cash.

A casual review of the cash flow statement would lead one to believe that the payment should be classified as a financing activity. However, a footnote accompanying the company's financial statements indicate that amounts due shareholders consist of "accrued salaries and consulting fees payable to our president and chief executive officer . . . our chief operating officer . . . and relatives."⁷ Accordingly, because amounts due reflected operating-related items, their payment was properly classified as an operating and not as a financing use of cash.

Minority Interest in Equity

Minority interest in equity, also referred to as a noncontrolling interest, reflects the portion of shareholders' equity that is owned by third-party shareholders. These are investors who are not shareholders in the parent company. Thus, minority interest represents a claim of outsiders on the shareholders' equity of a consolidated entity. Minority interests arise when a controlling shareholder owns less than 100 percent of a consolidated subsidiary. Minority shareholders own the portion of the entity that the controlling shareholder does not own.⁸

Most analysts do not agree on whether minority interests represent a liability or an equity claim. Arguments in favor of an equity claim are supported by the fact that minority interests represent equity ownership, although equity of a subsidiary controlled by someone else. Unlike liabilities, a minority interest claim has no scheduled maturity date. Moreover, it does not bear interest. However, if the subsidiary in question were to be liquidated, minority shareholders would be paid out of any available equity, meaning that the controlling shareholder would not receive all of the subsidiary's equity.

Attesting to the lack of consensus on whether minority interests represent a liability or equity claim, minority interests are excluded from both liabilities and shareholders' equity. They are reported in a mezzanine section, a middle section between liabilities and shareholders' equity.⁹ Consider the excerpts from the balance sheet of Coherent, Inc., presented in Exhibit 4.4.

As seen in the exhibit, Coherent does not include minority interests in a total liabilities or a total shareholders' equity amount. Rather, minority interest is reported between liabilities and shareholders' equity, in the so-called mezzanine section of the balance sheet.

Even though minority interests are reported as a claim on the balance sheet, similar to

Exhibit 4.4 Coherent, Inc., Excerpts from the Balance Sheet, Years Ended September 30, 2002, and 2003 (\$ thousands)

	2002	2003
Total current liabilities	\$ 98,207	\$101,113
Long-term obligations	43,345	27,911
Other long-term liabilities	55,860	29,008
Minority interest in subsidiaries	49,602	7,475
Total stockholders' equity	557,243	543,858
	\$804,257	\$709,365

Source: Coherent, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 51.

liabilities or shareholders' equity, most changes in minority interests are not reported on the cash flow statement as cash provided or used from financing activities. Minority interest in equity originates when an acquisition is made and less than 100 percent of the outstanding shares are acquired. The cash paid in the acquisition is reported as an investing use of cash. Liabilities assumed in such an acquisition and any resulting increase in minority interest in equity would not appear on the cash flow statement but would be reported as supplemental noncash investing and financing activities.

Income earned by a subsidiary that is not wholly owned would increase minority interest reported on the balance sheet for the minority interest share of that income. Even though the subsidiary is not wholly owned, all of the cash flow associated with the subsidiary's earnings would be reported as operating cash flow. Like the reporting of cash paid for dividends, distributions to minority shareholders—that is, dividends paid by a subsidiary to outside shareholders—are reported as financing uses of cash. More is said later about the reporting of dividends paid.

Purchases of shares in a subsidiary that is not wholly owned would reduce minority interests on the parent company's balance sheet; sales of shares would increase it. Because such changes in minority interests entail the purchase and sale of shares in another entity, any cash employed or provided is reported as cash flow from investing activities. For example, as seen in Exhibit 4.4, Coherent reduced minority interest in subsidiaries from \$49,602,000 at September 30, 2002, to \$7,475,000 at September 30, 2003. The company went on to report a substantial investing use of cash for the "acquisition of businesses and minority interest, net of cash acquired."¹⁰

Restricted Cash

As discussed in Chapter 3, restricted cash is set aside, either informally or by legal agreement, for a particular purpose. The nature of the restriction guides the cash flow classification of changes in restricted cash balances. Examples noted in Chapter 3 included cash restricted for customer-related transactions, which was reported as operating cash flow, and cash restricted for the replacement of equipment damaged by a fire, which was reported as investing cash flow.

Restricted cash that is related to financing items would be reported as cash provided or used from financing activities. Consider Avado Brands, Inc. On its balance sheet for the year ended December 31, 2001, Avado reported a current asset, restricted cash, in the amount of \$9,978,000, which was held “as collateral to secure letters of credit that secured the Company’s insurance programs.”¹¹ During 2002 that restriction was released as part of completion of a new credit facility. The reduction in the restricted cash balance was reported in 2002 as a financing source of cash.

Interest Paid

Interest paid on debt is reported as an operating use of cash unless that interest has been capitalized into property, plant and equipment accounts. As discussed in Chapter 3, such capitalized interest is included with capital expenditures and is reported as an investing use of cash.

Consider, for example, Tyson Foods, Inc. In its annual report for the year ended September 27, 2003, Tyson Foods notes, “The Company capitalized interest costs of \$3 million in 2003, \$9 million in 2002 and \$3 million in 2001 as part of the cost of major asset construction projects.”¹² These interest expenditures were added to building and equipment items under construction, and the cash expended was reported in the investing section of the cash flow statement.

Beazer Homes USA, Inc., also capitalizes interest on construction projects. However, unlike Tyson Foods, where construction was on assets to be used in operations, at Beazer Homes most construction was on homes and related development activities. Such assets were held for sale and, accordingly, were reported as inventory, on which cash expended was reported as a component of operating cash flow. As noted by the company, “Housing projects and land held for development and sale are stated at cost (including direct construction costs, capitalized indirect costs, and real estate taxes).”¹³ At year-end 2002 and 2003, the company reported total inventory costs of \$1,364 million and \$1,688 billion, respectively. Included in these amounts were capitalized interest costs of \$24,441,000 and \$34,285,000, respectively. Exhibit 4.5 presents a company-provided display of activity in capitalized interest included in inventory during 2002 and 2003.

As noted in the exhibit, the company capitalized \$51,171,000 and \$65,295,000 of interest costs into inventory during 2002 and 2003, respectively. Such costs were reported as operating uses of cash. When the related homes were completed and sold, capitalized interest included in inventory was amortized to expense and became a noncash component of cost of sales.

Debt Issue Costs

The cost of issuing debt, including appraisal and recording fees and commitment fees paid separately to a lender, are capitalized and reported on the balance sheet as an asset. Typically, a descriptive title, such as capitalized debt issuance costs, is used.

The cash paid for such capitalized debt issue costs is reported as a financing use of cash.¹⁴ As an example, consider Bull Run Corp., where cash paid for debt issue costs, \$1,345,000, was reported as a use of cash in the financing section of the cash flow statement.¹⁵

It is not uncommon for companies that bear such debt issue costs to net the amounts paid against the proceeds from the debt issue and report net proceeds as financing

Exhibit 4.5 Beazer Homes USA, Inc., Details of Activity in Capitalized Interest Included in Inventory, Years Ended September 30, 2002, and 2003 (\$ thousands)

	2002	2003
Capitalized interest in inventory, beginning of year	\$16,271	\$24,441
Interest incurred and capitalized	51,171	65,295
Capitalized interest amortized to cost of sales	(43,001)	(55,451)
Capitalized interest in inventory, end of the year	\$24,441	\$34,285

Source: Beazer Homes USA, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 43.

cash flow. Shaw Group, Inc., employed such a net approach when, in 2003, the company reported proceeds from issuance of debt, net of deferred debt issue costs, of \$242,545,000.¹⁶

Once capitalized, debt issue costs are amortized to interest expense over the financing term of the related debt. Such amortization, which reduces net income, is a noncash expense. Note the inconsistency here. With the exception of capitalized interest, interest paid on debt is expensed and reported as an operating use of cash. Capitalized debt issue costs also are expensed as interest; however, the payment of such costs are reported as a financing use of cash.

Dividends Paid

Also in contrast to the treatment of interest incurred, cash dividends paid on outstanding shares are reported as financing uses of cash. The apparent inconsistency—interest paid is, for the most part, an operating item while dividends paid are a financing item—is designed to keep operating cash flow measured in a manner consistent with the measurement of net income. Both are measured from the viewpoint of the shareholder. As such, interest is an expense in measuring net income available for shareholders in the same way that cash provided by operating activities is cash available for shareholders. Dividends are not an expense in measuring net income but rather are reported as a distribution of profits to shareholders. Thus, for cash flow reporting, dividends paid to shareholders are not subtracted in computing operating cash flow but rather are reported as a use of cash in the financing section of the cash flow statement.¹⁷

Dividends on Mandatorily Redeemable Preferred Stock

Mandatorily redeemable preferred stock represents an unconditional obligation to the issuer to repurchase the shares at some specified or determinable date. As such, the securities have more of a debt quality about them than traditional preferred shares that carry no such required redemption. Historically, because of the required redemption provision, generally accepted accounting principles have not permitted companies to include such

securities with equity. As a result, they have been reported in the mezzanine section on the balance sheet, similar to minority interests.

However, recent changes in GAAP, namely Statement of Financial Accounting Standards No. 150, designed to clarify the true financial nature of these securities, require their inclusion with liabilities. No longer may they be reported in the mezzanine section of the balance sheet.¹⁸

Consider, for example, the disclosure provided by Loral Space and Communications, Ltd., in its quarterly filing for the period ended September 30, 2003: “On July 1, 2003, the Company adopted SFAS No. 150. . . As a result of the adoption of SFAS 150, the Company reclassified its preferred stock to liabilities.”¹⁹ The reporting change added approximately \$224 million, or 8 percent, to the company’s total liabilities of \$2.9 billion.

SFAS No. 150 has not changed the cash flow classification of mandatorily redeemable preferred shares. Thus, whether reported in the mezzanine section or with liabilities, proceeds from the issue of mandatorily redeemable preferred stock and cash used in their redemption are reported as cash flow from financing activities. However, SFAS No. 150 did change the cash flow classification of dividends on those securities. As a result of the new accounting standard, what were dividends, a financing item, will now be classified as interest, an operating item. Continuing with the Loral Space disclosure, “related dividends since adoption have been included in interest expense.”²⁰

GAAP FLEXIBILITY: IS IT OPERATING OR FINANCING CASH FLOW?

Within the boundaries of GAAP are numerous opportunities to alter operating cash flow by classifying what are seemingly financing items as operating or vice versa. In the process, apparent operating performance can be altered.

Several examples related to the cash flow classification of operating and financing items are provided. The examples are designed to help the reader better understand how cash flows are reported and to illustrate how some cash flow classifications can be misleading.

Book Overdrafts

A cash-balance *bank* overdraft arises when checks written and presented for payment exceed an available bank balance. Often a company will have an automatic overdraft protection arrangement in place with its bank whereby short-term financing is provided to cover checks presented for payment. An overdraft arrangement also can serve as an effective cash management tool as a means of minimizing the opportunity cost of carrying funds in a low-yielding bank account.

For example, one or more bank accounts may be used for deposits only, where cash collections are regularly deposited and periodically transferred elsewhere. A separate account may be used for disbursements where no balance is carried but where cash is automatically transferred when checks are presented to the bank for payment. At the end of an accounting period, even though automatic financing has been provided to cover and eliminate a bank overdraft in the disbursement account, the existence of outstanding checks will result in a *book* overdraft—a negative cash balance on the books although not

at the bank itself. Thus, a distinction should be made between a bank overdraft and a book overdraft. A bank overdraft occurs when checks are presented for payment that exceed a company's cash balance held by its bank. An automatic financing arrangement typically is used to cover a bank overdraft.

A book overdraft is not an overdraft at a bank but rather an excess of outstanding checks on a company's books over its reported bank cash balance. A book overdraft becomes a bank overdraft when outstanding checks are presented for payment.

The Williams Companies, Inc., describes its cash management system and the company's reporting of book overdrafts in this way:

Note 10. Accounts Payable and Accrued Liabilities

Under Williams' cash-management system, certain subsidiaries' cash accounts reflect credit balances to the extent checks written have not been presented for payment. The amounts of these credit balances included in accounts payable are approximately \$59 million and \$30 million at December 31, 2002 and 2001, respectively.²¹

As noted by Williams, at year-end, book overdrafts, described as "credit balances in cash accounts," are reclassified to accounts payable. This reporting classification is consistent with GAAP, which call for negative cash balances, that is, overdrafts, to be reclassified as current liabilities. That is, rather than reporting overdrafts as negative cash balances, GAAP calls for reporting them as current liabilities. The book cash balance in the account with an overdraft is increased from what would have been a negative amount up to zero, eliminating the overdraft. The offset to this adjustment is to increase current liabilities. In effect, the reporting company owes the overdraft balance to the bank that will cover it as checks are presented for payment.

The use of accounts payable to report the overdraft balance, as is the case at Williams and is common at other companies, is not completely consistent with the true nature of the overdraft balance. It implies that the company's supplier is owed the amount due on an account. In fact, a check was written to the supplier making payment. A more descriptive account description would be something like "overdrafts payable." However, use of accounts payable is a practical expedient and is innocuous provided a reporting company, such as Williams, discloses the amount of any material overdrafts outstanding included in accounts payable.

The reporting of book overdrafts is not uncommon. As part of a study completed by the Georgia Tech Financial Analysis Lab, among a sample of 2,571 10-K annual report filings spread across the fiscal 2001 filing year, 3.9 percent disclosed the existence of book overdrafts of a sufficiently material amount to warrant disclosure.²² We think that many more companies have book overdrafts but simply do not disclose their existence.

A selection of companies disclosing the existence of book overdrafts is provided in Exhibit 4.6. Included in the exhibit is the amount of reported book overdrafts along with each company's reported cash balance, which has been increased for the amount of any book overdraft. The exhibit also includes the amount of each company's net cash balance, or what reported cash would have been had it not been increased with book overdrafts.

The exhibit provides an interesting array of both large and small companies. For example, while Boeing Corp. reports overdrafts of \$301 million at December 31, 2002, the

Exhibit 4.6 Reported Cash Balances, Book Overdrafts, and Net Cash Balances

Company	Year Ended	Reported Cash Balance	Book Overdraft Balance	Net Cash Balance (Overdraft)
Airborne, Inc.	Dec. 31, 2001	\$ 210,500,000	\$ 25,531,000	\$ 184,969,000
	Dec. 31, 2002	339,900,000	29,705,000	310,195,000
AMC Entertainment, Inc.	Mar. 29, 2002	219,432,000	31,751,000	187,681,000
	Mar. 28, 2003	244,412,000	39,076,000	205,336,000
Anheuser-Busch Companies	Dec. 31, 2001	162,600,000	92,300,000	70,300,000
	Dec. 31, 2002	188,900,000	87,400,000	101,500,000
Aviall, Inc.	Dec. 31, 2001	2,526,000	7,500,000	(4,974,000)
	Dec. 31, 2002	4,997,000	34,220,000	(29,223,000)
Boeing Corp.	Dec. 31, 2001	633,000,000	351,000,000	282,000,000
	Dec. 31, 2002	2,333,000,000	301,000,000	2,032,000,000
Cox Communications, Inc.	Dec. 31, 2001	86,860,000	90,700,000	(3,840,000)
	Dec. 31, 2002	228,704,000	66,800,000	161,904,000
Eastman Chemical Co.	Dec. 31, 2001	66,000,000	69,000,000	(3,000,000)
	Dec. 31, 2002	77,000,000	39,000,000	38,000,000
Hershey Foods Corp.	Dec. 31, 2001	134,147,000	26,500,000	^a 134,147,000
	Dec. 31, 2002	297,743,000	24,800,000	^a 297,743,000
Kendle International, Inc.	Dec. 31, 2001	6,016,000	503,000	5,513,000
	Dec. 31, 2002	12,671,000	101,000	12,570,000
Limited Brands, Inc.	Feb. 2, 2002	1,495,000,000	120,000,000	1,375,000,000
	Feb. 1, 2003	2,262,000,000	161,000,000	2,101,000,000
Medsolutions, Inc.	Dec. 31, 2001	0	145,500	(145,500)
	Dec. 31, 2002	0	87,588	(87,588)
National R.V. Holdings, Inc.	Dec. 31, 2001	22,000	608,000	(586,000)
	Dec. 31, 2002	14,000	943,000	(929,000)
Orthodontic Centers of America, Inc.	Dec. 31, 2001	14,172,000	3,992,000	10,180,000
	Dec. 31, 2002	7,522,000	2,211,000	5,311,000
Paving Stone Corp.	Dec. 31, 2001	35,439	326,936	(291,497)
	Dec. 31, 2002	15,639	78,393	(62,754)
Perini Corp.	Dec. 31, 2001	9,512,000	2,626,000	6,886,000
	Dec. 31, 2002	47,031,000	0	47,031,000
Strategic Distribution, Inc.	Dec. 31, 2001	3,614,000	0	3,614,000
	Dec. 31, 2002	43,622,000	2,090,000	41,532,000
US Xpress Enterprises, Inc.	Dec. 31, 2001	8,185,000	0	8,185,000
	Dec. 31, 2002	131,000	6,437,000	(6,306,000)

(continues)

Exhibit 4.6 (Continued)

Company	Year Ended	Reported Cash Balance	Book Overdraft Balance	Net Cash Balance (Overdraft)
Williams Companies, Inc.	Dec. 31, 2001	1,258,500,000	20,000,000	1,238,500,000
	Dec. 31, 2002	1,728,300,000	59,000,000	1,669,300,000

^a Hershey Foods Corp. has a formal right of offset of different accounts held at the same bank. Accordingly, in 2001 and 2002, the company netted overdrafts against other positive cash balances held at the same bank.

Source: C. Mulford, K. Maloney, and M. Ely, *A Re-examination of Cash Flow Reporting in the Presence of Overdrafts* (Atlanta: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, June 2003), pp. 5–6.

company still reported a net cash balance, calculated as reported cash less overdrafts, of over \$2 billion. Similarly, at February 1, 2003, Limited Brands, Inc., reported overdrafts of \$161 million. Still, the company reported net cash of \$2.1 billion.

On the other end of the spectrum, Medsolutions, Inc., reported zero cash balances at December 31, 2001, and 2002. However, footnote disclosures indicated that the company carried book overdrafts of \$145,500 and \$87,800, respectively at year-end 2001 and 2002. Thus, although the company reported no cash on hand, its net cash balances were actually negative. At various times, net cash balances were also negative for other companies, including Aviall, Inc., Cox Communications, Inc., Paving Stone Corp., and US Xpress Enterprises, Inc.

At December 31, 2001, and 2002, Hershey Foods Corp. carried book overdrafts of over \$20 million. However, the company made this disclosure:

As a result of maintaining a consolidated cash management system, the Corporation maintains overdraft positions in certain accounts at several banks. The Corporation has the contractual right of offset for the accounts with overdrafts. Such overdrafts, which were reflected as a reduction to cash and cash equivalents, were \$24.8 million and \$26.5 million as of December 31, 2002 and 2001, respectively.²³

The company has a formal right to offset bank accounts with negative balances against cash accounts with positive balances. Because of its right of offset, the company does not report its book overdrafts as liabilities but nets them against cash accounts that carry positive balances. As a result, its reported cash and its calculated cash balance net of overdrafts are the same amount.

Book Overdrafts and Net Debt

Often when discussing general debt levels, companies may emphasize their net debt as opposed to total debt. Net debt is total debt less cash on hand. For many companies with substantial cash balances, it is a substantially smaller amount.

For example, in its earnings press release for the first quarter of 2003, Verizon Communications, Inc., highlighted net debt of \$49.9 billion, which had been reduced by \$4.2

billion in cash on hand. Similarly, Dana Corp. emphasized net debt that is 41 percent lower than its total debt of \$3.4 billion.²⁴

It may appear reasonable to subtract cash on hand from total debt to derive a net debt amount. After all, a company could use its cash on hand to repay debt. The problem is that cash on hand may not be available for debt repayment. For example, a large portion may be needed for transaction balances or other obligations. In addition, cash on hand may be carried at foreign subsidiaries and may not be available for transfer, or if it were transferred, significant income taxes may be owed.

It is also possible that cash on hand was increased when overdrafts were reclassified to a liability account. Consider AMC Entertainment, Inc., for example. In his letter to shareholders accompanying the company's 2002 annual report, AMC's chairman and chief executive officer notes, "Our debt ratio improved: Net debt stood at 2.7 times Adjusted EBITDA at the end of fiscal 2002, compared to 4.4 times in fiscal 2001."²⁵

At the end of its fiscal 2002, AMC increased cash on hand with \$31.8 million in overdrafts payable. At that level, overdrafts, which represent outstanding checks and are not available for debt repayment, comprised approximately 5 percent of outstanding debt.

Book Overdrafts and Operating Cash Flow

Beyond the effects of book overdrafts on the balance in cash reported on the balance sheet, changes in overdrafts from one period to the next can alter reported operating cash flow. Increases in book overdraft balances are a source of cash; decreases are a use of cash.

There is little in the way of official guidance on how cash flows associated with overdrafts are to be classified. For example, SFAS No. 95, "Statement of Cash Flows," does not make specific reference to the cash flow classification of overdrafts.²⁶ The statement is, however, clear in noting that outside sources of cash in the form of borrowed amounts are to be classified as financing activities. Because cash is not on hand to fund a book overdraft balance, financing is needed. Supporting this view, in a speech delivered to the Twenty-third Annual National Conference on Current SEC Developments in 1996, a former associate chief accountant of the SEC noted:

Registrants are reminded to evaluate the criteria in SFAS 95 for classifying each cash receipt and payment in the appropriate category. . . . Cash overdrafts should be reported as financing activities.²⁷

Most companies report changes in overdraft balances in financing cash flow. In research conducted by the Georgia Tech Financial Analysis Lab, 61 percent of companies reporting overdrafts included changes in overdraft balances in financing cash flow while 16 percent of them reported overdrafts in operating cash flow. The remaining 23 percent of firms reporting overdrafts did not provide sufficient information to determine whether overdrafts were reported in financing or operating cash flow.²⁸

Exhibit 4.7 provides a selection of companies that in 2002 included overdrafts in operating cash flow. The exhibit also reports the operating cash effects of those overdrafts.

By mixing with operating cash flow a nonrecurring, financing-like source of cash, the inclusion of overdrafts in operating cash flow can yield misleading results. For example, as noted in Chapter 1, \$9.7 million of the \$12.9 million in operating cash flow generated

Exhibit 4.7 Overdrafts and Operating Cash Flow

Company	Year Ended	Operating Cash Flow Provided (Used) by Overdrafts
Airborne, Inc.	Dec. 31, 2002	\$ 4,174,000
Anheuser-Busch Companies	Dec. 31, 2002	(4,900,000)
Limited Brands, Inc.	Feb. 1, 2003	41,000,000
Medsolutions, Inc.	Dec. 31, 2002	(57,912)
National R.V. Holdings, Inc.	Dec. 31, 2002	335,000
Optimal Robotics Corp.	Dec. 31, 2002	(98,390)
Orthodontic Centers of America, Inc.	Dec. 31, 2002	(1,781,000)
Paving Stone Corp.	Dec. 31, 2002	(248,543)
Perini Corp.	Dec. 31, 2002	(2,626,000)
Speizman Industries, Inc.	June 29, 2002	(1,438,000)
Strategic Distribution, Inc.	Dec. 31, 2002	2,090,000

Source: C. Mulford, K. Maloney, and M. Ely, *A Re-examination of Cash Flow Reporting in the Presence of Overdrafts* (Atlanta: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, June, 2003), p. 9.

by Mim Corp. during the first quarter of 2002 was derived from an increase in overdraft financing.

Also, consider the examples presented in Exhibit 4.7. During the year ended December 31, 2002, Airborne, Inc., boosted operating cash flow by \$4,174,000, or 2 percent, through overdraft financing, while Strategic Distribution, Inc., used overdrafts to increase operating cash flow by \$2,090,000, or 5 percent.

Like many other companies, Limited Brands, Inc., includes its overdrafts with accounts payable. The company reports changes in accounts payable, including changes in overdrafts, in operating cash flow.²⁹ During the company's year ended February 1, 2003, Limited's overdrafts increased by \$41 million, boosting operating cash flow by just over 5 percent.

As seen in Exhibit 4.7, overdrafts also can reduce operating cash flow. When overdraft balances decline, operating cash flow is reduced. For example, during the year ended December 31, 2002, overdrafts at Perini Corp. declined by \$2,626,000, reducing operating cash flow. During 2002 the company reported that it consumed operating cash flow of \$3,632,000. Had it not been for declines in overdrafts, the company would have reported that it consumed operating cash flow of \$1,006,000 (i.e., $-\$3,632,000 + \$2,626,000$) for the year.

As one last example of the confounding effects that overdrafts can have on operating cash flow, consider Aviall, Inc. In 2000 Aviall reported that it generated \$7.7 million in operating cash flow. However, that year an increase in overdrafts from \$4.5 million in 1999 to \$19.7 million in 2000, provided \$15.2 million in operating cash flow. Had the company not included overdraft financing in operating cash flow in 2000, it would have consumed \$7.5 million (i.e., $\$7.7 \text{ million} - \15.2 million) in cash from operations.

In 2001, Aviall reported that it used \$93.4 million in cash from operations. That year, a decline in overdrafts consumed \$12.2 million in operating cash flow. The company

changed its reporting practices in 2002 and began reporting the amount of funds provided from changes in overdraft balances in the financing section of its statement of cash flows. The company also reclassified its cash flow statements for 2000 and 2001 to move overdraft-related cash flows to the financing section. For the year ended December 31, 2002, Aviall's operations, excluding any effects of overdrafts, used \$37.1 million in cash flow.

Extended Vendor Payment Terms

Increases in accounts payable and accrued expenses payable occur when purchases of inventory are made and operating costs are incurred without payment. Operating cash flow is reduced when these open accounts ultimately are paid. When unpaid accounts are left open for increased periods of time, a company receives what is effectively a free source of financing. Such a move may reflect management prudence. However, the boost it provides to operating cash flow is only temporary. And although the use of supplier funds functions much like a financing transaction, because the cash is derived from suppliers and not lenders, it is properly reported as operating cash flow.

Evidence of a company's use of extended payment terms to boost operating cash flow is apparent when the length of time taken to pay accounts payable and accrued expenses payable increases. As seen in Chapter 1, during the year ended February 2, 2002, Home Depot, Inc., increased the length of time taken to settle accounts payable to approximately 34 days from 22 days in 2001. As noted, that 12-day increase added approximately \$1.1 billion to operating cash flow in 2002. Much like a financing transaction, that \$1.1 billion is a nonrecurring source of cash.

Then during the year ended February 2, 2003, Home Depot further extended its payment period for accounts payable. By the end of the year the company was paying suppliers in 41 days, up from 34 days in 2002. That 7-day increase added \$800 million to operating cash flow for the year. As reported, cash provided by operating activities declined to \$4,802 million in 2003 from \$5,963 million in 2002. Without a lengthened payment schedule, operating cash flow would have declined even more.

Home Depot and others would argue that their ability to increase the amount of time taken to pay their vendors is a sign of market strength. In this view, companies should take as long as possible to make payment. Assuming the vendors in question are not indirectly charging for this service—for example, through higher prices—we do not disagree. Our point is that any incremental operating cash flow provided by delaying payment is inherently unsustainable and should be treated as such.

It is unclear whether Home Depot will continue increasing the period taken to settle with its suppliers. Obviously at some point the company's suppliers will balk and the company will no longer be able to use increased payment terms to incrementally increase operating cash flow.

As another example, consider E.I. DuPont De Nemours & Co. In the year ended December 31, 2002, DuPont reported that cash flow provided by operating activities declined to \$2,053 million from \$2,419 billion in 2001. However, in 2002, a year in which revenues declined by approximately 3 percent, accounts payable increased 23 percent. Had the company's accounts payable declined in proportional terms with revenues in 2002, they would have declined to \$2,152 million from \$2,219 million in 2001. Instead, during 2002, accounts payable increased to \$2,727 million. This \$575 million increase in accounts payable during 2002 that was not accounted for by growth in the company's

operations (\$2,727 million – \$2,152 million) increased operating cash flow that year. Without this source of cash, the company's cash flow performance in 2002 would have been even worse.

In a prominent report filed in June 2002, an analyst at Goldman Sachs Group, Inc., noted that the automotive division of Ford Motor Co. boosted its annual operating cash flow by \$1.4 billion per year through delays in the way it was paying “the costs of lease or loan incentives to Ford Credit, the company's financial arm.”³⁰ Ford disputed the analyst's claim that the company's cash balance was overstated by as much as \$10 billion because of payment delays, saying the balance was less than half of that amount. However, the company did not dispute the analyst's observation that payment delays boosted the operating cash flow of its automotive division.

A payment delay, such as that employed by Ford, is a good example of how extended payment terms can boost operating cash flow. Although the Ford moves simply benefited one Ford division over another, they nonetheless concerned the market, where participants “sent the stock tumbling” at the time the analyst's report was made public.³¹

As a counterexample, consider Baker Hughes, Inc. In the year ended December 31, 2002, the company reduced to 39 days the length of time taken to settle with its suppliers. The quickened payment schedule, down from 54 days in 2001, consumed over \$140 million in operating cash flow in 2002 and more than explained the decline of \$25 million that year in cash provided by continuing operations.

Customer-Provided Financing

When revenue is collected in advance of being earned, the proceeds received are reported as a liability, a form of customer-provided financing. That liability, typically referred to as deferred revenue, reflects an obligation borne by the receiving company to provide goods or services to its customers.³² When those goods or services are provided, the underlying revenue is earned and is reported on the income statement. That recording of revenue is offset by a reduction in deferred revenue.

Deferred revenue is the result of customer-related collections. Accordingly, collections leading to increases in the deferred revenue liability are reported as operating and not financing sources of cash. Later, when the underlying revenue is earned, increasing revenue and reducing deferred revenue, no operating cash flow is provided. As a result, reductions in deferred revenue are reported as subtractions from net income in computing operating cash flow.

The deferred revenue transactions of Microsoft Corp. are an instructive example. Excerpts from the company's revenue recognition footnote are provided below.

Revenue for retail packaged products, products licensed to original equipment manufacturers (OEMs), and perpetual licenses for current products under our Open and Select volume licensing programs is generally recognized as products are shipped, with a portion of the revenue recorded as unearned due to undelivered elements including, in some cases, free post-delivery telephone support and the right to receive unspecified upgrades/enhancements of Microsoft Internet Explorer on a when-and-if-available basis. . . . Unearned revenue due to undelivered elements is recognized ratably on a straight-line basis over the related product's life cycle. . . . Revenue from multi-year licensing arrangements are accounted for as subscriptions, with billings recorded as unearned revenue and recognized as revenue ratably over the billing coverage period.³³

The company's deferred revenue, referred to as unearned revenue, reflects collections made for undelivered software or services. Deferred amounts are recognized over future periods as services are provided. The effects and the importance to operating cash flow of the company's deferred revenue account can be seen in Exhibit 4.8.

As seen in the exhibit, a significant portion of the company's operating cash flow is collected each year from customers, in advance. New amounts of deferred revenue increased from \$6,970 million in 2001 to \$12,519 million in 2003. In fact, in 2003, additions to deferred revenue comprised 79 percent of the company's operating cash flow.

On the company's cash flow statement, additions to unearned revenue were reduced each year by amounts earned and recognized as revenue. It is important to note that although amounts recognized appear as subtractions on the cash flow statement, as apparent uses of cash, they are not, in fact, reductions in cash flow. Rather, amounts recognized serve to increase revenue and net income without providing incremental cash flow. Accordingly, amounts recognized appear as subtractions in reconciling net income to operating cash flow.

Net increases in deferred revenue can be considered to be a sign of financial strength as they provide current operating cash flow and the promise of future revenue, as deferred amounts are later earned. Although declines in deferred revenue lead to increases in current-period revenue, operating cash flow is not increased and the maintenance of past revenue levels is more uncertain.

When reviewing the operating section of the cash flow statement, it is important to note the role played by changes in deferred revenue. Although increases in deferred revenue will increase operating cash flow, that operating cash support may not be sustainable if a company is unable to continue driving new orders higher.

At Symbol Technologies, Inc., a net increase in deferred revenue added \$9,958,000 to operating cash flow in the year ended December 31, 2000. Then in 2001, a net increase in deferred revenue added \$5,577,000 to operating cash flow. In 2002, net deferred revenue declined by \$4,189,000.³⁴ That year the net decline in deferred revenue appeared as a subtraction in computing operating cash flow. However, the implication for earnings is that future revenue will be impacted negatively. There is less deferred revenue to be recognized in future periods.

Avaya, Inc., offers a counterexample and demonstrates how a reversal of declining

Exhibit 4.8 Microsoft Corp., Excerpts from Operating Section of the Statement of Cash Flows, Years Ended June 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Unearned revenue (amounts collected in advance)	\$ 6,970	\$11,152	\$12,519
Recognition of unearned revenue	(6,369)	(8,929)	(11,292)
Net increase in unearned revenue	\$ 601	\$ 2,223	\$ 1,227
Net cash provided by operating activities	\$13,422	\$14,509	\$15,797

Source: Microsoft Corp. Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 21.

deferred revenue provides an increase to operating cash flow. During the year ended September 30, 2001, Avaya's deferred revenue declined by \$132 million, increasing revenue but not operating cash flow. That year, the company reported that it consumed \$133 million of cash flow in operations. During 2002, deferred revenue continued to decline but by a smaller amount, \$98 million. That year, the company generated positive operating cash flow of \$198 million. During 2003, the company began increasing deferred revenue again, providing \$22 million of the \$197 million in operating cash flow generated during the year.³⁵

Notes Payable

Financing of operating costs with notes payable to suppliers, even notes that bear interest, is reported in the operating section of the cash flow statement. Thus, financing provided by a supplier in the form of notes payable as opposed to accounts payable still is reported as an operating source of cash. Payments of principal on those notes, as well interest on them, are also reported as operating uses of cash.

Payments on notes payable to suppliers for purchases of operating-related items such as inventory are properly classified as operating cash flow. Cash flow classification, however, is less clear when those same notes are payable to lenders. Consider, for example, the use of floor-plan financing.

Under a floor-plan financing arrangement, a dealer, such as an auto dealer or a marketer of recreational vehicles, boats, or manufactured homes, pledges its inventory as collateral for a loan. The loan may come from the manufacturer, or, more often, it may come directly from a financial institution. When a unit is sold from inventory, the floor-plan agreement typically requires that an amount, the release price, attributable to the unit sold must be paid to the lender. Although this sounds very much like a financing arrangement, suggesting that related cash flows should be reported as financing activities, in fact floor-plan financing typically is reported as part of operating cash flow. The likely explanation is that floor-plan financing tends to replace open account financing from suppliers, that is, accounts payable, and is for the purchase of an important operating item, inventory.

United Auto Group, Inc., an auto retailer, describes its floor-plan financing agreement in this way:

We finance the majority of our new and a portion of our used vehicle inventory under revolving floor plan financing arrangements between our subsidiaries and various lenders. In the U.S., we make monthly interest payments on the amount financed, but are generally not required to make loan principal repayments prior to the sale of the new and used vehicles we have financed.³⁶

Although such an arrangement sounds very much like a financing transaction, collections and payments on the floor-plan-related notes payable are reported by the company as operating cash flow. The direct link between the floor-plan notes payable and inventory helps explain this cash flow treatment. For example, in 2001, a decline in inventory provided United Auto with \$146.8 million in operating cash flow. Offsetting that source of cash was a reduction in floor-plan notes payable in the amount of \$116.5 million. Then in 2002, an increase in inventory consumed \$186.8 million in operating cash flow. However, offsetting that use of cash was a source of cash of \$181.5 million resulting from an increase in floor-plan notes payable.

The operating section of the cash flow statement for Asbury Automotive Group, Inc., provided in Exhibit 4.9, demonstrates well the close connection that exists between changes in inventory levels and floor-plan notes payable.

As seen in the exhibit, in years such as 2002 and 2003, when inventory levels at the company increased, consuming operating cash flow, amounts borrowed under floor-plan notes payable also increased, providing operating cash flow. Then in years such as 2001, when inventory levels were reduced, providing operating cash flow, that source of cash was offset by uses of cash caused by reductions in floor-plan notes payable. Although sources and uses of cash for changes in inventories and floor-plan notes payable are offsetting, the amounts involved are not identical. Differences in amounts arise due to such factors as differences in the timing of changes in inventories and floor-plan notes and the possibility that not all inventories were financed through a floor-plan arrangement.³⁷

Operating cash flow treatment for floor-plan financing arrangements is not universal. Liberty Homes, Inc., a modular home manufacturer, uses floor-plan financing to finance unsold inventory. However, the company reports cash received and payments made on its floor-plan notes payable as financing cash flow. This classification hurts operating cash flow in years when inventory and floor-plan notes payable are increasing. The increase in inventory is an operating use of cash; an offsetting source of cash from the increase in floor-plan notes payable is reported in the financing section. In years when inventory and floor-plan notes payable are declining, however, the company's cash flow classification actually helps operating cash flow. The decline in inventory is an operating source of cash; the requisite reduction in floor-plan notes payable is a use of cash in the financing section.

The years 2001 and 2002 were difficult financially for Liberty Homes as the company lost a cumulative \$6 million. Responding to difficult times, the company drew down its inventory, providing a \$6.8 million boost to operating cash flow across the two years. As a result, the company actually reported positive operating cash flow of \$6.6 million in 2001 and \$1.1 million in 2002. However, not appearing in the operating section was a cumulative \$4.3 million reduction in outstanding floor-plan notes payable. That use of cash was reported in the financing section of the company's cash flow statement.

Floor-plan financing arrangements are the most common form of financing provided by financial institutions that are reported as operating cash flows. Because floor-plan

Exhibit 4.9 Asbury Automotive Group, Inc. Excerpts from Operating Section of the Statement of Cash Flows, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Cash provided (used) by operating activities:			
Changes in operating assets and liabilities, net of acquisitions and divestitures:			
Inventories	\$106,081	\$(79,898)	\$(3,553)
Floor plan notes payable	\$(80,812)	\$ 73,945	\$37,646

Source: Asbury Automotive Group, Inc. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 60.

arrangements entail a direct link between inventory levels, which are pledged as loan collateral, and any loan balance, the problem of extended payment terms providing a short-term boost to operating cash flow that exists for accounts payable does not exist with floor-plan financing. A borrower cannot unilaterally extend the payment terms for floor-plan notes payable in the way that payment terms for accounts payable can be extended.

Using Notes Payable to Shift Operating Cash Flow between Reporting Periods

In the year ended December 31, 2002, Delphi Corp. generated \$2,073 million in operating cash flow. That amount was up substantially from the \$1,360 million provided from operations in 2001 and \$268 million provided in 2000. During the fourth quarter of 2002, the company elected to defer payment on \$287 million in accounts payable through a financing arrangement it had with General Electric Credit Corp.³⁸ Interestingly, the General Electric agreement permitted the company to shift operating cash flow from 2002 to 2003.³⁹

Pursuant to the agreement, General Electric Credit provided financing to cover amounts due from Delphi for purchases made from vendors. Payment to General Electric Credit would take place during the first quarter of 2003. As a result of the financing arrangement, operating cash flow in 2002 was reduced for the \$268 million in payments due vendors. Financing cash flow was increased for the same amount. In effect, during the fourth quarter of 2002, accounts payable were reduced, resulting in a reduction of operating cash flow, and notes payable were increased, resulting in a financing source of cash.

Later, during the first quarter of 2003, payments to General Electric Credit were reflected as financing uses of cash. Had the company not employed the special financing arrangement, those loan payments would have been reported as an operating use of cash flow.

It is not clear why Delphi arranged for a postponement of vendor-related payments in a year when operating cash flow was, relative to recent history, so strong. Whether by design or not, the arrangement permitted Delphi to shift operating cash flow from the fourth quarter of 2002 to the first quarter of 2003. Although the transaction was accounted for in accordance with generally accepted accounting principles, it served to cloud the actual cash-generating ability of the company during the two years in question.

Accounts Receivable Financing

Because of their liquidity and the relative ease with which an assessment of fair value can be established, accounts receivable often serve as the basis for financing transactions. A financing of accounts receivable may take the form of a borrowing, where accounts receivable serve as collateral for a loan, or an outright sale. Accounting for the financing transaction varies depending on how it is structured.

Secured Borrowing

In a secured borrowing transaction based on accounts receivable, the borrower assigns or pledges accounts receivable as security for a loan. To cover refunds and potentially uncollectible accounts, a lender will lend only a portion of the accounts receivable pledged

as collateral. For example, a lender may lend 80 percent of the estimated fair value of selected accounts receivable. If the borrower defaults on the loan, the lender has the right to convert the underlying collateral to cash by taking control of and collecting the accounts receivable.

In most secured borrowing arrangements involving accounts receivable, the borrower continues to service the pledged receivables. Customers remit payments to the borrower and are likely unaware that the amounts they owe have been pledged in a financing transaction. As collections are made, remittances are directed to the lender to cover principal and accrued interest on the underlying loan. Once the loan is repaid, any remaining uncollected receivables are released from the loan security agreement.

As an example, a subsidiary of Navistar International Corp. used a borrowing arrangement, for which accounts receivable had been pledged as collateral, as a means of raising funds. As disclosed by the company, “At October 31, 2003, \$90 million of a Mexican subsidiary’s receivables were pledged as collateral for bank borrowings.”⁴⁰

In another example, as reported by Eagle Broadband, Inc.:

On September 29, 2000, Atlantic Pacific Communications, Inc. (“APC,” a wholly owned subsidiary of the Company), entered into a one year \$900,000 line of credit agreement with Southwest Bank of Texas (“SWBT”). . . . APC’s accounts receivable are pledged as collateral. . . .⁴¹

Both the Navistar and Eagle Broadband examples stress the financing nature of the receivables-based borrowing arrangements. The companies entered into borrowing agreements for which accounts receivable served as security to help ensure repayment. As such, the underlying proceeds received by the companies were correctly reported as cash flow provided by financing activities.

Sales of Receivables

Rather than simply borrowing against accounts receivable, companies often will sell their accounts receivable outright. Such sales may take the form of a factoring arrangement or a securitization.

In a factoring arrangement, a company typically sells its accounts receivable to a financial institution that collects the underlying accounts directly from the selling company’s customers. The factor acts as if it were the company’s credit department. As such, it purchases receivables without recourse to the selling company.

When a customer order is placed, the company requests credit approval from the factor. Once approved, the company ships product or provides services to fill the order and the factor advances cash to the company in payment. The customer placing the order is notified that the amount owed should be remitted directly to the factor.

Consider this disclosure provided by Asbury Automotive Group, Inc.:

The Company has agreements to sell certain of its trade receivables, without recourse as to credit risk, in an amount not to exceed \$25,000,000 per year. The receivables are sold at a discount that is included in selling, general and administrative expenses in the accompanying consolidated statements of income. The discounts totaled \$.5 million, \$.4 million and \$.5 million for the years ended December 31, 2003, 2002, 2001.

As of December 31, 2003, 2002 and 2001, \$20.5 million, \$17.5 million and \$18.1 million of receivables, respectively, were sold under these agreements and were reflected as reductions of trade accounts receivable.⁴²

The company routinely sells up to \$25 million in accounts receivable per year. The receivables are sold without recourse, but at a discount. The discount, which is accounted for as a component of selling, general and administrative expense, is designed to protect the buyer from collection-related losses. The discount also provides a return to the buyer of the receivables. Because it is reported as an outright sale of accounts receivable, the selling company accounts for any proceeds received from the factor as operating as opposed to financing cash flow. Such treatment is consistent with the cash flow treatment of collections of accounts receivable in the ordinary course of operations. Consider excerpts from the operating section of Asbury's cash flow statement provided in Exhibit 4.10.

As seen in the exhibit, to reflect the fact that sales were made that were not yet collected, normal operating-related increases in accounts receivable are reported as uses of cash in the operating section of the company's cash flow statement. As with normal collections, proceeds from sales of accounts receivable are reported as sources of operating cash flow. Note that over the last few years, the company has reduced the amount and proportion of receivables sold, serving as a drag on operating cash flow.

In a securitization transaction, accounts receivable are pooled. An undivided interest in the receivables pool, which represents a claim on the entire pool of receivables, is sold, effectively creating a security that is backed by the receivables. The sale itself is structured on a "continuous basis," where receivables are sold and proceeds are received; then as those receivables are collected, they are replaced with new ones in a revolving fashion.

To facilitate the securitization transaction, a bankruptcy-remote, special purpose entity is created into which the sponsoring company transfers its receivables. The establishment of a SPE is necessary so that the sponsoring company can separate the receivables, ultimately permitting recognition of their securitization as a sale. The bankruptcy-remote status of the entity means that in the event the sponsoring company experiences financial difficulties, creditors would not have access to the SPE's assets. Bankruptcy-remote status notwithstanding, however, the SPE typically is wholly owned

Exhibit 4.10 Asbury Automotive Group, Inc. Excerpts from Operating Section of the Statement of Cash Flows, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Cash provided (used) by operating activities:			
Changes in operating assets and liabilities, net of acquisitions and divestitures:			
Accounts receivable, net	\$(20,004)	\$(30,317)	\$(38,177)
Proceeds from sale of accounts receivable	\$ 17,624	\$ 17,136	\$ 19,958

Source: Asbury Automotive Group, Inc. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 60.

and consolidated by the sponsoring company. It is nothing more than a conduit into which the company transfers its receivables and then sells them.

Although all of a company's receivables may be transferred into the SPE, only eligible receivables, those from selected customers with preestablished credit quality, are available for sale. The entity itself sells an undivided interest in eligible receivables to an unrelated party, usually a financial institution, which might represent one or more investment interests. Typically, debt financing, often commercial paper, is used to finance the purchase of the undivided interest in the receivables. As a result of the sale, proceeds are received by the SPE in an amount that is based on a formula that considers the amount of eligible receivables sold.

The receivables themselves typically are purchased from the entity at a discount. That discount is designed to cover any interest costs on monies borrowed to finance their purchase.

The sponsoring company typically retains an interest in the receivables sold. Accordingly, the amount of receivables underlying the securitization transaction will exceed the proceeds received by the entity. This retained interest provides a cushion that is designed to absorb unexpected credit losses, protecting investors from loss. The goal is to eliminate virtually all collection risk for the purchaser of the undivided interest in the receivables.

The sponsoring company continues to service the receivables. As collections are made, cash is forwarded to the SPE. Discounts on receivables sold are used to service borrowings undertaken to purchase the receivables. Remaining cash is used to purchase new receivables on a continuous basis as they are transferred to the SPE.

In the year ended December 31, 2002, Halliburton Co. reported an addition of \$180 million to operating cash flow for what was referred to as the "sale of receivables, net."⁴³ The sale transaction was a securitization of accounts receivable, described in this way:

On April 15, 2002, we entered into an agreement to sell accounts receivable to a bankruptcy-remote limited-purpose funding subsidiary. Under the terms of the agreement, new receivables are added on a continuous basis to the pool of receivables, and collections reduce previously sold accounts receivable. This funding subsidiary sells an undivided ownership interest in this pool of receivables to entities managed by unaffiliated financial institutions under another agreement. Sales to the funding subsidiary have been structured as "true sales" under applicable bankruptcy laws, and the assets of the funding subsidiary are not available to pay any creditors of Halliburton or of its subsidiaries or affiliates, until such time as the agreement with the unaffiliated companies is terminated following sufficient collections to liquidate all outstanding undivided ownership interests. The funding subsidiary retains the interest in the pool of receivables that are not sold to the unaffiliated companies, and is fully consolidated and reported in our financial statements. . . . The total amount outstanding under this facility was \$180 million as of December 31, 2002. We continue to service, administer and collect the receivables on behalf of the purchaser. The amount of undivided ownership interest in the pool of receivables sold to the unaffiliated companies is reflected as a reduction of accounts receivable in our consolidated balance sheet and as an increase in cash flows from operating activities in our consolidated statement of cash flows.⁴⁴

Halliburton entered into its securitization transaction during 2002. As noted in the disclosure provided, at year-end the company had \$180 million of financings outstanding under the agreement. In effect, the company borrowed against its accounts receivable. Even the company viewed it as a financing of sorts. When asked by a *Forbes* reporter about the motivation for the transaction, a company spokesperson noted that “securitizing receivables was more effective than trying to raise cash in a commercial paper market that is leery of its asbestos exposure.”⁴⁵ However, because the transaction was accounted for as a sale, the proceeds received were reported as operating and not financing cash flow.

Because they are, in effect, sales of accounts receivable, it is proper to include the proceeds from securitization transactions in operating cash flow. The problem is that an outright sale or securitization of accounts receivable transfers what would be future operating cash flow into the current period. Accounts receivable that would be open and uncollected at period’s end, providing operating cash flow as they are collected in a subsequent period, are instead collected in the current period. Thus, collection is accelerated because a portion of operating cash flow in the current period is effectively borrowed from the future. Although new receivables may be sold or securitized in that future period, new receivables would serve only to replace those sold previously. Only an incremental amount of receivables sold would serve to increase operating cash flow. Moreover, in the future, if a company sought to reduce the amount of receivables sold or securitized, operating cash flow would decline.

Consider the information provided in Exhibit 4.11, which was taken from the financial statements of Airborne, Inc.

In the information provided in the exhibit, Airborne, Inc., notes that cumulative proceeds from securitization transactions totaled \$150 million at the end of 2000 and was increased to \$200 million at the end of 2001. The amount remained constant at \$200 million at the end of 2002. Thus, the company reported incremental operating cash flow of \$50 million during 2001 for the increase in the cumulative proceeds from securitization transactions from \$150 million at the end of 2000 to \$200 million at the end of 2001. Because there was no change in the cumulative proceeds received from securitization transactions during 2002, no incremental operating cash flow was provided that year. If the

Exhibit 4.11 Airborne, Inc., Securitized Accounts Receivable, Years Ended December 31, 2000, 2001, and 2002 (\$ thousands)

	2000	2001	2002
Retained interest in securitized accounts receivable:			
Securitized trade accounts receivable	\$340,838	\$306,497	\$341,813
Less: Proceeds from sale of undivided interest in receivables	(150,000)	(200,000)	(200,000)
Less: Allowance for doubtful accounts	(8,610)	(9,220)	(11,588)
Retained interest in securitized accounts receivable, net	\$182,228	\$ 97,277	\$130,225

Source: Airborne, Inc. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001 p. 39, and December 31, 2002, p. 37.

company were to reduce the amount of securitized receivables and the cumulative proceeds received from securitization transactions, operating cash flow would fall.

That is exactly what happened at Halliburton during 2003. In the third quarter of 2003, Halliburton reduced the amount of securitized accounts receivable to zero from \$180 million at December 31, 2002. As a result, operating cash flow for nine months ended September 30, 2003, was reduced by \$180 million and was reported to be a negative \$535 million. A use of cash from operations of \$535 million during 2003 was a sharp turnaround from the production of operating cash flow of \$1 billion for the nine-month period ended September 30, 2002, a period when operating cash flow included a \$200 million boost from securitization proceeds.⁴⁶

Stock Repurchases to Avoid Dilution from Option Exercises

During the 1990s, stock options became a favored form of compensation for company officers and employees. Options provided a means for strongly aligning their interests with those of shareholders and providing what often amounted to significant incentive compensation, typically without impacting earnings. Officers and employees wanted options and companies were all too happy to oblige.

As stock prices rose, sometimes dramatically, the use of stock options mushroomed. The impact on earnings of such option grants was negligible because proposals from the FASB for the expensing of options had been met by stiff opposition and had been withdrawn, being replaced with footnote disclosure only. Yet there was a growing dilution overhang caused by outstanding options that understandably concerned current shareholders.

Consider the options outstanding at Cypress Semiconductor Corp. in the late 1990s. During the year ended December 29, 1997, the company granted options on 6,618,000 shares and had options on 23,923,000 shares outstanding at year-end. During its fiscal 1998, the year ended January 3, 1999, the company granted options on an additional 17,593,000 shares and reported options on 26,515,000 shares outstanding at year-end. During this two-year period, the company had approximately 100 million shares outstanding.⁴⁷ Thus options offered potential additional dilution of up to 25 percent—a sizable amount.

More recently, the use of stock options as a form of compensation has slowed from the torrid pace witnessed during the late 1990s. Companies again face the prospect of expensing option grants as the FASB reconsiders the topic and pressure builds from a collection of respected firms, including such names as Coca-Cola Co. and Washington Post Co., which have elected to expense them. Also, the dilution effect is a continuing concern as options granted get exercised and the number of shares outstanding are increased. Yet the use of stock options continues and because they are an effective form of compensation, they are unlikely to ever be entirely discontinued.

Stock Repurchase Example: Microsoft Corp.

Over the years, Microsoft Corp. has actively employed stock options as part of its compensation arrangement for employees. Consider the activity in the company's options outstanding during 2002 and 2003, as presented in Exhibit 4.12.

As seen in the exhibit, during 2002 the company granted options on 82 million shares. During 2003 option grants on an additional 254 million shares were made. Also, during

Exhibit 4.12 Microsoft Corp., Activity in Options Outstanding, Years Ended June 30, 2002 and 2003 (millions of shares)

	2002	2003
Beginning balance	1,796	1,604
Granted	82	254
Exercised	(198) ^a	(234) ^a
Canceled	(76)	(75)
Ending balance	1,604	1,549

^a Exercise prices received by the company averaged \$6.41 per share in 2002 and \$6.89 per share in 2003.

Source: Microsoft Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 33.

2002 and 2003, options were exercised, resulting in the issue of 198 million and 234 million new shares, respectively.

As a means of containing dilution from option grants, Microsoft has actively repurchased its shares. As noted by the company: “We repurchase our common shares primarily to manage the dilutive effects of our stock option and stock purchase plans, and other issuances of common shares.”⁴⁸

In the year ended June 30, 2002, the company spent \$6,069 million to repurchase 256 million shares, reflecting an average price paid of \$23.71 per share. Then in 2003, another \$6,468 million was expended to repurchase an additional 238 million shares at an average price of \$27.18 per share. During that time the number of shares of the company’s stock outstanding remained relatively constant at just below 10,800 million shares.

Consistent with treasury stock transactions generally, the significant amounts of cash expended by Microsoft to repurchase shares were reported as cash used for financing activities. Helping to offset that multibillion-dollar spending were cash proceeds received from the exercise of the options, \$1,269 million in 2002 and \$1,612 million in 2003. These proceeds also were reported as financing cash flow.⁴⁹

Although the net cash expended to repurchase shares was reported as financing cash flow, a reasonable argument could be made that cash used to repurchase shares in this manner is, in substance, an operating item. The net cash expended—that is, the cash expended to repurchase shares issued as a result of option exercises less the cash received from the exercises themselves—is effectively the net cash cost to Microsoft of having the option plan in place. Because the options are used as a form of compensation, net cash expended thus is related more to operations than to how the company is financed.

In 2002, the company repurchased 256 million shares. Limiting the cash expended for buybacks to the 198 million shares issued as a result of option exercises and using an average repurchase price for 2002 of \$23.71, the cash required to repurchase shares issued totaled \$4,695 million (198 million shares times \$23.71).⁵⁰ Against this expenditure, we net the \$1,269 million in proceeds received from the exercise of options. Thus, the net cash expended to repurchase shares issued from option exercises in 2002 was \$3,426 million (\$4,695 billion minus \$1,269 billion), or about 24 percent of operating cash flow reported for the year.

In 2003, the company repurchased 238 million shares in a year when options were exercised on 234 million shares. It would require \$6,360 million to repurchase 234 million shares at 2003's average share repurchase price of \$27.18 (234 million shares \times \$27.18). From this amount, we subtract the \$1,612 million in proceeds received from the exercise of options, resulting in net cash expended to repurchase shares issued from option exercises in 2003 of \$4,748 million (\$6,360 – \$1,612), or 30 percent of the year's operating cash flow.

There is also the issue of tax benefits from stock options. For Microsoft, such tax benefits, derived from option-related tax deductions and received in the form of reductions in tax payments, totaled \$1,596 million in 2002 and \$1,376 million in 2003. In accordance with GAAP, these tax benefits were reported as operating cash flow.

We discuss the tax benefits topic at length in Chapter 5, where we advocate removing from operating cash flow tax benefits, including options-related benefits, which are inherently unsustainable. However, if operating cash flow were to be adjusted downward for the net cash expended in the repurchase of shares issued from stock option exercises, then any tax benefit received from the exercise of those options should remain in cash provided by operations.

If a company were to issue shares from option exercises but not employ cash in their repurchase, we would not advocate adjusting operating cash flow for an assumed repurchase of shares. Our interests are in refining the classification of actual cash flows rather than measuring nonexistent, phantom cash flow. Also, on a per-share basis, operating cash flow for a company that has not repurchased shares will be reduced. Companies repurchasing shares will lower shares outstanding and boost operating cash flow on a per-share basis if provision is not made for cash expended to repurchase shares.

Stock Repurchase Example: Vital Signs, Inc.

To apply the stock repurchase provisions outlined here to another company, consider Vital Signs, Inc. Activity in the company's outstanding options during the years ended September 30, 2002, and 2003 is presented in Exhibit 4.13.

As observed in the exhibit, Vital Signs granted 94,494 options in 2002 and 288,786

Exhibit 4.13 Vital Signs, Inc., Activity in Options Outstanding, Years Ended September 30, 2002, and 2003

	2002	2003
Beginning balance	456,257	459,334
Granted	94,494	288,786
Exercised	(59,519) ^a	(37,328) ^a
Canceled	(31,898)	(72,933)
Ending balance	459,334	637,859

^a Exercise prices received by the company averaged \$19.80 per share in 2002 and \$19.95 per share in 2003.

Source: Vital Signs, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. F-19.

options in 2003. Options granted previously that were exercised during those years totaled 59,519 shares for total proceeds of \$1,178,476 in 2002 and 37,328 shares for total proceeds of \$744,694 in 2003.

The company also repurchased shares in 2002 and 2003. During 2002, it repurchased 61,000 shares at an average price of \$37.18 per share. At that average price, the cash expended to repurchase the 59,519 shares issued as a result of options exercised was \$2,212,916 ($59,519 \times \37.18). Subtracting the \$1,178,476 in proceeds received for options exercised, we arrive at the net cash expended in 2002 for share repurchases related to stock options of \$1,034,440 ($\$2,212,916 - \$1,178,476$). During 2003, 100,300 shares were repurchased at an average price of \$25.71. Using that average price, the company expended \$959,703 to repurchase the 37,328 options-related shares issued during 2003 ($37,328 \times \$25.71$). Subtracting the \$744,694 in proceeds received for options exercised, we determine the net cash expended in 2003 for share repurchases related to stock options of \$215,009 ($\$959,703 - \$744,694$).

Vital Signs reported operating cash flow of \$34,856,000 in 2002 and \$35,353,000 in 2003. Had the company reported as operating cash flow as opposed to financing cash flow the net cash expended for options-related share repurchases, \$1,034,440 in 2002 and \$215,009 in 2003, the impact on operating cash flow would have been small. Nonetheless, if the company were to increase its option grants or if option exercises were to increase markedly, the net cash expended for share repurchases could become more material to operations.

Sale and Leaseback Transactions

When an asset is sold and simultaneously leased back, the seller gives up ownership but not possession of the asset in question. Such a transaction may be utilized for any number of reasons, including:

- A desire to free up capital for investment
- An interest in an alternative, cost-efficient means of raising cash without using the debt and equity markets
- A belief that the asset in question (often real estate) should be owned by firms who are in that business
- A desire to lower debt as a means of improving financial leverage
- A desire to shed assets as a means of increasing return on assets

Any long-lived asset is potentially available for a sale and leaseback transaction. Examples include a headquarters facility, most any kind of equipment, such as manufacturing, mining, satellite, and office equipment, aircraft and other transportation equipment, restaurants, warehouses, and even rights to motion picture films.⁵¹

In general, accounting standards for sale and leasebacks are designed to treat them as financing transactions. In effect, the seller has borrowed against its equity in the asset that has been sold. In line with the financing view of the sale and leaseback, it is common for some or all of the realized gain to be deferred and recognized over the term of the leaseback. Only the gain, if any, that exceeds the present value of the leaseback can be recognized immediately.⁵²

The leaseback itself is accounted for according to the terms of the underlying lease. If it meets one of these criteria, it is treated as a capital lease:

- The lease transfers ownership of the asset to the lessee by the end of the lease term.
- The lease contains a bargain purchase option, the right to purchase the asset for less than its fair value.
- The lease term is equal to 75 percent or more of the estimated economic life of the leased property.
- The present value at the beginning of the lease term of the minimum lease payments equals or exceeds 90 percent of the fair value of the leased property.⁵³

Under capital lease treatment, the asset sold and the related lease obligation are immediately restored to the seller's balance sheet. If the leaseback meets none of the above criteria, it is accounted for as an operating lease. The asset that has been sold remains off the balance sheet and periodic rent expense is recorded. A lease obligation is not recorded.

Illustration of Sale and Leaseback Transaction

Consider these terms for the sale and leaseback of aircraft:

- Book value of the aircraft is \$2,500,000.
- Selling price is \$4,000,000, resulting in a realized gain to the seller of \$1,500,000 (\$4,000,000 – \$2,500,000).
- Aircraft's remaining economic life is 10 years and the leaseback term is 72 months.
- The leaseback does not meet any criteria for capital lease treatment and is accounted for as an operating lease.
- The interest rate implicit in the lease as computed by the lessor is 8 percent per annum.
- Monthly lease payments are \$58,874 due at the beginning of each month, yielding a present value for the leaseback of \$3,380,236.

As a result of the sale and leaseback transaction, the book value of the old aircraft, \$2,500,000, is removed from the financial statements and is replaced with cash of \$4,000,000 and a deferred gain of \$1,500,000, which is reported as a liability. Gain deferral is required because the gain is exceeded by the \$3,380,236 present value of the leaseback. The deferred gain will be amortized at the monthly rate of \$20,833 (\$1,500,000 ÷ 72-month lease term) against rent expense over the 72-month term of the underlying operating leaseback. Each month, net rent expense of \$38,041 (\$58,874 – \$20,833) will be reported.

Cash Flow Classification of Sale Proceeds

The financing nature of sale and leaseback transactions notwithstanding, there is no definitive guidance on the classification of sale proceeds, \$4,000,000 in the last example, received from such transactions. There does appear to be consistent classification of sale proceeds received in a sale with a leaseback accounted for as a capital lease. When the leaseback is accounted for as a capital lease, a lease obligation is recorded on the balance sheet and the related proceeds are reported as a financing source of cash. Consider Bertucci's Corp., for example. In 2003, the company reported \$8,977,000 in net proceeds from sale and leaseback transactions accounted for as capital leases. However, when a

leaseback is classified as an operating lease, there is disagreement on the classification of the sale proceeds received. Some companies classify the proceeds as a financing source of cash; others employ an investing classification. Consider the next examples.

Sale with Operating Leaseback Classified as Financing Cash Flow Ingles Markets, Inc., a supermarket chain, regularly sells and simultaneously leases back food-handling equipment. On its balance sheet at September 28, 2002, and September 27, 2003, the company reported deferred gains on sale and leaseback transactions of \$1,928,116 and \$1,494,546, respectively. On the statement of cash flows for the year ended September 27, 2003, \$891,571 in amortized deferred gain was subtracted from net income in computing operating cash flow. Amortization or recognition of the deferred gain was included in net income but provided no cash flow. Accordingly, it was subtracted from net income in computing cash provided by operations.

The recognition in 2003 of \$891,571 of previously deferred gains helps to explain the \$433,570 (i.e., \$1,928,116 – \$1,494,546) decline in the deferred gain during 2003. The company also deferred additional gains of \$458,001 (amortized gain of \$891,571 – decrease in deferred gain of \$433,570) during the year resulting from new sale and leaseback transactions.

The financing section of Ingles' cash flow statement reports proceeds from sale and leaseback transactions of \$1,318,257 and \$498,937, respectively, in 2002 and 2003. Such financing treatment is consistent with the underlying financing nature of the transactions.

Generally accepted accounting principles do not state explicitly that proceeds received from sale and leaseback transactions are to be reported as cash provided from financing activities. The provisions of GAAP for sale and leaseback transactions only imply that the proceeds received should be reported as financing cash flow. For example, gain deferral and the use of the present value of the leaseback to determine the amount of any gain to defer are consistent with the view that the transaction is more of a financing event. Certainly a sale with a leaseback of substantially all of the asset being sold is, in substance, a financing.

The fact that the seller has given up ownership but not possession of the asset in question attests to the underlying financing nature of the transaction. Like a borrowing, the transaction has been used to generate funds and not to dispose of an asset. In addition, sale and leaseback proceeds often are used to repay other outstanding borrowings. Ingles' treatment of the proceeds received in its sale and leaseback transactions is consistent with this view.

As noted, however, not all firms classify the proceeds from sales with operating leasebacks as financing events. Some use an investing classification.

Sale with Operating Leaseback Classified as Investing Cash Flow During 2002, Haverty Furniture Companies, Inc., a furniture retailer, entered into a sale and leaseback agreement. The company described the transaction in this way:

In 2002, the Company entered into a sale-leaseback arrangement. Under the arrangement, 11 retail stores with a net book value of \$38,000,000, were sold for \$41,500,000 and leased back under a 20-year operating lease agreement. The gain on this transaction was deferred and is being amortized over the term of the lease agreement.⁵⁴

In the transaction, the company sold 11 retail stores with a book value of \$38 million for \$41.5 million. Simultaneously with their sale, the company leased the stores back under 20-year operating leases. The \$3.5 million gain realized on the sale was deferred and will be amortized over the lease terms. Interestingly, the company reported the proceeds from sale of the retail stores in the investing section of its cash flow statement.

Investing treatment of the proceeds from a sale and leaseback transaction is somewhat innocuous. After all, such treatment does not affect operating cash flow. However, treating such proceeds as investing cash flow does improve one important measure of financial performance, free cash flow.

As discussed at length in Chapter 10, definitions of free cash flow do vary. A common definition is cash provided by operating activities less preferred dividends and capital expenditures. Here capital expenditures typically are calculated as net capital expenditures, that is, gross capital expenditures less proceeds from dispositions. Computing free cash flow using capital expenditures net of dispositions has intuitive appeal because gross capital expenditures generally include the replacement of assets disposed of. As a result, gross capital expenditures overstate incremental capital spending. However, if the proceeds from sale and leaseback transactions were included with asset dispositions in investing cash flow, net capital expenditures would be understated because gross capital expenditures do not include assets leased back after sale. Accordingly, free cash flow computed using capital expenditures net of assets sold and leased back would be overstated.

As a result of its sale and leaseback transaction, Haverty's capital expenditures net of dispositions, which were \$15.6 million in the year ended December 31, 2001, actually became a source of cash flow from investing activities of \$4.3 million in 2002.

We cannot say that companies such as Haverty's, which report sale and leaseback proceeds as investing cash flow, are intentionally taking such steps to increase free cash flow. Indeed, in its annual report, Haverty's even highlighted its gross capital expenditures, which were \$45.5 million in 2002 and were projected to decline to \$30 million in 2003.⁵⁵ However, examples such as this point out the importance for analysts to use care when computing free cash flow to make sure that proceeds from sale and leaseback transactions are excluded, even when reported as investing cash flow.

Sales with Minor Leasebacks Generally accepted accounting principles permit recognition of the full gain resulting from a sale and leaseback transaction when the leaseback is considered to be a minor one. A minor leaseback is one in which the present value of the leaseback is less than 10 percent of the fair value of the asset sold. In effect, the asset has been sold because the seller has given up possession of virtually the entire asset.

Consider, for example, the sale of an office building owned and occupied by a bank. Assume that after the sale, the bank vacated the entire building except for the leaseback of a small amount of space to be used for a branch outlet. The bank has effectively sold the building and should be permitted to recognize the gain on sale. Importantly, such a transaction is more of an investing event than it is a financing event. In our view, it is appropriate here to report the proceeds from sale as part of investing activities. For analysts, the implication is that in computing net capital expenditures for purposes of determining free cash flow, such proceeds can reasonably be netted against gross capital expenditures.

Middle-Ground Transactions A question arises as to the appropriate cash flow treatment for sale transactions that are accompanied with leasebacks that do not entail deferral of the entire gain on sale. For example, what if the present value of the leaseback were more than 10 percent of the fair value of the asset sold, indicating more than a minor leaseback? Also, what if it were exceeded by the gain on sale? For such a sale and leaseback transaction, GAAP would call for deferral of the gain equal to the present value of the leaseback. However, GAAP also would call for current recognition for any gain in excess of the present value amount. Thus, the transaction has elements of both an investing and a financing event. The natural question that arises is: How should the proceeds from sale be treated?

One could always split the proceeds, allocating a portion to financing activities based on the percentage that the present value of the leaseback comprises of the total gain and allocating any remainder to investing activities. However, rather than getting that detailed in the calculations, our recommendation is simply to treat the proceeds from sale as financing cash flow and exclude it from any computations of free cash flow. Such a transaction entails a sufficiently significant leaseback that at least a portion of the gain on sale was deferred. Thus, the seller probably had financing in mind when the sale was made.

BEYOND THE BOUNDARIES OF GAAP

Most of the examples provided here have not entailed a misclassification of cash flow between the operating and financing categories that extended beyond the boundaries of GAAP. Although the examples presented do have the capacity to mislead analysts as to the sustainability of operating cash flow, they have not entailed restatements. However, in this chapter and others we have seen some noteworthy examples of rather egregious violations of GAAP entailing misclassifications between operating and financing cash flow.

Consider the case of Enron Corp. presented earlier in this chapter. In order to convince analysts that its reported earnings were for real, Enron needed to report higher operating cash flow. During 2000, in order to increase operating cash flow, the company entered into oil sales contracts with certain off-balance sheet entities that it controlled. The off-balance sheet entities were financed with bank borrowings that were guaranteed by Enron. Pursuant to the oil sales contracts, and using borrowed money, Enron was paid in advance by the entities for the oil that was ostensibly sold to them. Enron accounted for the cash received from the entities as customer deposits on oil to be delivered later. Because the cash was received as customer deposits, a form of deferred revenue, it was reported as part of operating as opposed to financing cash flow. This was clearly a borrowing and should have been accounted for as such.

Similar to the Enron example was the case of Dynegy, Inc., presented in Chapter 1. Dynegy also created off-balance sheet entities that were financed with bank borrowings. Like Enron, Dynegy guaranteed these loans. Loan proceeds were funneled to Dynegy through discounts on purchases of natural gas, which Dynegy then resold. These discounts were to be repaid through purchases at a premium in later years. Because the transaction was structured as an operating item—the purchase and sale of natural gas—associated cash flow was reported as part of operations. It should have been reported as a financing source of cash.

The example of Global Crossing, Inc., presented in Chapter 1, was a case where capital-lease treatment was afforded leases that had been classified as operating. The change was designed to boost earnings before interest, taxes, depreciation, and amortization (EBITDA) by converting rent expense into interest and amortization. Such a change also would boost operating cash flow. Under operating-lease treatment, all cash paid is accounted for as rent expense, a component of operating cash flow. With capital-lease treatment, cash payments are classified as interest and loan principal reductions. Although the interest component is part of operating cash flow, the loan principal component is a financing cash item.

SUMMARY

This chapter examines misclassifications of operating and financing cash flow. Eleven key points were raised:

1. Due to flexibility within the boundaries of GAAP, operating cash flow may provide misleading signals regarding a company's ability to generate sustainable cash flow.
2. Flexibility in GAAP notwithstanding, some companies extend their reporting practices beyond the boundaries of GAAP and use financing items to exaggerate operating cash flow.
3. Cash flow provided by financing activities includes principal amounts borrowed from lenders and cash received from shareholders in the issuance of shares. Repayments of debt principal and repurchases of previously issued shares of stock as well as dividends on outstanding shares are reported as cash used by financing activities.
4. Although dividends paid are reported as financing cash flow, interest paid is reported as a component of operating cash flow. One important exception is interest capitalized to property, plant, and equipment accounts, which is reported as investing cash flow.
5. A book overdraft—the excess of outstanding checks over a bank cash balance—is reported as a current liability. The change in a book overdraft during a reporting period is a financing cash flow.
6. Advance payments by a customer for goods or services to be provided provide a form of customer-related financing. Changes during a reporting period in the resulting liability, typically referred to as deferred revenue, are reported as operating cash flow and provide an early indicator of future revenue trends.
7. Borrowings on supplier-related notes payable are components of operating cash flow. An example is a floor-plan financing arrangement, where an outstanding loan balance is linked directly to and secured by levels of inventory.
8. Proceeds provided from loans secured by accounts receivable is reported as financing cash flow. Cash provided from outright sales of accounts receivable, whether to a factor or through a securitization agreement, is reported as operating cash flow. Such operating cash flow is effectively borrowed from a future reporting period and is not sustainable.
9. In order to offset dilution arising from exercises of stock options, some companies

will repurchase shares, which according to GAAP is a financing use of cash. However, consideration should be given to subtracting from operating cash flow such payments, net of the proceeds received from the exercise of the options. If operating cash flow is adjusted for such option-related stock repurchases, no adjustment should be made to operating cash flow for any tax benefits received.

10. In substance, sale and leaseback transactions are financing arrangements. Accordingly, cash proceeds from the sale of an asset that is simultaneously leased back should be reported as a financing source of cash.
11. Some of the more egregious examples of the misclassification of financing cash flow to the operating section that extend beyond the boundaries of GAAP entail financings disguised as trading activities.

NOTES

1. M. Pacelle and L. Cohen, "J.P. Morgan, Citigroup Reach Settlement in the Enron Case," *The Wall Street Journal*, July 29, 2003, p. A1.
2. The Financial Accounting Standards Board now refers to SPEs as variable interest entities (VIEs). In practice, the terms and acronyms are used interchangeably. Refer to FASB Interpretation No. 46, *Consolidation of Variable Interest Entities* (Norwalk, CT: FASB, January 2003).
3. According to FASB Interpretation No. 46, consolidation by the primary beneficiary of a variable interest entity, the new name for special purpose entities, is required when the entity's equity is insufficient to absorb any anticipated losses. According to the interpretation, equity of at least 10 percent of total assets is necessary to be sufficient to absorb any anticipated losses.
4. Statement of Financial Accounting Standards Board, *SFAS No. 149, Amendment of Statement 133 on Derivative Instruments and Hedging Activities* (Norwalk CT: FASB, April 2003).
5. 3Com Corp., Form 10-K annual report to the Securities and Exchange Commission, June 1, 2001, p. 44.
6. Ibid.
7. The Bluebook International Holding Co., Form 10-Q quarterly report to the Securities and Exchange Commission, June 30, 2003, p. 3.
8. The terms "minority interest" and "noncontrolling interest" are being used interchangeably here. However, the term "noncontrolling interest" is broader than minority interest, encompassing the interests of noncontrolling or third-party shareholders whether the controlling shareholder has a majority voting interest.
9. The FASB is reconsidering the balance sheet presentation of noncontrolling interests and may call for their inclusion in shareholders' equity.
10. Coherent, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 54.
11. Avado Brands, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 32.
12. Tyson Foods, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 27, 2003, p. 38.

13. Beazer Homes USA, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 18.
14. Emerging Issues Task Force, *Statement No. 95-13, Classification of Debt Issue Costs in the Statement of Cash Flows* (Norwalk, CT: FASB, September, 1995).
15. Bull Run Corp., Form 10-K annual report to the Securities and Exchange Commission, August 31, 2003, p. 38.
16. Shaw Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, August 31, 2003, p. 76.
17. Inconsistencies between net income and operating cash flow remain. For example, a gain or loss on the sale of property, plant and equipment is included in net income. These gains and losses are removed, however, in calculating operating cash flow so that the proceeds from sale can be reported in the investing section of the cash flow statement.
18. *SFAS No. 150, Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity* (Norwalk, CT: FASB, May 2003).
19. Loral Space and Communications, Ltd., Form 10-Q quarterly report to the Securities and Exchange Commission, September 30, 2003, p. 52.
20. Ibid.
21. Williams Companies, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 133.
22. C. Mulford and K. Maloney, *Cashflow Reporting in the Presence of Overdrafts* (Atlanta, GA: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, January 2003), p. 4.
23. Hershey Foods Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. A-43.
24. S. Young, "Talking up 'Net Debt' Allows Some Firms to Take a Load Off," *The Wall Street Journal*, July 29, 2003, p. C1.
25. AMC Entertainment, Inc., annual report, March 2002. Information obtained from Disclosure, Inc., *Compact D/SEC: Corporate Information on Public Companies Filing with the SEC* (Rockville, MD: Disclosure, Inc., June 2003).
26. *SFAS Statement No. 95: Statement of Cash Flows* (Norwalk CT: FASB, November, 1987).
27. C. Davine, "Current SEC Developments," speech given to the American Institute of Certified Public Accountants Twenty-Third Annual National Conference on Current SEC Developments, 1996.
28. Mulford and Maloney, *Cashflow Reporting in the Presence of Overdrafts*, p. 7.
29. A call to the company confirmed that changes in overdrafts are included in operating cash flow.
30. N. Shirouzu, "Ford Publicly Disputes Report That Questions Its Accounting," *The Wall Street Journal* online, September 11, 2002.
31. Ibid.
32. Other titles for revenue collected in advance include unearned revenue and unearned income. In some industries, specialized titles are employed. For example, airlines often refer to tickets paid for in advance of service as air traffic liability.
33. Microsoft Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 23.

34. Symbol Technologies, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. F-3.
35. Avaya, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 52.
36. United Auto Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 23.
37. While Asbury Automotive uses the first in, first out (FIFO) method of assigning inventory costs to inventory and cost of goods sold, many auto dealers use the last in, first out (LIFO) method. Even when LIFO is applied, floor-plan financing typically is based on inventory at current cost, creating yet another reason for differences between inventory changes and floor-plan financing levels.
38. Delphi Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 38.
39. This was pointed out in a report written by the Center for Financial Research and Analysis, Rockville, Maryland.
40. Navistar International Corp., Form 10-K annual report to the Securities and Exchange Commission, October 31, 2003, p. 64.
41. Eagle Broadband, Inc., Form 10-K annual report to the Securities and Exchange Commission, August 31, 2003, pp. F-13 and F-14.
42. Asbury Automotive Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 68.
43. Halliburton Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 54.
44. Ibid., p. 64.
45. E. MacDonald, "Artificial Sweeteners," *Forbes.Com*, December 8, 2003.
46. Halliburton Co., Form 10-Q quarterly report to the Securities and Exchange Commission, September 30, 2003, p. 4.
47. Cypress Semiconductor Corp., Form 10-K annual report to the Securities and Exchange Commission, January 2, 2000, p. 43.
48. Microsoft Corp., Form 10-K annual report to the SEC, p. 31.
49. Computed as the average exercise price times the number of shares exercised.
50. Although we are not considering it here, one may want to allow for share repurchases in excess of shares issued resulting from option exercises to offset the effects in prior years of repurchases that are exceeded by shares issued.
51. For a more exhaustive list, refer to E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2002), p. 470.
52. The discount rate used in computing present value is the lesser of the interest rate implicit in the lease or the lessee's incremental borrowing rate.
53. *SFAS Statement No. 13, Accounting for Leases* (Norwalk, CT: FASB, November 1976), para. 7.
54. Haverty Furniture Companies, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 31.
55. Ibid., p. 22.

Income Taxes and the Statement of Cash Flows

Net cash flow from operating activities is contaminated by the income tax effects of investing and financing activities.¹

The Bells generated 173% free cash flow growth in 2002, but this does not look sustainable as the temporary benefit from cash taxes deferred could reverse in upcoming periods.²

Income taxes are a constant presence in the financial statements of U.S. corporations. In most years, companies have either tax-related cash outflows or inflows.³ Tax-related cash outflows normally result when a firm has taxable income in its income tax return. A firm may have tax-related cash inflows when it is able to carry current tax losses back and eliminate previous taxable income. The retroactive elimination of previous taxable income also eliminates previous taxes, resulting in a recovery of taxes previously paid. In other cases, losses are carried forward and used to eliminate what would otherwise be taxable earnings in future years. In these cases, tax-related cash outflows may be eliminated in whole or in part depending on the size of the losses carried forward. Cash flows are benefited, but in the form of a reduced tax cash outflow as opposed to cash inflow.

The Statement of Financial Accounting Standards (SFAS) No. 95, “Statement of Cash Flows,” gives little attention to income taxes and simply calls for their inclusion in the determination of cash flows from operating activities.⁴ However, some additional commentary on income taxes in the statement of cash flows is included as part of the section entitled “Basis for Conclusions.”⁵

The limited attention given to income taxes in SFAS No. 95 might suggest that their treatment in the statement of cash flows is without controversy. However, as the opening quote to this chapter indicates, some contention exists about the classification of income tax cash flows within the statement of cash flows. The confinement of income tax cash flows to the operating section of the statement of cash flows is seen as improper when these cash flows are the result of investing and financing transactions. This chapter will examine this contention, among others, in some detail.

Beyond issues related to the classification of tax cash flows, nonrecurring tax cash flows have the potential to distort cash flow trends. That is, nonrecurring cash flows may either understate or overstate sustainable cash flows. Without adjustment, a cash flow projection based in part on recent historical trends will be either overstated or understated. An overstatement may result if recent results have included nonrecurring tax cash inflows. Alternatively, an understatement may result if recent results have included nonrecurring tax cash outflows. The second of the opening quotations to this chapter highlights analysts' concern about the effects of taxes on the sustainability of cash flows.

This chapter opens with a brief treatment of income tax accounting. Taxes are very significant to the analysis of earnings, cash flow, and financial position. Yet the complexity of their reporting and disclosure prevents them from being well understood, even by experienced users of financial statements.

This chapter focuses on the identification of nonrecurring income taxes as well as the proper classification of income taxes in the statement of cash flows. Chapter 6 deals with a much wider range of nonrecurring cash flows. In Chapter 7, these items, along with income taxes, are removed from generally accepted accounting principles (GAAP) operating cash flow in order to create a more sustainable, non-GAAP, measure of operating cash flow.

TAX REPORTING ESSENTIALS

In attempting to understand tax reporting, it is essential always to bear in mind that there are two different measures of profitability: book or shareholders' income and tax return income. The income tax provision in the shareholders' income statement is based on the income reported there. However, taxes are paid or recovered based on income reported in the tax return.

There are many differences between book income and tax return income. All of these differences can be grouped into one of two categories, (1) temporary differences and (2) permanent differences.⁶

Temporary Differences

Temporary differences result from the recognition or inclusion of revenues, gains, expenses, or losses in the shareholder income statement in periods different from the tax return. A temporary difference is any item of revenue, gain, expense, and loss currently recognized in the book income statement that also will eventually be included in the tax return. A temporary difference also may result from revenues, gains, expenses, or losses recognized currently in the tax return that will be included in future shareholder income statements.

The reversal of a temporary difference occurs when an item of revenue, gain, expense, or loss that was previously recognized in the shareholder income statement is subsequently included in computing taxable income, or vice versa. For example, the reversal of a temporary difference occurs when revenue recognized earlier on the books is included in the tax return. Also, the reversal of a temporary difference associated with an expense that was recognized earlier in the tax return occurs when the expense is subsequently recorded in the shareholder income statement.

Temporary differences give rise to deferred tax assets and liabilities. Deferred tax as-

sets represent future tax benefits that will be realized when the associated temporary difference reverses. An example would be an expense that was deducted in one year on the books but in subsequent year in the tax return. When this expense subsequently is deducted in the tax return, it reduces taxable income and with it any cash payment for income taxes. The deferred tax asset recorded represents the future tax savings that will be realized in a future year.

Most temporary differences that give rise to deferred tax assets involve the recognition of expenses in the shareholder income sooner than in the tax return. Expense deductions will be taken in the tax return when these temporary differences reverse in subsequent periods. These temporary differences typically are referred to as deductible temporary differences. Their reversal results in a reduction in taxable income. Another common source of deferred tax assets is the future tax saving represented by operating loss, capital loss, and tax credit carryforwards.

Unlike carrybacks, the realization of deferred tax assets associated with carryforwards requires income in a future tax return. Moreover, loss or credit carryforward periods are limited. As a result, sufficient income must be produced within the carryforward period or the carryforward will expire and the deferred tax asset will not be realized. The realization of a carryforward reduces tax payments but does not result in a refund of taxes previously paid.

Depreciation temporary differences are the single most common source of deferred tax liabilities. The temporary difference results from the recognition of depreciation on a straight-line basis in the shareholder income statement, while accelerated depreciation is used in the tax return. The temporary difference is originating, and a deferred tax provision and associated deferred tax liability are recorded, as long as depreciation expense in the shareholder income statement is less than that in the tax return. The temporary difference reverses, and the deferred tax liability becomes a current tax obligation, when depreciation in the shareholder income statement exceeds that deducted in the tax return.

A deferred tax liability also would arise if the profit on a sale were recognized in one year on the books and in a subsequent year in the tax return. A tax-deferred tax expense is recorded initially on the books along with an offsetting deferred tax liability. The deferred tax on the gain will not become payable until a subsequent year when the temporary difference reverses and the gain is included in the tax return. Income taxes are paid when earnings are reported in the tax return, not when accrued on the books. In a subsequent year the gain is reported in the tax return and the associated deferred tax liability become payable.

Temporary differences that give rise to deferred tax liabilities are referred to as taxable temporary differences. Their reversal results in an increase in tax return income. Alternatively, temporary differences that give rise to deferred tax assets are referred to as deductible temporary differences. Their reversal results in a decrease in tax return income.

Permanent Differences

Unlike temporary differences, differences that never reverse are referred to as permanent differences. Permanent differences are revenues, gains, expenses, or losses that appear in the books or the tax return, but never in both. These items do not give rise to deferred tax assets and liabilities. Rather, they cause the expected amounts of income taxes to be either higher or lower than would be expected given the level of shareholder income.

Consider, for example, a company's receipt of life insurance proceeds upon the death of an officer. The proceeds are income for the company, but they are exempt from taxation. Thus, they are a permanent difference—included in book earnings but never included as income in the tax return. As a result, tax expense computed on book earnings will appear to be somewhat low because the life insurance proceeds are included in earnings but no income tax is accrued on them.

Alternatively, taxes will appear to be higher than expected given the level of shareholder income if a company has paid a fine. The fine is a business expense and is deducted in arriving at pretax book earnings. However, fines are not deductible for tax purposes. Because the fine is deductible on the books but never in the tax return, it represents a permanent difference that lowers book income but not taxable income. Here tax expense computed on book earnings will be higher than expected because the expense associated with the fine did not provide a tax benefit.

The next example illustrates the influence of both temporary and permanent differences on the tax provision as well as on cash flows.

Tax Reporting Example

The key features of the accounting and reporting for income taxes are summarized in Exhibit 5.1.

The example in the exhibit begins with income before income taxes and before any temporary or permanent differences. By definition, the two temporary differences, one for depreciation of \$20,000 and one for an asset write-down of \$8,000, will reverse in the future. When reversal takes place, \$20,000 of depreciation, deducted earlier in the tax return, then will be deducted in computing book income. This causes taxable income to rise in relation to book earnings, and the deferred tax liabilities are reduced. In addition, the \$8,000 asset write-down will be deductible in the tax return upon eventual disposition of the asset that was earlier written down on the books. Disposition of the asset causes the reversal of the temporary difference. Here book earnings will rise in relationship to taxable income, and the deferred tax assets are reduced. Reduction of deferred tax assets in this manner is often referred to as amortization of deferred tax assets.

The two permanent differences in this example, one for nondeductible fines of \$5,000 and one for \$40,000 of nontaxable life insurance proceeds, are included in the book income statement but never in the tax return. The fines are an expense and properly deducted in the books, but tax law does not permit their deduction in the tax return. The life insurance proceeds are income and properly included in book earnings, but they are not taxable.

There are two components to the total income tax provision. The first component, referred to as the current tax provision, is the foundation for tax-related cash flows. The current provision is based on the amount of taxable income or loss on the tax return. Taxes are paid or recovered based on tax-return earnings or loss. Using a combined federal and state tax rate of 40 percent, the current tax provision is \$24,000—40 percent of the \$60,000 of tax-return earnings. The standard convention is to refer to this amount as the current tax provision or expense.

The second component of the total tax provision is the deferred tax provision. The deferred tax provision is computed on the temporary differences that originated during the year.⁷ The first temporary difference resulted from book depreciation being \$20,000 less

Exhibit 5.1 Tax Accounting and Reporting Example

	Book versus Tax		
	Books	Differences	Tax Return
Income before temporary and permanent differences	\$100,000		\$100,000
Temporary differences:			
Depreciation expense	(20,000)	(20,000)	(40,000)
Asset write-down	(8,000)	8,000	-0-
Permanent differences:			
Nondeductible fines	(5,000)	5,000	-0-
Nontaxable life insurance proceeds	40,000	(40,000)	-0-
Pretax income	\$107,000	\$(47,000)	\$ 60,000
Current tax provision	24,000		
Deferred tax provision, net	4,800		
Total tax provision	28,800		
Net income	\$ 78,200		
Other information:			
	Year		
	Beginning	Ending	Change
Deferred tax liability balance	\$ 10,000	\$ 18,000	+\$8,000
Deferred tax assets balance	\$ 4,000	\$ 7,200	+\$3,200
Taxes payable balance	\$ 2,000	\$ 1,000	-\$1,000

Note: Above tax calculation uses a combined federal and state income tax rate of 40%.

than the amount of depreciation deducted in the tax return. This caused pretax book income to be \$20,000 more than taxable income. Generally accepted accounting principles require that a deferred tax provision of \$8,000 (40 percent tax rate \times \$20,000) be accrued on this additional \$20,000 of earnings.⁸ However, because it is not currently payable, it is recorded on the balance sheet as a deferred tax liability. This obligation will require a future tax payment when the underlying temporary difference reverses and earnings in the tax return increase above those in the books.

In contrast, book earnings were reduced by the asset write-down recorded in computing pretax book income. This deduction will be available in the tax return in the future when the asset is disposed of and the loss is realized for tax purposes. In the meantime, a deferred tax asset is recorded on this temporary difference. The deferred tax asset represents a future tax savings that will be realized when the temporary difference reverses. A deferred tax asset of \$3,200 (40 percent \times \$8,000) is recorded along with a reduction in the deferred tax provision.

The combination of a deferred tax provision on the depreciation temporary difference of \$8,000 ($40 \text{ percent} \times \$20,000$, or \$8,000) and a deferred tax benefit on the asset write-down temporary difference of \$3,200 ($.40 \times \$8,000$, or \$3,200) results in the net deferred tax provision of \$4,800 ($\$8,000 - \$3,200$) shown in the exhibit. The breakdown of the total tax provision into its current and deferred components, as presented in the exhibit, is a GAAP requirement. In this case, the disclosure indicates that \$4,800 of the total tax provision did not require a current cash payment.

Cash Tax Payment

The cash tax payment and the cash tax payment rate are readily computed from the information provided in Exhibit 5.1. A very direct computation method simply removes the deferred tax provision or benefit from the total tax provision and then adjusts for changes in income taxes payable or receivable. A computation example is provided in Exhibit 5.2, which uses the information in Exhibit 5.1.

The computation in the exhibit follows the convention of designating tax cash payments with parentheses and tax cash benefits without. Absent any adjustments, the total tax provision would be the tax payment. This explains the parentheses around the initial total tax provision of \$28,800. Consistent with the discussion in Chapter 2, the \$1,000 decrease in income taxes payable has parentheses because the reduction in taxes payable would require a cash payment.⁹ Combining the total tax provision and the net deferred tax provision yields the current tax provision of \$24,000. This would be the tax payment for the year if there were no changes in either income taxes payable or receivable. However, the addition of the \$1,000 decrease in income taxes payable produces the tax payment of \$25,000.

Timing of Tax Payments For most corporations, tax payments are distributed across the year. In general, taxes on U.S. income that are labeled current should be paid by the end of the year for large corporations, defined as those with taxable income of \$1 million or more in any of the last three years. Notice that the current provision of \$24,000 in the example provided in Exhibit 5.1 is fully paid by year-end. In addition, an additional payment of \$1,000 for a tax liability carried forward from a previous year was also paid.

Most corporations must pay their current-year taxes in four installments. For a calendar-year firm, payments must be deposited in a Federal Reserve or authorized commercial bank on or before April 15, June 15, September 15, and December 15.

Corporations that do not satisfy the large-corporation test have more favorable payment rules. Small corporations can satisfy the installment payment requirements, and

Exhibit 5.2 Computation of Income Tax Payment

Total tax provision	\$ (28,800)
Total net deferred tax provision	4,800
Current tax provision	(24,000)
Decrease in income taxes payable	(1,000)
Income tax payment	\$ (25,000)

Source: Information in Exhibit 5.1.

avoid interest or penalties, by paying amounts during the year that are equal to 100 percent of the previous year's tax. Any additional amounts to discharge the actual total tax obligation for the year must be paid with the filing of the tax return for the year.

Effective Income Tax Rate and Cash Tax Rate

The effective income tax rate normally is defined as the total tax provision, consisting of current and deferred income taxes, divided by pretax book earnings. An effective tax rate assumption is a standard feature of earnings projections. Using the Exhibit 5.1 data yields an effective tax rate of 26.9 percent, computed as the total provision of \$28,800 divided by pretax book earnings of \$107,000. This rate is well below the combined federal and state rate of 40 percent. An explanation of this difference is a GAAP requirement and is provided by the reconciliation provided in Exhibit 5.3.

The first line item in the exhibit often is referred to as the statutory tax expense. It represents what the tax provision would be if all \$107,000 of pretax income were taxable at the combined federal and state rate of 40 percent. It is a hypothetical tax that provides a base from which to reconcile to the actual tax provision and the effective tax rate. In the process, the reasons for any differences between the statutory tax expense and rate and the effective tax provision and rate are explained.

A cash tax rate also can be computed from the information in Exhibit 5.1. The most common computation divides the current tax provision \$24,000 by pretax book income of \$107,000 for a cash tax rate of 22.4 percent. If the actual cash tax payment is used, then the result is \$25,000 divided by \$107,000, or 23.4 percent. With their traditional focus on cash flow, lenders often have a much greater interest in the cash tax rate as opposed to the effective tax rate. However, equity analysts have a strong interest in both cash and effective tax rates. They share the lender's interest in the cash tax rate because of its relevance to their efforts to forecast cash flows. Moreover, their active participation in forecasting earnings means they also must pay attention to the overall effective tax rate.

Deferred Tax Valuation Allowance

An important but not well understood feature of tax reporting is the requirement to assess the likelihood that the deferred tax benefits represented by deferred tax assets will be realized. Once recorded, a deferred tax asset continues to be recorded on the balance sheet

Exhibit 5.3 Reconciliation of the Effective Tax Rate

	Amount	Percent
Pretax book income of \$107,000 at combined 40% rate: \$107,000 × .40	\$42,800	40.00
Tax reduction from nontaxable life insurance proceeds: 40% × \$40,000	(16,000)	(14.95)
Tax increase from nondeductible fines: 40% × \$5,000	2,000	1.87
Actual income tax provision and effective tax rate	\$28,800	26.92%

Source: Information in Exhibit 5.1.

only if the “likelihood of realizing the future tax benefit is more than 50 percent.”¹⁰ If the likelihood of realization is 50 percent or less, then a valuation allowance is set off against the deferred tax assets failing this likelihood of realization test. Additional deferred tax expense is recorded when the valuation allowance is increased, and a reduction in deferred tax expense is recorded when the valuation allowance is reduced.

Income Tax Fundamentals—A Recap

Exhibit 5.4 summarizes a number of important features of income taxes and their reporting.

CLASSIFICATION OF TAX-RELATED CASH FLOW

SFAS No. 95 specifies that all “cash payments to governments for taxes” are to be included in cash outflows from operating activities.¹¹ Some respondents to an exposure draft of SFAS No. 95 suggested “allocating income taxes paid to investing and financing transactions.”¹² The allocated taxes paid, or recovered, would be only those determined to be associated with investing or financing transactions. The balance of the payments or recoveries would be classified in operations. Taxes paid on gains from the sale of investments are an example of taxes associated with an investment transaction. A financing transaction could produce cash tax savings if a deductible loss were realized on the retirement of debt.

In spite of the conceptual appeal of allocating tax payments or refunds to investing and financing transactions, the FASB decided that all income tax cash flows should be classified in operating activities. This position was based on the FASB’s view that “the allocation of income taxes . . . would be so complex and arbitrary that the benefits, if any, would not justify the costs involved.”¹³

In contrast to U.S. GAAP, International Accounting Standard (IAS) No. 7, the international standard on cash flow reporting, leaves open the possibility of allocating tax payments or recoveries to investing and financing activities. However, international standard setters do recognize the practical difficulties of tracing tax cash flows to investing and financing activities:

While tax expense may be readily identifiable with investing and financing activities, the related tax cash flows are often impracticable to identify and may arise in a different period from the cash flows of the underlying transaction.¹⁴

Tracing cash tax payments and benefits clearly does represent a challenge. However, in the face of material gains and losses on investing and financing transactions, the cost-benefit relationship may make reclassification quite compelling. The alternative is a very poor measure of sustainable cash flow produced from operations.

Tax-Related Cash Inflows and Outflows in the Statement of Cash Flows

The disclosure of tax-related cash inflows and outflows within the operating activities section is quite different in the case of the direct versus indirect statements of cash flows.

Exhibit 5.4 Summary of Key Features of Income Tax Reporting

There are two taxable income numbers, book income or income reported on the income statement and taxable income or income reported on the tax return.

Book income and taxable income are virtually always different.

Taxes are paid or refunded on the basis of taxable income or losses, but accrued in the shareholder income statement on the basis of book income.

Taxes generally are paid in four installments during the year.

The divergence between the two taxable incomes is explained by two classes of differences:

Temporary Differences

Revenues, gains, expenses, or losses that are recognized in different time periods in the books versus the tax return.

Permanent Differences

Revenues, gains, expenses, or losses that are recognized in either the book or tax-return profit calculations, but not both.

Temporary differences give rise to deferred tax assets and liabilities.

Changes in deferred tax assets and liabilities give rise to associated deferred tax provisions and benefits. In computing cash flows from operating activities, deferred tax provisions are added back to earnings as a noncash expense, but deferred tax benefits are deducted from earnings as a noncash increase in earnings.

Permanent differences cause effective income tax rates to be either higher or lower than statutory rates.

The total book tax provision (both current and deferred) is divided by income from continuing operations before taxes to compute the effective tax rate. Dividing just the current provision (an approximation of cash taxes) by income from continuing operations before taxes yields the cash tax rate.

Temporary differences that upon origination cause book income to exceed tax-return income require the recording of deferred tax liabilities. Temporary differences that upon origination cause book income to be less than tax-return income require the recording of deferred tax assets.

Temporary differences reverse when the original relationship between book and taxable income is reversed.

The reversal of a temporary difference that initially caused book income to exceed tax-return income calls for the reduction of a deferred tax liability and the recording of a deferred tax benefit.

The reversal of a temporary difference that initially caused tax-return income to exceed book income calls for the reduction of a deferred tax asset and the recording of a deferred tax provision.

A valuation allowance must be set off against deferred tax assets that fail a realization test.

Recall that these two statement formats differ only in terms of the formatting of the calculation of cash flows from operating activities. The presence of tax-related cash flows is clearest when the direct-format statement of cash flows is provided. Their presence is much less apparent when the indirect method is employed.

Tax Cash Flows in Both the Direct- and Indirect-Format Statements of Cash Flows

The cash flow from operating activities of M Corp., an actual company, is provided in Exhibit 5.5 on both a direct basis and an indirect one.

Recall that firms presenting their statement of cash flows in the direct format also must disclose operating cash flows on an indirect basis.¹⁵ In referring to the exhibit, note that

Exhibit 5.5 Income Taxes in the Direct and Indirect Format Statement of Cash Flows, M Corp., Years Ended December 31, 2001, and 2002

	2001	2002
Direct Format		
Cash Flows from Operating Activities:		
Cash received from customers	\$2,134,984	\$2,353,857
Cash paid to suppliers and employees	(2,201,350)	(2,134,011)
Interest and dividends received in cash	781,355	311,540
Income taxes paid in cash	(1,000,000)	(394,050)
Net cash provided (used) by operating activities	\$ (285,011)	\$ 137,336
Indirect Format		
<i>Cash Flows from Operating Activities:</i>		
Net income	\$2,471,401	\$ 359,552
Adjustments to reconcile net income to net cash provided (used) by operating activities:		
Depreciation	96,268	88,337
Provision for doubtful account receivables	(5,000)	—
Minority share of consolidated subsidiaries income	221,647	21,928
Amortization of deferred credit	(8,220)	(8,220)
Realized gains on dispositions of investments	(3,489,091)	(6,358)
Changes in operating assets and liabilities		
(Increase) decrease in accounts receivable	(33,142)	(16,160)
(Increase) decrease in prepaid expenses	1,950	(13,358)
(Increase) decrease in prepaid income taxes	17,492	—
Increase (decrease) in payables and accrued liabilities	110,676	(51,235)
Increase (decrease) in deferred income taxes	68,500	(13,450)
Increase (decrease) in income taxes payable	262,508	(223,700)
Net cash provided (used) by operating activities	\$ (285,011)	\$ (137,336)

Source: M Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 8–10. The convention used in the statement is: source (use) of cash.

the M Corporation cash flows from operating activities for the years ended December 2001 and 2002 are the same in both the direct and indirect formats. It follows that the same cash tax payments must be included in both the indirect and direct formats.

The calculation of cash tax payments for M Corp. for the years ended December 31, 2001, and 2002 under the direct-format is presented in Exhibit 5.6.

This exhibit illustrates the calculation of income taxes paid for M Corp. by removing changes in prepaid taxes, deferred income taxes, and income taxes payable from the total income tax provision. In the process the accrual-basis tax provision is converted into cash-basis tax payments. The calculated amounts of income taxes paid appear as income tax paid in cash in the direct-method statement presented in Exhibit 5.5.

Exhibit 5.7 presents data needed to derive income taxes paid under the indirect format for M Corp. for the years ended December 31, 2001, and 2002.

Exhibit 5.6 Tax Cash Flows for the Direct Format, M Corp., Years Ended December 31, 2001, and 2002

	2001	2002
Total income tax provision	\$(1,348,500)	\$(156,900)
(Increase) decrease in prepaid income taxes	17,492	—
Increase (decrease) in deferred income taxes	68,500	(13,450)
Increase (decrease) in income taxes payable	262,508	(223,700)
Cash tax payments	\$(1,000,000)	\$(394,050)

Source: M Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 7–10.

Exhibit 5.7 Information Needed to Derive Income Taxes Paid under the Indirect Format, M Corp., Years Ended December 31, 2001, and 2002

	2001	2002
Net income (already reflects a preliminary tax cash outflow amount equal to the total tax provisions of \$1,348,500 and \$156,900 in 2001 and 2002, respectively)	\$ 2,471,401	\$ 359,552
Changes in balance sheet income tax accounts disclosed within the operating activities section on separate line items		
(Increase) decrease in prepaid income taxes	17,492	—
Increase (decrease) in deferred tax liabilities	68,500	(13,450)
Increase (decrease) in income taxes payable	262,508	(223,700)

Source: M Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 7–10.

This exhibit illustrates how the same information used in Exhibit 5.6 to compute cash tax payments under the direct method is incorporated into the determination of cash flows from operating activities under the indirect method. The indirect statement does not disclose tax cash payments within the body of the statement of cash flows. However, Exhibit 5.7 illustrates where net cash outflows equal in amount to the tax cash payments are present in the calculation of cash flows from operating activities on the indirect basis.

The indirect calculation of cash flows from operating activities begins with net income or loss. A preliminary tax cash outflow has already been registered by the deduction of the total tax provisions, \$1,348,500 and \$156,900 in 2001 and 2002, respectively, in computing net income. In addition, adjustments for the changes in prepaid income taxes, deferred tax liabilities, and income taxes payable complete the incorporation of the tax cash payments into the calculation of operating cash flow under the indirect method.

In considering these tax cash flow computations, it is helpful to recall that tax payments and receipts are driven by the current tax provision because this provision is based only on taxable income in the tax return. An abbreviated computation of the M Corp. income taxes paid amounts can be accomplished by beginning the calculation with the current tax provisions. The calculations are illustrated in Exhibit 5.8.¹⁶

The M Corp. current provisions in the exhibit represent the taxes computed on tax-return income. For large firms, the current provisions usually approximate the amounts paid during the year, in the absence of changes in the balance sheet tax accounts, income taxes payable, or income tax refunds receivable. In 2001, M Corp. has a total current provision of \$1,280,000. However, its 2001 tax payment amounted to only \$1,000,000. The difference is explained by a reduction of \$17,492 in prepaid taxes, which was probably excess estimated taxes paid in previous years, and an increase in income taxes payable of \$262,508, which represents taxes accrued but not yet paid in 2001. The 2002 tax payments are well in excess of the 2002 current provision. This is due to the payment in 2002 of amounts owed from 2001.

The tax payments and refunds discussed in this section were all included in the determination of cash flows from operating activities. However, the first of the opening quotations to this chapter suggests that the exclusive inclusion of tax payments or refunds in operating cash flow may distort operating, investing, and financing cash flows. These po-

**Exhibit 5.8 Tax Cash Payments Using the Current Tax Provision, M Corp.,
Years Ended December 31, 2001, and 2002**

	2001	2002
Current income tax provisions	\$ (1,280,000)	\$ (170,350)
Changes in income tax asset and liability balances:		
(Increase) decrease in prepaid income taxes	17,492	—
Increase (decrease) in income taxes payable	262,508	(223,700)
Total (tax cash payments)	\$ (1,000,000)	\$ (394,050)

Source: M Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 7–10 and 15.

tential distortions can be avoided by the allocation, for purposes of analysis, of tax cash payments and benefits to each of the three sections of the statement of cash flows. This intrastatement allocation would be called for when firms have materials gains and losses from investing or financing transactions.

Intrastatement Allocation of Income Tax Cash Flows

The current GAAP requirement that all tax cash flows be included in operating activities does have the virtue of simplicity. However, this simplicity may create significant distortions when income tax cash flows related to investing and financing transactions are classified into operations.

Quick Preview of Intrastatement Allocation

The cash flow data of M Corp. included in Exhibit 5.5 can be used for a brief preview of the intrastatement allocation of tax cash flows. For example, as noted in that exhibit, gains on the disposition of investments of \$3,489,091 in 2001 were deducted from net income in arriving at operating cash flow. This is necessary because none of the cash produced from the sale of the investments, including the amount equal to the gains realized, may be classified in operating cash flow under GAAP.¹⁷ The tax associated with these gains is included in 2001 tax cash outflows (i.e., the tax on this investment gain reduced operating cash flow).

The pretax earnings of M Corp. were \$3,819,901 in 2001. A review of M Corp.'s tax disclosures suggests a combined, federal and state, marginal income tax rate of approximately 39 percent. Multiplying this marginal rate times the investment gains yields an estimated tax on the gains of \$1,360,745 ($\$3,489,091 \times 39\% = \$1,360,745$).

An alternative approach places the focus on taxes paid in 2001, the year in which the gains were realized. Tax payments are allocated based on the fraction that the investments gains represent of total pretax income. The income taxes paid in 2001 of \$1,000,000, per Exhibit 5.8, are multiplied times the gains of \$3,489,091 divided by total income before taxes of \$3,819,901. This allocates \$913,389 ($\$3,489,091 / \$3,819,901 \times \$1,000,000 = \$913,389$) of the taxes paid to the investment gains.

The allocation of \$913,398 of the tax payments associated with the investment gain from operating cash flow to investing cash flow changes the 2001 operating cash flow from a use of \$285,011 to a source of \$628,387 [$(\$285,011) + \$913,398 = \$628,387$]. Operating cash flow, purged of the tax cash outflow associated with the 2001 investment gain, provides a better indicator of sustainable cash flow than the GAAP-reported cash flow from operating activities.

Investing Gains and Losses and Classification of Tax Cash Flows

Exhibit 5.9 provides a summary of the potential effects of investing and financing gains and losses, and their associated tax effects, on operating, investing, and financing cash flows.

Operating cash flow is understated when either investing or financing transactions produce taxable gains because it is burdened by tax cash outflows that are unrelated to operating activities. Investing and financing cash flow also are misstated because they do not include tax payments resulting from the gains. In the case of losses, operating cash

Exhibit 5.9 Distortions from GAAP Classification of Taxes Associated with Investing and Financing Gains and Losses

Cash Flow Classification	Gain Transaction	Loss Transaction
Operating activities	Cash inflow understated	Cash inflow overstated
Investing activities	Cash inflow overstated	Cash inflow understated
Financing activities	Cash outflow understated	Cash outflow overstated

Note: For simplicity, the exhibit assumes that investing activities provide an overall source of cash while financing activities represent an overall use of cash. In addition, the gains and losses are assumed to be realized items that would be included in tax-return income.

flow is overstated. Here the tax savings that result from the nonoperating losses increase operating cash flow. However, now investing and financing cash flows will be misstated because they do not include a tax benefit produced by the losses.

Reclassification of Income Taxes on Investing Gains and Losses

The misstatement of operating cash flow as a result of taxable gains and losses on investing and financing transactions is not widely understood. Companies seldom comment on these effects. However, Tredegar Corporation did highlight this issue in conjunction with a presentation of its comparative cash flows. Tredegar experienced a steep drop in cash from operating activities in 2000, and it apparently felt the need to explain the role played by the taxes on its investment gains. The company explained:

In the statement of cash flows, income taxes related to venture capital investment activities, divestitures and property disposals are classified in operating activities, while related gains and losses are effectively classified with proceeds in investing activities.¹⁸

Tredegar had net realized investment gains of \$136 million in 2000. Associated income taxes would approximate \$50 million assuming a combined federal and state tax rate of 37 percent (federal of 35 percent + state of 2 percent) is used. That is, \$136 million times 37 percent equals \$50 million. Adding to operating cash flow the \$50 million tax on the gains increases GAAP operating cash flows for 2000 from a reported \$21 million to \$71 million, an increase of 238 percent. Completing the revision would require that a cash outflow of \$50 million be included in investing cash flow.¹⁹ The result in this case, which is consistent with the classification scheme provided in Exhibit 5.9, is an initial understatement of cash flows from operating activities and an offsetting overstatement of investing cash inflows.

As another example, consider the partial cash flow statement of Scope Industries for the years ended June 30, 2001, 2002, and 2003 provided in Exhibit 5.10.

As seen in the exhibit, Scope Industries reported pretax gains on sales of investments and property and equipment of about \$21.5 million in its 2002 income statement. These gains are disclosed in the operating activities section of the Scope Industries statement of

Exhibit 5.10 Partial Statement of Cash Flows: Scope Industries, Inc., Years Ended June 30, 2001, 2002, and 2003

	2001	2002	2003
Cash Flows from Operating Activities:			
Net income (loss)	\$(4,173,681)	\$11,085,017	\$3,181,267
<i>Adjustments to reconcile net income (loss) to net cash flows from operating activities:</i>			
Depreciation and amortization	4,754,299	5,154,052	7,626,636
Amortization of routes and contracts	2,363,409	2,321,738	1,659,302
(Gain) on sale of investments	(352,160)	(21,080,990)	—
(Gain) on sale of property and equipment	(210,428)	(448,469)	(1,175,178)
Loss on impairment of assets	1,021,832	—	—
Unrealized loss on equity investments	—	1,752,855	992,646
Deferred income taxes	(208,000)	(477,000)	19,475
<i>Changes in operating assets and liabilities:</i>			
Accounts and notes receivable	774,946	(606,858)	(531,410)
Inventories	(194,114)	81,885	(61,052)
Prepaid expenses and other current assets	(811,567)	972,416	(155,281)
Accounts payable and accrued liabilities	(222,851)	946,875	(411,463)
Income taxes receivable or payable	(1,963,233)	2,417,253	(772,000)
Tax benefit applied to purchase of routes and contracts	560,000	560,000	365,000
Other assets	81,191	220,621	156,311
Net cash flows from operating activities	1,419,643	2,899,395	10,894,253
Cash Flows from Investing Activities:			
Purchase of U.S. Treasury securities	(21,421,504)	(29,063,695)	(22,270,660)
Maturities of U.S. Treasury securities	30,335,570	20,500,000	34,265,828
Purchase of property and equipment	(9,646,010)	(12,562,888)	(10,175,623)
Proceeds—disposition of property and equipment	941,121	1,038,292	1,488,932
Purchase of business	—	—	(3,500,000)
Purchase of investments available for sale	(178,629)	(195,427)	(6,054,766)
Purchase of other equity investments	(6,580,000)	—	(398,526)
Proceeds from disposition of investments available for sale	625,639	22,911,151	—
Nonappropriated bond proceeds held by trustee	3,478,079	1,962,598	—
Net cash flows (used in) from investing activities	(2,445,734)	4,590,031	(6,644,815)

Source: Scope Industries, Inc., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 11.

cash flows in the exhibit. Without these gains, Scope Industries would have reported a pretax loss of about \$4.3 million.²⁰ Because of their investment character, the gains of \$21.5 million were deducted from net income in computing cash flow from operating activities.

Scope Industries deducted a total tax provision consisting of current and deferred tax expense of \$6.1 million in 2002. Of this total, the current provision, which is based on tax-return income, was \$5.7 million, with the remainder of \$0.4 million representing the deferred tax provision. The taxes actually paid during 2002, which were disclosed at the bottom of the company's full statement of cash flows, amounted to \$3.6 million. The difference between the current provision and the taxes actually paid is explained in this case by changes in taxes payable and income taxes refunds receivable.²¹

The entire cash tax effect of the \$21.1 million gain remains in operating cash flow. This follows from the fact that the tax on the gain is part of the total tax provision that was deducted in arriving at net income—the opening line item in the computation of cash flows from operating activities. Once net income is adjusted for changes in the balance sheet tax accounts, the cash tax payment for 2002 is fully incorporated into cash flows from operating activities.

As with the earlier discussion of the Tredegar Corporation, the reclassification of tax cash flows calls for an addition to operating cash flows of the tax payments associated with investment gains and a deduction of the same amount from investing cash flows. Because operating results were a loss in the absence of the investment gains, the total cash tax payment of \$3.6 million made in 2002 is considered to be the result of the investment gains. Hence, the \$3.6 million payment is added to cash flows from operating activities and deducted in turn from investing cash flows. This adjustment increases operating cash flows from about \$2.9 million to \$6.5 million, an increase of 124 percent. Investing cash inflows are in turn reduced from \$4.6 million to \$1.0 million, a reduction of 78 percent.

The maximum total tax payment on the investment gains would approximate the assumed tax rate of 36 percent times the gains of \$21.5 million, or \$7.7 million.²² A portion of this total provision, \$3.6 million, was paid this year, and its reclassification was discussed above. The remainder should be paid in the coming year. A reasonable approximation of the remaining tax on the gains is represented by the \$2.4 million adjustment for income taxes receivable or payable.²³ It is quite likely that most of this increase is in income taxes payable and is driven by the taxes on the investment gains. The burden of this payment, following GAAP, will fall on cash flow from operations of 2003. Hence, a \$2.4 million addition should be made to 2003 cash flows from operating activities and an offsetting \$2.4 million deduction to 2003 cash flows from investing activities.²⁴

Reclassification of Income Taxes on Financing Gains and Losses

Tax cash flows that are associated with gains and losses from financing transactions raise the same reclassification issues as do gains and losses on investing transactions. Repayments of debt are the most common source of financing gains and losses. In the recent past such gains and losses were classified as extraordinary items in the income statement. However, SFAS No. 145, "Rescission of FASB Statements No. 4, 44, and 64," eliminated this requirement.²⁵ Now it is common to see these gains and losses classified as ordinary items in the income statement.

AKI Holding Corporation reported gains and losses on the early retirement of debt in

each year from 2001 to 2003. These gains and losses were not reported as extraordinary gains or losses. The company reported a loss of \$871,000 in 2001 and gains of \$3,941,000 and \$3,446,000, respectively, in 2002 and 2003. These gains and losses are financing in nature; that is, they result from the retirement of debt. Therefore, they are adjusted out of net income in arriving at cash flows from operating activities. These adjustments, as well as other relevant information, are found in the statement of cash flows of AKI Holding in Exhibit 5.11.

In reviewing Exhibit 5.11, it should be noted that the income tax cash flows associated with AKI's gains and losses from the debt retirements are reported in operating cash flows. However, all of the cash payments that were made to retire the debt are in cash outflow from financing activities. As with the investing gains discussed earlier, a reclassification of tax cash flows from operations to financing is necessary to avoid a mismatching of cash flows. This reclassification will increase operating cash flows in the two years in which gains were reported, i.e., 2002 and 2003. However, operating cash flow will be reduced in 2001, the year in which a loss was incurred on debt retirement.

The logic of these adjustments is that operating cash flows should not bear the burden of the tax cash outflow when financing transactions produce gains. Similarly, operating cash flow should not reap the benefit of the income tax reduction that results when a loss on retirement is incurred.

A restatement of the AKI Holding's cash flows is presented in Exhibit 5.12.

The tax effects of the financing gains and losses in the exhibit have been computed by multiplying the gains and losses by 38 percent, an estimate of the marginal tax rate of AKI Holding. For example, the tax benefit created by the \$871,000 loss on early debt retirement in 2001 amounts to \$330,980 ($.38 \times \$871,000 = \$330,980$). This benefit is initially included in 2001 cash flow from operating activities. The procedure is the same with financing gains. The \$3,941,000 gain in 2002 is multiplied by 38 percent to produce the \$1,497,580 tax burden initially included in 2002 cash flow from operating activities.

In reviewing Exhibit 5.12, note that cash flow from operating activities is increased in both 2002 and 2003. The tax cash outflows related to the 2002 and 2003 financing gains, and previously deducted in arriving at operating cash flow, are added back to operating cash flow. However, operating cash flow in 2001 is reduced because the loss in that year produced a tax benefit that is reclassified from operating cash flow into cash flow from financing activities.

In contrast to the earlier examples of M Corp., Scope Industries, and Tredegar Corp., the effects on operating cash flow of the AKI Holding Corp. adjustments are quite modest. This probably represents a case where making the adjustments is unlikely to be cost effective.

Reclassification of Income Taxes on Gains and Losses of Discontinued Operations

It is common to observe gains and losses on the disposition of assets of discontinued operations. Under GAAP, all tax-related cash inflows and outflows are to be included in operating cash flows whether they are from continuing or discontinued operations. Just as with the previous examples, the tax cash flows associated with investing gains and losses of discontinued operations should be reclassified out of operating cash flows into the investing section.

Exhibit 5.11 Statement of Cash Flows: AKI Holding Corp., Years Ended June 30, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Cash flows from operating activities:			
Net income	\$4,467	\$4,737	\$1,509
Adjustment to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of goodwill and other intangibles	7,331	12,096	10,119
Amortization of debt discount	1,640	3,029	3,610
Amortization of loan closing costs	646	693	808
Deferred income taxes	2,003	(918)	(712)
Loss (gain) from early retirement of debt	871	(3,941)	(3,446)
Other	592	472	(84)
Changes in operating assets and liabilities:			
Accounts receivable	3,270	(3,177)	4,364
Inventory	749	690	1,427
Prepaid expenses, deferred charges, and other assets	(4)	(131)	(400)
Accounts payable and accrued expenses	(1,177)	(118)	1,077
Income taxes	(6,173)	365	1,332
<i>Net cash provided by operating activities</i>	14,215	13,797	19,604
Cash flows from investing activities:			
Purchases of equipment	(2,345)	(1,338)	(3,015)
Payments for acquisitions, net of cash acquired	—	(19,422)	—
Patents	(119)	(79)	(137)
<i>Net cash used in investing activities</i>	(2,464)	(20,839)	(3,152)
Cash flows from financing activities:			
Payments under capital leases for equipment	—	(503)	(846)
Repayments of long-term debt	(18,031)	(6,805)	(3,110)
Net proceeds (repayments) on revolving loan	7,250	2,750	(9,000)
Proceeds (repayments) on term loan, net of repayment of \$500 in 2002	(1,375)	9,500	—
Payments of loan closing costs	—	(679)	—
<i>Net cash provided (used) in financing activities</i>	(12,156)	4,263	(12,956)
Net increase (decrease) in cash and cash equivalents	(405)	(2,779)	3,496
Cash and cash equivalents, beginning of period	1,875	4,654	1,158
<i>Cash and cash equivalents, end of period</i>	\$1,470	\$1,875	\$4,654

Source: AKI Holding Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. F-6.

Exhibit 5.12 Reclassification of Tax Cash Flows from Financing Transactions of AKI Holding Corp., Years Ended June 30, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Reported cash flows from operating activities	\$ 14,215	\$13,797	\$ 19,604
Adjustment for tax on financing gain (loss)	(331)	1,498	1,309
Revised cash flows from operating activities	\$ 13,884	\$15,295	\$ 20,913
Reported cash flow from financing activities	\$(12,156)	\$ 4,263	\$(12,956)
Adjustment for tax on financing (gain) loss	331	(1,498)	(1,309)
Revised cash flows from financing activities	\$(11,825)	\$ 2,765	\$(14,265)

Source: AKI Holding Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. F-6.

Barra, Inc Information on discontinued operations reported in the income statement of Barra, Inc., for the years ended March 31, 2001, 2002, and 2003 is presented in Exhibit 5.13. A partial statement of cash flows for the company for the same reporting period is presented in Exhibit 5.14. Both exhibits provide a basis for illustrating the reclassification of tax cash outflows associated with a gain on the disposition of discontinued operations.

Exhibit 5.14 reveals that Barra had after-tax gains of about \$76 million from the sale of discontinued operations in 2002. Disclosures of its discontinued operations indicate that the pretax amount of the gains was approximately \$129 million.²⁶ As presented in the exhibit, this gain was backed by an inflow of cash in 2002 as evidenced by the “proceeds from sale of discontinued operations” of about \$142 million in the investing section of the 2002 statement of cash flows. The net cash produced by sale of the discontinued operations is reduced by any cash outflow for taxes on the gain.

Barra’s supplemental cash flow disclosures show cash tax payments of about \$60 million in 2002. The current tax on continuing operations was approximately \$19 million for

Exhibit 5.13 Income Statement Disclosure of Discontinued Operations, Barra, Inc., Years Ended March 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Discontinued Operations:			
Income from operations, net of income taxes	\$13,138	\$1,916	\$ —
Gain (loss) on sale of discontinued operations, Net of income taxes	(659)	75,983	770

Source: Barra, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 32.

Exhibit 5.14 Partial Statement of Cash Flows, Barra, Inc., Years Ended March 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Cash Flow from Operating Activities:			
Net income	\$45,302	\$118,293	\$33,966
Adjustments to reconcile net income to net cash provided by operating activities			
Equity in income of investees	(159)	(115)	(181)
Depreciation and amortization	6,305	5,110	5,204
Unrealized gains on marketable equity securities held for trading	(304)	(491)	(784)
Sale (purchase) of marketable equity securities held for trading	(1,623)	2,143	71
Impairment loss on investments in unconsolidated companies	—	—	6,936
Deferred taxes	(3,324)	(18)	7,067
(Gain) loss on sale of discontinued operations, net of income taxes	659	(75,983)	(770)
Other	531	283	(781)
Changes in:			
Accounts receivable—Risk management products	6,486	1,273	(2,324)
Accounts receivable—Related parties	1,219	20,002	2,066
Prepaid expenses	(419)	2	2
Other assets	(311)	104	(311)
Accrued income taxes	12,119	(36,600)	(2,184)
Accounts payable, due to related party and accrued expenses	(2,307)	(10,998)	(4,794)
Unearned revenues	5,282	3,375	(2,443)
Net cash provided by continuing operations	69,456	26,380	40,740
Net cash provided by (used in) discontinued operations	(1,832)	2,459	—
Net cash provided by operating activities	67,624	28,839	40,740
Cash Flow from Investing Activities:			
Capital expenditures	(3,497)	(3,235)	(2,932)
Sale (purchase) of marketable debt securities—available			
for sale, net	(62,433)	(123,884)	42,079
Proceeds from sale of discontinued operations	13,086	142,000	1,245
Acquisitions—cash paid	—	—	(22,346)
Investments in unconsolidated companies	(3,098)	(1,768)	—
Net cash provided (used) in investing activities	(55,942)	13,113	18,046

Source: Barra, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 33.

the year. The \$41 million of additional tax payments (\$60 million total tax payments – \$19 million current tax on income from continuing operations) is reasonably attributable to the gain on discontinued operations.

Barra's tax disclosures show a combined, federal and state statutory income tax rate of about 39 percent for 2002.²⁷ This would suggest total taxes on the gains from discontinued operations of \$50 million, computed as pretax gains of \$129 million times 39 percent. The remaining \$9 million of payments (\$50 million – \$41 million in taxes attributable to the gains paid in 2002) on the gains presumably will be paid in 2003 and should be added back in the computation of operating cash flow at that time.

The reclassification of estimated tax payments for the gain on the sale of the discontinued operations calls for adding the \$41 million 2002 tax payment back to cash flow from operating activities and adding an additional \$41 million cash outflow to investing activities. This produces the revised 2002 cash flow information provided in Exhibit 5.15.

In reviewing the exhibit, it can be seen that Barra's revised operating cash flow for 2002 is increased by \$41 million, or 142 percent. In addition, investing cash flow is changed from a \$13 million source to a \$28 million use of cash. These quite dramatic changes confirm the merits in this case of the reclassification of cash flows so as to improve the reliability of operating cash flow.

Challenge of Reclassifying Tax Cash Flows

The FASB decision to require classification of all tax-related cash flow as operating activities clearly was influenced by the perceived difficulties associated with linking tax cash flows with gains and losses on investing and financing transactions.

The Board decided that allocation of income taxes paid to operating, investing, and financing activities would be so complex and arbitrary that the benefits, if any, would not justify the costs involved.²⁸

The International Accounting Standards Board (IASB) also generally calls for the assignment of all tax cash flows to operating activities. But it does permit some flexibility in the classification of tax cash flows

Exhibit 5.15 Reclassification of Tax Cash Payments from a Gain on Discontinued Operations, Barra, Inc., Year Ended March 31, 2002 (\$ thousands)

	Cash Flow from Operating Activities	Cash Flow from Investing Activities
Cash flow as reported	\$28,839	\$ 13,113
Reclassification of taxes paid on gain from sale of discontinued operations	41,000	(41,000)
Revised cash provided (used)	\$69,839	\$(27,887)

Source: Barra, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 33, and author estimates.

when it is practicable to identify the tax cash flow with an individual transaction that gives rise to cash flows that are classified as investing and financing activities the tax cash flow is classified as investing or financing as appropriate.²⁹

The reclassifications in this section of tax cash flows from operating to investing and financing activities create a higher degree of representational faithfulness in these three cash flow categories. Representational faithfulness is a very important qualitative characteristic of accounting information.³⁰ It is defined as the “correspondence or agreement between a measure or description and the phenomenon that it purports to represent (sometimes called validity).”³¹ In principle, income tax cash flows that are the product of investing and financing transactions should be included in investing and financing cash flows if the cash flow statement categories are to be representationally faithful.

The FASB position that all tax cash flows must be included in operating cash flow might be appropriate from a practical standpoint in cases where investing and financing gains and losses are relatively small. The cost/benefit tradeoff in such cases should favor simplicity. However, in the case of material gains or losses from investing and financing transactions, it should be worth the effort to allocate tax cash flows to investing and financing in order to have a more reliable measure of operating cash flow.

Beyond the issue of representational faithfulness, there is a long tradition in accounting of allocating income tax provisions and benefits for accrual accounting purposes between years, within statements, and between financial statements. The recording of deferred taxes implements the allocation of taxes across periods. The assignment of income taxes to income from continuing operations, discontinued operations, extraordinary items, and the cumulative effects of accounting changes illustrate the intrastatement allocation of income taxes. Finally, the assignment of income taxes to items of other comprehensive income, which are located within shareholders’ equity, calls for the interstatement allocation of taxes.³²

The reallocation of tax cash flows just discussed is consistent with this tradition and is consistent with the spirit of tax allocation: Taxes should follow the transactions that caused their incurrence. Preserving the interpretative value of cash flows from operating activities calls for the reallocation to investing or financing of cash outflows and inflows produced by material gains and losses on investing and financing transactions.

NONRECURRING INCOME TAX CASH FLOWS

The concept of sustainable operating cash flow is a central theme of this book. Income tax cash flows are typically both material and a challenge to analyze in terms of their recurring or nonrecurring nature. However, the identification and measurement of nonrecurring tax cash flows is essential to the computation of sustainable operating cash flow. This section provides examples of nonrecurring or unsustainable tax cash inflows and outflows as well as guidance on how to locate them.

Examples of Nonrecurring Income Tax Cash Flows

Tax cash inflows and outflows that result from nonrecurring investing and financing gains and losses also should be considered to be nonrecurring. In the last section, these

tax cash flows were reclassified out of operations and into the investing and financing activities sections of the statement of cash flows. This was done to improve the analytical value of cash flows from operating activities. These reclassifications removed cash flows that were at the same time not operating cash flows and nonrecurring cash flows. Here the focus is primarily on other tax cash inflows and outflows that, while properly considered to operating, are deemed to be nonrecurring.

Nonrecurring, as well as nonoperating, tax cash flows must be identified and removed from operating cash flows to arrive at sustainable operating cash flows. Some of the more common examples are presented in Exhibit 5.16.

Loss Carryback Benefits

The refund of taxes from the carryback of losses to earlier years is a frequent source of tax-related cash inflows. Among its many provisions, the Workforce Assistance and Job Creation Act of 2002 introduced changes that increased both the size and frequency of such refunds from loss carrybacks. The act, a response to the economic malaise that followed September 11, 2001, temporarily increased the loss carryback period to five years from two.³³

As presented in Exhibit 5.16, both Del Global Technologies and Mississippi Chemical had cash inflows from loss carrybacks. Note that Del Global includes a reference to the temporary five-year carryback period. These carrybacks had a dramatic positive effect on the operating cash flows of these two companies. However, these benefits are not a sustainable source of future cash flow. Both Del Global and Mississippi Chemical exhausted their carryback capability when these benefits were realized.

Loss Carryforward Benefits

Del Global Technologies and Mississippi Chemical exhausted their carryback benefits, but they also disclosed a variety of carryforwards, such as federal net operating losses, state tax credits, alternative minimum taxes, and state operating loss carryforwards. These carryforwards can reduce future tax payments but, unlike carrybacks, they do not produce tax refunds.³⁴ Nevertheless, they do increase a firm's net operating cash flows by reducing future cash tax payments. However, these carryforward benefits are fixed in amount, and they also must be utilized within a fixed number of future years or they will expire unused. Therefore, these carryforward benefits should be considered to be nonrecurring or unsustainable even though they might produce cash savings for a number of future periods.³⁵ Note that the utilization by Lowrance Electronics, as presented in Exhibit 5.16, of some of its loss carryforwards significantly reduced its 2003 operating cash outflow.

Tax Dispute Settlements

The settlement of disputes with the Internal Revenue Service (IRS) is a common source of both tax payments and recoveries. As seen in Exhibit 5.16, American Greetings Corp. was required to make a very substantial tax payment to settle a dispute with the IRS. Tax settlements are sometimes in the taxpayer's favor, and refunds may be received. It is quite clear that these tax cash flows should be considered to be nonrecurring components of operating cash flow.

Exhibit 5.16 Selected Nonrecurring Tax Cash Flows**Loss Carryback Benefits*****Del Global Technologies (2003)***

Refund from amended tax returns and carryback of losses to five previous years—amounted to 83% of 2003 operating cash flows.

Mississippi Chemical Corp. (2003)

Refund of federal taxes pursuant to the Job Creation and Workforce Assistance Act of 2002—amounted to 49% of operating cash flows in 2002.

Loss Carryforward Benefits***Lowrance Electronics, Inc. (2003)***

Reduction in tax payments due to the use of net operating loss (NOL) carryforwards reduced tax cash outflow from operations by one-third.

Tax Dispute Settlements***American Greetings Corp. (2003)***

Payment to the IRS to settle a dispute involving a company-owned life insurance program reduced cash flow from operating activities for 2003 by about 58%.

Tax Benefits from Stock Options***Microsoft, Inc. (2003)***

Reduction in current tax payments as a result of tax-return deductions associated with employee stock options of \$5.5, \$2.1, \$1.6, and \$1.4 billion in 2000, 2001, 2002, and 2003, respectively.

Tax Overpayments***Krispy Kreme, Inc. (2003)***

Estimated income taxes were overpaid in fiscal 2003 by \$2 million. The refund of this amount in fiscal 2004 is a nonrecurring cash inflow. The overpayment of taxes resulted from the inability to anticipate tax savings from employee stock options.

Tax Incentives and Holidays***Jabil Circuit, Inc. (2003)***

Earnings benefited by \$15.8, \$11.7, and \$14.3 million in 2001, 2002, and 2003, respectively, from tax incentives and holidays in China, Hungary, and Malaysia—incentives and holidays expire through 2010

Delayed or Deferred Tax Payments***The Clorox Co. (2003)***

In explaining its growth in cash from continuing operations, Clorox explains that the timing (delay) of tax payments played a positive role in both 2002 and 2003.

Sources: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated. The Liquidity and Capital Resources section of management's discussion and analysis was the primary source of this information.

Tax Benefits from Stock Options

Companies may receive an expense deduction in their tax returns in connection with the exercise by employees of certain stock options. These options are termed nonqualified options under the tax law.³⁶ The expense deduction is typically equal to the excess of the market price of the shares over their exercise price, that is, the amount that the employee

must pay to exercise the option and acquire the shares. Until recently there was no associated expense deduction in the shareholder income statement. This situation changed as firms began to adopt the new FASB statement that calls for recording options expense in the book income statement as well.³⁷ However, this accounting change does not alter the nonrecurring and, arguably, nonoperating character of stock-option tax benefits.

Exhibit 5.17 provides some examples of this cash tax benefit for a small set of firms over recent years.

As seen in the exhibit, technology firms have been major beneficiaries of the tax benefits from stock options in view of their heavy reliance on options in their compensation programs. At \$5.5 billion, Microsoft Corp.'s benefits amounted to 40 percent of its 2000 operating cash flow. These option benefits generally declined for the firms included in the exhibit in concert with the stock market's decline in 2000, 2001, and 2002. The decline in share prices limits the exercise of options as market prices fall below option exercise prices. Recall that the tax deduction obtained by an issuing firm is based on the excess of the market price over the option's exercise price. The market recovery that has extended through 2003 and into 2004 likely will result in an upturn in option tax benefits.

Beyond their nonrecurring or irregular nature, option tax benefits are the direct product of a financing transaction—that is, issuance of shares in exchange for cash. For accounting purposes these tax benefits are added to shareholders' equity. This would argue for a reclassification of these cash benefits out of cash flows from operating activities and into financing activities. Alternatively, the connection of the option tax benefit with a compensation arrangement might support the operations classification. In any event, the often irregular or nonrecurring character of the benefits would call for removing these

Exhibit 5.17 Option Tax Benefits among Selected Technology Firms
(\$ millions)

Company	Years			
	2000	2001	2002	2003
Adobe Systems, Inc.	\$ 125	\$ 46	\$ 22	\$ 37
Chiron, Corp.	\$ 38	\$ 26	\$ 9	\$ 33
Cisco Systems, Inc.	\$2,495	\$1,397	\$ 61	\$ 132
Dell Computer Corp.	\$1,040	\$ 929	\$ 487	\$ 260
Electronic Arts, Inc.	\$ 33	\$ 26	\$ 23	\$ 75
Intuit, Inc.	\$ 94	\$ 60	\$ 53	\$ 48
Jabil Circuit, Inc.	\$ 4	\$ 9	\$ 43	\$ 1
Microsoft Co.	\$5,535	\$2,077	\$1,596	\$1,376
Oracle Corp.	\$ 493	\$1,149	\$ 44	\$ 110
Paychex, Inc.	\$ 19	\$ 26	\$ 24	\$ 6
Selectron Corp.	\$ 60	\$ 40	\$ 4	\$ 0
Sun Microsystems, Inc.	\$ 708	\$ 816	\$ 98	\$ 9

Source: Form 10-K annual reports to the Securities and Exchange Commission. The listed amounts are believed to represent the cash tax savings realized in each of the listed years. In most cases the option tax benefits were listed in the operating activities section of the statement of cash flows.

benefits from operating cash flow in developing a more reliable measure of sustainable operating cash flow.

The decline and irregularity in the option tax benefits in Exhibit 5.17 is probably more pronounced than would be the case for nontechnology firms. The share prices of most nontechnology firms are not as volatile, and these firms do not place as much reliance on options in their compensation plans.

Tax Overpayments

Earlier in this chapter, we described the installment payment of income taxes that is required by U.S. federal tax law. These payments are based on required projections of taxable profits for the year. Overpayments may result if initial profit prospects prove much too optimistic. In this case, a firm may make tax payments in the earlier portion of the year that are greater than those required for the entire year. The Krispy Kreme Doughnuts, Inc., case presented in Exhibit 5.16 is of special interest because its \$2 million of tax overpayments were linked to its inability to project tax deductions from the exercise of stock options by its employees. That is, Krispy Kreme overestimated its taxable income for the year because it did not take into account the tax deductions that it earned from the exercise of stock options by some of its employees.

Tax Incentives and Holidays

Some firms derive substantial tax benefits as a result of reduced tax rates and tax holidays on earnings in foreign countries. As noted in Exhibit 5.16, Jabil Circuit had substantial tax savings in each year from 2001 to 2003 from tax incentives and holidays in China, Hungary, and Malaysia. Although these benefits may appear to be sustainable, note that they expire during the period through 2010. In some cases these benefits might be renewable, but there is always a degree of uncertainty associated with this prospect. The continued availability of these benefits lacks the degree of control or predictability normally associated with sustainable cash flows derived from core operating activities.

In addition to reduced rates and tax holidays, numerous tax credits may be earned based on specific performance requirements. As with the preceding benefits, the sustainability of these credits calls for continued performance by the firm as well as the continuation of the tax credit as part of the tax law. Firms earned substantial tax credits for making certain capital expenditures in the period extending from 1962 to 1986. These benefits formed a significant portion of the reported profits of many capital-intensive firms during this time. However, these benefits were eliminated as part of the Tax Reform Act of 1986.

Other current tax credits, which usually are referred to as general business credits, include those for activities associated with research, low-income housing, disabled access, rehabilitation, business energy, work opportunity, welfare to work, and empowerment zone employment. Earning these benefits on an ongoing basis calls for continued engagement in the mandated behavior, for example, the rehabilitation of historic structures, as well as for the continued existence of the provision in the tax law. For many businesses, especially those in the technology sector, the research credit is one of the more common and significant of the tax credits.

The principal research credit is an incremental credit that is 20 percent of qualified expenditures beyond a base amount.³⁸ Technical details on this credit are found in Section

44 of the Internal Revenue Code. Research credits may be carried back for 1 year and forward for 20 if they exceed annual limitations under the law. Tax credits have a powerful effect on cash flows because, unlike expense deductions, they reduce tax payments on a dollar-for-dollar basis: A dollar of credit reduces taxes by a dollar, whereas a dollar of expense reduces taxes by the tax rate times a dollar.

Delayed or Deferred Tax Payments

This chapter opened with an overview of accounting for income taxes. This overview emphasized that tax payments or refunds are driven by the taxable income or loss reported in the tax return. Alternatively, the taxable portion of pretax book earnings drives the total tax provision deducted in the shareholder income statement. The difference between the total tax provision and the current tax provision is referred to as the deferred tax provision. The sum of the current and deferred tax provisions equals the total tax provision. Of course, either or both of these elements can be positive (expense) or negative (benefit).

Accrual Accounting and the Timing of Tax Cash Flows The recording of income taxes follows the accrual basis of accounting. This means that the actual tax payments or recoveries for any given period may be quite different from the current tax provision or benefit recorded for the period. Tax cash flows may either exceed or fall short of the current provision or benefit for the year. The size of these differences may be especially large in cases where firms have earnings that are produced in foreign taxable entities. Often there are greater delays in making tax payments or in receiving tax recoveries outside of the United States. As a result, U.S. firms with substantial overseas profits may have greater disparities between tax accruals and tax payments than do firms with strictly domestic profits.

Oracle Corporation provides an example of the influence that this payment timing can have on operating cash flow. Oracle sold investments in common stock during fiscal 2000 at substantial gains. However, the taxes on these gains were not paid until 2001. Earnings in 2002 were down by about 10 percent, but cash flows from operating activities were up by about 48 percent. Oracle felt the need to explain the effect of the timing of these tax payments on period-to-period cash flows:

Fiscal 2002 Compared to Fiscal 2001: Although net income decreased in 2002, cash flows from operating activities increased due to large tax payments made in fiscal 2001 related to the sale of Oracle Japan and Liberate common stock in fiscal 2000. Excluding these tax payments, cash provided by operating activities would have decreased slightly from fiscal 2001 to fiscal 2002.³⁹

This explanation suggests two issues: (1) the relationship of tax cash flows to earnings, on a period-to-period basis, can be distorted by payment delays for substantial amounts of taxes; and (2) large cash tax payments on investing transactions, such as the sale by Oracle of common stock, can degrade the analytical value of operating cash flow. This is of course why we earlier illustrated the reclassification of tax payments on investment gains from operating to investing activities.

Identifying the timing effects on Oracle's operating cash flow requires a careful reading of Oracle's management's discussion and analysis (MD&A) content, especially the

comparison of year-to-year operating cash flows. The dollar effects of the tax payments on the investment gains are not set out in the 2001 Oracle disclosures. One estimate would involve the assumption that the fiscal 2001 decrease in income taxes payable was due to payment of the gains on the stock sales. This amounted to \$892 million in 2001. However, Oracle's disclosure of the gains identifies the total associated taxes at \$2,681 million. Tax payments are not disclosed by Oracle until 2002. The statement of cash flows in Oracle's 2002 Form 10-K shows tax payments of \$2,400 million for 2001.⁴⁰ This \$281 million difference (\$2,681 million – \$2,400 million) may simply indicate some revisions in the original tax amounts and/or that not all of the gains-related taxes were paid in 2001.

Deferred Income Taxes

Deferred income taxes arise from temporary differences and were discussed in the earlier section that overviewed income tax accounting. Temporary differences can create a wide range in the mix of the current and deferred components of the total tax provision. A stable mix can aid the prediction of future cash tax payments. Whereas tax cash payments are based on tax-return income, earnings estimates are normally of book earnings. Tax cash payments can be estimated by applying the expected cash tax rate to projected future book earnings. Changes in the current and deferred mix need to be examined to establish whether they appear to be temporary, that is, nonrecurring, or whether the more recent mix of current and deferred taxes is likely to be sustained.

A sampling of different tax mixes for both current and deferred income taxes is provided in Exhibit 5.18.

Although it is common to talk of deferring income taxes, notice that Angelica Corp. in the exhibit is paying taxes that exceed the total book tax provision. That is, its current provision (i.e., taxes being paid) is larger than the total tax provision. This is a common situation when companies are recording large restructuring charges or asset write-downs on their books that are not yet available as deductions in their tax returns. Although they are not very substantial, Walgreen Co. is deferring tax payments for each year shown in the exhibit. Also, Cabot Oil & Gas has substantial tax deferrals. This is quite typical in the case of very capital-intensive companies. It is common for these firms to have continuing excesses of tax over book depreciation. A deferred income tax provision is accrued, along with an associated increase in deferred tax liabilities, on the resulting excess of book over tax-return profits.

The prospective mix of current and deferred income taxes has important implications for future cash flows. It is common for statement users to focus on the portion, if any, of the total tax provision that is deferred on a period-to-period basis. In addition, attention is given to the overall size and nature of the net balance sheet position with respect to deferred taxes. Is the firm in a net deferred tax asset or liability position? In general, the current tax provision will decline as a proportion of the total tax provision as an overall deferred tax liability position rises. That is, additional taxes will be deferred for payment in the future. The opposite is true as a net deferred tax liability decreases. Taxes deferred in earlier years are paid. Increases and decreases in net deferred tax asset positions have exactly the opposite effects on cash tax flows.

A review of the sources of a firm's net deferred tax position is important in assessing the likelihood that, for example, a firm is likely to be able to continue to defer a portion of

Exhibit 5.18 Variations in the Current and Deferred Tax Mix (\$ thousands)

Company	Current	Deferred	Total
No Tax Deferral			
Angelica Corp. (2003)			
2001	\$ 2,603	\$ (1,102)	\$ 1,501
2002	3,181	(3,020)	161
2003	4,906	(626)	4,280
Modest Tax Deferral			
Walgreen Co. (2003)			
2001	\$490,200	\$46,900	\$537,100
2002	595,200	22,900	618,100
2003	654,100	58,900	713,000
Substantial Tax Deferral			
Cabot Oil & Gas Corp. (2002)			
2000	\$ 3,305	\$13,162	\$ 16,467
2001	11,480	15,985	27,465
2002	(289)	7,963	7,674

Sources: Form 10-K annual reports to the Securities and Exchange Commission for the years indicated. Numbers in the exhibit without parentheses are positive tax expenses, and those with parentheses are tax benefits.

the tax provision. Recall that the second of the quotes that opened this chapter noted that the ability of the Bells to continue their rate of tax deferral did “not look sustainable as the temporary benefit from cash taxes deferred could reverse in upcoming periods.”⁴¹ Further guidance on the disclosure and detection of nonrecurring tax cash flows associated with changes in deferred tax positions is provided in the next section.

Disclosure and Detection of Nonrecurring Tax Cash Flows

This section supplements the discussion of nonrecurring tax cash flows, giving some attention to their typical disclosure and detection. This task is made difficult by the considerable variability in disclosure practices. It is essential to bear in mind that most initial information on nonrecurring tax items is on an accrual accounting basis. For example, a company might highlight in its income statement a tax settlement in its favor. However, further steps are necessary to determine whether the settlement is backed by a cash inflow during the current period.

The absence of a current-period cash inflow from a favorable tax settlement requires an adjustment in the operating activities section of the statement of cash flows. The adjustment is most likely to take the form of an increase in income taxes receivable listed among the changes in operating assets and liabilities. The increase in this asset balance will be deducted from net income in computing operating cash flow. Upon collection in a subsequent period, the decrease in the asset balance will be added to net income, which adds the cash collection to operating cash flow.

This section provides additional guidance on the disclosure and detection of some of the nonrecurring items that were listed in Exhibit 5.16.

Loss Carryback Disclosure and Detection

The tax refunds associated with loss carrybacks of Del Global Technologies presented in Exhibit 5.16 can be found in at least three locations. In their order of appearance in the 2003 10-K annual report:

1. From the Liquidity and Capital Resources section of the MD&A (p. 40): “The Company generated approximately \$4.9 million of cash from operations . . . Contributing to this year’s cash generation . . . a collection of approximately \$4.1 million in income tax receivable.”
2. In the Cash Flow from Operating Activities section of the statement of cash flows (p. F-5):

	2001	2002	2003
Decrease (Increase) in income tax receivable	\$(525,000)	\$1,282,000	\$4,086,000

Recall from Chapter 2 that a decrease in a current asset such as the income tax receivable is treated as a cash inflow and an increase in the asset as an outflow. The 2002 and 2003 decreases in income tax receivable indicates cash collections, and they are added to net income in arriving at cash flows from operating activities. The increase of the receivable in 2001 of \$525,000 resulted from the recognition of a tax benefit that was not yet collected. This benefit decreased the net loss in 2001, but it resulted in no associated cash inflow in 2001. This increase was deducted from net income in arriving at cash flow from operating activities.

3. In the Income Tax Note (p. F-25): “Refundable income taxes were \$3,992,000 at August 3, 2002 representing refunds expected from federal and state government agencies. . . . Said refunds were collected during the first quarter of fiscal 2003.”

The disclosure by Mississippi Chemical Corporation in Exhibit 5.16 of cash inflows from loss carrybacks was the most user friendly. The tax refunds were set out as separate line items in the operating activities section of the statement of cash flows. Slightly higher amounts were disclosed in a note on Supplemental Cash Flow information. These refunds were also discussed in the Liquidity and Capital Resources section of Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Loss Carryforward Disclosure and Detection

The tax law generally permits net operating losses to be carried forward for 20 years and set off against future profits. There may be restrictions on the utilization of these carryforwards in cases where they were incurred by other companies prior to their acquisition by the taxpayer company or if the firm has had substantial changes in its ownership.⁴² Capital losses are limited to a 5-year carryforward period. The various general business tax credits, identified earlier, are normally also subject to a 20-year carryforward limitation. As with other tax issues, the disclosure and detection of loss carryforward benefits can be somewhat involved. This complexity can be reduced if we partition the treatment

in terms of whether the loss carryforward benefits were recognized in the determination of book income or loss in the same period in which the loss carryforward originated.

Tax Benefit Recognized upon Origination of Loss Carryforward A firm with strong future profit prospects will usually recognize the tax-saving potential of a net operating loss (NOL) carryforward in the period in which the carryforward originates.⁴³ In Exhibit 5.16 Lowrance Electronics disclosed a loss carryforward of \$2,697,000 in its tax note at the end of fiscal 2002.⁴⁴ Its schedule of deferred tax assets and liabilities included a deferred tax asset for a net operating loss carryforward of \$998,000. The \$998,000 represented the potential tax saving of the NOL carryforward. Note that the NOL deferred tax asset of \$998,000 yields a tax rate of about 37 percent when divided by the associated NOL carryforward of \$2,697,000. This suggests that the carryforward is available for state as well as federal tax purposes. That is, the federal benefit would be in the 34 to 35 percent region for a firm with the profit levels of Lowrance. The additional 2 to 3 percentage points reflect the state tax benefit.

The Lowrance NOL carryforward benefit was fully recognized in the determination of its net income or loss in either the year the carryforward originated or at least prior to the end of fiscal 2002. This full recognition is established by the absence of a deferred tax asset valuation allowance at the end of fiscal 2002.⁴⁵

If the loss carryforward tax benefit is fully *recognized* in the income statement upon its origination, then the subsequent *realization* of the carryforward tax benefit produces no income statement effect. The benefit is realized when the loss carryforward is used to shield profits in the tax return that otherwise would be subject to tax. This took place in fiscal 2003 for Lowrance Electronics. The only disclosure of this tax cash savings was this statement in the income tax note: “The Company had a net operating loss carryforward of approximately \$2,697,000 at July 31, 2002, all of which was utilized during fiscal 2003.”⁴⁶ However, the realization of this benefit also can be inferred because the NOL deferred tax asset of \$998,000 declined to zero during fiscal 2003.⁴⁷

Tax Benefit Recognized on Realization or Utilization of Loss Carryforward A history of losses, combined with weak profit prospects, often means that a NOL carryforward benefit will be recognized in the income statement only if and when it is realized. In this circumstance, a 100 percent valuation allowance is set off against the NOL-related deferred tax asset.

Compass Minerals Group, Inc., has substantial NOL carryforwards, and their utilization was restricted as a result of ownership changes. Compass Minerals maintained a 100 percent valuation allowance against all of its deferred tax assets in view of the uncertainty surrounding their ultimate realization. However, its tax reconciliation schedule reveals that a benefit from a loss carryforward did reduce its taxes by \$3.4 million in 2002. That is, a portion of the unrecognized NOL carryforward benefit was realized. This schedule is provided in Exhibit 5.19.

The realization of the NOL tax benefit in 2002 reduced the cash tax payments of Compass Minerals by \$3.4 million and increased its cash flow from operating activities by the same amount. While not shown here, another indicator of this benefit is the \$3.4 million decline in the deferred tax asset for NOL carryforwards during 2002 in the Compass Minerals schedule of deferred tax assets.⁴⁸

Exhibit 5.19 Reconciliation Schedule, Compass Minerals Group, Inc., Years Ended December 31, 2000, 2001, and 2002 (\$ millions)

	2000	2001	2002
Computed tax at the federal statutory rate of 35%	\$(200.0)	\$16.1	\$11.0
Foreign income, mining, and withholding taxes	1.0	3.0	6.0
Foreign exchange gain	—	2.6	—
Percentage depletion in excess of basis	(1.4)	(2.9)	(1.9)
State income taxes, net of federal income tax benefit	2.1	1.1	0.6
Restructuring and other charges	—	6.8	—
Write-down and amortization of goodwill	94.6	—	—
Net operating loss carryforward benefit	—	—	(3.4)
Other	—	0.1	(0.5)
Income tax expense (benefit)	\$(103.7)	\$26.8	\$11.8
Effective tax rate	18%	58%	37%

Source: Compass Minerals, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 51–52.

If Compass Minerals had recognized the \$3.4 million benefit earlier—that is, if it had not recorded a \$3.4 million valuation—then there would have been no entry in the tax reconciliation schedule presented in Exhibit 5.19. However, in each case there would still be a reduction in tax cash outflows and an increase in operating cash flow.

The increase in operating cash flow, assuming earlier recognition of the tax benefit, would be accomplished by adding a deferred tax provision of \$3.4 million to net income in computing cash flows from operating activities. The deferred tax provision would result from the write-off of the NOL-related deferred tax asset. That is, the realization of the deferred tax asset is accounted for by reducing the deferred tax asset by \$3.4 million and recording an offsetting deferred tax provision in the same amount.⁴⁹ Adding the deferred tax provision to net income increases operating cash flows by the \$3.4 million of realized tax savings.

The \$3.4 million increase in operating cash flows from the utilization of the NOL carryforward is not a sustainable source of operating cash flow. A restatement of cash flows designed to develop a measure of sustainable operating cash flow would deduct this \$3.4 million from reported cash flow from operating activities.

Tax Settlement Disclosure and Detection

American Greetings, Inc., was on the losing side of a tax settlement with the IRS. American Greetings recorded a charge in its 2001 income statement and accrued an offsetting liability to deal with tax exposure covering the period 1992 through 1999. This exposure derived from a dispute with the IRS over company-owned life insurance (COLI) programs. The dispute was settled and the obligation was paid in 2003.⁵⁰

The accrual of this potential obligation appeared as a \$144 million reconciliation item

in the 2001 income tax notes of American Greetings. The same \$144 million also was disclosed in the text of the income tax note, as was the settlement reached in 2003. This accrual increased taxes dramatically for 2001 because the \$144 million charge related not to 2001 earnings but rather to COLI issues of 1992 through 1999. However, no cash outflow for this obligation was reported in either 2001 or 2002. A large positive adjustment from an increase in accounts payable and other liabilities, where this tax liability was reported, negated the effect of this tax charge on 2001 cash flow from operating activities.

The eventual settlement of the COLI-related tax obligation was disclosed in the 2003 annual report of American Greetings in the Liquidity and Capital Resources section of its MD&A. A net decline of \$106 million in accounts payable and other liabilities was characterized as “due mainly to payments to settle the disputed income tax liability associated with the Corporation’s COLI program.”⁵¹

The Liquidity and Capital Resources section of the MD&A is often a valuable source of information on nonrecurring tax cash flows. Much of the analysis found in the MD&A is devoted to explaining differences in earnings between adjacent periods: for example, 2004 compared to 2003, and 2003 compared to 2002. However, much of the MD&A discussion is focused on accrual information and is less useful than the information found in the Liquidity and Capital Resources section, where emphasis is mainly on liquidity and cash flow.

Unlike American Greetings, Sequa Corporation listed a favorable tax settlement of \$36 million on a separate line item in its 2001 income statement. There was no need for an adjustment in its 2001 statement of cash flows for the settlement because the operating activities section began with its loss from continuing operations *before* income taxes.⁵² No adjustment was needed for this noncash benefit because the opening line item already excluded the \$36 million settlement.

Evidence that the \$36 million adjustment produced no current cash inflow was found in MD&A section: “In 2001, the IRS notified Sequa that a settlement agreement concerning the 1989 restructuring of two subsidiaries was approved. As a result of the settlement, \$36.0 million, representing the reversal of reserves no longer required, was recorded as income through a reduction of the income tax provision.”⁵³

Sequa had earlier recorded a liability or reserve for these potential taxes. With the settlement, Sequa simply eliminated the liability from its balance sheet and made an offsetting reduction in its income tax provision or expense for the year. In this case, the disclosures revealed that this \$36 million settlement would never involve a cash outflow.

Care needs to be exercised to determine if and when a cash movement is associated with a tax settlement. It is quite common for settlements to be recorded in one period and the cash inflow or outflow to occur in subsequent periods. It is also common for the settlement of tax disputes simply to involve the reversal of liabilities accrued in earlier periods. A careful review of the income statement, balance sheet changes, entries in the operating activities section of the statement of cash flows, MD&A, and income tax notes often is necessary to determine if and when a cash flow occurs.

Option Tax Benefits Disclosure and Detection

Option tax benefits leave tracks in numerous locations within the shareholders’ equity section, the statement of cash flows, income tax notes, and various sections of the MD&A. A review of these disclosures is required in order to identify option tax benefits

and to determine whether they have reduced tax payments and, therefore, increased overall cash flow. The data that were provided in Exhibit 5.17 highlight the variability and apparent lack of sustainability of these benefits.

Beyond their nonrecurring character, the inclusion of the option tax benefits in operating cash flows can be challenged. These benefits are associated with the use of options to compensate employees, and this would argue for their classification within operating cash flows. However, both the cash received from the exercise of options as well as associated tax savings are accounted for as additions to shareholders' equity. This would argue for a financing classification in the statement of cash flows. On balance, in cases where option tax benefits are very material and irregular in amount, we believe that removing the benefits from operating cash flow is appropriate.⁵⁴

Option Tax Benefits and the Profitable Firm The exercise of nonqualified stock options provides the issuing firm with a tax return deduction equal to the excess of the market value of the shares over the option exercise price. For the profitable firm, or a firm with loss carryback potential, the deduction produces either a tax refund or a reduction in tax payments. The realization of the tax savings takes place within the same period that the options are exercised. In most current cases there will have been no corresponding compensation deduction in the book income statement. The absence of a deduction in the book income statement normally would be seen as giving rise to a permanent difference. Although this is technically the case, the option expense is not treated as a permanent difference when it comes to computing and recording the current tax provision.

Consider a case where nonqualified options are exercised for a total of \$100,000 and the associated market value of the acquired shares is \$300,000. Assume that the firm has taxable book and tax-return income of \$1,000,000 in the absence of the stock option transaction. The relevant computations and reporting are summarized in Exhibit 5.20. A flat combined federal and state income tax rate is used in the computations.

Notice in item 1 of the exhibit that the current provision ignores the option expense deduction. That is, the current provision is computed on \$1,000,000 of income, which is greater than the \$800,000 amount actually subject to taxation. This is necessary so that the \$80,000 of tax savings ($\$200,000 \times 40$ percent) from the exercise of the options does not reduce the tax provision on pretax book income. The option expense of \$200,000 that gives rise to the \$80,000 tax savings was not deducted in arriving at book pretax income. Hence, these tax savings must not be reflected in the current tax provision.

Items 1 and 2 in Exhibit 5.20 show both the computation and recording of the current tax provision, respectively. Item 3 records the collection of cash upon exercise of the options and the associated increase in paid-in capital. This \$100,000 cash inflow must be included in cash flows from financing activities in the statement of cash flows.⁵⁵ Item 4 reduces the taxes payable by \$80,000 to the amount that will actually be paid, that is, \$320,000 ($40 \text{ percent} \times \$800,000$).

Unlike the cash received upon exercise of the options, the \$80,000 option tax benefit is currently included in cash flow from operating activities.⁵⁶ This is accomplished by adding back the \$80,000 option tax benefit to net income in computing operating cash flow. This addition compensates for the original \$80,000 overstatement ($\$400,000 - \$320,000$) of the tax provision, as noted in items 1 and 2.

Although there is some variability in disclosure practices, the options-related information of Exhibit 5.20 usually would appear in four areas:

Exhibit 5.20 Accounting for the Exercise of Stock Options: Full Benefit Realization

	Books	Tax Return
1. Computation of taxable earnings and the tax provision:		
Book and tax-return earnings before option expense	\$1,000,000	\$1,000,000
Option expense: $\$300,000 - \$100,000 = \$200,000$	—	200,000
Taxable income	1,000,000	800,000
Current tax provision: $.40 \times \$1,000,000$	\$400,000	
Taxes payable on tax-return earnings: $.40 \times \$800,000$	\$320,000	
2. Recording the book tax provision:		
Increase in current tax provision	\$400,000	
Increase in taxes payable	\$400,000	
3. Recording issuance of shares:		
Increase in cash	\$100,000	
Increase in common stock or paid-in capital	\$100,000	
4. Recording tax benefit as additional paid in capital		
Decrease in taxes payable	\$80,000	
Increase in additional paid in capital	\$80,000	
5. Cash taxes paid		
Decrease in taxes payable	\$320,000	
Decrease in cash	\$320,000	

1. There will be an addition to net income of \$80,000 in the operating activities section of the statement of cash flows. A common label for this line item is stock option income tax benefits or something comparable. This addition adjusts for the \$80,000 overstatement of the current tax provision. It is essentially a noncash component of the current tax provision, much like a deferred tax provision. This adjustment also ensures that the cash tax benefit from the reduction of taxes payable is part of cash flow from operating activities.
2. The common stock accounts, and in some cases additional paid-in capital, will be increased by the \$100,000 received upon exercise of the options. This disclosure will appear in the schedule of changes in shareholders' equity.
3. The \$100,000 cash inflow from exercise of the options is classified in the financing activities section of the statement of cash flows.
4. It is common for the income tax notes to disclose the amount of option tax benefits in text discussion. Disclosure within the MD&A is also provided on occasion.

To reinforce this illustration, the option-related disclosures of Qlogic Corp. are provided for the years ended April 1, 2001, March 31, 2002, and March 30, 2003 in Exhibit 5.21.

Disclosures 1 and 2 in the exhibit are typical for firms with realized option tax benefits.

Exhibit 5.21 Option Benefit Disclosures, QLogic Corporation, Years Ended April 1, 2001, March 31, 2002, and March 30 2003 (\$ thousands)

	2001	2002	2003
1. Addition to net income in the operating activities section of the statement of cash flows:			
Tax benefit from issuance of shares under stock plans	\$52,742	\$7,512	\$6,037
2. Increase in additional paid-in capital in statement of changes in stockholders' equity	\$52,742	\$7,512	\$6,037
3. Income tax note:			
"The tax benefits associated with dispositions from employee stock plans of approximately \$52.7 million, \$7.5 million and \$6.0 million, respectively, were recorded directly in additional paid-in capital."			
4. MD&A			
No disclosure			

Source: QLogic Corp., Form 10-K annual report to the Securities and Exchange Commission, March 30, 2003, pp. 26–27 and 40.

The addition of the tax benefits to net income, as seen in disclosure number 1, adjusts for the overstatement of the current tax provision that keeps the option tax benefit out of reported earnings. Generally accepted accounting principles require that the recognized tax benefits of exercised options be included in stockholders' equity. The impact of the option benefits on stockholders' equity is presented in disclosure 2. QLogic provided an additional disclosure of the option tax benefit in its tax notes. This information is presented in disclosure 3 of the exhibit.

QLogic did not discuss the option tax benefits in its MD&A. In particular, there was no commentary within the Liquidity and Capital Resources section of MD&A. The 2001 option tax benefits of about \$53 million are a substantial increase over the benefits of \$34 million in 2000. QLogic's cash flow from operating activities increased from \$66.5 million in 2000 to \$98.1 in 2001. The \$19 million increase in option tax benefits provided 59 percent of the approximately \$32 million increase the 2001 cash flow from operating activities. The QLogic Liquidity and Capital Resources section in its 2001 MD&A provided this commentary on the 2001 improvement in cash flow provided by operations:

The growth in cash provided by operations compared to the prior year was primarily due to increases in profitability. Additionally, in fiscal 2001, cash flow from operations was improved by increases in income taxes payable, accounts payable, and accrued compensation balances, and was offset by increases in accounts and notes receivable and inventories.⁵⁷

The growth in QLogic's net income of about \$21 million and the increase in option tax benefits of \$19 million are of similar amount. QLogic chose to highlight the former and

not the latter in the MD&A discussion of liquidity and capital resources. The magnitude, and arguably less sustainable character, of the option tax benefits would argue for highlighting the contribution of the option tax benefits to the increase in operating cash flow.⁵⁸

Option Tax Benefits and the Loss Firm QLogic had sufficient tax return profits to realize the full tax savings associated with its option expense deductions in each year from 2001 to 2003. Full realization is possible for the tax-loss firm if, in the absence of current profits, it has sufficient taxable income in its carryback period. This section considers the case in which a loss is incurred in the current period. A modified version of the example in Exhibit 5.20 is provided in Exhibit 5.22.

The only change in this exhibit example is that taxable earnings before option expense has been reduced from \$1,000,000 to \$100,000. Further, it is assumed that there are no profits in the carryback period.

The example in Exhibit 5.22 permits only partial *realization* of the tax-saving potential of the \$200,000 option tax expense in the year incurred. As revealed in item 1, the option expense of \$200,000 shielded only \$100,000 of tax-return earnings from taxation. This results in a realized tax benefit of \$40,000 ($\$100,000 \times 40$ percent). That is, taxes of \$40,000 were avoided.

Absent profits in the carryback period, the \$100,000 loss created by the \$200,000 option expense deduction can be carried forward. Generally accepted accounting principles require that the future tax savings of \$40,000 ($\$100,000 \times 40$ percent) be recorded on the balance sheet as a deferred tax asset. The recording of this deferred tax asset as well as the current tax provision is presented in item 2 of Exhibit 5.22. Thus, the full \$80,000 tax

Exhibit 5.22 Accounting for the Exercise of Stock Options: Partial Benefit Realization

	Books	Tax Return
1. Computation of taxable earnings and tax provisions:		
Book and tax-return earnings before option expense	\$100,000	\$100,000
Option expense: $\$300,000 - \$100,000 = \$200,000$	—	200,000
Taxable income (loss)	100,000	(100,000)
Current tax provision: $.40 \times \$100,000$	\$40,000	
2. Recording the book tax provision:		
Increase in current tax provision	\$40,000	
Increase in deferred tax asset	\$40,000	
Increase in taxes payable	\$80,000	
3. Recording issuance of shares:		
Increase in cash	\$100,000	
Increase in common stock or paid-in capital	\$100,000	
4. Recording tax benefit as additional paid in capital		
Decrease in taxes payable	\$80,000	
Increase in additional paid in capital	\$80,000	

benefit of the \$200,000 option expense is *recognized*, but only \$40,000 is *realized*. If \$100,000 of tax return income were earned in the following year, then the remaining \$40,000 benefit could be realized.

This example highlights the significance of differences between the amount of the option tax benefits added to net income in arriving at operating cash flow and the addition to shareholders' equity of recognized option tax benefits. In the first example, presented in Exhibit 5.20, the options tax benefit was fully realized. This is implied by the correspondence between the addition to net income (\$80,000) in computing operating cash flow and to shareholders' equity (\$80,000). However, in the current case, presented in Exhibit 5.22, the addition to net income in the statement of cash flows is only \$40,000, while the addition to shareholders' equity is \$80,000. Utilization of the loss carryforward in a subsequent year will result in a reduction in the previously recorded deferred tax asset associated with the carryforward of \$40,000 and an offsetting increase in the deferred tax provision. This \$40,000 will be added back to net income in the statement of cash flows, thus including the realization of the remaining tax benefit in operating cash flow.

Disclosures by two firms with recognized option tax benefits that are different from their realized amounts are summarized in Exhibit 5.23.

As seen in the exhibit, Cisco Systems apparently had insufficient current tax return profits or carryback capability to realize the full tax-saving potential of its stock option deductions in fiscal 2001. This is evidenced by the fact that the *realized* benefits, those

Exhibit 5.23 Tax Benefit Disclosures of Firms with Recognition versus Realization Differences

(in \$ millions)	2001	2002	2003
Cisco Systems, Inc.			
Recognized benefits per shareholders' equity	\$1,755	\$61	\$132
Realized benefits per statement of cash flows	\$1,397	\$61	\$132
Tax note disclosure:			
"The Company's income taxes payable for federal, state, and foreign purposes have been reduced, and deferred tax assets increased, by the tax benefits associated with the dispositions of employee stock options. . . . Benefits reducing taxes payable amounted to \$132 million, \$61 million, and \$1.397 billion for fiscal 2003, 2002, and 2001, respectively. Benefits increasing gross deferred tax assets amounted to \$358 million in fiscal 2001."			
(in \$ thousands)	2001	2002	2003
Forrest Laboratories, Inc.			
Recognized benefits per shareholders' equity	\$77,689	\$37,543	\$44,985
Realized benefits per statement of cash flows	\$79,793	\$28,188	\$52,889
Tax note disclosure:			
Deferred tax assets for employee stock option benefits	—	\$15,137	\$7,720

Sources: Data are from various pages of the Cisco Systems, Inc., and Forrest Laboratories, Inc., fiscal 2003 Form 10-K annual reports to the Securities and Exchange Commission.

associated with a reduction in taxes payable, amount to only \$1,397 million, whereas the benefits *recognized* by the additions to shareholders' equity totaled \$1,755 million. This \$358 million difference was recorded as an increase in deferred tax assets. The recording of these benefits required a decrease of \$1,397 million of income taxes payable, an increase in deferred tax assets of \$358 million, and an increase in shareholders' equity of \$1,755 million.

The Forest Laboratories, Inc., information shown in the exhibit reveals that its realized tax benefits exceeded the benefits recognized in shareholders' equity in 2001 and 2003. This relationship is reversed in 2002. The 2001 and 2003 results are consistent with unrealized benefits from earlier periods being realized currently. As illustrated in the exhibit, deferred tax assets would have been recorded in these earlier periods when *recognized* tax benefits exceeded those that were *realized*. The option expense deductions that earlier created a loss carryforward are now deducted in the tax return and taxes payable are reduced. The deferred tax assets are reduced and an offsetting deferred tax provision is recorded.

The Forest Laboratories information in the exhibit illustrates the amortization of the deferred tax assets associated with the current realization of option tax benefits. The \$7.4 million decline in these deferred tax assets matches very closely the \$7.9 million excess of fiscal 2003 realized over recognized option tax benefits.⁵⁹

Potential Option Reporting Changes on the Horizon It is important to note that the FASB currently (fall 2004) has an exposure draft of a new standard that, if approved, will have a significant effect on the accounting for stock options.⁶⁰ The comment deadline is June 30, 2004. If approved, the standard would become effective for fiscal years beginning after June 15, 2005.

In its current form, the standard will require that compensation expense be recognized in the income statement for stock options. In terms of the statement of cash flows, the principal change will be to alter the classification, in a specific circumstance, of some of the tax cash savings realized by compensation deductions taken in the tax return.

Currently, all realized tax benefits derived from compensation expense associated with the exercise of stock options are classified in operating activities. For the most part, the classification of cash tax savings will continue to be in operating activities under the terms of the proposed new standard. However, in the case of *excess tax benefits*, some of the cash tax savings will be included in financing activities. Excess tax benefits are realized tax savings produced when there is an excess of compensation cost deducted in the employer's tax return over that recognized in the employer's book income statement.⁶¹

If the proposed standard is approved, our position will continue to be that realized tax benefits from stock options used for purposes of compensation are nonrecurring cash benefits. Benefits included in operating activities will be removed in developing adjusted measures of operating cash flow. Excess tax benefits included in financing activities will require no adjustment.

Disclosure and Detection of Delayed or Deferred Tax Payments or Receipts (Benefits)

Although they may appear to be the same, the sources of delayed versus deferred tax payments or receipts are quite different. Delayed tax payments or receipts are the simple

product of differences between the timing of the recognition and realization of certain tax provisions or benefits. However, deferred tax payments and receipts are the product of temporary differences between book and tax return earnings.

Delayed Tax Payments or Receipts The most common form of delayed tax payment results from differences between the accrual of current tax provisions or benefits and their payment or receipt. The tax law surrounding the timing of tax payments in the United States was discussed in the opening section of this chapter. The lag between recording and the subsequent tax payment or receipt often pushes some of the cash movement into a subsequent period. This delay may be more pronounced when firms have taxable units in other countries. Moreover, the typical disclosure of these payments and receipts often makes it difficult to detect the actual cash movement. However, for most large U.S. firms, without significant foreign operations, installment payments of expected taxes during the year should result in only a limited delay of payments or receipts.

The concern about material delayed tax payments or receipts is that they might create a significant spread between reported and sustainable cash flow produced in a given period. American Greetings Company presents just such a possibility. American Greetings disclosed a \$144 million tax charge in fiscal 2001. The charge was related to a contested income tax issue. This charge to the income statement was offset by an increase in taxes payable. However, substantial payment on this obligation was not made until fiscal 2003. American Greetings noted that a \$106 million decrease in accounts payable and other liabilities, including income taxes payable, in fiscal 2003 was “primarily to settle the disputed income tax liability associated with the Corporation’s company owned life insurance (COLI) program.”⁶²

The detection of this delayed tax payment provides a model for investigating similar transactions. The tracks detected in five locations included:

1. The 2001 income statement reveals an effective tax rate of 194 percent. This should trigger an immediate interest in locating a nonrecurring tax charge.
2. The 2001 balance sheet reveals a \$180 million increase in taxes payable. This indicates a large, but unpaid, tax accrual.
3. The 2001 statement of cash flows includes an addition to net income in arriving at operating cash flows of \$87 million for changes in accounts payable and other liabilities. Other liabilities included the above \$180 million increase in taxes payable.
4. The MD&A section included several references to a \$144 million COLI-related tax accrual. These were located in discussions of operating results as well as in the section dealing with Liquidity and Capital Resources.
5. The income tax note included a discussion of the \$144 million charge and the charge was also included in the schedule that explained the difference between expected and actual tax expense.

The disclosures in locations 2 to 4 above were continued in 2002. The three cash flow–related tracks left in the 2003 statements and notes included:

1. The 2003 balance sheet reveals a \$93 million reduction in taxes payable.
2. The statement of cash flows, which combines accounts payable and other liabil-

ities, including taxes payable, shows a \$106 million decline for this liability reduction.

3. The MD&A included several disclosures of the tax payment.

Deferred Tax Payments or Receipts: Short-term Deferrals Nonrecurring deferred tax payments or receipts can result from reversals of temporary differences over relatively short periods of time. For example, a firm might have a deferred tax liability for the deferral of tax payments from a gain that was recognized fully on the books but accounted for as an installment sale in the tax return. All payments could be received as soon as the next year, resulting in a full reversal of the original deferred tax liability. For example, Gilman & Ciocia, Inc. recorded a \$140,000 deferred tax liability on an installment sale in 2001 that was fully reversed by the end of 2002.⁶³ Both the gain and the associated tax payment should be considered nonrecurring.

Detection of these and other potentially nonrecurring deferred tax transactions requires a careful review of the schedule of deferred tax assets and liabilities. In the current case, the focus should be on identifying line items for deferred tax liabilities associated with gains on installment sales.⁶⁴ The installment gains are recognized in their entirety on the books in the year of the sale. Moreover, a deferred tax provision and offsetting deferred tax liability are recognized. Subsequently, in a reversal of the temporary difference, the deferred tax liability is drawn down as the installments are collected and the gains are now included in the tax return. In the absence of offsetting deductions in the tax return or loss carryforwards, these reversals of taxable temporary differences increase tax cash payments.

Both the gains on property sold as well as the associated tax payments are nonrecurring. The cash collected on the sale is properly classified in cash flows from investing activities. Under GAAP, the tax payments must be classified in operations. However, these cash payments should be removed from operating cash flows for the purpose of assessing sustainable cash flows from operations.

The tax disclosures of a gain recognized on the installment basis by California-Engles, Inc., and which reverses over several periods, are found in Exhibit 5.24.

The installment gain transaction of California-Engles Mining took place in 2000. California-Engles Mining recognized the gain in its entirety in its 2000 tax return. However, the gain is being accounted for on an installment basis in their book income statement. A deferred tax liability for the installment gain first appeared in the December 31, 2000, schedule of deferred tax liabilities disclosed by the company. The total deferred tax liability balance associated with the installment gain was \$19,789 at the end of 2000. This balance declined by \$2,516 and \$5,158 during 2001 and 2002, respectively. If the temporary difference from the installment sale continues to reverse at the 2002 pace, then the remaining \$12,115 deferred tax liability, \$7,623 federal and \$4,492 state, shown in Exhibit 5.24 should be reduced to zero by early 2005.

Deferred Tax Payments or Receipts: Longer-term Deferrals Longer-term deferrals of tax cash payments or receipts also have the potential to affect the sustainability of operating cash flows. The deferral of tax payments associated with depreciation temporary differences has received considerable attention for almost half a century. For capital-intensive firms that are both growing and profitable, a cumulative excess of tax over book depreciation can create very large deferred tax liabilities that may grow for decades.

Exhibit 5.24 California-Engles Mining, Inc., Deferred Tax Liability Reversals on Installment Gain Transaction, Years Ended December 31, 2001, and 2002.

	2001	2002
Deferred income taxes consisted of the following at December 31:		
Deferred tax liabilities:		
Federal:		
Unrealized gain on securities	\$ 309	\$ —
Installment sale gain	10,868	7,623
State:		
Installment sale gain	6,405	4,492
Total deferred tax liabilities	\$17,582	\$ 12,115

Source: California-Engles Mining, Inc. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 18.

Banks and other financial firms that provide substantial lease financing also accumulate very large deferred tax liabilities.

For example, General Electric disclosed net deferred tax liabilities of about \$13 billion dollars at December 31, 2003.⁶⁵ Leasing transactions were the largest contributor to its net deferred-tax-liability position. Verizon Communications, Inc., reported about \$20 billion of net deferred tax liabilities at December 31, 2003.⁶⁶ Depreciation and leasing temporary differences contributed about \$13 billion to the net deferred-tax-liability balance of Verizon Communications.

Repayment of Deferred Tax Liabilities Although the deferral of tax payments is a clear benefit to operating cash flow, analysts should be conscious of the deferred prefix to these liabilities. A decline in capital expenditures or a reduction in lease-financing activities would eventually result in a reversal of both depreciation and leasing temporary differences. This results in turn in a rise in tax return income in relationship to book income. The deferred tax liability will be paid down as total tax payments exceed the book tax provision for the year.

The earlier examples of Gilman & Ciocia and California-Engles Mining represent examples of relatively fast repayments of deferred tax liabilities. The underlying transactions in these cases had terms of less than five years. However, the transaction terms underlying the depreciation and lease-related temporary differences of General Electric and Verizon Communications are no doubt longer. This means that the reversal of the temporary differences and payment of the deferred tax liabilities would be spread out over a longer period of time. The payment of depreciation-related deferred tax liabilities will generally have the least effect on the sustainability of operating cash flow because the reversals of the temporary differences and payment of the deferred tax liabilities will normally extend over many years.

The useful lives of the depreciable assets of heavy industrial firms are usually quite long. However, the depreciable lives of assets used by various technology-related firms often are relatively short. The dynamic and volatile nature of technology firms also may cause greater fluctuations in their capital expenditures. Both of these factors mean that special attention should be paid to analyzing the sources of deferred tax liabilities in the case of technology or related firms. The short useful lives of their depreciable assets plus the sometimes-volatile nature of their capital expenditures increase the likelihood of sharp reversals of temporary differences and a rapid repayment of deferred tax liabilities.

Recent Tax Law Initiatives and the Repayment of Deferred Tax Liabilities Financial analysts have shown a growing interest in the potential for substantial reductions in the capacity of some firms to maintain or grow their depreciation-related deferred tax liabilities. Special attention has been focused on the effects of tax law changes that provided for further acceleration of tax-return depreciation.

Important depreciation-related changes are found in two tax acts: the Job Creation and Worker Assistance Act of 2002 (2002 Tax Act) and the Jobs Growth Tax Relief Reconciliation Act of 2003 (2003 Tax Act). The 2002 Tax Act allows firms to take 30 percent bonus depreciation for certain assets acquired after September 10, 2001, but before September 11, 2004. That is, 30 percent of the cost of eligible assets could be written off as depreciation in the year of acquisition. In addition, depreciation also can be recorded in the year of acquisition on the remaining cost, that is, the 70 percent of the original cost.⁶⁷ Property that qualifies must be Modified Accelerated Cost Recovery System property with a class life of 20 years or less. Real estate generally does not qualify for bonus depreciation.

The 2003 Tax Act added a further depreciation bonus on top of the 30 percent provided by the 2002 Tax Act. The 2003 Tax Act increases the bonus to 50 percent of the asset's cost. The 50 percent bonus applies to qualifying assets purchased after May 2003 but before June 1, 2005.

The dramatic acceleration of depreciation made possible by the two acts will either expand the current depreciation temporary differences of a firm or create new depreciation temporary differences. In some cases net operating losses may be created. The limited extension of the NOL carryback to five years, which is also a feature of the 2002 Tax Act, may make it possible to receive tax refunds from such depreciation-produced losses.

A corollary of the accelerated depreciation of the cost of acquired assets is reduced depreciation in future periods. In the absence of growth in qualified asset additions, tax return depreciation may fall below book levels after 2005 when the bonus depreciation expires. This temporary-difference reversal will result in a decline of the depreciation-related deferred tax liability and an increase in tax cash outflows. The tax mix will move from reduced current and increased deferred provisions to increased current and reduced deferred tax provisions.

Some recent attention has focused on the telecommunications services industry. It has been noted that "the Bells have been fortunate that tax law changes have allowed deferred taxes to increase despite declining capex (capital expenditures)."⁶⁸ However, going forward, especially beyond 2005, declining capital expenditures will no doubt result in the reversal of some of the multibillion-dollar deferred tax liabilities of these companies. Even if capital spending were maintained and did not decline, the phase-out

of bonus depreciation probably would cause some reversals of the depreciation temporary differences and a paydown of deferred tax liabilities.

The point to be made is that current levels of operating cash flow may not be sustainable because of a heavy reliance in some cases on the bonus depreciation of the Tax Acts of 2002 and 2003.⁶⁹ The detection of these possibilities would call for the examination of a firm's schedule of deferred tax assets and liabilities. Special attention should be given to schedules of deferred tax assets and liabilities that are dominated by depreciation-related deferred tax liabilities. Then attention should be given to recent and prospective spending on depreciable assets. Operating cash flow may be under threat in the case of firms that currently have flat capital expenditures and prospects for future declines in capital spending.

Deferred Tax Assets and Future Cash Flows Attention historically has centered on deferred tax liabilities and the associated deferral of cash tax payments. However, many firms now have overall deferred tax asset positions because of other tax law changes, changes in GAAP, and the economic conditions of the past decade. The Tax Reform Act of 1986 introduced a number of changes that created new deferred tax assets. Some of the key changes introduced:

- Dramatically reduced the deferral of profits by substantially reducing the availability of the installment method of accounting
- Reduced the availability of the completed-contract method of reporting earnings
- Increased the range of costs that had to be capitalized for tax purposes
- Substantially reduced the ability to use the reserve method of accounting for bad debts⁷⁰

Each of these changes initially reduces book income in relationship to tax return income. This is because either revenues or gains are recognized sooner or expenses and losses are deducted later in the tax return versus the books.

In addition to these tax law changes, difficult times created substantial NOL carryforwards. Generally accepted accounting principles require that deferred tax assets be recorded for all NOL and tax credit carryforwards. Other FASB statements also accelerated expense recognition on the books versus the tax return, for example, SFAS No. 106, "Employers' Accounting for Postretirement Benefits other than Pensions," and SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of."

The disclosure of the deferred tax assets and liabilities of American Greetings presented in Exhibit 5.25 provides a fairly typical example of the sources of deferred-tax assets.

Unlike a firm with a net deferred tax liability position, operating cash flow is bolstered by the *reversal* of temporary differences that produced deferred tax assets. For example, the reversal of temporary differences underlying the "reserves not currently deductible" in the exhibit will increase expenses that are deductible in the tax return. These increased expenses will in turn reduce taxable income and cash tax payments. If a loss is created by the increased expenses, then a tax benefit can be derived by either a carryback or carryforward of the loss.

Exhibit 5.25 American Greetings Corp., Schedule of Deferred Tax Assets and Liabilities, Years Ended February 28 2002 and 2003 (\$ thousands)

	2002	2003
Deferred tax assets:		
Employee benefit and incentive plans	\$ 27,408	\$ 26,312
Net operating loss carryforwards	43,251	49,632
Deferred capital loss carryforward	11,394	11,394
Inventory costing	10,500	13,707
Reserves not currently deductible	94,277	73,702
Other	42,678	65,004
	229,508	239,751
Valuation allowance	(44,756)	(45,253)
Total deferred tax assets	184,752	194,498
Deferred tax liabilities:		
Depreciation	46,210	38,150
Other	19,789	11,844
Total deferred tax liabilities	65,999	49,994
Net deferred tax assets	\$118,753	\$144,504

Source: American Greetings Corp., Form 10-K annual report to the Securities and Exchange Commission, February 28, 2003, pp. 75–76.

In summary, a firm that is in a net deferred tax liability position has a potential future threat to operating cash flows if the underlying temporary differences reverse. Alternatively, the reversal of the temporary differences underlying deferred tax assets produces cash tax savings. These conditions are both a further source of nonrecurring tax cash flows.

SUMMARY

This chapter has outlined the treatment of income taxes in the statement of cash flows. Attention has focused on the classification of tax cash flows within the statement of cash flows as well as the disclosure and detection of nonrecurring tax cash flows. Ten key points include:

1. Income taxes are paid (refunded) on the earnings (loss) reported in the tax return, but the total tax provision deducted in the shareholder income statement is based on pretax book earnings.
2. Differences between book and tax return earnings are classified as either temporary or permanent. Upon origination, temporary differences give rise to either deferred tax assets or liabilities.

3. The reversal of temporary differences increases tax payments in the case of deferred tax liabilities, but produce cash tax savings in the case of deferred tax assets.
4. Permanent differences create neither deferred tax assets nor liabilities, but they do cause effective tax rates to either rise or fall.
5. Generally accepted accounting principles require the classification of all tax cash flows within cash flows from operating activities.
6. The disclosure of tax cash flows normally is made in the income tax note, a note providing supplemental cash flow information, or at the bottom of the statement of cash flows.
7. The mismatch of tax cash flows associated with investing and financing gains and losses calls for reclassification, in material cases, of these tax cash flows out of operations and into either investing or financing activities.
8. Important nonrecurring tax cash flows may result from income tax refunds of loss carrybacks, tax reductions from loss and tax credit carryforwards, payments or receipts from settlements of tax disputes, unsustainable tax benefits from tax credits, tax holidays, or reduced tax rates on foreign earnings, realized cash benefits from stock options, temporarily delayed tax payments, and unsustainable deferred taxes.
9. Tax benefits from nonqualified stock options are classified in operating cash flows under GAAP, but normally should be treated as nonrecurring and removed from operating cash flow.
10. The detection of nonrecurring tax cash flows requires a comprehensive and integrated review of each financial statement, the income tax note, and management's discussion and analysis of operations and financial position (MD&A).

NOTES

1. H. Nurnberg, "Income Taxes and The Statement of Cash Flows," *CPA Journal* (June 2003) (electronic version, not paginated).
2. S. Flannery, E. Huh, P. Enright, and C. Loh, *To Spend or Not to Spend, That Is the Taxing Question* (New York: Morgan Stanley & Co., October 16, 2003), p. 1.
3. Some corporations elect S-Corporation status. This results in income tax being levied at the shareholder as opposed to corporate level. No income taxes appear in the financial statements of the corporation. However, in this situation, analysts often view part of the dividends paid to shareholders as the economic equivalent of tax payments. That is, it is usually necessary for the corporation to make distributions to its shareholders so that they can pay the tax on the corporate income reported on their personal tax returns.
4. Financial Accounting Standards Board, *SFAS No. 95, Statement of Cash Flows* (Norwalk, CT: FASB, November 1987), para. 23.
5. *Ibid.*, paras. 91 and 92.
6. For many examples see E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2000), chapter 5.
7. A more comprehensive example would involve both originating and reversing temporary differences. In the interest of simplicity, only originating differences are incorporated in this example.

8. Financial Accounting Standards Board, *SFAS No. 109, Accounting for Income Taxes* (Norwalk, CT: FASB, February 1992), paras. 6–15.
9. Related to income taxes, application of the Chapter 2 cash flow classification scheme would treat increases in income tax liabilities and decreases in income tax assets as sources of cash. Alternatively, decreases in income tax liabilities and increases in income tax assets would be treated as uses of cash.
10. SFAS No. 109, para. 97.
11. SFAS No. 95, para. 23c.
12. Ibid., para. 91.
13. Ibid., para. 92.
14. International Accounting Standard Board, *Standard No. 7, Cash Flow Statements* (London: IASC, 1994), para. 36.
15. SFAS No. 95, para. 28.
16. The current tax provisions in Exhibit 5.8 were disclosed in the tax note of M Corporation. In addition, they can be computed from the information in Exhibit 5.6. The total tax provisions for 2001 and 2002 are simply adjusted for the changes in the deferred tax balance sheet accounts for 2001 and 2002. For 2001, \$1,348,500 minus \$68,500 equals the current provision of \$1,280,000. The 2001 increase of \$68,500 in the deferred tax liability results in a noncash deferred tax component in the total tax provision. For 2002, \$156,900 plus \$13,450 equals the current tax provision of \$170,350. The 2002 decrease of \$13,450 in the deferred tax liability results in a noncash deferred tax benefit in the total tax provision. Moving from the total to the current tax provision requires that the amount of this benefit be added back to the total tax provision.
17. SFAS No. 95, para. 16.
18. Tredegar Corporation, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, pp. 24–25.
19. Tredegar included its comments on taxes and investing gains in conjunction with a schedule that opened with free cash flow. Tredegar defines free cash flow as cash flows from operating activities minus capital expenditures and dividends.
20. Scope Industries had pretax income of \$17.2 million in 2002. Deducting the investment gains of \$21.5 million results in a pretax loss of \$4.3 million.
21. The operating activities section of the Scope Industries statement of cash flows presented in Exhibit 5.10 shows a single line item for income taxes payable and receivable. The cash benefit represented by the \$2,417,253 addition to operating cash flow could be a combination of an increase in taxes payable and a decrease in taxes receivable. Either change is treated as a cash inflow in the statement of cash flows.
22. The combined 36 percent rate approximates the sum of the federal and state rates disclosed in the tax notes of Scope Industries.
23. This \$2.4 million of taxes yet to be paid, combined with the tax payment of \$3.6 million made in 2002, amounts to a total of \$6.0 million. This is somewhat short of the maximum computed tax of \$7.7 million. This difference could reflect some differences in the amount of the gain for book versus income tax purposes.
24. A discussion by Oracle of its changes in operating cash flow highlights the potential for distortion of not only the taxes associated with investing gains and losses but also the timing of these payments. Oracle explains in this way: “Although net income decreased in

fiscal 2002, cash flows from operating activities increased due to large tax payments made in fiscal 2001 related to the sale of Oracle Japan and Liberate common stock in fiscal 2000. Oracle sold shares and received cash in 2000. However, the tax on the gain was not paid until 2001.” The 2001 operating cash flow of Oracle bore the burden of this investing cash outflow. Oracle Corp., Form 10K annual report to the Securities and Exchange Commission, May 31, 2002, p. 24.

25. SFAS No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement 13, and Technical Corrections* (Norwalk, CT: FASB, April 2002).
26. Barra, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 39.
27. Ibid., p. 40. This combined statutory rate should be a good approximation of the marginal tax rate.
28. SFAS No. 95, para. 92.
29. IAS No. 7, para. 34.
30. Financial Accounting Concepts, *Statement No. 2, Qualitative Characteristics of Accounting Information* (Norwalk, CT: FASB, May 1980), paras. 58–78.
31. Ibid. This definition comes from the glossary of terms in SFAC No. 2. The glossary includes neither paragraph nor page numbers.
32. Items included in other comprehensive income are certain gains and losses on financial derivatives, translation gains and losses, unrealized gains and losses on available-for-sale investments, and additional minimum pension liability adjustments.
33. Under the Job Creation and Worker Assistance Act of 2002 (HR 3090), the loss carry-back period was extended to five years from two. Losses must have been incurred in tax years ending in 2001 and 2002 to qualify for the extended five-year carryback period.
34. Unlike loss carryforwards, tax credits reduce income taxes on a dollar for dollar basis. A federal loss carryforward of \$1 million, assuming a 35 percent tax rate, has the potential to save \$350,000 of taxes. However, a tax credit carryforward of \$1 million has the potential to save \$1 million of taxes.
35. The carryforwards highlight the fact that the nonrecurring classification sometimes moves into a gray area. A firm with very large carryforwards might produce cash tax benefits for many future periods.
36. Nonqualified stock options have failed to meet the tax law requirements to be classified as incentive stock options. Incentive stock option requirements are presented in Section 422 of the Internal Revenue Code. Rules governing nonqualified stock options are found in Reg. Sec. 1.83-7.
37. If the total book and tax return option expense are the same, then year-to-year differences in expense will be temporary. However, there will continue to be a permanent difference if the total expenses differ.
38. The “basic” research credit is less common and is 20 percent of research payments made to qualified organizations, for example, universities.
39. Oracle Corporation, Form 10-K annual report to the Securities and Exchange Commission, May 31, 2003, p. 49.
40. Ibid., p. 47.
41. Flannery, Huh, Enright, and Loh, C., *To Spend or Not to Spend*, p. 1.

42. Discussion of these rather complex limitations is found in Section 382 of the Internal Revenue Code.
43. Relevant GAAP guiding recognition is found in SFAS No. 109, paras. 16–25.
44. Lowrance Electronics, Form 10-K annual report to the Securities and Exchange Commission, July 31, 2003, p. F-19.
45. Lowrance recorded a \$2,000,000 valuation allowance against deferred tax assets associated with net operating loss carryforwards at the end of fiscal 1998. This valuation allowance was eliminated by the end of fiscal 2000 because of improved profit prospects.
46. Lowrance Electronics, Form 10-K annual report to the Securities and Exchange Commission, July 31, 2003, p. F-19.
47. The decline to zero could also result from the expiration of the NOL carryforward without it being used to shield profits from taxation. This is of course not consistent with the company's statement that the carryforwards were utilized. The expiration unused of the NOL carryforward would simply call for writing off the deferred tax asset against the valuation allowance. The reduction in the valuation allowance and the deferred tax asset simply zero out.
48. Compass Minerals Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 52.
49. The current tax provision is reduced by \$3.4 million as a result of using up the loss carryforward. Recording the \$3.4 deferred tax provision offsets this reduction and ensures that the benefit is not recognized in earnings twice—once when the deferred tax asset was originally recorded and a second time when the NOL carryforward was utilized.
50. American Greetings Corp., Form 10-K annual report to the Securities and Exchange Commission, February 28, 2003, p. 22.
51. *Ibid.*, p. 30.
52. Sequa Corporation, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, Item 8. Beginning the cash flow statement with earnings before taxes is uncommon.
53. *Ibid.* The Tribune Company, Inc., provides a comparable example. A \$35 million settlement with federal and state tax authorities was recorded by simply reversing previously recorded tax liabilities. There was no current cash tax inflow and there will be none in the future. The Tribune Company, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 29, 2002, p. 30.
54. The classification of the option tax benefits within operating cash flow is consistent with the FASB position of including all income tax cash flows in operating activities. This is understandable since most tax cash flows are associated with operating activities. However, in the case of income tax cash flows associated with material nonrecurring investing and financing transaction, a reclassification into either investing or financing cash flows is in order.
55. Accounting Principles Board, *APB No. 25, Accounting for Stock Issued to Employees* (New York: AICPA, October 1972), para. 17.
56. Emerging Issues Task Force, *Issue No. 00-15, Classification in the Statement of Cash Flows of the Income Tax Benefit Received by a Company upon Exercise of a Nonqualified Employee Stock Option* (Norwalk, CT: FASB, July 19–20, 2000).
57. *Ibid.*, p. 13.

58. Microsoft, Inc., had a sharp reduction in option tax benefits in 2001. These benefits declined from 48 percent of operating cash flow in 2000 to 15 percent of operating cash flow in 2001. Although operating cash flow increased between 2000 and 2001, Microsoft did disclose that the increase was “partially offset by a decrease in the stock option benefits.” Microsoft, Inc., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 15. This disclosure was in the Microsoft MD&A.
59. The wide range of circumstances that can produce differences between option tax benefits that are recognized versus those realized make it difficult to generalize on this matter. Readers interested in more detail on this subject should read this excellent paper: M. Hanlon and T. Shevlin, “Accounting for Tax Benefits of Employee Stock Options and Implications for Research,” *Accounting Horizons* (March 2002): 1–12.
60. FASB Exposure Draft of Proposed Statement of Financial Accounting Standards, *Share-Based Payment—An amendment of FASB Statements No. 123 and 95* (Norwalk, CT: FASB, March 31, 2004).
61. *Ibid.*, p. 175.
62. American Greetings Company, Form 10-K annual report to the SEC, p. 30.
63. Gilman & Ciocia, Inc., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 65. Gilman & Ciocia was in a substantial NOL carryforward position in 2002, and the realization of the gain in the tax return probably did not result in a tax cash outflow.
64. A gain can be deferred in whole or part to the extent that some payments are received in other than the year of the sale. For details see the Internal Revenue Code, Sec. 453(b)(2) and (k). Losses cannot be treated on the installment basis.
65. General Electric Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 97.
66. Verizon Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Item 8.
67. For smaller firms there is also the availability, subject to income limitations, of the first year write-off of \$25,000 under Sec. 179 of the Internal Revenue Code.
68. Flannery, Huh, Enright, and Loh, *To Spend or Not to Spend*, p. 1.
69. Some part of these tax-deferral benefits would no doubt have been produced, even in the absence of the Tax Acts of 2002 and 2003, because of increases in some cases in capital expenditures.
70. In most cases, bad debts are deducted for tax purposes only when it has been determined that they are uncollectible.

Nonrecurring Sources and Uses of Operating Cash Flow

During 2003, we made cash payments for income taxes totaling \$945 million, primarily as a result of our sale of QVC. . . . We anticipate that cash paid for income taxes will be significantly reduced in 2004.¹

Due to this accelerated contribution, Cox does not anticipate additional contributions during 2004 for the funded pension plans.²

In recent years, the influence of nonrecurring items of income, including revenues, gains, expenses, and losses, on accrual-based net income has received considerable attention. Much of this interest can be explained by the prominence achieved by analyst forecasts of earnings per share. Special attention typically is given to whether firms meet or exceed analyst forecasts. Share prices often are penalized when firms miss these forecasts by just a few pennies. Such market penalties were of particular note during the latter stages of the bull market that ended in 2000.

The process of assessing the accuracy of estimated EPS seldom relies on as-reported or actual earnings per share (EPS). Rather, the benchmark for assessing accuracy is typically the amount of actual EPS after adjustments have been made for the effects of nonrecurring items. That is, nonrecurring expenses and losses are added back to earnings while nonrecurring revenues and gains are deducted, all with appropriate income tax adjustments. The resulting measures are commonly referred to as pro-forma, operating, or sustainable measures of earnings. The logic behind the development of this alternative measure is threefold. First, analysts normally cannot be expected to consider or anticipate nonrecurring items when their forecasts are developed. As a result, a proper comparison of forecast with actual EPS calls for the removal of nonrecurring items from the reported amount. Second, an EPS measure from which nonrecurring items have been eliminated generally is considered to be more value relevant. That is, pro-forma measures of EPS are of higher quality because they are more sustainable.³ Third, a measure of sustainable earnings is a more reliable foundation on which to base forecasts of future sustainable earnings.

This chapter extends the analysis of nonrecurring components of earnings to nonrecurring sources and uses of operating cash flow. Ultimately, the goal is to obtain a more sustainable measure of operating cash flow by revising reported operating cash flow to remove these nonrecurring items along with the nonoperating items identified in Chapters 3, 4, and 5. A worksheet approach for making these adjustments is provided in Chapter 7.⁴

The focus of this chapter is primarily on identifying nonrecurring items of operating cash flow that have an income statement counterpart. A common example is cash paid for a litigation settlement. This item of expense reduces both income and operating cash flow. Moreover, a litigation settlement often is seen as producing both a nonrecurring expense and a nonrecurring operating cash outflow. The nonrecurring litigation charge is the income statement counterpart to the nonrecurring litigation operating cash outflow in the statement of cash flows.

Nonrecurring increases or decreases in operating cash flow that result from certain changes in days statistics—for example, days accounts receivable and days accounts payable—are exceptions to the expectation of an income statement counterpart for items of nonrecurring operating cash flow. That is, a temporary increase in days accounts payable may create a nonrecurring increase in operating cash flow. However, this increase in operating cash flow has no income statement counterpart. For example, it has no effect on cost of sales.

A comprehensive revision of operating cash flow also would include adjustments for two other classes of operating cash flow items. The first category consists of cash flows that have been classified following specific generally accepted accounting principles (GAAP) requirements, but that do not fit a true operating designation. For example, income taxes on nonoperating gains and losses are all classified into cash flow from operating activities under GAAP. Such tax-related cash flows are more appropriately classified with the financing or investing items that gave rise to them. Notice that the first of the two quotes that opened this chapter highlight just such tax items. Other examples that fit into this category are identified and discussed in Chapters 3 and 4.

The second category involves the classification of cash flows in situations where management may have exploited the flexibility or ambiguity that exists in GAAP to produce measures of operating cash flow that may provide a misleading impression of a firm's ability to generate sustainable cash flow. In the typical case, this means that a cash flow is opportunistically classified so as to increase operating cash flow. A cash inflow that arguably belongs in either the investing or financing section is instead classified into operations. Alternatively, a cash outflow that should be, for purposes of measuring sustainable operating cash flow, included in operations is instead classified into investing or financing cash flow.

For example, an increase in book overdrafts might be classified into operating cash flow. However, a strong case can be made that this cash inflow should instead be classified into financing cash flow. Cash received from the disposition of trading securities by a nonfinancial firm also might be classified into operating cash flow. Here again, inclusion in investing is more appropriate and results in a better measure of sustainable operating cash flow. Other examples that fit into this category are identified in Chapters 3 and 4 as well. The initial focus of this chapter is on identifying and characterizing the nature of nonrecurring operating cash flow that has an income statement counterpart. Attention then is given to identifying or locating potential nonrecurring items of operating cash

flow. The chapter also addresses how the timing of the cash movement associated with income statement items, which normally are recorded on an accrual and not a cash flow basis, can be established.

CHARACTERISTICS OF NONRECURRING ITEMS OF OPERATING CASH FLOW

As is the case with definitions of nonrecurring revenues, gains, expenses, and losses, which receive scant attention in the financial literature, nonrecurring operating cash flow is not defined by GAAP. There appears to be a general consensus that “you will know it when you see one.” However, some common characteristics of nonrecurring items can be identified. They include not appearing with any regularity, appearing with some regularity but being very irregular in amount, and not being derived from the central or core operating activities of the firm. These characteristics of nonrecurring revenues, gains, expenses, and losses are relevant because most nonrecurring operating sources and uses of cash are derived, in turn, from these income statement items.

The development of measures of sustainable earnings requires that firms identify nonrecurring items and remove them from reported earnings. It is common for many of these items to be either noncash or nonoperating in character. In addition, in developing these non-GAAP measures, firms may not include all items that might reasonably be seen as giving rise to nonrecurring operating cash flow. Careful analysis is necessary to identify items that are both nonrecurring and included in operating cash flow. Often the cash inflow or outflow associated with a nonrecurring item of income will take place in periods other than those in which it is included in the determination of net income.

EXAMPLES OF NONRECURRING CASH SOURCES AND USES

A sampling of nonrecurring operating cash flow items is included in Exhibit 6.1. Each of the items in the exhibit was included in the determination of operating cash flow. Almost all have an income statement counterpart in line with earlier discussion in this chapter. Examples of items without an income statement counterpart would be outsized changes in working capital accounts (Bulova Corp. and Newell Rubbermaid, Inc.) and outsized pension plan contributions (Cox Communications, Inc.). In many of the cases in the exhibit, the cash inflow or outflow occurred in a period after the items were included in the income statement. For example, it is very common for cash outflow associated with the settlement of litigation to occur in periods after the charge has been recognized in the income statement.

The items listed in the exhibit share the characteristics of nonrecurring items listed earlier. For most firms, the litigation and arbitration settlements are unlikely to be recurring, would clearly be irregular in amount even if they appeared from time to time, and are not a product of the core operations of the firms. The endorsement fees and the one-time fee for contract assignment—Holiday RV Superstores, Inc. and Sealed Air Corp., respectively—appear to be nonrecurring. The Stabilization Act fee received by Delta Air Lines is a benefit of limited duration because it is a focused tax law response to the aftermath of September 11, 2001. The cash flows from discontinued operations are necessarily

Exhibit 6.1 Selected Examples of Nonrecurring Items of Operating Cash Flow

Item	Company
Inventory purchase prepayment	Apple Computer, Inc. (2003)
Restructuring cost payments	Apple Computer, Inc. (2003)
Outsized distributions from equity investments	Arch Coal, Inc. (2002)
Class action settlement payment	Ascential Software Corp. (2002)
Acquisition-related withholding tax payment	Ball Corporation (2003)
Operating cash flow of discontinued operations	The Beard Co. (2002)
Litigation proceeds	Blue Rhino Corp. (2003)
Litigation settlement payments	Bristol-Myers Squibb Co. (2003)
Outsized increase in receivables and inventory ^a	Bulova Corp. (2003)
Outsized restructuring payments	ConocoPhillips (2003)
Security fee reimbursement	Continental Airlines, Inc. (2003)
Foreign exchange gain on loan receivable collection	The Cooper Companies (2003)
Payment of accrued acquisition costs	The Cooper Companies (2003)
Proceeds from business interruption insurance	Cosi, Inc. (2002)
Outsized pension plan contributions	Cox Communications, Inc. (2003)
Stabilization Act compensation	Delta Air Lines, Inc. (2003)
Merger-related charges	Earthlink, Inc. (2002)
Payoff of an equipment lease—not a capital lease	Flowers Foods, Inc. (2003)
Plant closing costs	Flowers Foods, Inc. (2003)
Separation payments	Flowers Foods, Inc. (2003)
Payment of liabilities assumed in an acquisition	GenCorp, Inc. (2003)
Interest collected on tax settlement	Hasbro, Inc. (2002)
Exchange offer payments	Hawk Corp. (2003)
Endorsement fee received	Holiday RV Superstores, Inc. (2002)
Payment of arbitration settlement	Krispy Kreme Doughnuts, Inc. (2003)
Defamation suit	Mississippi Chemical Corp. (2003)
Interest rate swap termination fees	Newell Rubbermaid, Inc. (2003)
Outsized inventory decrease	Newell Rubbermaid, Inc. (2003)
Income tax paid on long-term contracts ^b	Northrop Grumman Corp. (2003)
Contract termination fee received	Oil Dri Corporation of America (2003)
Income taxes refunded	Pacific Security Financial, Inc. (2003)
Avian influenza relief cash from U.S. Government	Pilgrims Pride Corp. (2003)
One-time cash fee received for contract assignment	Sealed Air Corp. (2002)
Cash paid for special items	Storage Technology, Inc. (2002)
Proceeds from insurance claims	Transtech Industries, Inc. (2002)
Outsized income tax payments	The Washington Post Co. (2003)
Payments for tendered stock options	The Washington Post Co. (2003)

^a The term “outsized” indicates payments or receipts that are much higher than recent amounts or that changed at a disproportional rate in relationship to their apparent driver, for example, sales.

^b Northrop Grumman had a \$1.2 billion tax payment due to the completion of a long-term contract (B-2 EMD contract) with the U.S. government. This tax had accumulated over a number of years. Northrop Grumman Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 38

Source: The entries above are from Form 10-K annual reports to the Securities and Exchange Commission of the listed companies for the years indicated

nonrecurring. The Beard Co. has disposed of the operations that gave rise to their operating cash flow. The nonrecurring character of the outsized pension contribution by Cox Communications, Inc., is affirmed in the second of the quotes opening this chapter.⁵

MANAGEMENT IDENTIFICATION OF NONRECURRING OPERATING CASH FLOW

Although in our view the cash flow items listed in Exhibit 6.1 are nonrecurring in nature, we thought that it would be instructive to obtain the views of management regarding nonrecurring operating cash flow. We obtained these insights by examining management's comparative analysis of year-to-year changes in cash flow from operating activities. This analysis typically is presented in the Liquidity and Capital Resources section of the management's discussion and analysis (MD&A). Although firms may not explicitly identify these items as nonrecurring, the way these items are used in explaining changes in operating cash flow often imply that they are. A sampling of such disclosures is presented in Exhibit 6.2.

The full Kellogg Co. disclosure of the information summarized in the exhibit was presented within its Liquidity and Capital Resources section. The disclosure provided an excellent example of both identifying a nonrecurring operating cash flow item and also indicating its after-tax influence on comparative operating cash flows:

As a result of stronger than expected cash flow in both 2003 and 2002, we made voluntary contributions to several of our major pension and retiree health care plans. The after-tax impact of these contributions reduced cash flow by approximately \$37 million in 2003 and \$254 million in 2002. After adjusting for these differences, 2003 cash flow was within \$40 million of 2002 cash flow, as the higher earnings in 2003 were overshadowed by extremely strong working capital improvements in 2002.⁶

Kellogg adjusted reported operating cash flows in both 2002 and 2003 by adding back, on an after-tax basis, the reduction that resulted from the nonrecurring pension contributions. Making the tax adjustments indicates that these contributions are deductible for tax purposes, either currently or at a future date. Reported operating cash flow was \$999.9 million and \$1,171.0 million in 2002 and 2003 respectively. The adjusted numbers are \$1,253.9 million (\$999.9 million plus \$254.0 million) in 2002 and \$1,208.0 million (\$1,171.0 million + \$37 million) in 2003. We believe that Kellogg's adjustment of the discretionary pension contributions out of the company's reported operating cash flow indicates that management views these contributions as nonrecurring operating cash flow items.

Tax-related payments and refunds are common items to be highlighted by management in explaining changes in operating cash flow. Selected examples in the exhibit include AT&T Corp., Delta Air Lines, Inc., Dole Foods, Inc., Emerson Electric Co., Krispy Kreme Doughnuts, Inc., Steel Cloud, Inc., and Verizon Communications, Inc. Notice that Material Sciences highlights taxes on the sale of an investment. This would be more appropriately classified in investing cash flow to offset the proceeds received on the sale.

Over the last few years, companies often have reported outsized pension plan contributions. These contributions are the product of the decline in the market value of equity securities that resulted in many pension plans becoming underfunded. The combination

Exhibit 6.2 Management Identification of Nonrecurring Items of Operating Cash Flow

Alpharma, Inc. (2002)

Absence of acquisition-based accounts receivable

AT&T Corp. (2003)

Increase in income tax receipts

The Coca-Cola Co. (2003)

Increased contributions to pension plans

Collection of \$280 million from an agreement reached on royalties from Coca-Cola (Japan)

Cash payments for streamlining costs

A stronger U.S. dollar reduced operating cash flow

ConocoPhillips (2003)

Working capital changes

Discontinued operations

Delta Air Lines, Inc. (2003)

Net tax refunds

Increase in restricted cash

Pension contribution

Dole Foods, Inc. (2003)

Income taxes paid in 2002 related to a 2001 gain on sale of the Honduran beverage business

Income tax refunds in 2003

Emerson Electric Co. (2003)

Increased inventory turnover

Delayed receipt of a refund from a capital loss carryback

Increases in pension contributions

The Fairchild Corp. (2003)

Cash used for investments in trading securities

One-time change in control payments and bonuses required under contracts with top executives

Outsized decrease in accounts payable and other accrued liabilities

Georgia Gulf Corp. (2002)

Sale of interest in trade receivables

Kellogg Co. (2003)

Additional voluntary contributions to pension plans

Kennametal, Inc. (2003)

Operating cash flow increase primarily due to cash from reductions in working capital

Krispy Kreme Doughnuts, Inc. (2004)

Tax benefits from the exercise by employees of nonqualified stock options

(continues)

Exhibit 6.2 (Continued)**Material Sciences Corp. (2003)**

Substantial cash was utilized in fiscal 2002 for income taxes payable related to the fiscal 2002 gain on the sale of Speciality Films.

Newell Rubbermaid, Inc. (2003)

Cash received from termination of interest rate swaps

The Procter & Gamble Co. (2003)

Increase in taxes payable

Steel Cloud, Inc. (2003)

Collection of tax refund

Cash collected relating to unearned revenue

Verizon Communications, Inc. (2002)

Tax payments on disposition of businesses and assets

Source: Information was drawn from 10-K reports to the Securities and Exchange Commission for the year associated with each listed company.

of these outsized contributions together with a recovery in market values is restoring many firms to a well-funded status. This will bring contribution levels down and in some cases will eliminate them altogether. Management is making efforts to make this point clear to readers of their financial statements.

Steel Cloud, listed in the exhibit, disclosed two nonrecurring cash inflows as part of the Liquidity and Capital Resources section in their MD&A. The combination of the tax refund and the outsized growth in unearned revenue accounted for all of its 2002 cash flow from operating activities. The disclosure of these two items is obviously crucial in understanding the change in operating cash flow between 2001 and 2002.

Selected changes in working capital accounts are frequently cited when explaining year-to-year changes in operating cash flow. Conoco Phillips, Emerson Electric Co., The Fairchild Co., and Kennametal, Inc., are examples presented in Exhibit 6.2. Making the nonrecurring determination turns on identifying changes that result from discrete events and not simply changes that are a function of growth or decline in level of business activity. For example, Kennametal notes that “the continued reduction in working capital reflects our initiatives to generate strong cash flow.”⁷

Management identification of what appear to be items of nonrecurring operating cash flow are usually not comprehensive in nature, and the information is seldom organized in such a way that a revised measure of operating cash flow is easily discerned. However, we have located some companies that did provide somewhat more comprehensive revisions of GAAP operating cash flow.

Company Revisions of Cash Flows from Operating Activities

Examples of two companies that revised operating cash flow to remove nonrecurring items are provided. The first, Avon Products, Inc., provided relevant information in text form. The second, Delphi Corp., used a statement format.

Avon Products: Textual Revision of Operating Cash Flow

Avon Products highlights the importance of identifying nonrecurring operating cash flows by disclosing several in the text of the Liquidity and Capital Resources section of its MD&A.

Liquidity and Capital Resources—Cash Flow (in millions)

Net cash provided by operating activities was \$182.1 unfavorable to 2001. 2002 results reflect increased U.S. pension plan contributions of \$95.0, a tax payment of \$20.0 deferred from 2001 and increased cash payments of \$35.6 associated with restructuring activities. 2001 results reflect the receipt of a federal income tax refund of \$95.2 and the net cash settlement with Sears of \$25.9. Excluding these items, net cash from operations was \$109.6 higher than the prior year.⁸

Avon does not refer to the above items as nonrecurring. However, their use to facilitate a more meaningful comparison of 2002 to 2001 by developing a revised measure of changes in operating cash flow implies nonrecurring status. Note that on an as-reported basis, 2002 operating cash flow is, as reported by the company, “unfavorable to 2001.” However, after excluding nonrecurring items, 2002 net cash from operations exceeded that in 2001 by \$109.6 million. This analysis is consistent with the frequent practice of recasting net income to measures of operating or pro forma earnings.

We summarize the Avon disclosures in Exhibit 6.3. The exhibit is a prelude to a comprehensive worksheet for revising operating cash flow to be introduced in Chapter 7. The worksheet will be used to summarize information on nonrecurring items of operating cash flow and transform reported operating cash flow for each year into sustainable amounts. As noted in the exhibit, Avon’s operating cash flow adjusts for a total of five distinct nonrecurring revision items:

1. An outsized pension contribution
2. A delayed tax payment
3. Increased restructuring payments
4. An income tax refund
5. A settlement payment to Sears

The recasting of Avon’s cash flow data, presented in Exhibit 6.3, requires adding back nonrecurring cash uses and deducting nonrecurring cash sources. Notice that Avon reaches back to 2001 and deducts a tax that was incurred in 2001 but actually paid in 2002. It adds it back to 2002 cash flow. This adjustment is quite different from the others because it involves shifting a cash flow to another period. Shifting the tax cash flow achieves a matching of the tax payment with the taxable income in 2001 that created the tax obligation. Matching is, of course, the central feature of accrual accounting, but it is normally not a characteristic of cash flow presentations. Cash flows normally are reported in the same period as the cash receipts and disbursements. Each of the other adjustment items is simply added to or deducted from as-reported operating cash flow.

The restructuring payments added back in 2002 are identified as “increased” payments. This would fit with the earlier suggestion that some items are treated as nonrecurring based their being irregular in amount. That is, this additional payment level is not expected to continue. The tax refund is deducted in the year received, 2001, because its

Exhibit 6.3 Revision of Operating Cash Flow to Remove Nonrecurring Items, Avon Products, Inc., Years Ended December 31, 2001, and 2002 (\$ millions)

	2001	2002	(Decrease) Increase
As reported cash flows from operating activities	\$747.5	\$565.4	\$(182.1)
Add:			
Increased pension contribution		95.0	
Tax payment deferred from 2001 to 2002		20.0	
Increased restructuring payments		35.6	
Deduct:			
Settlement payment to Sears	(25.9)		
Income tax refund received	(95.2)		
Tax payment deferred from 2001 to 2002	(20.0)		
Sustainable cash flows	\$606.4	\$716.0	\$ 109.6

Source: Avon Products, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 35.

nonrecurring character inflates the 2001 level of operating cash flow. The increased pension contribution is added back in 2002 because this increased or irregular payment understates 2002 sustainable operating cash flow.

The revision of earnings as opposed operating cash flow always makes adjustments for the tax effects, if any, of nonrecurring items. Avon does not make adjustments for tax effects of taxable or tax deductible items. As a result, its cash flow adjustments are overstated. That is, tax effecting with a combined federal and state tax rate of 40 percent reduces the pension adjustment to \$57 million ($\$95 \text{ million} \times .60$), the restructuring payments to \$21.4 million ($\$35.6 \text{ million} \times .60$); and the Sears settlement to \$15.5 million ($\$25.9 \text{ million} \times .60$). The 40 percent combined tax rate is a reasonable approximation of Avon's marginal federal and state tax rates. Multiplication of the nonrecurring cash flows by 60 percent, or 1 minus the marginal rate of 40 percent, reduces these cash flows to their after-tax amounts. The issue of tax adjustments is discussed further in Chapter 7.

Avon's motivation for providing information that permits the revising of its operating cash flow would seem to be apparent. The company's reported cash provided by operating activities declined by \$182.1 million between 2001 and 2002. However, Avon believes that this unadjusted comparison obscured the real trend in operating cash flow due to nonrecurring items in both 2001 and 2002. The adjusted data show an increase in cash from operations of \$109.6 million. Avon went on to observe that this increase in operating cash flow was due mainly to higher net income.

Delphi Corporation: Schedule Presentation of Adjustments to Operating Cash Flow

Delphi Corporation provides another example of a firm making adjustments to reported operating cash flow. Unlike Avon Products, Delphi presented its data in a schedule or

statement format. The company's reconciliation of reported operating cash flow to a new measure of sustainable operating cash flow is presented in Exhibit 6.4.

The adjustments made to Delphi's reported operating cash flow include both nonrecurring items of operating cash flow as well as one reclassification adjustment to remove cash flow from the sale of accounts receivable from operations to financing cash flow.⁹ The nonrecurring items include pension contributions, payments related to employee and product line charges, signing bonuses, and separation and initial public offering-related items. The adjustment for sales of accounts receivable is a reclassification adjustment to remove these cash benefits from operations to financing cash flows. The deduction of capital expenditures is typical in the calculation of measures of free cash flow but not operating cash flow.¹⁰

The pension contributions added back in Exhibit 6.4 represent total pension contributions and not outsized amounts. An outsized amount would be the excess of current contributions over more typical amounts. An adjustment for the outsized amount is what one would expect to see in this revision. As was true of Avon Products, tax adjustments are not made in the Delphi revisions.¹¹

Although items of nonrecurring operating cash flow typically are present in company financials, locating them can be a challenge. Some guidance is provided in the sections that follow.

LOCATING NONRECURRING ITEMS OF OPERATING CASH FLOW

The key to locating items of nonrecurring operating cash flow is first to identify the nonrecurring items of revenue, gain, expense, and loss that may have an associated cash flow. Some of our earlier work focused on the income statement and provided guidance on locating nonrecurring items.¹² This research revealed that a substantial portion of all non-

Exhibit 6.4 Delphi Corporation, Adjusted Operating Cash Flow, Years Ended December 31, 2001 to 2003 (\$ millions)

	2001	2002	2003
Cash provided by operating activities as shown in our consolidated financial statements	\$1,360	\$2,073	\$ 737
Capital expenditures	(1,057)	(1,035)	(1,005)
Pension contributions	—	400	990
Cash paid for employee and product line charges	343	318	229
Cash paid for lump sum contract signing bonuses	—	—	125
Cash paid to GM for separation-related obligations and other IPO related adjustments	205	143	—
Decrease (increase) in sales of accounts receivables	—	(639)	144
Operating cash flow	\$ 851	\$1,260	\$1,220

Source: Delphi Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 7.

recurring items of revenue, gain, expense, and loss could be located by sequentially reviewing the income statement, statement of cash flows, operating activities section only, other income and expense note, inventory note, and income tax note. Management's discussion and analysis (MD&A), especially the discussion of comparative operating results, was also a fruitful source of information on nonrecurring items. Of even greater value in terms of the cash flow dimension is the Liquidity and Capital Resources section of the MD&A. Also, in recent years firms increasingly provide notes on restructuring charges that almost always include disclosures of nonrecurring operating cash flows.

After nonrecurring items of revenue, gain, expense, and loss have been located, a second step usually is required to establish if there is an associated cash flow. In some cases, locating nonrecurring items of income and determining their cash flow status will take place simultaneously. For example, the description of a nonrecurring item may make it clear that there is neither a current nor a future associated cash flow. An inventory write-down, like all asset write-downs, is a noncash item, and no additional search to locate an associated cash flow is necessary.

The items presented in the next sections are all nonrecurring or nonoperating items of cash flow.

Income Statement

Income statements often disclose the presence of nonrecurring items, a sampling of which is presented here. With each item, it is also necessary to determine whether there is a past, current, or future cash inflow or outflow. Detailed guidance on the process of determining cash flow status is presented later. Some limited commentary also will be provided in some of the case examples that follow.

ResMed, Inc.: Donations to Research Foundation

ResMed, Inc., reports a \$2.3 million deduction for "Donations to Research Foundation" in 2002.¹³ This charge is included in the operating expense section of the ResMed income statement. There is a charge in 2002, but none in either 2001 or 2003. The item appears to be nonrecurring. Detailed attention to determining if there is an associated cash flow is provided in a subsequent section. However, in this particular case one can infer that cash was paid in 2002 because of the absence of an addition to net income for a noncash "Donation to Research Foundation."

Timco Aviation Services: Gain on Extinguishment of Debt

Timco Aviation Services disclosed a \$27.3 million gain as a result of the retirement of debt.¹⁴ Most analysts would consider this gain to be nonrecurring. However, it is not a nonrecurring item of operating cash flow. The gain does have an associated cash flow, but this cash outflow, which was the payment required to retire the debt, was classified in the financing activities section of the statement of cash flows.

Continental Airlines, Inc.: Security Fee Reimbursement and Stabilization Act Grant

Continental Airlines, Inc., disclosed nonrecurring items in both its 2001 and 2003 income statements. The items were related to September 11, 2001, and its aftermath. The 2001 income statement disclosed a \$417 million Stabilization Act Grant and the 2003 income

statement a \$176 million Security Fee Reimbursement.¹⁵ Actual receipts in 2001 from the \$417 million Stabilization Act Grant were \$354 million.¹⁶ A footnote disclosure in the 2003 Continental annual report stated that “in May 2003, we received and recognized in earnings \$176 million in cash from the United States government pursuant to the Emergency Wartime Supplemental Appropriations Act enacted in April 2003.”¹⁷ In each case, these nonrecurring cash receipts were included in operating cash flow.

The difference between the \$417 million benefit recognized in the 2001 income statement and the actual amount collected during the year of \$354 million highlights the need to often go beyond the income statement to determine the amount and timing of associated cash flow.

Techne Corp.: Litigation Settlement

Techne displayed a \$17.5 million litigation settlement on the face of its 2002 income statement. The charge was listed among its operating expenses. No litigation charges were disclosed in either the 2001 or 2003 income statement. As a result, treating this item as nonrecurring seems appropriate.

The use of the word “settlement” often indicates that cash payments were paid. However, there still may be delays in making the actual cash distributions associated with such settlements. In addition, sometimes the settlement will involve the use of noncash assets, for example, shares of common stock. In such a case there would still be a nonrecurring charge, but it would not be an item of nonrecurring operating cash flow.

In the case of the Techne litigation, settlement did in fact imply that payment was made in 2002. Techne disclosed the payment in its discussion of 2002 results of operations in the MD&A:

In May 2002, the parties agreed to a \$17.5 million cash settlement of the dispute. The settlement was paid in June 2002 with cash on hand and the liquidation of approximately \$15 million of short-term available-for-sale investments.

The \$17.5 million payment made by Techne in a litigation settlement is clearly an item of nonrecurring operating cash flow.

Statement of Cash Flows: Operating Activities Section

The operating activities section of the statement of cash flow does disclose some items of nonrecurring operating cash flow. In addition, it aids the effort to determine whether nonrecurring items of revenue, gain, expense, and loss are cash items. The display of changes in working capital accounts within this section is also useful in efforts to assess whether some of the associated cash flows might be nonrecurring.

In many cases, it is actually the absence of an entry for a nonrecurring item in the operating activities section that is informative about cash flow. For example, there was no entry in the operating activities section of the Techne Corp. example immediately above for its \$17.5 million litigation charge in 2002. The absence of a cash outflow in 2002 for this charge would be implied if the charge were added back to 2002 net income in arriving at operating cash flow. However, a future cash outflow would not be ruled out. The charge simply may have been accrued in 2002 with payment to take place later. Further investigation would be needed to make this determination.

***Union Pacific Corporation & ChevronTexaco, Corp.:
Outsized Pension Contributions***

Union Pacific Corporation The 2002 operating activities section of Union Pacific's statement of cash flows lists "cash paid to pension plan" of \$225 million, with no contributions listed for 2000 and 2001.¹⁸ Union Pacific's defined benefit plans had losses on pension assets totaling \$401 million in 2000 and 2001, and the plans went from being over- to underfunded status. However, the combination of a \$297 million return on plan assets in 2003 and large funding contributions markedly improved the funded status of the plans. Union Pacific reported that it expected to make \$50 million of pension contributions in 2004, but that "the 2004 funded pension plan contribution was voluntary."¹⁹

It seems clear that some portion of the 2002 pension contribution should be considered to be a nonrecurring operating cash flow. In retrospect, if the dramatic losses on pension assets had been anticipated, then some portion of the large catch-up contribution in 2002 would have been made in 2000 and 2001. A recasting of operating cash flows of previous years would deduct some of the later, 2002, contributions. This sort of retroactive adjustment was illustrated in the income tax adjustment in the Avon Products example in Exhibit 6.3.

Such retroactive adjustments have not been part of the adjustments made to earnings for nonrecurring items. However, there has been some discussion of doing so in selected cases, for example, restructuring charges. This effort to smooth out cash flows tends to move away from simply registering cash movements in the period that the inflows or outflows occur. Smoothing, although it may be appropriate in some cases, tends to embrace the accrual concept that is antithetical to the thrust of the cash flow movement. As a general matter, we do not recommend revising the operating cash flow of previous years by placing cash flows into periods in which they did not take place.

ChevronTexaco Corp. ChevronTexaco highlighted its outsized 2003 pension contributions by placing them on a separate line item within the operating activities section of the statement of cash flows. The contributions are presented in Exhibit 6.5.

The information on pension contributions in the exhibit is of course not definitive in establishing that some or all of the pension contributions are nonrecurring in nature. However, disclosed pension contributions should be viewed as potential nonrecurring items of operating cash flow that require further investigation. In this particular case, further investigation leads to information in both the pension note and the Liquidity and Capital Resources section of the MD&A, which suggest that a large portion of the 2003 contribution is nonrecurring.²⁰

**Exhibit 6.5 ChevronTexaco Corp., Pension Contributions, Years Ended
December 31, 2001, 2002, and 2003 (\$ millions)**

	2001	2002	2003
Cash contributions to employee pension plans	\$(107)	\$(246)	\$(1,417)

Source: ChevronTexaco Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 49.

Beyond the pension contributions, the ChevronTexaco cash flow statement includes some other items that should be investigated to determine whether they indicate a nonrecurring operating cash flow. These potential nonrecurring items include what could be outsized dividend distributions from equity affiliates as well as possible nonrecurring cash flows associated with foreign currency gains and losses. A substantial 2002 increase in operating cash flow from a decrease in working capital also merits investigation.

Mississippi Chemical Corp.: Tax Refunds

Mississippi Chemical Corp. disclosed tax refunds received in both 2002 and 2003 on separate line items in the operating activities section of its statement of cash flows.²¹ These tax refunds were derived from provisions of the Job Creation and Workforce Assistance Act of 2002. Although Mississippi Chemical is not explicit on the specific source of this refund, it probably arose from the provision in the act that provided a temporary extension of from two to five years in the carryback period for net operating losses. These cash recoveries are clear items of nonrecurring operating cash flow.

The Beard Co.: Litigation Settlement

The Beard Co. disclosed cash collected from a litigation settlement on a separate line item in the 2003 operating activities section of its statement of cash flows. This cash inflow is very visible because the company presents its operating cash flow in the direct format. The operating activities section is presented in Exhibit 6.6.

Although very visible in the direct format, the settlement gain is not evident at all in the presentation of operating cash flows on an indirect basis. The settlement gain was included in a summary total with other income and expense items in the Beard Co. 2003 income statement. However, the receipt of cash could have been inferred from the fact that the settlement gain of \$1,162,000 was not deducted in reconciling net income to net cash

Exhibit 6.6 The Beard Co., Operating Activities Section of the Statement of Cash Flows, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Operating activities:			
Cash received from customers	\$ 768	\$ 499	\$ 593
Gain on settlement	—	—	1,162
Cash paid to suppliers and employees	(1,766)	(1,595)	(2,247)
Interest received	142	21	1
Interest paid	(106)	(430)	(160)
Taxes refunded	73	—	—
Operating cash flow from discontinued operations	(354)	(284)	(81)
Net cash used by operating activities	(1,243)	(1,789)	(732)

Source: The Beard Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 41.

used in operating activities. This would have been necessary if the gain was recognized but cash was not yet collected.

It is interesting to note that the Beard Co. makes it clear in the Liquidity and Capital Resources section of its MD&A that the settlement proceeds should not be viewed as recurring. It also points out that there would be a further settlement receipt of \$2,826,000 in 2004.

On the other hand, 2003 financial results have benefited, and 2004 results will benefit, from the McElmo Dome settlement in the gross amount of \$1,162,000 and \$2,826,000, respectively. The *settlement is a non-recurring item* (emphasis added), so we will not have this benefit in the future except to the extent that McElmo Dome operating results may benefit from improved pricing as a result of the settlement.²²

Changes in Working Capital Accounts

Changes in working capital accounts are disclosed within the operating activities section of the statement of cash flows. Some ebb and flow in working capital is a normal part of growth and decline in the level of business. However, additional attention should be given to changes that are either out of proportion to changes in the level of business activity or opposite in direction from what would be expected. That is, growth and decline in business normally are expected to result in increases and decreases, respectively, in net working capital. As with most initial identifications of potential nonrecurring operating cash flow items, further investigation is required to establish whether the effect of certain changes in working capital on operating cash flow should be considered nonrecurring.

Corn Products International, Inc.: Increases in Accounts Payable and Accrued Liabilities Corn Products International disclosed decreases in net working capital in both 2002 and 2003. Increases in accounts payable were exceeded by increases in accounts receivable and inventories, reducing net working capital and creating a source of operating cash flow. These changes amounted to \$65 million in 2002 and \$49 million in 2003.²³ Corn Products had relatively flat sales between 2001 and 2002, but a growth in sales of about 15 percent in 2003. It had a typical relationship of current assets and liabilities, with its working capital assets exceeding its working capital liabilities.

The reduction in net working capital in each of these years is not what would be expected with flat or growing sales. Therefore, this information would merit additional investigation to determine whether these operating cash flow benefits should be considered to be nonrecurring. Of the \$236 million of cash flow from operations in 2003, which represented an increase of \$30 million over 2002, \$49 million is attributable to the reduction in working capital. Absent these working capital reductions, cash flow from operations would have declined by \$30 million in 2002 and increased by \$46 million in 2003.

Corn Products did provide information that is relevant to making the nonrecurring judgment in the Liquidity and Capital Resources section of its MD&A:

We generated \$49 million of cash from changes in working capital in 2003, primarily reflecting improved accounts payable processing, as our working capital management program continued to contribute to cash flow growth.²⁴

It seems unlikely that the company can continue to produce incremental improvements in its working capital positions. Therefore, these cash flow benefits, while real, could be considered a nonrecurring source of operating cash flow.

Other Income and Expense Note

When provided, a note on other income and expenses can be a rich source of information on nonrecurring items, some of which also may prove to be items of nonrecurring operating cash flow. However, these disclosures usually are dominated by items that are either noncash or nonoperating. The disclosures need to be examined very carefully to identify potential nonrecurring operating cash flow items.

C. R. Bard, Inc.: Various Nonrecurring Items

C. R. Bard, Inc. provides a detailed other income and expense note that is presented in Exhibit 6.7.

The C.R. Bard note includes four potential nonrecurring operating cash flow items:

1. Foreign exchange gains and losses
2. Legal and patent settlements
3. Restructuring charges
4. Merger termination costs

The foreign exchange gains and losses would not be considered a nonrecurring item in this case because they are a key feature of Bard's international operations, are very small, and are a consistent component of other income and expense for at least back to 1998. If in the future a large cash foreign currency gain or loss were to occur, then treating some of the cash flow as nonrecurring might be in order.

The timing and amount of cash flows associated with the remaining items cannot be determined from their disclosure in the other income and expense note alone. Rather, other disclosures will need to be examined. Again, this process is illustrated in detail in

Exhibit 6.7 C. R. Bard, Inc., Other Income and Expense Note, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Interest income	\$(6,200)	\$ (6,500)	\$ (6,600)
Foreign exchange losses (gains)	1,100	(300)	1,000
Legal and patent settlements, net	(1,200)	(5,000)	54,500
Asset impairments	—	—	6,100
Divisional and manufacturing restructuring	—	33,700	(2,500)
Merger termination costs	—	6,200	(400)
Other, net	400	500	400
Total other (income) expense, net	\$(5,900)	\$28,600	\$52,500

Source: C. R. Bard, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. II-55.

the next section of this chapter. However, to provide some preliminary insight into cash flow status, the C. R. Bard statement of cash flows was examined. A “Provision for 2003 legal verdict” of \$58.0 million was added back to net income in reconciling net income to cash flow from operating activities. This charge was the major component of the \$54.5 million “Legal and patent settlements, net” in Exhibit 6.7. The addition of this charge to net income reveals that there was no cash outflow in 2003 for the dominant component of the legal and patent settlement charge, net. In addition, the entire 2002 restructuring charge of \$33.7 million was added back to net income.

Although arguably nonrecurring items in terms of earnings, neither the \$33.7 million restructuring charge in 2002 nor the legal verdict charge of \$58.0 million in 2003 represents nonrecurring operating cash flow items in the years in which they were accrued. However, if paid in subsequent periods, each of these items then could be considered items of nonrecurring operating cash flow.

The last prospective nonrecurring operating cash flow item from Exhibit 6.7 is the “Merger termination costs” item. The charge of \$6.2 million in 2002 appears to have been paid in 2002 because it was not added back to net income in the operating section of the statement of cash flows. Therefore, it is a nonrecurring operating cash outflow.²⁵

Inventory Note

Although the inventory note is often a source of information on nonrecurring charges and credits, these items seldom involve a current or prospective cash inflow or outflow. The most common nonrecurring item is the noncash write-down of inventory. However, disclosures of increases and decreases in earnings as a result of last in, first out (LIFO) liquidations are also quite common in inventory notes. The earnings effects of the LIFO liquidations are the result of cost-of-sales differences that result from reducing physical inventory levels and including older as opposed to current replacement costs in cost of sales. In almost all cases older costs are lower than current replacement costs and the LIFO liquidations increase pretax earnings.

There are also two potential nonrecurring operating cash flow effects. First, there is a nonrecurring cash benefit associated with the inventory reduction if there is no plan to restore the inventory levels. However, offsetting this to some extent are the increased cash tax payments or tax recoveries for firms in a loss position.

Union Carbide: Effect of LIFO Liquidations

This disclosure of LIFO liquidations is from the inventory note of Union Carbide Corp.:

A reduction of certain inventories resulted in liquidation of some quantities of LIFO inventory, which increased pretax income by \$2 million in 2003, and reduced pretax loss by \$31 million in 2002 and \$53 million in 2001.²⁶

Union Carbide’s results are improved as income is increased or losses reduced by the introduction of older and lower costs into the cost of sales calculation while the products are sold at current price levels. The gains and losses associated with LIFO liquidations typically are considered to be nonrecurring in terms of earnings analysis.

Union Carbide’s disclosures reveal that, despite its pretax loss position in 2001 and 2002, it did pay income taxes of \$49 million in 2002 and \$17 million in 2003, while receiving tax recoveries of \$32 million in 2001.²⁷ As a result, the LIFO liquidations would

have the effect of reducing the tax recovery in 2001, by reducing the loss carryback and associated recovery of previous tax payments and increasing tax payments in both 2002 and 2003. If the LIFO liquidation gains are considered to be nonrecurring, then the associated cash tax effects should be as well.

Income Tax Note

Income tax notes often include disclosures of additional tax payments or receipts that are the result of settling tax disputes with governments. This topic was discussed extensively in Chapter 5. In addition, the tax benefits of carrying net operating losses (NOLs) either back, providing refunds, or forward, providing reductions in future tax payments, sometimes are disclosed as well. These tax items are generally viewed as nonrecurring in earnings analysis and also would be considered to be nonrecurring items of operating cash flow if there are associated cash inflows or outflows.

Albemarle Corp.: Cash Tax Settlement

Albemarle Corp. disclosed the receipt of cash from a tax settlement. Interestingly, this nonrecurring operating cash inflow was divided between taxes and other income. The disclosure of the item of nonrecurring operating cash inflow was in a footnote to Albemarle's tax note.

On April 25, 2002, the Company received a favorable tax settlement of \$4,509,000, which included interest of \$2,017,000 (reflected in other income, net), from the Internal Revenue Service on its claims for adjustments of export benefits for the years 1994 and 1995.²⁸

Albemarle also disclosed receipt of an additional tax refund of \$6,199,000 in 2003.²⁹ In addition to disclosure in the text of its tax footnote, the Company also highlighted the presence of the two tax benefits in the reconciliation of the federal statutory to the effective income tax rates. This schedule is provided in Exhibit 6.8.

Other Notes

The footnotes just discussed are important, but they represent only a small portion of the total footnotes found in a typical annual report. Almost any footnote has the potential either to reveal a nonrecurring item or to help to establish its cash flow status. Because time is never unlimited or without cost, a cost-effective search for nonrecurring items of operating cash flow should permit the examination of only a subset of footnotes and other disclosures. That is, a less than exhaustive search should make it possible to identify most material nonrecurring items of operating cash flow. Some guidance in making these choices is provided at the end of this chapter. The additional notes discussed next also have a reasonable likelihood of revealing nonrecurring items and their associated cash flow status.

The Coca-Cola Co.: Restructurings

Note disclosures of restructuring charges are a very common source of information on nonrecurring items of operating cash flow. These disclosures are very useful because of

Exhibit 6.8 Albemarle Corp., Tax Reconciliation Schedule, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands, except for percentages)

	2001	2002	2003
	Percent of Income before Income Taxes		
Federal statutory rate	35.0%	35.0%	35.0%
Foreign sales corporation/Extraterritorial tax benefit	(1.9)	(2.7)	(2.7)
State taxes, net of federal tax benefit	1.1	0.9	0.9
Depletion	(1.8)	(1.8)	(2.0)
Valuation allowance	(2.6)	—	—
Revaluation of reserve requirements	—	—	(8.5) ^a
Export benefit adjustment & IRS settlement	—	(2.5) ^b	(5.1) ^a
Other items, net	0.1	(1.1)	(1.8)
Effective income tax rate	29.9%	27.8%	15.8%

^a During 2003, the company received a \$6,199,000 refund including interest of \$2,711,000 (\$1,727,000 after income taxes) relating to the IRS's examination of the company's 1996 and 1997 tax returns and released \$7,516,000 to earnings upon finalization of IRS's examination of the company's 1998 and 1999 tax returns.

^b On April 25, 2002, the company received a favorable tax settlement of \$4,509,000, which included interest of \$2,017,000, from the IRS on its claims for adjustments of export benefits for the years 1994 and 1995.

Source: Albemarle Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, pp. 42–43.

timing differences between when such charges are recorded in the income statement and when they are actually paid. In addition, a portion of these charges typically involves asset write-downs and impairment charges that do not result in either current or future cash outflows. Although “restructuring” is the generic label given to these charges, a variety of different labels also are used. Most involve words beginning with the letter “r,” such as: rationalizing, reorganizing, redeploying, reengineering, and rightsizing.

Coca-Cola deviated from the “r” norm by using an “s” word to describe its restructuring efforts. Its restructuring disclosure is provided in Exhibit 6.9. The schedule reveals that of the total streamlining costs of \$561 million incurred in 2003, only \$219 million involved a cash outflow. Moreover, the asset impairment component will never require a cash payment. Most of the remaining accrued streamlining balance will require a cash payment in subsequent years.

In addition to the streamlining note, the streamlining costs in Exhibit 6.9 were also disclosed in MD&A.³⁰

Restructuring payments usually will be considered to be nonrecurring operating cash flows. However, for some firms that appear to be in a constant state of restructuring, the nonrecurring classification in general might not apply. However, occasional outsized restructuring payments still might be considered to be nonrecurring operating

Exhibit 6.9 The Coca-Cola Co., Streamlining Note, Year Ended December 31, 2003 (\$ millions)

	Costs Incurred	Payments	Noncash and Exchange	Accrued Balance Dec. 31, 2003
Severance pay and benefits	\$248	\$(113)	\$ 3	\$138
Retirement related benefits	43	—	(14)	29
Outside services—legal, etc.	36	(25)	—	11
Other direct costs	133	(81)	(1)	51
Total	\$460	\$(219)	\$(12)	\$229
Asset impairments	\$101			
Total costs incurred	\$561			

Source: The Coca-Cola Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 94.

cash outflows. The influence of the 2003 streamlining payments was referenced in the Liquidity and Capital Resources section of MD&A: “Streamlining costs in 2003 accounted for significant cash payments.”³¹ Although classified as other operating charges, the streamlining costs were disclosed as separate line items in both the Coca-Cola income statement and statement of cash flows.³²

AT&T Corp.: Supplementary Cash Flow Information

Firms provide selected supplementary cash flow information either as part of the statement of cash flows or in a separate note. The key information in terms of nonrecurring items of operating cash flow is the amount of income taxes paid or recovered. AT&T Corp. provided this supplementary information in a separate note to its financial statements. Exhibit 6.10 provides the AT&T tax payments and receipts for years ended December 31, 2001, 2002, and 2003.

AT&T highlighted the significance of the disclosures about its tax receipts and payments by discussing their contribution to its operating cash flow: “Favorably impacting cash flow in 2002 were income tax receipts of \$0.8 billion compared with income tax

Exhibit 6.10 AT&T Corp., Disclosure of Tax Receipts and Payments, Year Ended December 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Income tax (receipts) payments	\$1,441	\$(814)	\$(1,201)

Source: AT&T Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 54.

payments of \$1.4 billion in 2001.”³³ Tax payments are as recurring as the taxable earnings that drive them. However, tax receipts, or refunds, are inherently nonrecurring because they are a product of losses that are carried back, usually for two years, to offset previous taxable income and recover the earlier tax payments. The potential tax recoveries are limited to the amount of the current loss and the profits in the carryback period. Therefore, the contribution of these tax refunds to operating cash flow is not sustainable.

Management’s Discussion and Analysis

The most fruitful sections of the MD&A in locating nonrecurring items of operating cash flow are those that focus on explaining changes in earnings for successive years, for example, 2002 to 2003 and 2003 to 2004, as well as the section on Liquidity and Capital Resources.

Earnings Comparisons

It is standard for MD&A to include earnings comparisons for the last three years. For example, a 2005 10-K report will include a discussion of the reasons for changes in earnings for 2003 to 2004 and 2004 to 2005. It is also typical for firms to disclose nonrecurring items of revenue, gain, expense, and loss in explaining the reasons for these earnings changes. However, it is important to note that the focus of MD&A is typically on earnings information. Although occasionally information about cash flow may be disclosed, this section of the MD&A is not cash flow oriented. Accordingly, usually additional analysis is required to establish if and when an identified nonrecurring item of earnings is associated with an operating cash flow.

Timco Aviation Services, Inc.: Collection of Fully Reserved Account Receivable Timco Aviation Services disclosed a nonrecurring operating cash inflow from the collection of an account receivable. As it noted: “We resolved a long standing customer dispute and collected \$925 thousand of accounts receivable that was previously fully reserved.”³⁴ This disclosure simultaneously reveals this nonrecurring item of operating income as well as the fact that an associated cash inflow took place in the same reporting period.

Liquidity and Capital Resources

The Liquidity and Capital Resources section of the MD&A is cash flow oriented, especially the Liquidity section. Of special value is the discussion of changes in cash flows from operating activities for adjacent years. Management often discloses nonrecurring items of operating cash flow as a part of this process of explaining changes in operating cash flow.

Krispy Kreme Doughnuts, Inc.: Stock Option Tax Benefits Krispy Kreme disclosed cash benefits from the exercise by employees of their stock options in its Liquidity and Capital Resources section. The recent cash benefit for fiscal 2004 of \$42.8 million was 210 percent higher than the fiscal 2003 benefit of \$13.8 million.³⁵ Krispy Kreme’s management signaled the potentially nonrecurring character of this benefit in this statement: “The Company’s operating cash flows may continue to be favorably impacted by similar tax benefits in the future; however, the exercise of stock options is outside of the Company’s control.”³⁶

The Krispy Kreme disclosures confirm a current reduction in cash tax payments.³⁷ That is, the option tax benefits have been realized. However, realization in this case takes the form of a reduction in tax payments and not an inflow of cash. The Chapter 5 discussion on the tax benefits of stock options makes it clear that the recognition of these benefits and the realization of the associated cash benefit may not occur in the same period.

The fiscal 2004 realized tax benefits from stock options amounted to 45 percent of Krispy Kreme's cash flow from operating activities. A decline in the value of the Krispy Kreme common stock could significantly reduce the option tax benefits and with it the company's operating cash flow. The Krispy Kreme tax benefits from stock options are clearly a nonrecurring source of operating cash flow.³⁸

Oxford Industries, Inc.: Inventory Reduction In a comparison of operating cash flow from 2001 to 2002, the Liquidity and Capital Resources section of Oxford Industries highlights a large inventory reduction: "Inventory declined \$62,829,000 or 43% from \$147,370,000 in 2001 to \$84,541,000 in 2002 due to better asset management."³⁹ Inventory reductions of this magnitude due to "better asset management" are unlikely to be sustained. This lack of sustainability of inventory reductions is affirmed by the subsequent inventory increase of \$20 million in 2003.

Kroger Co.: Accounts Payable, Tax Benefits, and Pension Plan Contributions Kroger identified fluctuations in accounts payable balances as contributing to increases in 2002 operating cash flows and decreases in 2003. In the case of 2002, Kroger states: "In 2002, our accounts payable balances increased substantially due to an enterprise system conversion that enabled our western divisions to improve their accounts payable position."⁴⁰ The 2003 decrease in accounts payable was due to another change related to the transfer of deposits to concentration accounts.

Kroger also highlights the transient nature of tax savings resulting from post-September 11 tax legislation:

The amount of cash paid for income taxes in 2003 and 2002 was lower than the amount paid in 2001 due, in part, to a tax law benefit that will continue through 2004. Under current law, the bonus depreciation provision will expire in December 2004 and we expect the cash benefit will begin to reverse in 2005.⁴¹

Kroger also disclosed these tax benefits of \$22 million in 2001, \$106 million in 2002, and \$130 million in its income tax note.

Finally, Kroger also made reference, as part of an explanation of changes in year-to-year operating cash flow, to a pension contribution: "Our 2003 operating cash flow results also reflect a \$100 million cash contribution to our company-sponsored pension plan."⁴² The pension note disclosed a \$4 million pension contribution in 2002 and \$104 million in 2003. Kroger also disclosed planned contributions of \$34 million on September 15, 2004, plus an additional contribution on the same date of \$149 million. This language implies that the \$34 million is required and the \$149 million is probably more discretionary. Also in the pension note, Kroger reports that these 2004 contributions "will reduce minimum required contributions in future years."⁴³

The characteristic shared by each of the items disclosed and discussed by Kroger is their nonrecurring or irregular contribution to operating cash flows. The Kroger Liquidity

and Capital Resources disclosures are an especially rich example of the disclosure of information that is helpful in the effort to identify items of nonrecurring operating cash flow.

The discussion in this section on locating potential nonrecurring items of operating cash flow is not intended to be exhaustive. For example, only a subset of notes to the financial statements that might yield nonoperating or nonrecurring operating cash flow items is reviewed. However, we believe that these disclosures are those most likely to be fruitful in locating both nonoperating and nonrecurring items of operating cash flow. Once the items are located, further analysis usually is required to determine if and when a nonoperating or nonrecurring item will produce a source or use of cash flow. This is the focus of the next section.

CASH FLOW TRACKING

In a limited number of cases the initial identification of a nonrecurring item and the determination of its cash flow status take place simultaneously. For example, the 2003 Pilgrims Pride Corp. income statement listed a line item for \$45 million in nonrecurring recoveries. This early disclosure in the search procedure, as well as the use of the term “recoveries,” made it clear that the items in this income statement entry were cash flow backed.⁴⁴ These nonrecurring items consisted of payments received from the U.S. government related to an avian influenza outbreak and litigation proceeds.⁴⁵ However, in most cases a number of different steps and the examination of several disclosures are necessary in order to establish that a nonrecurring cash flow has occurred. We refer to this process as cash flow tracking and illustrate it with a series of case examples.

Bristol-Myers Squibb Co. Litigation Settlement Charge

Cash paid or received related to litigation is one of the more common nonrecurring operating cash flow items.⁴⁶ The Bristol-Myers Squibb Co. income statement for 2002 includes a litigation settlement charge of \$659 million.⁴⁷ The charge or expense is recorded on the basis of accrual accounting principles, and it is not possible to tell from the income statement entry alone whether cash has been paid or not. The best way to establish that cash was not paid is to review the operating activities section of the 2002 statement of cash flows and look for an addition of the litigation charge back to net income. In fact, the entire charge was added back to net income in arriving at cash from operating activities, indicating that cash was not paid in 2002.

If the litigation charge did not appear in the operating section of the Bristol-Myers cash flow statement, then a review of the income tax note is a useful alternative source of information about the item’s cash flow status. If Bristol-Myers accrues a litigation charge on its books that it has not yet paid, then a temporary difference is created. That is, an expense is recorded on the income statement that will become a deduction in the tax return only when cash is paid to settle the litigation. A deferred tax asset would be recorded to reflect the future tax savings associated with the litigation charge.

The relevant portion of the Bristol-Myers tax note—the schedule of deferred tax assets and liabilities—in fact revealed a deferred tax asset for the legal settlement. This information is presented in Exhibit 6.11.

The \$207 million deferred tax asset in the exhibit represents the future tax savings that

Exhibit 6.11 Bristol-Myers Squibb Co., Deferred Tax Asset and Legal Settlement, Years Ended December 31, 2001, and 2002 (\$ millions)

	2001	2002
Legal settlement	—	\$207

Source: Bristol-Myers Squibb Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 71.

will be realized when the litigation settlement of \$659 million is paid and an expense deduction then is taken in the Bristol-Myers income tax return. Again, the presence of this deferred tax asset indicates that the deduction for the legal settlement was taken in the income statement but not yet in the tax return.

The tax rate used in recording the Bristol-Myers deferred tax asset is about 31 percent. This is determined by dividing the \$207 million deferred tax asset by the associated \$659 million legal settlement ($\$207 \text{ million} / \$659 \text{ million} = 31 \text{ percent}$). This somewhat reduced rate is not surprising because the Bristol-Myers effective income tax rates from 2000 to 2002 were 25, 3, and 16 percent, respectively. The primary sources of these reduced effective rates were operations in locations with lower tax rates, including Ireland, Puerto Rico, and Switzerland.⁴⁸

Although it was not paid in 2002, the Bristol-Myers 2003 disclosures reveal the actual payment of the 2002 litigation charge. The 2003 Bristol-Myers income statement shows the accrual of new net litigation charges of \$199 million. Net charges were only \$77 million in 2001, reinforcing the view that much of the 2002 charge, and associated 2003 cash payment, should be viewed as nonrecurring. The 2003 Bristol-Myers statement of cash flows shows litigation settlement payments, net of receipts, of \$604 million.⁴⁹ Although the receipts are not disclosed, it is clear that most if not all of the 2002 litigation charges were paid in 2003.

In the absence of disclosure of the payment in the 2003 operating activities section of the Bristol-Myers statement of cash flows, the behavior during 2003 of the litigation-related deferred tax asset was consistent with the payment having been made. That is, the \$207 million deferred tax asset in Exhibit 6.11 was no longer present in 2003.⁵⁰ The unrealized tax savings of \$207 million associated with the legal settlement charge of \$659 were realized. The legal settlement was paid and a deduction was taken in the Bristol-Myers tax return. This deduction of \$659 million shielded a like amount of income from taxation and saved \$207 million in taxes.

Cox Communications, Inc.: Pension Contributions

The Pilgims Pride Corp. and Bristol-Myers Squibb Co. nonrecurring items of operating cash flow were located early in the standard search sequence discussed earlier in this chapter. Moreover, the cash flow status of these companies was quickly established. However, the search sequence that is quite effective in locating nonrecurring income items needs an important modification when the ultimate objective is to locate nonoper-

ating and nonrecurring items of operating cash flow. The Liquidity and Capital Resources section of MD&A should be reviewed early in the search process.

In the Cox Communications, Inc., case, an examination of the income statement, operating activities section of the statement of cash flows, other income and expense note, or income tax note did not suggest the presence of a nonrecurring pension cash outflow. However, a review of the Liquidity and Capital Resources section of the Cox Communications MD&A and the pension note disclosed an outsized pension contribution in 2003. The Liquidity and Capital Resources section included this statement: “Cox contributed its total planned 2003 plan year contributions for the funded pension plans during 2003. Due to this accelerated contribution, Cox does not anticipate additional contributions during 2004 for the funded pension plans.”⁵¹

The outsized pension contribution also was revealed by the disclosure of changes in plan assets of the Cox Communications defined benefit pension plans presented in Exhibit 6.12.

The nonrecurring operating cash flow in the Cox Communications case would be the difference between the actual contribution in 2003 and a more typical contribution level. This excess of the actual contribution over a more typical level would be added back to reported cash flow from operating activities. The adjustment typically would be on an after-tax basis.

Metro-Goldwyn-Mayer, Inc.: Due Diligence Expenses

Metro-Goldwyn-Mayer (MGM) disclosed a charge in its income statement for 2003 that was titled “due diligence expenses.”⁵² The charge was added back to its net loss in arriving at cash flows from operating activities.⁵³ This disclosure normally would indicate that the charge did not involve a cash payment in 2003. If so, then as was the case with the litigation charge of Bristol-Myers Squibb, a deferred tax asset should appear in the income tax note. That is, an expense was recorded on the income statement that was unlikely to have been deductible in the tax return because it was not paid in cash. However, a review of the MGM schedule of deferred tax assets and liabilities revealed no such deferred tax asset.”⁵⁴

Exhibit 6.12 Cox Communications, Inc., Selected Pension Disclosures, Years Ending December 31, 2002, and 2003 (\$ thousands)

	2002	2003
Change in Plan Assets		
Fair value of plan assets at beginning of year	\$158,101	\$176,571
Actual return (loss) on plan assets	(7,323)	45,274
Employer contributions	28,448	55,915
Benefits paid	(2,655)	(3,055)
Fair value of plan assets at end of year	\$176,571	\$274,705

Source: Cox Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 81.

A return to the MGM statement of cash flows revealed that the “due diligence expenses” added back to the MGM net loss were listed as a cash outflow in the investing activities section of the 2003 statement of cash flows. So there was a nonrecurring expense and a cash outflow linked to that expense. However, the cash outflow was classified as an investing item and is not a nonrecurring item of operating cash flow. As demonstrated here, in cash flow tracking it is important to look beyond just the operating activities section of the statement of cash flows.

EarthLink, Inc.: Merger-Related Charges

The 2000 income statement of EarthLink revealed “merger related charges” of \$33,967,000. The operating activities section of the statement of cash flows was examined to determine if there was any associated cash flow and, if so, its classification within the statement of cash flows. There was no add back to EarthLink’s net loss for the year in the operating activities section. Therefore, the implication was that there were cash payments for the charges. That is, the charges reduced earnings and also were paid in cash during the same period. Both earnings and operating cash flows were reduced.

Further tracking of the charges beyond the income statement and statement of cash flows, to include a review of notes to the financial statements, provides additional insight. A note on Merger and Restructuring and Facility Exit Costs revealed that \$32,891,000 of the \$33,967,000 of charges was paid during the year 2000. The difference between these two amounts constitutes a noncash charge. Although not material in amount, nonrecurring operating cash payments would have been overstated by \$1,076,000 (\$33,967,000 – \$32,891,000) in the absence of moving beyond the statement of cash flows to the footnote disclosure.⁵⁵

Newell Rubbermaid, Inc.: Interest Rate Swap Termination

The Liquidity and Capital Resources section of the MD&A should be reviewed early in the search process for nonrecurring items of operating cash flow. In the Newell Rubbermaid, Inc., income statement, the operating section of the statement of cash flows, other income and expense note, inventory note, and tax note yielded nothing about the operating cash inflow from an interest rate swap termination that eventually was located. However, this item was disclosed both as an additional note to the financial statements and in the Liquidity and Capital Resources section of the Newell Rubbermaid MD&A. The relevant portion of the note follows:

Gains and losses resulting from the early termination of interest rate swaps are deferred as an increase or decrease to the carrying value of the related debt and amortized as an adjustment to the yield of the related debt instrument over the remaining period originally covered by the swap. The cash received relating to the termination of interest rate swaps is included in “other” as an operating activity in the Consolidated Statement of Cash Flows.⁵⁶

In this case of cash tracking, the nonrecurring item is located simultaneously with the revelation that the cash flow from the swap termination was classified in operating cash inflow. However, this disclosure did not reveal the amount of the cash inflow. The referenced line item, “other,” in the operating activities section of the statement of cash flows

might include more than just the swap termination cash inflow. The disclosure in the Liquidity and Capital Resources section provided a detailed listing of sources and uses of liquidity and capital resources. Included was this paragraph:

Cash provided from operating activities for the year ended December 31, 2003 was \$773.2 million compared to \$868.9 million for the comparable period of 2002. The decrease in cash provided from operating activities was due to a decrease in earnings before non-cash charges of \$29.0 million . . . and a reduction in the year-over-year improvement in working capital and other assets in 2003 versus 2002, which used an additional \$74.2 million, partially offset by an increase in deferred gains relating to the early termination of certain interest rate swap arrangements. The deferred gain from these swap agreements was \$28.3 million in 2003 compared to \$20.8 million in 2002 and was included in other in the Consolidated Statement of Cash Flows.⁵⁷

Notice that the cash received of \$20.8 million in 2002 and \$28.3 million in 2003 from the swap terminations is disclosed in the excerpt from the Liquidity and Capital Resources section. We would consider these swap termination cash flows to be nonrecurring in view of the substantial uncertainty surrounding their likely sustainability.

Summary of Cash Flow Tracking

There is inherent potential for overlap of the processes of locating potential items of nonrecurring operating cash flow and determining their cash flow status. In some cases, the steps merge into one. The initial identification of a potential nonrecurring component of operating flow usually must be followed up with further analysis to determine its cash flow status. We characterize this process as cash flow tracking.

In earnings analysis, the search sequence for nonrecurring items of revenue, gain, expense, and loss normally starts with the income statement and then moves to the operating activities section of the statement of cash flows, the other income and expense note, the inventory note, the income tax notes, other notes, and MD&A. This same general sequence is recommended in searching for potential nonrecurring operating cash flow items. However, our experience suggests that making the MD&A, and in particular the section on Liquidity and Capital Resources, step 1 in the process can accelerate and make more efficient the location of many nonrecurring items of operating cash flow.

Reviewing the Liquidity and Capital Resources section as step 1 in the overall process of locating nonrecurring items of operating cash flow will, in some cases, collapse the identification and determination of cash flow status. However, when MD&A is less forthcoming, determination of the cash flow status of various items will require the cash flow tracking method illustrated here. Cash flow tracking entails the steps presented in Exhibit 6.13.

SUMMARY

The nine key points raised in this chapter include:

1. There is a long tradition of adjusting reported net income for the effects of nonrecurring items of revenue, gain, expense, and loss. The logic is that these

Exhibit 6.13 Summary of the Cash Flow Tracking Process

1. Identifying potential nonrecurring items of operating cash flow, usually in the income statement, but in other cases in notes to the financial statements or the MD&A.
2. Tracking these items to the statement of cash flows, operating-activities section, to determine if the potential nonrecurring operating cash flow items are adjustments, added to or deducted from net income or loss, in arriving at operating cash flow. Adjustments may indicate either that the item has no associated current cash flow or that it is not an operating cash flow element, or both.
3. Tracking items to the tax note to determine whether either deferred tax assets or liabilities have emerged that appear to be associated with the potential nonrecurring operating cash flow item. The emergence of a deferred tax asset usually will indicate that an expense recorded in the income statement has not yet been paid and is therefore not yet deductible in the tax return. A deferred tax liability usually will indicate that income has been recognized on the books but not in the tax return because cash has not yet been collected.

adjusted results provide more reliable indicators of underlying operating performance and that they also are a sounder basis from which to develop forecasts of future earnings. We believe that the same position is applicable to operating cash flow.

2. Nonrecurring items of operating cash flow share one or more of the following characteristics:
 - a. Irregular in occurrence
 - b. Irregular in amount
 - c. Not associated with the core operating activities of the firm
3. The identification of nonrecurring items of operating cash flow involves the exercise of considerable judgment. At times it is difficult simply to render a yes/no decision on a nonrecurring classification. Gradations of nonrecurring cash flow are introduced in the next chapter as an approach to dealing with this important judgmental component of identifying operating cash flows.
4. There is a great deal of variety in items that can reasonably be considered nonrecurring items of operating cash flow. Most of these items have an income statement counterpart. Two common examples are litigation charges and restructuring charges.
5. A small subset of nonrecurring operating cash flow items has no income statement counterpart. Outsized changes in working capital and outsized pension contributions are two examples.
6. The initial search for nonrecurring items of operating cash flow follows in broad outline the same process employed to locate nonrecurring items of revenue, gain, expense, and loss. A key addition to the search process is an early careful review of the Liquidity and Capital Resources section of MD&A. This is a very rich source of information on nonrecurring items of operating cash flow. Moreover, this section typically discloses nonrecurring items and their cash flow status simultaneously.

7. Once potential items of nonrecurring operating cash flow are identified, often a second step is necessary to establish if and when cash inflows and outflows occur. We refer to this process as cash flow tracking.
8. The operating activities section of the statement of cash flows, the Liquidity and Capital Resources section of the MDA, and the income tax note are some of the most important tools used in cash flow tracking.
9. It is rare for firms to revise systematically and comprehensively their reported operating cash flow by removing nonrecurring items. However, it is becoming more common for firms to make limited adjustments designed to remove the effects of nonrecurring items of operating cash flow.

NOTES

1. Comcast Corp., annual report, December 31, 2003, p. 17.
2. Cox Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 83.
3. See E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2000), chapter 3, for an extensive presentation on the revision of earnings that removes nonrecurring items of revenue, gain, expense, and loss from reported earnings.
4. While made about earnings, one could readily substitute “operating cash flow” for “earnings” into this statement from a study made by a committee of the American Institute of Certified Public Accountants: “Users want information about the portion of a company’s reported earnings that is stable or recurring and that provides a basis for estimating sustainable earnings.” American Institute of Certified Public Accountants, *Improving Business Reporting—A Customer Focus* (New York: AICPA, 1993), p. 4.
5. Cox Communications, Inc., Form 10-K annual report to the SEC.
6. Kellogg Company, annual report, December 31, 2003, p. 25.
7. Kennametal, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 38.
8. Avon Products, Inc., annual report, December 31, 2002, p. 34.
9. The treatment of sales of accounts receivable is discussed in Chapter 4.
10. Chapter 10 is devoted to free cash flow.
11. A report by the Center for Financial Research and Analysis, “The Pro-forma Presentation of Operating Cash Flow,” April 23, 2004, is quite critical of Delphi’s restated operating cash flow. We share the report’s concern about the failure to make tax adjustments as well as treating the entire amount of the pension contributions as nonrecurring.
12. C. Mulford and E. Comiskey, *Financial Warnings* (New York: John Wiley & Sons, 1996), chapters 5 and 6, and Comiskey and Mulford, *Guide to Financial Reporting and Analysis*, chapters 2 and 3.
13. ResMed, Inc., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. F-3.
14. Timco Aviation Services, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. F-5.

15. Continental Airlines, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 22.
16. Ibid., Item 7, Liquidity and Capital Resources of MD&A.
17. Ibid., p. 29.
18. Union Pacific Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 39.
19. Ibid., p. 56.
20. ChevronTexaco Corp, Form 10-K annual report to the Securities and Exchange Commission, pp. 35 and 69.
21. Mississippi Chemical Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 44.
22. The Beard Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Item 7, Liquidity and Capital Resources.
23. Corn Products International, Inc., annual report, December 31, 2003, p. 37.
24. Corn Products International, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Item 7.
25. The \$0.4 million benefit in Exhibit 6.7 related to the merger and termination costs probably represents either the reversal of a previously accrued liability or the recovery of previous costs. There would be no cash inflow if a liability balance were simply reversed. However, there would be a small nonrecurring operating cash inflow if a refund of costs previously paid was received.
26. Union Carbide Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 33.
27. Ibid., p. 37.
28. Albemarle Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 35.
29. Ibid., pp. 42–43.
30. The Coca-Cola Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, pp. 37–38.
31. Ibid., p. 42.
32. Ibid., pp. 51 and 54.
33. AT&T Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 54.
34. Timco Aviation Services, Inc., Form 10-K annual report to the Securities and Exchange Commission, p. 21.
35. Krispy Kreme Doughnuts, Inc., Form 10-K annual report to the Securities and Exchange Commission, February 1, 2004, pp. 32–33.
36. Ibid., p. 32.
37. There is no actual cash flow in this situation. Rather, a deductible expense is recorded for income tax purposes. This reduces taxable income and with it current cash tax payments.
38. Krispy Kreme Doughnuts, Inc., has seen its share price decline in recent months (written in October 2004). The decline is driven in part by the embrace of the low carb diet. The first quarter of fiscal 2005 for Krispy Kreme showed \$1.6 million of option tax benefits

versus \$6.0 million of the first quarter of fiscal 2004. Krispy Kreme Doughnuts, Inc., Form 10-Q quarterly report to the Securities and Exchange Commission, quarter ended May 2, 2004, p. 6.

39. Oxford Industries, Inc., Form 10-K report to the Securities and Exchange Commission, May 31, 2002, p. 21.
40. Kroger Co., Form 10-K annual report to the Securities and Exchange Commission, January 31, 2004, Item 7, Liquidity and Capital Resources section of MD&A.
41. Ibid.
42. Ibid.
43. Kroger Co. Form 10-K annual report to the Securities and Exchange Commission, January 31, 2004, Item 8, Note 18 on Benefit Plans.
44. Pilgrims Pride Corp., Form 10-K annual report to the Securities and Exchange Commission, September 27, 2003, p. 79.
45. The receipt of funds from the U.S. government related to the avian influenza outbreak reflects the fact that Pilgrims Pride Corp. is in the poultry business.
46. For some firms litigation charges have become rather common. In such cases, it is more likely that the key will be to focus on atypical levels of litigation cash flows. The nonrecurring cash flow would be the deviation from what might be considered the typical level of litigation cash flow activity.
47. Bristol-Myers Squibb Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 48.
48. Ibid., p. 70.
49. Bristol-Myers Squibb Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 61.
50. Ibid., p. 82.
51. Cox Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 45.
52. Metro-Goldwyn-Mayer, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31 2003, p. 61.
53. Ibid.
54. Ibid., pp. 79–81. A deferred tax asset might have been buried in a large balance labeled “Net miscellaneous tax assets.”
55. Ibid., p. 80.
56. Newell Rubbermaid, Inc., annual report, December 31, 2003, p. A-29.
57. Ibid., p. A-10.

Measuring Sustainable Operating Cash Flow

Users want information about the portion of a company's earnings that is stable or recurring and that provides a basis for estimating sustainable earnings.¹

Had we not incurred these net litigation payments or received the tax refunds and escrow receipt, cash flows from operating activities in 2003 would have been \$306.7 million compared to \$285.0 million in 2002, representing an increase of \$27 million or 7.6%.²

The first quote invokes earnings, but in our view, it is also valid if *operating cash flow* were substituted for *earnings*. Equity investors and creditors need information about stable or recurring operating cash flow. This information plays a central role in determining the valuation of securities, and it is also essential to creditors in assessing the capacity of debtors to service borrowings.

Chapter 6 provided numerous examples of firms highlighting nonrecurring items of operating cash flow. These disclosures are designed to better inform users of financial statements about both the past and the future capacity of firms to generate continuing operating cash flow. The second of the opening quotes is an excellent example of such efforts. However, these efforts lack a consistent or uniform structure and are seldom comprehensive. The objective of this chapter is to help equity investors and creditors meet their informational needs by providing a structured and comprehensive process for measuring sustainable operating cash flow.

The development of an adjusted or sustainable operating cash flow series is the focus of the first section of this chapter. The adjustments remove nonrecurring items that have been included in the computation of reported operating cash flow and reclassify certain operating items. These reclassifications may involve moving items either into or out of operating cash flow. The primary basis for the reclassification adjustments is a perceived weakness in some cash flow classifications called for by generally accepted accounting principles (GAAP). A further basis for these reclassifications is the occasional presence

of opportunistic classifications that appear motivated by a desire to increase operating cash flow. These problematic classifications are made possible by the flexibility under current GAAP in the classification of some cash flow.

The product of this process of adjustment and reclassification is an operating cash flow series purged of the effects of both nonoperating and nonrecurring items of operating cash flow. This adjusted series should be more consistent with the operations or operating prefix to cash flows, and also should be more sustainable because it will have been purged of items judged to be nonrecurring. Further, this adjusted series should be a better indicator of underlying operating performance and also provide a more reliable base on which to develop projections of future operating cash flows. This adjusted series typically will be referred to as sustainable operating cash flow, which we will refer to as SOCF or, on occasion, simply adjusted operating cash flow.

The second section of this chapter provides SOCF information developed from adjustments to the reported operating cash flow of the Standard & Poor's (S&P) 100 companies. These data provide very valuable information about both the magnitude and frequency of the adjustments necessary to develop a measure of sustainable operating cash flow.

SUSTAINABLE OPERATING CASH FLOW

The measurement of sustainable operating cash flow follows the same general procedure used to develop measures of sustainable earnings.³ The starting point is a GAAP measure, net income in the case of the measurement of sustainable earnings and reported operating cash flow in the case of the measurement SOCF. Other labels sometimes used for these measures are pro-forma earnings and pro-forma or adjusted operating cash flow.

A worksheet is used to organize the development of SOCF. This worksheet is in statement format and moves from reported operating cash flow to three alternative measures of SOCF. Before presenting and illustrating the use of this sustainable cash flow worksheet, we discuss the basis for several different levels or layers of SOCF. We also provide a further example from practice of an effort to measure SOCF to reinforce the underlying concept of the adjustment process with a simplified version of the more complex worksheet provided later in this chapter. This example is followed by the rationale for multiple measures of SOCF, with the worksheet presented and illustrated as the last item in this section.

Measuring Sustainable Operating Cash Flow: Another Example from Practice

Service Corporation International, Inc., provided information on its reported operating cash flow, along with a number of adjustment items, in the Liquidity and Capital Resources section of its management's discussion and analysis (MD&A):

Cash flows from operating activities were \$374.1 million in 2003 and included payments of \$27.1 million, net of insurance recoveries, to resolve certain litigation matters. Excluding these litigation payments, cash flows from operating activities were \$401.2 million, ahead of our guidance range of \$350 to \$400 million (our target range

specifically excluded any potential impact from litigation matters). Also included in our actual and projected 2003 amounts and our 2003 guidance range was the receipt of a \$94.5 million tax refund. Cash flows from operating activities in 2002 were \$352.2 million and included a \$57.1 million tax refund and a \$10.1 million escrow receipt from the sale of our French insurance company. Had we not incurred these net litigation payments or received the tax refunds and escrow receipt, cash flows from operating activities in 2003 would have been \$306.7 million compared to \$285.0 million in 2002, representing an increase of \$21.7 million or 7.6%.⁴

This disclosure by Service Corporation is useful in understanding changes in operating cash flow. However, this information can be made much more informative if summarized into a schedule. The schedule in Exhibit 7.1 is a simplified version of the worksheet introduced later in this section. The schedule reconciles the reported operating cash flow of Service Corporation to SOCF. There is little change between the reported and adjusted information in this case because the additions to and deductions from reported operating cash flow in 2002 and 2003 are virtually equal.

Service Corporation made no tax adjustments for either the litigation payment or the escrow receipt. A tax adjustment to the litigation payment would have reduced this adjustment to \$27.1 million times one minus the marginal tax rate of the company. Likewise, assuming that it is taxable, a tax adjustment also would reduce the adjustment for the escrow receipt of \$10.1 million. These tax adjustments, omitted by Service Corporation, are a key feature of the worksheet approach illustrated in this chapter.

In additional commentary, Service Corporation noted that the adjusted operating cash flow increase was primarily the result of reductions in interest payments and working capital improvements, which offset reduced operating cash flow from the company's French operations. The reductions in interest payments are unlikely to be an adjustment item because they appear simply to be the result of a reduced debt level. However, some portion of the reduction in working capital might be treated as a nonrecurring contribution to operating cash flow. The 2003 statement of cash flows shows a \$179 million net

Exhibit 7.1 Service Corporation International, Inc., Reconciliation of Reported to Sustainable Operating Cash Flow, Years Ended December 31, 2002, and 2003 (\$ millions)

	2002	2003	Increase
Reported cash flow from operating activities	\$352.2	\$374.1	\$21.9
Add:			
Net litigation payment		27.1	
Deduct:			
Income tax refunds	(57.1)	(94.5)	
Escrow receipt	(10.1)		
Sustainable operating cash flow	\$285.0	\$306.7	\$21.7

Source: Service Corporation International, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 29.

reduction in working capital versus a net increase of \$111 million in 2002. More background on the reasons for this reduction would be necessary to decide if an adjustment would be appropriate as well as the amount of the adjustment.

A final item that might have been considered for adjustment would be any additional tax payments or recoveries that resulted from very substantial gains and losses related to dispositions reported by Service Corporation. Under GAAP, all of these tax cash inflows or outflows are classified within operations. However, as earlier discussion has maintained, the reclassification of such tax payments or benefits out of operations and into investing cash flow provides better measures of both operating and investing cash flow.

CALIBRATING OPERATING CASH FLOW ADJUSTMENTS

A review of any list of potential adjustment items would show that the case for treating some as adjustment items is more compelling than for others. This uncertainty surrounds both the designation as well as the measurement of the amount of cash flow associated with nonrecurring or nonoperating items. Of course, most classification schemes face this challenge.

One approach to this classification issue is simply to make no distinctions among potential adjustment items. Items would be either included or not included in arriving at SOCF. However, the result is a single measure of SOCF that could be somewhat crude. The approach followed in this chapter is to introduce some calibration into the process by dividing adjustment items into three gradations or layers based on the strength of the perception or judgment that an item is either nonoperating or nonrecurring.

The first layer includes those items whose treatment as adjustments is the most compelling. The second, while still strong, is not quite as compelling. The third layer is made up of adjustments for which a case can be made, but their treatment as adjustments is more problematic than for layers one and two.

Some examples of adjustment items and how they might be classified into layers are presented in Exhibit 7.2.

The nonrecurring adjustment items in the exhibit are added to or deducted from reported operating cash flow. Items that increased operating cash flow are deducted and those that decreased operating cash flow are added. In the case of reclassification adjustments, the reclassified items are moved either from or to operating cash flow from the investing or financing sections. The effect on operating cash flow will depend on the specific nature of the item being reclassified. For example, reclassifying a change in trading investments from operations to investing will either increase or decrease operating cash flow. Operating cash flow is increased if an increase in trading assets is reclassified to investing. The original increase in trading investments would have reduced operating cash flow, and an addition to operating cash flow is necessary to offset this effect. Alternatively, an adjustment decreasing operating cash flow is necessary if a decrease in trading assets is reclassified to investing cash flow. The original decrease in trading assets would have increased operating cash flow, and a deduction is necessary to offset this effect.

Several adjustment items are listed in more than a single layer. This reflects the fact that differences in context and circumstances could cause the same item to be classified in any one of the three layers.

Exhibit 7.2 Layering Operating Cash Flow Adjustments

Layer 1: Compelling Nonrecurring Operating Cash Flow Items or Reclassifications

Increased pension contributions to deal quickly with an underfunded status
 Payments or receipts from a litigation settlement, not a high-risk industry
 Payments related to a restructuring paid over a short period of time with few prior restructurings
 Receipts from the U.S. government by airlines, related to September 11 aftermath
 Tax effects of nonrecurring investing or financing gains or losses
 Changes in working capital from one-time events or discretionary management actions
 Tax payments or receipts from the settlement of a major tax dispute
 Receipt or payment related to a patent infringement suit
 Net cash provided or used in discontinued operations
 Stock option tax benefits
 Charitable foundation donations
 Transactional foreign currency gains and losses, unusual or outsized
 Tax refunds from loss carrybacks
 Loss carryforward tax savings with carryforward utilized in a single period
 Cash use or source from acquisitions or dispositions of trading securities in operating activities
 Tax cash payments or receipts on nonoperating gains and losses
 Capitalized interest or operating costs in investing activities
 Cash recovered from termination of overfunded pension plans
 Accounts receivable securitizations
 Changes in overdrafts classified in operating activities

Layer 2: Somewhat Less Definitive Nonrecurring Operating Cash Flow Items or Reclassifications

Increased pension contributions to deal with an underfunded status over a limited period of time
 Payments related to restructurings made over several years, with some previous restructurings
 Changes in working capital related to new efforts to improve working capital management
 Payments or receipts from settlement of interest rate hedges
 Stock option tax benefits
 Charitable foundation donations
 Transactional foreign currency gains and losses, unusual or outsized
 Tax savings from bonus depreciation—Job Creation & Worker Assistance Act of 2002
 Multiple period tax refunds from loss carrybacks
 Multiple period loss carryforward tax savings

Layer 3: Status as a Nonrecurring Item or Reclassification More Problematic

Increased pension contributions to deal with an underfunded status over multiple periods
 Outsized distributions from equity-accounted investments
 Changes in working capital not proportional to changes in revenues
 Payments or receipt from litigation settlement, outsized and high-risk industry
 Payments related to restructuring paid over multiple years with numerous prior restructurings
 Charitable foundation donations
 Transactional foreign currency gains and losses, unusual or outsized

The reclassification of capitalized interest from an investing cash outflow to an operating cash outflow always will reduce operating cash flow. The same would be true of capitalized operating costs that were included in investing cash flow. The reclassification to operations from investing reduces operating cash flow.

A summary of each of the three adjustment layers is provided in Exhibit 7.3 to explain further this calibration process.

Examples of Cash Flow Calibration

Sorting operating cash flow adjustments into the three layers described in Exhibit 7.3 requires the exercise of considerable judgment. The classification of some adjustment items, especially those that fit into Layer 1, usually is quite clear. However, classification into Layers 2 and 3 normally requires a careful review of not only the item itself but also of the specific context and circumstances surrounding the cash flow. The next examples illustrate this calibration process.

Pension Contributions

Pension contributions provide an excellent example of adjustment items that could be included in any one of the three layers depending on surrounding facts and circumstances.

Layer 1 Classification Inclusion in Layer 1 would be appropriate if there were a single outsized contribution and supplementary information, probably provided in the pension note, indicated that contributions would return to more traditional levels in the next year. The pretax amount of the nonrecurring adjustment would be the excess of the contribution over an estimate of the more typical contribution amount.⁵

Exhibit 7.3 Calibration of Operating Cash Flow Adjustments

Layer 1: Compelling Nonoperating and Nonrecurring Operating Cash Flow Items

Layer 1 adjustments are items whose nonrecurring or nonoperating status is most compelling. The cash inflow or outflow itself may be very exceptional, or the amount may be far greater than normal. Also, while classified in operating cash flow under GAAP, the item may be far removed from the core operating activities of the firm.

Layer 2: Less Compelling Nonoperating and Nonrecurring Operating Cash Flow Items

Layer 2 adjustments are still plausible nonoperating or nonrecurring adjustments to reported operating cash flow. However, this status is not as compelling as items classified in Layer 1. They may be related to core operations and occur from time to time, but they are not rare.

Layer 3: Problematic Nonoperating and Nonrecurring Operating Cash Flow

The case for treatment as nonoperating or nonrecurring is the weakest for Layer 3 adjustments. This layer might include items that do occur from time to time. The linkage to core operating activities may also be very remote. This layer also might include cash flows that share both operating and investing or financing characteristics.

Layer 2 Classification A Layer 2 classification would be appropriate for a firm attempting to work its way out of an underfunded position by making much larger than normal contributions over a period of two to three years.

Layer 3 Classification A Layer 3 classification might be in order if pension underfunding is large and a number of years will be needed to resolve an underfunded situation. Given the longer time horizon, it is also possible that new reversals might occur that would undo some of the funding efforts and extend the period required to achieve a more fully funded status. Not making adjustments for these cash flow items also could be considered.

Case Examples Cox Communications provides a rather clear example of an outsized pension contribution that should be classified in Layer 1. The company doubled its pension contribution in 2003 and declared that “due to this accelerated contribution, Cox does not anticipate additional contributions during 2004 for the funded pension plans.”⁶

The circumstances surrounding outsized pension contributions of Merck & Co., Inc., make the classification less clear. Merck’s plans were underfunded by \$747 million in 2001, \$1.3 billion in 2002, and \$789 million in 2003. Pension contributions were \$250 million in 2001, \$761 million in 2002, and \$641 million in 2003. Merck indicated plans for contributions of \$650 million in 2004. Much of a 2003 improvement in funded status was a result of the \$1.0 billion actual return on plan assets in 2003 versus a loss of \$237 million in 2002. Benefits paid in 2003 from plan assets amounted to \$424 million.⁷

If the goal of the contribution plan is to achieve fully funded status, return uncertainties could cause a continued need for elevated contributions. Alternatively, increases in interest rates, by reducing the benefit obligation, could improve the funded status of the plans

There is uncertainty about how long Merck’s pension contributions will be maintained at recent elevated levels. This would seem to rule out their classification in Layer 1. However, the planned pension contribution of \$650 million, combined with reasonable returns on pension assets, could quickly close the funding shortfall. A classification of the outsized portion of its pension contributions into Layer 2 seems justified.

Restructurings

Restructuring activities have been a dominant feature of the corporate landscape for more than a decade. The nature and frequency of these activities vary quite dramatically.

Layer 1 Classification The cash flows associated with a restructuring program that is a landmark event in the history of a company, is unlikely to be repeated, and is executed over a relatively short period of time should be a Layer 1 adjustment.

Layer 2 Classification Restructuring cash flows of a firm with periodic restructurings that are completed over only a few years would belong in Layer 2.

Layer Three Classification At the other end of the restructuring spectrum are firms with ongoing and extended restructurings. Some may appear to be in an almost constant state of restructuring. Depending on their frequency and length, these cash flows would be

treated as Layer 3 adjustments or not be considered as adjustments to reported operating cash flow.

Case Example Micron Technology, Inc., provides an example of restructuring payments that warrants inclusion in Layer 1. Micron Technology reported a single year with a restructuring charge between 1999 and 2003. At the end of 2003, the year in which the charge was recorded, Micron Technology reported that “the Company substantially completed the restructure plan.”⁸

Legal Settlements

The calibration of a legal settlement raises issues that are similar to the case of outsized pension contributions and restructuring cash flows just discussed.

Layer 1 Classification Just as with restructurings, for some firms legal settlements may be a rarity. In such cases any cash flow associated with legal settlements would be a Layer 1 adjustment.

Layer 2 Classification For most large firms, ongoing legal disputes are all too familiar. However, the incidence of large cash payments may be unusual. That is, the nature of the firm and its legal vulnerabilities do not normally lead to large settlements. In these cases, an occasional outsized legal settlement might be classified into Layer 2.

Layer 3 Classifications For some firms, the nature of their legal exposure gives rise to ongoing litigation and numerous large settlements. Firms with exposure linked to asbestos, tobacco, vehicles, pharmaceuticals, and medical products immediately come to mind. In these cases, the cash payments would not appear to be adjustment items. However, on occasion, there will be settlements that are much larger than the normal range. In these cases, the outsized portion of a legal settlement might be treated as a Layer 3 adjustment.

Case Example C. R. Bard, Inc., provides an instructive example. Bard’s net legal and patent settlements during 1993 to 2003 are listed in Exhibit 7.4.⁹

Legal and patent settlements were present in 9 out of the 11 years from 1993 to 2003. These items could hardly be seen as either nonoperating or nonrecurring. However, al-

Exhibit 7.4 C. R. Bard, Inc., Net Legal and Patent Settlements, Years Ended December 31, 1993 to 2003 (\$ millions)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Legal and patent settlements	\$61	\$28	\$—	\$4	\$2	\$(49)	\$—	\$(5)	\$(1)	\$(5)	\$55

Parentheses = income

No parentheses = expense

Source: C. R. Bard, Inc., Form 10-K annual reports to the Securities and Exchange Commission, December 31, 1995, p. II-22; 1997, p. II-22; 2000, p. II-29; 2003, p. II-9.

though they are recurring, the settlements in Exhibit 7.4 are certainly irregular in amount as well as sign (i.e., gain or loss). The settlements are expenses in 5 years and income in 4. These items are not Layer 1 or 2 candidates. Some or all of any cash flows associated with the outsized expenses in 1993 and 2003, and income in 1998, however, could be Layer 3 adjustments.

It is important to recall that the amounts listed in Exhibit 7.4 are accrual-basis income statement amounts. Further analysis, which we referred to as cash flow tracking in Chapter 6, usually is necessary to establish if and when a cash inflow and outflow occurs. For example, the \$55.0 million in patent and legal settlements in 2003 is made up of a \$58 million charge resulting from a jury verdict against C.R. Bard, offset by \$3.0 million of income from a favorable intellectual property settlement. The entire \$58 million charge was added back to net income in 2003 in C.R. Bard's statement of cash flows. This means that no cash payment was made on this settlement in 2003. C.R. Bard did declare that "the Company has filed post-trial motions to set aside the verdict or reduce the amount of the award and for a new trial."¹⁰ A substantial nonrecurring operating cash outflow may take place in the future. The amount and timing are uncertain at this time and will turn on the outcome of C.R. Bard's posttrial motions.

Income Tax Refunds

Income tax refunds are one of the more common nonrecurring operating cash inflows. Their origin usually is from the overpayment of estimated income taxes, the favorable resolution of tax disputes, or the recovery of taxes previously paid through the use of net operating loss carrybacks.

Layer 1 Adjustment Layer 1 treatment is compelling when a typically profitable firm incurs a loss and is able to carry the loss back in its tax return and obtain a refund. Many firms were able to obtain substantial tax refunds as a result of the temporary extension, resulting from post–September 11, 2001, tax legislation, of the carryback period to five years from the traditional two-year period. Tax recoveries or payments from the successful or unsuccessful, respectively, resolution of tax disputes also may be adjustment items. Layer 1 treatment would be appropriate if such resolutions are very infrequent or outsized in amount.

Layer 2 or 3 Adjustment Some firms have numerous ongoing tax disputes with payments and recoveries being quite common. As with the litigation-related cash inflows and outflows, outsized cash flows in such cases could be candidates for classification as at least a Layer 3 adjustment. Layer 2 classification might be in order depending on the combination of just how outsized and numerous the adjustment items are. The less frequent and the more outsized, the stronger the case for Layer 2 classification.

Case Example Mississippi Chemical Corp. reported tax refunds of \$28 million and \$15 million in fiscal years 2002 and 2003, respectively.¹¹ These refunds were designated as resulting from the "refund of federal income taxes pursuant to the Job Creation and Workforce Assistance Act of 2002." A refund of \$7 million was also disclosed as having been received in fiscal 2001.¹²

The carryback extension to five years applied only to losses incurred during 2001 and 2002. These refunds span three years and probably have been exhausted. An examination

of the income tax note in the Mississippi Chemical 10-Q filing for the six months ending December 31, 2003, gives no indication of any further tax refunds.¹³

The Mississippi Chemical cash tax refunds do extend over a three-year period, but they also have a finite time limit under the enabling income tax legislation. If considered individually, classification as Layer 1 seems justified. However, their extension over a three-year period may argue for treatment as Layer 2 adjustments. This case represents a good example of the necessity to exercise judgment in making decisions about cash flow calibration.

Although they will not result in refunds, Mississippi Chemical also has substantial net operating loss carryovers that can shield its future profits from taxation for perhaps a number of years.¹⁴ The company disclosed \$59 million of federal and \$20 million of state net operating loss carryovers at December 31, 2003. This tax shield will not result in a cash inflow but rather in the avoidance of a cash outflow. When realized, these tax savings should be classified as either Layer 1 or 2 adjustments. Layer 1 would be in order if the carryforward benefit were all realized in a single period; Layer 2, if realization extended over several years.

Changes in Working Capital

Changes in working capital are typical with the growth and decline in the level of business activity. Somewhat proportional increases and decreases in working capital from increases and decreases, respectively, in the level of business activity are a reasonable expectation. The associated use or source of cash in these cases should be viewed as recurring.

However, it is common to see references to the influence of outsized or inverse (i.e., an increase in sales accompanied by a decline in working capital or a decline in sales accompanied by an increase in working capital) changes in working capital as explanations for changes in operating cash flow. Three such disclosures are presented in Exhibit 7.5.

Layer 1 Classification The Valmont Industries, Inc., disclosure in Exhibit 7.5 is probably the most compelling example of a nonrecurring operating cash flow of the three examples. Valmont involves a temporary, one-period increase in inventories followed by an inventory reduction in the immediate following period. The inventory increase represented a use of cash in 2000 and the decrease in inventory a source in 2001. Each should each be treated as Layer 1 nonrecurring items of operating cash flow.

Layer 2 Classification Home Depot appears to have made a conscious decision to strengthen its operating cash flow by achieving an increase in its days payable. Moreover, its statement that “we have realized the majority of the benefits from our renegotiated payments terms” suggests that it has arrived at its new targeted level of efficiency. An adjustment for the increase in operating cash flow due to the transition to the new days payable should be made. Although this might well be classified in Layer 1, Layer 2 is suggested in view of some potential uncertainty in Home Depot’s ability to maintain the new level of days payable.

Layer 3 Classification The Applera, Inc., case also appears to involve discretionary actions taken to improve the efficiency of working capital management. However, unlike

Exhibit 7.5 Company Disclosures of Operating Cash Flow and Working Capital Changes

Applera Corp. (2003)

Net cash from operating activities for fiscal 2002 was \$126.5 million higher than the fiscal 2001 level. This increase was primarily due to strong working capital management, partially offset by lower income-related cash flows.

The Home Depot, Inc. (2002)

During fiscal 2002, we experienced a significant growth in days-payable outstanding to 42 days at the end of fiscal 2002 from 34 days at the end of fiscal 2001. The growth in days payable is the result of our efforts to move our payment terms to industry averages. We have realized the majority of the benefits from our renegotiated payment terms.

Valmont Industries, Inc. (2003)

The decrease in operating cash flow in 2003 as compared with 2002 related mainly to lower earnings in 2003. The stronger operating cash flow in 2001 related principally to substantial reductions in inventory that year, since our inventories were at relatively high levels in 2000.

Source: Information was drawn from 10-K annual reports to the Securities and Exchange Commission for the years associated with each listed company.

the case of Home Depot, Applera's disclosure simply identifies strong working capital management as the source of improvement in operating cash flow without being more specific. It is less clear in this case that a targeted new level of working-capital efficiency has been reached and it is likely to be maintained. However, it is notable that the cash flow increase in 2002 produced by the decrease in working capital was not repeated in 2003. In this case the increase in operating cash flow from the 2002 improvement in working capital management should be classified as a Layer 3 adjustment.

Choosing the proper layer classifications for these three examples of discretionary working capital changes also highlights the need for the exercise of judgment in refining the measurement of sustainable operating cash flow.

Case Example York International Corporation provides a further example of the role of working capital changes in explaining changes in operating cash flow. York International reported that \$46 million of \$161 million of its 2003 operating cash flow was generated by a change in assets and liabilities. A reconstruction of the \$46 million from the operations section of the 2003 statement of cash flows shows that it includes changes in standard working capital accounts as well as changes in other long-term assets and liabilities.

York International goes on to provide a helpful characterization of these changes in assets and liabilities:

These cash flows are the result of initiatives employed to reduce our working capital. Due to diminishing returns expected from these types of initiatives, we do not expect to generate cash flows in 2004 from further reductions in our working capital and other long-term assets and liabilities. Furthermore, our working capital and other

long-term assets and liabilities may increase as our businesses grow and economic conditions change.¹⁵

The York International statement that “we do not expect to generate more cash flow in 2004 from further reductions in working capital” affirms the nonrecurring character of the \$46 million benefit. York International appears to have arrived at a new working capital relationship in which future increases and decreases in working capital are likely to be proportional to changes in its level of business activity. A Layer 1 classification of this \$46 million nonrecurring operating cash flow adjustment is in order in this case.

MEASURING SUSTAINABLE OPERATING CASH FLOW

Measuring sustainable operating cash flow draws on virtually all of the preceding chapters. The measurement process is facilitated by a SOCF worksheet and draws on information produced by the process of identifying and measuring both nonoperating and nonrecurring items of operating cash flow.

The completion of the SOCF worksheet requires that each adjustment item be classified into one of the three adjustment layers. In addition, each item also must be classified based on whether it requires a tax adjustment or not. The tax adjustment process requires selected adjustment items to be multiplied times one minus the firm’s marginal income tax rate. This places the adjustments on an after-tax basis. The summation of the initial reported operating cash flow and all adjustment items yields the SOCF series.

Before the SOCF worksheet is presented, some additional background on determining which adjustment items require tax adjustments is provided.

Income Taxes and Adjustment Items

Many adjustment items will call for a tax adjustment. For example, in most cases, a large severance payment related to a corporate restructuring will produce an associated tax saving because it will be deductible in computing taxable income. As a result, a \$20 million payment in 2005 reduces operating cash flow by only \$20 million times one minus the tax rate or \$12 million: [$\$20 \text{ million} \times (1 - .40)$]. This example assumes a combined federal and state tax rate of 40 percent. Moreover, this adjustment assumes that the firm is profitable in its tax return after this deduction. That is, the cash tax savings is realized in the same year in which the severance payment is made.¹⁶

Changes in working capital accounts that are treated as nonrecurring are an example of items that do not require a tax adjustment. Unlike the preceding restructuring payment, changes in working capital accounts do not increase or decrease taxable income. The same would be true of most nonrecurring income tax items. However, a refund of state income taxes would call for a federal income tax adjustment assuming that the original state income tax deduction reduced federal tax payments.

Tax Adjustments in Company Disclosures

Tax adjustments are the norm in the case of presentations of pro-forma or sustainable earnings by companies in their annual reports. However, tax adjustments are infrequent in

the case of adjustments made to operating cash flow. For example, in explaining a decrease in 2003 operating cash flow, Applera Corp. states:

Net cash from operating activities of continuing operations for fiscal 2003 decreased \$17 million in comparison to fiscal 2002 resulting (primarily) from approximately \$16 million of severance payments.¹⁷

Applera Corp. also makes reference, in explaining the decline in operating cash flow, to other nonrecurring items, including the receipt of a \$26 million patent litigation settlement. Both the severance payments and the receipts from the litigation settlement should have associated tax effects. However, no reference is made to any such tax adjustments.¹⁸

In contrast to Applera Corp., Techne Corp. discloses both the pretax and after-tax amount of the cash settlement from a dispute. The cash payment made by Techne Corp. was \$17.5 million, and it also disclosed the after-tax amount: “The after-tax amount of the charge was \$11.4 million.”¹⁹ This disclosure was part of the explanation of Techne’s results of operations and not its operating cash flow. However, the role of the settlement payment in explaining the 2002 decrease in operating cash flow was identified in the Liquidity and Capital Resources section.²⁰

A clear case of a firm making a tax adjustment to a nonrecurring item of operating cash flow is provided in the Liquidity and Capital Resources section of Kellogg Company’s 2003 annual report to shareholders:

As a result of stronger than expected cash flow in both 2003 and 2002, we made voluntary contributions to several of our major pension and retiree health care plans. The after-tax impact of these contributions reduced cash flow by approximately \$37 million in 2003 and \$254 million in 2002. After adjusting for these differences, 2003 cash flow was within \$40 million of 2002 cash flow as the higher earnings in 2003 were overshadowed by extremely strong working capital improvements in 2002.²¹

Kellogg obviously sees the disclosure, on an after-tax basis, of its outsized pension contributions as important in understanding the change in operating cash flow between 2002 and 2003. Simply adding back the pretax amount of the outsized contributions to reported operating cash flow would increase adjusted operating cash flow by an amount greater than the original after-tax reduction resulting from the contributions.

It is worth noting that Kellogg referenced the contribution to operating cash flow of working capital improvements in 2002. However, Kellogg did not elect to make adjustments for increases in operating cash flow that resulted from reductions in working capital. Kellogg, as part of its “manage for cash” focus, was actively managing down its core working capital as a percentage of net sales.²² If Kellogg had made an adjustment for the 2002 working capital changes, no tax adjustment would be required because the working capital changes have no direct effect on taxable earnings.

Tax adjustments are called for in the case of most nonrecurring operating cash flow items that are linked to revenues, gains, expenses, and losses in the income statement. A current-period adjustment is in order only if taxes paid or recovered are affected by the adjustment items.

Worksheet for the Measurement of Sustainable Operating Cash Flow

A worksheet is provided in Exhibit 7.6 to organize and record nonoperating and nonrecurring items of operating cash flow. A worksheet is essential in cases involving multiple periods and a variety of different potential adjustment items. The worksheet also outlines the steps to be taken in measuring sustainable operating cash flow. Selected line-item titles are provided on the worksheet to alert users to at least some of the more common operating cash flow adjustments.

Construction of the Worksheet

The sustainable operating cash flow worksheet is completed on a piecemeal basis as one systematically works through the various locations in the financial statements and footnotes where adjustments might be located. A review of the income tax note is necessary in order to select an appropriate marginal income tax rate for items that need to be tax adjusted. In most cases, this will involve using a rate that approximates the sum of the statutory federal tax rate, 35 percent for larger companies, plus a state tax rate. Information on the state rate, actually a blend of many state rates, is provided in the tax footnote. Because the role of the tax rate is simply to reduce selected adjustments to an after-tax basis (i.e., a scaling process), a reasonable approximation of the marginal rate is sufficient.²³

The first step in completing the worksheet is to record reported cash flow from operating activities on the top line. Next, as they are located, nonrecurring items of operating cash flow or cash flow reclassifications are recorded on the worksheet. The absence of parentheses indicates that the adjustment is an addition to operating cash flow; the presence of parentheses indicates a deduction. Stated another way, items with parentheses are negative and items without parentheses are positive.

Line Labels and Layer Classifications Line labels are provided in the worksheet for some of the more common nonoperating or nonrecurring adjustment items. The line labels are simply illustrative and not intended to be exhaustive. Some of the line labels are repeated in adjustment Layers 1, 2, and 3. Different circumstances could cause the same type of adjustment item to be classified in any one of the three layers. For example, varying circumstances surrounding cash payments for restructuring charges could make classification of the cash payment into Layer 1, 2, or 3 appropriate.

The layered approach calls for the exercise of judgment as well as careful consideration of the facts and circumstances surrounding a potential adjustment item. However, this refinement of the cash flow information should make the SOCF information more informative.

Completion of the Worksheet Once all adjustment items are recorded, the worksheet is completed by making the tax adjustments and adding or subtracting subtotals for Layer 1, Layer 2, and Layer 3 adjustments to reported operating cash flow. The adjustment summation proceeds in three stages:

1. Layer 1 SOCF is computed as the sum of reported operating cash flow and the total Layer 1 adjustments.
2. Layer 2 SOCF is computed as the sum of the Layer 1 SOCF and the total Layer 2 adjustments.
3. Layer 3 SOCF is computed as the sum of the Layer 2 SOCF and the total Layer 3 adjustments.

Exhibit 7.6 Sustainable Cash Flow from Operations Worksheet

	Year 1	Year 2	Year 3
Reported operating cash flow source (use)			
Layer 1 Adjustments Add (deduct):^a			
<i>Tax-adjustable items^b</i>			
Litigation settlement, (receipt) payment			
Outsized pension plan contributions			
Restructuring payments			
Cash (provided) used by discontinued operations			
Other			
Subtotal			
Multiply subtotal times (1 – marginal tax rate)			
Total tax-adjusted items			
<i>Non-tax-adjustable items^c</i>			
One-time working capital (decrease) increase			
Tax (refund) from loss carrybacks			
Taxes (avoided) by utilization of loss carryforwards			
Net increases (decreases) in trading investments ^d			
Income taxes on nonoperating gains (losses)			
Stock option tax (benefits)			
Cash (provided) used by discontinued operations			
Net (increase) decrease in overdrafts—			
in operations			
Accounts receivable securitization (increase)			
decrease			
(Capitalized) operating costs in investing section			
(Capitalized) interest			
Other			
Total non-tax-adjusted items			
Total adjustments			
Layer 1 sustainable operating cash flow ^e			
Layer 2 Adjustments Add (deduct)^f			
<i>Tax adjustable items</i>			
Litigation settlement, (receipt) payment			
Outsized pension plan contributions			
Restructuring payments			
Other			
Subtotal			
Multiply subtotal times (1 – marginal tax rate)			
Total tax-adjusted items			
<i>Non-tax-adjustable items</i>			
Other working capital (decreases) increases			
Tax (refund) from loss carrybacks			
Taxes (avoided) by utilization of loss carryforwards			
Net increases (decreases) in trading investments ^d			

(continues)

Exhibit 7.6 (Continued)

	Year 1	Year 2	Year 3
Income taxes on nonoperating gains (losses)			
Stock option tax (benefits)			
Cash (provided) used by discontinued operations			
Net (Increase) decrease in overdrafts— in operations			
Other			
Total non-tax-adjusted items			
Total adjustments			
Layer 2 sustainable operating cash flow ^g			
Layer 3 Adjustments Add (deduct):^h			
<i>Tax adjustable items</i>			
Litigation settlement, (receipt) payment			
Outsized pension plan contribution			
Restructuring payments			
Other			
Subtotal			
Multiply subtotal times (1 – marginal tax rate)			
Total tax-adjusted items			
<i>Non-tax-adjustable items</i>			
Other working capital (decreases) increases			
Taxes (avoided) by utilization of loss carryforward			
Net increases (decreases) in trading investments ^d			
Income taxes on nonoperating gains (losses)			
Stock option tax (benefits)			
Cash (provided) used by discontinued operations			
Net (Increase) decrease in overdrafts— in operations			
Other			
Total non-tax-adjusted items			
Total adjustments			
Layer 3 sustainable operating cash flow ⁱ			

^a Nonoperating or nonrecurring status is quite compelling. Cash flow is either nonrecurring or an amount far greater than normal. Operating cash flow classification is also clear.

^b Cash flow item has an income statement counterpart that affects the computation of current-period taxable income.

^c Cash flow item with either no income statement counterpart or an income statement counterpart that has no effect on the computation of current-period taxable income.

^d Includes only those classified in the operating activities section of the statement of cash flows.

^e Reported operating cash flow plus level one total adjustments.

^f Nonoperating or nonrecurring status still plausible, but not as compelling as Layer 1 adjustments.

^g Level 1 SCFO plus Level 2 total adjustments.

^h Nonoperating and nonrecurring status is more problematic than Layers 1 and 2. Linkage to core operating activities is weaker and there may be some overlap of operating, and investing or financing characteristics.

ⁱ Level 2 SCFO plus Level 3 total adjustments.

Interpretation of the Completed Worksheet The Layer 1 SOCF is the least inclusive of the three measures of SOCF. That is, it makes adjustments to reported operating cash flow to reclassify certain operating items and to remove nonrecurring items only when the case for doing so is compelling. Layer 3 SOCF is the most inclusive in that it includes the largest number of adjustments.

The interpretation of the completed worksheet begins with a review of the amounts and trends, if any, of the reported operating cash flow and successive layers of SOCF. A quite different message would be revealed if reported operating cash flow were trending upward and the adjusted series is declining, or vice versa. Alternatively, reported and SOCF trends may be similar but the amounts of reported and sustainable operating cash flow could be quite different.

It should be noted that the computation of adjusted or sustainable measures of operating cash flow does not constitute a rejection of reported operating cash flow. This GAAP measure does have the virtue of imposing a degree of structure and consistency. This is especially helpful when making comparisons among different companies. The creation of non-GAAP financial information is designed to augment and not necessarily to replace GAAP financial information. Bear in mind that the several measures of SOCF begin with reported operating cash flow.

To illustrate its use, a completed Sustainable Operating Cash Flow Worksheet is presented and discussed.

COMPLETED SUSTAINABLE OPERATING CASH FLOW WORKSHEET

A single company presents only a limited number of adjustment items across the three-year periods that we examine here. However, this is sufficient to illustrate the use of the SOCF worksheet. The completed worksheet in Exhibit 7.7 is based on the 2001 to 2003 financial information of Bristol-Myers Squibb Co. The worksheet includes four different measures of operating cash flow. These include the initial reported operating cash flow as well as the three additional non-GAAP measures of SOCF.

In the case of Bristol-Myers, the pattern of each of the SOCF measures between 2001 and 2003 is similar to that of reported operating cash flow. There is a decline in reported operating cash flow in each of the SOCF measures between 2001 and 2002 followed by sharp increases in 2003. However, the decline in each of the SOCF measures is far less dramatic than in the reported series, which also leads to less dramatic recoveries in operating cash flow in 2003. The major contributor to the difference in 2002 between reported operating cash flow and the three measures of SOCF is the reclassification adjustment for income taxes associated with the gain on the sale of Clairol.

A total of eight different adjustment items are included in the worksheet. Several other items were potential adjustments—for example, foreign currency transaction losses, interest rate swap gains, and a tax settlement—but the inability to establish their operating or cash flow status from the available disclosures resulted in their omission.

Tax on the Sale of Clairol

The largest Bristol-Myers adjustment is \$1.7 billion of tax payments made in 2002 on a nonoperating gain from the sale of the Clairol business in 2001. The tax on the Clairol

Exhibit 7.7 Bristol-Myers Squibb Co., Sustainable Operating Cash Flow Worksheet, Years Ended December 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Reported operating cash flow source (use)	\$ 5,372	\$ 945	\$ 3,512
Layer 1 Adjustments Add (deduct)^a			
<i>Tax-adjustable items^b</i>			
Litigation settlement, (receipt) payment			
Outsized pension plan contributions		254	
Other			
Other			
Subtotal			
Multiply subtotal times (1 – marginal tax rate)		.63	
Total tax-adjusted adjustments		160	
<i>Non-tax-adjustable^c</i>			
One-time Working capital (decrease) increase			
Reclassification of taxes on gains & losses			
Tax (refund) from loss carrybacks			
Taxes (avoided) by utilization of loss carryforwards			
Net increases (decreases) in trading investments ^d			
Taxes on the gain from the sale of Clairol		1,700	
Income taxes on non-operating gains (losses)	176	35	
Stock option tax (benefits)	(157)	(45)	(10)
Cash (provided) used by discontinued operations	(300)		
(Increase) decrease in overdrafts in operations			
Other			
Other			
Total non-tax-adjusted adjustments	(281)	1,690	(10)
Total adjustments	(281)	1,850	(10)
Layer one sustainable operating cash flow ^e	5,091	2,795	3,502
Layer 2 Adjustment Add (deduct)^f			
<i>Tax-adjustable</i>			
Litigation settlement, (receipt) payment			604
Outsized pension plan contributions			
Other			
Other			
Subtotal			604
Multiply subtotal times (1 – marginal tax rate)			.63
Total tax-adjusted adjustments			381
<i>Non-tax-adjustable</i>			
Other working capital (decreases) increases			
Tax (refund) from loss carrybacks			
Taxes (avoided) by utilization of loss carryforwards			
Net increases (decreases) in trading investments ^d			
Income taxes on nonoperating gains (losses)			
Stock option tax (benefits)			

(continues)

Exhibit 7.7 (Continued)

	2001	2002	2003
Cash (provided) used by discontinued operations			
(Increase) decrease in overdrafts in operations			
Other			
Other			
Total non-tax-adjusted adjustments			
Total adjustments			381
Layer two sustainable operating cash flow ^g	5,091	2,795	3,883
Add (deduct) Layer 3 adjustments^h			
<i>Tax adjustable</i>			
Litigation settlement, (receipt) payment			
Income taxes on nonoperating (gains) losses			
Outsized pension plan contribution			
Restructuring payments	252	184	91
Other			
Other			
Subtotal	252	184	91
Multiply subtotal times (1 – marginal tax rate)	.63	.63	.63
Total tax-adjusted adjustments	159	116	57
<i>Non-tax-adjustable</i>			
Other working capital (decreases) increases			
Tax (refund) from loss carryback			
Taxes (avoided) by utilization of loss carryforward			
Net increases (decreases) in trading investments ^d			
Income taxes on nonoperating gains (losses)			
Stock option tax (benefits)			
Cash (provided) used by discontinued operations			
(Increase) decrease in overdrafts in operations			
DuPont acquisitions outlay in cost of sales	30		
Total non-tax-adjusted adjustments			
Total adjustments	189	116	57
Layer 3 sustainable operating cash flow ⁱ	5,280	2,911	3,940

^a Nonoperating or nonrecurring status is compelling. Cash flow is either nonrecurring or the amount far greater than normal. Operating cash flow classification is also clear.

^b Cash flow item has an income statement counterpart that affects the computation of current-period taxable income.

^c Cash flow item with either no income statement counterpart or an income statement counterpart that has no effect on current-period taxable income.

^d Includes only those changes in trading investments classified in the operating activities section of the statement of cash flows.

^e Reported operating cash flow plus total Layer 1 adjustments.

^f Nonoperating or nonrecurring status still quite plausible, but not as compelling as Layer 1 adjustments.

^g Layer 1 SCFO plus total Layer 2 adjustments.

^h Nonoperating and nonrecurring status is more problematic than Layers 1 and 2. Linkage to core operating activities is weaker and there may be some overlap of operating, and investing or financing characteristics.

ⁱ Layer 2 SCFO plus total Layer 3 adjustments.

gain was accrued in 2001 but not paid until 2002. This tax amount was located in a note on discontinued operations in the Bristol-Myers 2001 10-K report.²⁴ The \$1.7 billion of taxes is the difference between the disclosed pretax gain of \$4.3 billion and the after-tax amount of \$2.6 billion. These nonoperating taxes are reclassified out of operating cash flow and would be included in investing cash flow where the proceeds from the sale were also recorded. The \$1.7 billion tax payment is added back to 2002 reported operating cash flow where it would have been deducted.

Bristol-Myers highlighted the significance of this tax payment in the Liquidity and Capital Resources section of MD&A in its 2003 Form 10-K report:

The increase (in 2003 cash provided by operating activities compared to 2002) is attributable to higher net earnings and income tax payments in 2002 primarily related to the gain arising (in 2001) from the sale of the Clairol business.²⁵

The sale of Clairol is obviously a landmark, one-of-a-kind transaction. In addition, the tax payment associated with the gain on the sale should be considered an investing and not an operating cash flow. Reclassification out of reported operating cash flow as a Layer 1 adjustment is appropriate. No tax adjustment was required in this case because the adjustment itself is a tax item.

Outsized Pension Contribution

Bristol-Myers made an outsized pension contribution in 2002. The \$254 million pretax adjustment represents the excess of the 2002 contribution over the average pension contribution for the adjacent years, 2000, 2001, and 2003. The outsized portion of the pension contribution is treated as a Layer 1 adjustment. However, the pension adjustment arguably could have been made in Layer 2, because Bristol-Myers had suggested in 2002 the possibility of “increased cash funding requirements” in the future.²⁶ But this did not come to pass in 2003. Moreover, Bristol-Myers also noted at the end of 2003 that “as a result of improved investment returns in 2003 and significant contributions in recent years, there is no current plan to make cash contributions to the U.S. pension plans in 2004.”²⁷

A tax adjustment is required in the case of the outsized pension contribution because the contribution is deductible in determining taxable income.²⁸ Firms typically will not make pension contributions unless they are currently deductible for tax purposes.

Taxes on Nonoperating Gains

Bristol-Myers disclosed gains on the sale of businesses and product lines, separate from the Clairol gain, of \$475 million in 2001 and \$95 million in 2002.²⁹ These taxes on investing transactions also are added back to reported operating cash flow. The primary reason for the adjustments is that these taxes are related to investing and not operating cash activities. However, the taxes also could be considered nonrecurring because they are derived from gains that are nonrecurring. As with most adjustments for nonoperating items, these tax payments are treated as Layer 1 adjustments. No tax adjustments are required in this case as well because the adjustments are themselves taxes.

Tax Benefits from Stock Options

Tax benefits from stock options are treated as adjustments and included in Layer 1. The options are a form of compensation and might be viewed as operating in nature. However, the benefits also could be viewed as financing because they result from the exercise of stock options and the issuance of shares of common stock. These tax benefits are also quite unpredictable and subject to a great deal of volatility. As a result, the case for treating the option benefits as an adjustment could turn on their nonoperating or nonrecurring character. The option tax benefits are treated as a Layer 1 adjustment because of both their volatile nature and their problematic classification as an item of operating cash flow. The Bristol-Myers *realized* option tax benefits were disclosed in its income tax note.³⁰ No tax adjustments are required in this case because the adjustments are tax items.

Cash Provided by Discontinued Operations

The case is quite compelling for nonrecurring treatment of cash provided by or used in discontinued operations. The operations have ceased. Hence, treatment as a Layer 1 adjustment is in order. Information sufficient to determine the 2001 operating cash flow from discontinued operations was provided in a 2001 note on discontinued operations. The disclosure included a combined amount for operating and investing cash flows of \$5.3 billion, but also indicated that \$5 billion represented proceeds from the sale of the Clairol business. Operating cash flows are assumed to represent the difference: \$5.3 billion minus \$5.0 billion equals \$300 million.³¹

No separate tax adjustment is required because the \$300 million of operating cash flow from the discontinued operations already should be on an after-tax basis.

Litigation Payment

Although very large, the net litigation payment, accrued in 2002 but paid in 2003, is an ongoing issue for firms in pharmaceuticals and other healthcare-related businesses. However, its outsized nature is the reason for treating it as an adjustment item. The outsized nature of this payment argues for adjustment status, but the potential for recurrence suggests classification as a Layer 2 adjustment.

Bristol-Myers accrued this litigation charge of \$604 million in 2002, but it was paid in the subsequent year. The noncash nature of the charge in 2002 was evident because it was added back to 2002 net income in arriving at operating cash flow. Moreover, a \$207 million litigation-related deferred tax asset emerged in 2002. The tax saving potential of the litigation charge was recorded as a deferred tax asset because no tax saving was realized since payment had not been made. The deferred tax asset no longer appeared in the 2003 schedule of deferred tax assets. This implies that the litigation payment was made in 2003 and the tax saving represented by the deferred tax asset was realized.

A tax adjustment in this case is clearly in order. The Bristol-Myers marginal tax rate of 37 percent is used to make the adjustment. Alternatively, a tax adjustment equal in amount to the associated deferred tax asset of \$207 million might have been made. In this case there is little difference between the two approaches. The tax adjustment is \$207 million if the deferred tax asset amount is used or \$223 million (37 percent \times \$604 million) if the marginal tax rate is used.

Restructuring Payments

Bristol-Myers has had successive restructuring activities, and the payments are linked to operations. Classification in Layer 1 or 2 could be justified where restructurings are a clear unusual event and the associated cash payments are made over a short period of time. This would establish their nonrecurring nature. For firms with successive restructurings, which involve payment over several years, the payments should be treated as Layer 3 adjustments or perhaps not even be considered to be adjustment items.

The Bristol-Myers restructuring payments are classified in Layer 3 because of the somewhat recurring but irregular amounts of the restructuring payments. A sufficiently outsized restructuring payment might be classified as a Layer 2 adjustment. The Bristol-Myers restructuring payments were disclosed in its notes on restructurings and other items.³²

Tax adjustments are necessary in this case on the very reasonable assumption that the restructuring payments were deductible in arriving at taxable income.

Recap of the Worksheet and Its Construction

It should be evident that the need to exercise judgment, so much a part of the construction of GAAP financial statements, is also called for in the measurement of non-GAAP sustainable operating cash flow. A significant search process is necessary both to identify adjustment items and establish their cash flow status. This search is unlikely to be a flawless effort given the growing length and complexity of current financial statements, associated notes, and commentaries. Moreover, once identified, adjustment items need to be divided into those that do and do not require tax adjustments and assigned to one of the three adjustment layers. The SOCF worksheet is a structured and effective way to organize and classify cash flow information. Moreover, the successive SOCF measures should provide additional insight into both the past and prospective operating performance of firms and of their capacity to generate sustainable operating cash flow.

FREQUENCY AND SIZE OF ADJUSTMENT ITEMS

The case of Bristol-Myers presented in Exhibit 7.7 illustrates application of the worksheet to a single company but cannot provide any more general insight into the frequency or magnitude of specific adjustment items. However, recent available research does provide information on both the frequency and magnitude of adjustment items. This work is based on the firms making up the S&P 100 and is referred to here as the S&P 100 Study.³³

Adjustment Magnitude and Frequency: Information from the S&P 100

Information on both the magnitude and frequency of adjustment items is useful because it can help guide search efforts. Broader information on both magnitude and frequency can aid decisions about where in the financial statements and disclosures to spend time searching for potential adjustments to reported operating cash flow. The payoff from time invested in the search process is increased because effort can be directed to areas known to produce substantial numbers of relatively large adjustment items.

The S&P 100 Study was based on a defined set of adjustment items that included most of the adjustment items discussed in this book. However, outsized pension contributions, which were not a significant feature for much of the 2000 to 2002 time period covered by the study, were not included. Also, unlike the illustration in Exhibit 7.7, the S&P 100 Study did not classify adjustment items into layers.

Magnitude of Adjustments

Summary information on the average adjustments for the S&P 100 as well as the average difference between reported and adjusted or sustainable operating cash flow is provided in Exhibit 7.8.

On average, the largest adjustment items in the exhibit were taxes on nonoperating gains and losses, nonrecurring operating items, and stock option tax benefits. Declining stock values probably explain the decrease between 2000 to 2002 in the taxes on nonoperating gains and losses and the stock option benefits. Taxes on nonoperating gains are reduced by the decline in stock values. Moreover, option tax benefits are reduced when share prices fall. This is because tax-deductible compensation expense is the excess of share price over the exercise price of the underlying option. A lower share value results in less compensation expense and smaller cash tax savings.

Exhibit 7.8 Average Size of Adjustments Made in Computing Sustainable Operating Cash Flow for the Years 2000 to 2002, S&P 100 (\$ millions)

Adjustment Items	2000	2001	2002
Reported cash flow from operations	\$3,693	\$3,751	\$4,106
Adjustments:			
Cash (provided) used by discontinued operations	(8)	(4)	(10)
(Tax benefits from stock options)	(157)	(95)	(45)
Taxes on nonoperating gains/(losses)	180	90	36
Accounts receivable securitization (increase) decrease	(32)	(24)	8
(Increased vendor reliance)	(72)	(62)	(49)
After tax nonrecurring operating items (gain)/loss	68	114	104
Net increase/(decrease) in trading investments— in operations	(70)	(21)	67
(Increase)/decrease in overdrafts—in operations	0	1	0
(Capitalized operating costs) in investing section	(7)	(8)	(7)
(Capitalized interest)	(20)	(21)	(18)
Total average adjustment per firm, use (source)	(118)	(30)	86
Sustainable cash flow from operations	\$3,575	\$3,721	\$4,192

Note: Parentheses indicate a reduction in reported cash flow from operations. The absence of parentheses indicates an increase in reported cash flow from operations.

Source: C. Mulford and M. Ely, "Adjusted Cash Flow and the S&P 100: The Source of the Adjustments" (Atlanta: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, October 2003), p. 1.

Adjustments for increased vendor reliance, that is, outsized growth in accounts payable, were also quite substantial, as were changes in trading investments that had been classified in the operating activities section of the statement of cash flows. Adjustments were made for increased vendor reliance, or growth in accounts payable, only in cases where the increase in accounts payable exceeded revenue growth by 25 percentage points.³⁴

On average, the listed adjustments reduced reported operating cash flow in 2000 and 2001 by about 3.2 and 1.0 percent, respectively. The adjustments increased reported operating cash flow by 2.1 percent in 2002. The S&P 100 Study reported that “adding back nonrecurring restructuring charges was the main cause of the improved 2002 results.”³⁵ Adjustments for the restructuring charges were included in Exhibit 7.8 on the line item for “after-tax nonrecurring operating” items.

Although the average effect of the adjustment on reported operating cash flow might seem quite small, many companies were significantly affected. Exhibit 7.9 provides some additional information from the S&P 100 Study on the magnitude of the changes in reported operating cash flow for individual companies.

The data in the exhibit reveal that underlying the small average annual changes in reported operating cash flow were many companies whose adjusted results were substantially different from their reported operating cash flow. Forty or more companies had changes of 5 percent or more in each year from 2000 to 2002. Moreover, although declining in frequency, a substantial number of companies had changes in operating cash flow of 20 percent or more. It would be difficult to argue the merits of making adjustments to reported operating cash flow in the absence of these significant effects.

These results for the S&P 100 over the period 2000 to 2002 show substantial changes for many individual companies as a result of the adjustments for nonoperating and non-recurring operating cash flow. The results with other large companies probably would be similar. However, the effect of adjustments may be reduced somewhat for smaller companies where, for example, the tax benefits from stock options are less likely to be significant.

Frequency of Adjustments

Information on the frequency of specific adjustment items is also available from the S&P 100 Study and is provided in Exhibit 7.10.

Exhibit 7.9 Changes in Reported Operating Cash Flow, for the Years 2000, 2001, and 2002 (numbers of companies)

Percentage Change in Reported Operating Cash Flow	2000	2001	2002
Change of 5% or more	49	49	40
Change of 20% or more	26	17	12

Source: C. Mulford and M. Ely, “Adjusted Cash Flow and the S&P 100: The Source of the Adjustments” (Atlanta: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, October 2003), pp. 21, 24, and 27.

Exhibit 7.10 Frequency of Adjustment Items, for the Years 2000, 2001, and 2002 (numbers of companies)

Adjustment Items	2000	2001	2002
After-tax nonrecurring operating items	60	72	72
Taxes on nonoperating gains and losses	65	48	40
Capitalized interest	58	57	52
Tax benefits from stock options	38	40	34
Accounts receivable securitizations	9	14	14
Cash provided and used by discontinued operations	9	10	11
Increased vendor reliance	9	5	12
Capitalized operating costs	5	5	5
Net increases and decreases in trading investments	3	3	3
Increases and decreases in overdrafts	2	2	1
Total adjustments	258	256	244

Source: C. Mulford and M. Ely, "Adjusted Cash Flow and the S&P 100: The Source of the Adjustments" (Atlanta: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, October 2003), p. 2.

It is notable that the most frequently appearing adjustment items were also the largest dollar contributors to the operating cash flow adjustments. The exception is capitalized interest, which, although it is quite common, is not a substantial item for most firms. Homebuilding is an industry group for which capitalized interest is a very significant item. However, it is not an adjustment item because the interest usually is capitalized into inventory accounts. As a result, it is already incorporated in the determination of operating cash flow as a part of inventory increases and decreases. However, with airlines the amount of interest capitalized traditionally has been large and has been capitalized into property, plant, and equipment. An adjustment is necessary in this case to reclassify the capitalized interest from investing to operating cash flow.

It should be possible to achieve a more cost-effective search for adjustment items by using the information in both Exhibit 7.8 on adjustment magnitude and Exhibit 7.10 on adjustment frequency. This information would suggest that based on both magnitude and frequency, special attention should be given to locating nonrecurring operating cash flow items, tax benefits from stock options, and nonoperating gains and losses.

SUMMARY

Ten key points were raised in this chapter:

1. It is an established practice to adjust reported earnings by removing nonrecurring items of revenue, gain, expense, and loss. However, it is far less common for companies or analysts to extend this practice to the adjustment of operating cash flow.

2. The logic that motivates adjustments to earnings should extend as well to operating cash flow. An adjusted operating cash flow series should be a more reliable measure of underlying operating performance than reported operating cash flow.
3. An operating cash flow series, which is adjusted for the effects of nonoperating and nonrecurring items of operating cash flow, also should be a more reliable base from which to estimate future sustainable operating cash flow.
4. Efforts to date by companies to provide information on sustainable operating cash flow typically are lacking in comprehensiveness, fail to make appropriate tax adjustments, and are not consistent among companies.
5. The measurement of sustainable operating cash flow begins with reported operating cash flow. Adjustments are then made for both nonoperating as well as nonrecurring items of operating cash flow.
6. Beyond the identification of adjustments, these items also must be classified in the worksheet based on whether they require tax adjustment.
7. A further classification is required to group adjustment items into layers in descending order of the clarity of their designation as nonoperating or nonrecurring operating cash flow.
8. Information provided by a study of the S&P 100 revealed that the largest and most frequent adjustment items were nonrecurring operating items, taxes on nonoperating gains and losses, and the tax benefits of stock options.
9. The S&P 100 data revealed that the average difference between reported and sustainable operating cash flow was rather small over the three-year study period. However, significant changes were present in many individual companies.
10. Data on the magnitude and frequency of adjustments from the S&P 100 can provide guidance in conducting a more cost-effective search for adjustment items. Both the frequency and magnitude findings suggest that a focus be placed on locating nonrecurring operating cash flows, the cash tax savings of stock options, and taxes associated with nonoperating gains and losses.

NOTES

1. Special Committee on Financial Reporting, *Improving Business Reporting—A Customer Focus* (New York: AICPA, 1993), p. 4.
2. Service Corporation International, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 29.
3. Examples of the measurement of sustainable earnings can be found in E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2000), chapter 3.
4. Service Corporation International, Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 29.
5. In addition to funding considerations, pension contributions usually are made only if they will be deductible at the same time for income tax purposes: “We do not generally fund pension plans when our contributions would not be tax deductible.” Applera Corp., annual report, December 31, 2003, p. 18.
6. Cox Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 81.

7. Merck & Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, pp. 44–46.
8. Micron Technology, Inc., Form 10-K annual report to the Securities and Exchange Commission, August 28, 2003. P. 49.
9. In the earlier years, 1993 to 1997, the title used was “Legal fees and settlements” as opposed to “Legal and patent settlements.”
10. C. R. Bard, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. II-55.
11. Mississippi Chemical Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 33.
12. The source of the 2001 tax refund is unclear. It does not appear to have been disclosed in the 2001 10-K report. It is possible that it was the result of an amended tax filing after the issuance of the 2001 10-K report. The amended tax filing would have taken advantage of the temporary extension of the five-year net operating loss carryback feature of the Job Creation and Worker Assistance Act of 2002.
13. Mississippi Chemical Corp., Form 10-Q quarterly report to the Securities and Exchange Commission, December 31, 2003, note 10.
14. *Ibid.*, note 10.
15. York International Corp., annual report, December 31, 2003, p. 11.
16. If the firm is not in a taxable position, then the deduction may simply add to an existing net operating loss carryforward. The subsequent realization of the tax savings should be deducted on the worksheet in arriving at sustainable operating cash flow at that time.
17. Applera Corporation, Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 26.
18. It is possible that Applera made tax adjustments but simply did not make reference to having done so.
19. Techne Corp., annual report, June 30, 2003, p. 12.
20. *Ibid.*, p. 13.
21. Kellogg Company, annual report, December 27, 2003, p. 25. Kellogg’s measure of cash flow in this case is free cash flow, that is, reported operating cash flow minus expenditures for property additions.
22. *Ibid.*, p. 18.
23. The location of some operations in low-tax-rate countries can produce average tax rates that are well below U.S. statutory rates. A precise determination of the proper tax adjustment would require having information on the country in which each adjustment item originated. This is seldom going to be feasible, and spending time refining the estimation of an overall marginal tax rate is unlikely to satisfy any reasonable threshold for cost-effectiveness.
24. Bristol-Myers Squibb Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2001, p. 67.
25. *Ibid.*, p. 45. The parentheses were added for clarity.
26. *Ibid.*, p. 39.
27. *Ibid.*, p. 100.
28. Bristol-Myers stated at the end of 2003 that “significant tax-deductible contributions are

likely to be allowed under current IRS rules, but no minimum contributions will be required.” Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 100.

29. Ibid., p. 61.
30. Ibid., p. 82.
31. Ibid., p. 78.
32. Bristol-Myers Squibb Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 64, and December 31, 2003, p. 76.
33. C. Mulford and M. Ely, *Calculating Sustainable Cash Flow—A Study of the S&P 100 Using 2002 Data* (Atlanta, GA: Georgia Tech Financial Analysis Lab, Georgia Institute of Technology, October 2003).
34. Ibid., pp. 14–15. These pages include an example of the computation of the amount of the increased vendor reliance. Adjustments were made for accounts payable only. The position taken was that accounts payable are the most susceptible to management influence among the principal working capital components.
35. Ibid., p. 27.

Using Operating Cash Flow to Detect Earnings Problems

Operating cash flow at Sears, Roebuck & Co. . . . declined by 111.8 percent between 2000 and 2001, and became negative in 2002. During that same period, operating earnings declined only 3.8 percent.¹

Results at other companies whose operating cash flow showed a marked decline in relation to income during the period, including The Walt Disney Co., PepsiCo, and United Technologies, reflected weak revenue growth, increases in working capital, or outsized pension contributions.²

The relationship between earnings growth, more specifically, growth in income from continuing operations, and increases in operating cash flow is important and can provide meaningful insight into a company's financial health. Over extended periods, the rate of growth in earnings should be commensurate with the rate of growth in operating cash flow. A lasting discrepancy in their rates of growth should be investigated in order to gain an understanding of its causes and implications.

In the short run, there may be a valid explanation for such a development. For example, seasonal factors may cause cash flow to lag earnings as actions are taken to build stocks in anticipation of increased demand. Or due to declining sales during the early stages of a downturn, a cyclical company may see operating cash flow decline as inventory levels grow before cuts in production can be made. Later, as production cuts are made and inventory levels are reduced, operating cash flow may exceed earnings. Then, during an ensuing upturn, earnings may begin to grow again at a rate that exceeds the rate of growth in cash flow as working capital accounts that were liquidated in the earlier downturn are replenished.

A fundamental change in the stage of a firm's life cycle also can alter the relationship between operating earnings and operating cash flow. For example, a transition from start-up to growth may lead to positive earnings from losses in advance of a swing to positive operating cash flow.

Even in the absence of seasonal, cyclical, or life cycle changes, firm-specific developments may result in differences between the rate of growth in earnings and cash flow. For example, credit standards may be relaxed to boost sales. Similarly, increased amounts of inventory may be purchased to take advantage of discounts or to avoid unfilled orders.

Of course, more sinister reasons may explain an excess of earnings growth over cash flow growth. Earnings boosted by artificial means—for example, by premature or fictitious revenue recognition, by aggressive cost capitalization or extended amortization periods, by intentionally overstated assets or understated liabilities—will not be accompanied by an increase in operating cash flow.

If an imbalance between earnings and operating cash flow growth persists, and other, more benign explanations are ruled out, the sustainability of earnings can be called into question. The primary concern is that artificial accounting measures may have been used to cover up fundamental problems with a company's operations creating what otherwise would appear to be healthy increases in earnings. Certainly the possibility of write-downs, for example, of uncollectible receivables or slow-moving inventory, or even of overstated property, plant, and equipment, increases in likelihood, suggesting that earnings declines may be in the offing.

When operating cash flow grows faster than the rate of growth in earnings, the likely explanation is that the balance sheet is being liquidated. Receivables are being collected, inventory is being sold, and prepaid expenses are being consumed without replacement. Although such developments will provide cash flow, it is also possible that asset write-downs, say of property, plant, and equipment or special liability accruals including a restructuring reserve or severance accrual, may have reduced earnings without providing cash flow.

Here again there may be reasonable explanations for such developments in the short run. Seasonal changes may call for inventory liquidation. Prudence during a cyclical downturn may suggest reductions in current assets. A change in a firm's life cycle, this time from growth to maturity or maturity to decline, may be causing cash flow to grow faster or decline more slowly than earnings during a period of transition. Also, planned firm-specific developments, such as a tightening of credit standards or liquidation of unwanted inventory, or even a corporate restructuring, a nonrecurring event, can result in increased operating cash flow relative to earnings.

However, over an extended period, persistent operating cash flow growth in excess of earnings growth calls into question the sustainability of cash flow. Cash generated through liquidation of the balance sheet cannot be sustained. Reductions in earnings through asset write-downs or liability accruals eventually must stop. In the absence of a rebound in earnings growth relative to cash flow, the company will exhaust its supply of assets available for liquidation or write-down. Accrued liabilities will need to be paid.

Thus, after periods of high cash flow growth relative to earnings growth, it should not be surprising to see earnings growth rebound relative to cash flow. Higher earnings growth in such situations may not be a sign of developing problems but rather a return to normalcy. If earnings do not rebound, operating cash flow will eventually stop.

A truly sustainable relationship between earnings and operating cash flow requires that the two measures grow at comparable rates over the long term. When their rates of growth depart, an understanding of the causes can provide insight into how that discrep-

ancy might be resolved. Such insight will provide guidance on the direction of future earnings and cash flow.

Our focus is on using operating cash flow, properly adjusted to reclassify certain operating items and remove nonrecurring items, to detect developing earnings problems with sufficient lead time to permit corrective action. For credit professionals with loan positions in place, such corrective action may entail a tightening of terms, including higher interest rates, a shorter repayment schedule, or added security and guarantees. It may even entail the initiation of an exit strategy. For credit decisions under consideration, a prudent course of action may be simply to avoid the opportunity altogether. For equity investors and analysts, corrective action may entail sale of securities held or the initiation of a short position.

Regardless of the objective, operating cash flow can be a powerful tool for detecting developing earnings problems. However, to better grasp the implications of departures in the growth rates of earnings and operating cash flow, an understanding of the relationship between the two must first be gained.

RELATIONSHIP BETWEEN EARNINGS AND OPERATING CASH FLOW

The operating section of the statement of cash flows prepared in the indirect-method format, which provides a reconciliation of net income to operating cash flow, is instructive in better understanding the relationship between earnings and operating cash flow. As an example, consider the operating section of the statement of cash flows for Brown-Forman Corp. presented in Exhibit 8.1.

Referring to the exhibit, it can be seen that over the three-year period presented, Brown-Forman has reported a very stable relationship between earnings and operating cash flow. In fact, the manufacturer and marketer of distilled spirits, wine, and fine consumer durables, including chinaware and crystal collectibles, reported net income and operating cash flow that were almost identical in amount. Between 2001 and 2003, net income increased just over 5 percent, to \$245 million from \$233 million. Over that time period operating cash flow also increased by approximately 5 percent to \$243 million from \$232 million.

The company reported depreciation charges, which lowered net income but did not consume operating cash flow. Cash was consumed by deferred tax benefits and, more recently, increases in accounts receivable, resulting in little net difference between net income and operating cash flow.

It is noteworthy that in only one year, 2001, was there a measurable use of cash for an increase in inventory. As a manufacturer of distilled spirits and wines, the company carries inventory for considerable periods while its products age. Across the three years, 2001 through 2003, the company carried its combined inventory of all products on average for more than eight months. However, it is not the size of its inventory that would consume operating cash in any particular year, but rather the increase in that inventory. For Brown-Forman, inventory levels have remained relatively stable, resulting in little year-to-year cash flow effect.

Exhibit 8.1 Brown-Forman Corp., Operating Section, Statement of Cash Flows, Years Ended April 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Net income	\$233	\$228	\$245
Adjustments to reconcile net income to net cash provided by operations:			
Depreciation	53	55	55
Amortization	11	—	—
Deferred income taxes	(40)	(43)	(15)
Other	2	3	1
Change in assets and liabilities:			
Accounts receivable	(9)	23	(30)
Inventories	(63)	5	2
Other current assets	3	5	(4)
Accounts payable and accrued expenses	10	15	(18)
Accrued taxes on income	44	(13)	12
Noncurrent assets and liabilities	(12)	(29)	(5)
Net cash provided by operating activities	\$232	\$249	\$243

Source: Brown-Forman Corp., Form 10-K annual report to the Securities and Exchange Commission, April 30, 2003, p. 39.

In contrast to the stable relationship between earnings and operating cash flow reported by Brown-Forman, consider JetBlue Airways Corp. Excerpts from the company's statement of cash flows are presented in Exhibit 8.2.

The exhibit presents the operating section of the cash flow statement for JetBlue Airways. In each of the years presented, operating cash flow exceeded net income by a substantial amount. In 2003, at \$286,337,000, operating cash flow was nearly three times the company's reported net income of \$103,898,000. Noncash expenses, especially deferred income tax expense and depreciation expense, were the primary reasons for the difference between net income and operating cash flow. Increases in receivables, inventories, and prepaid expenses consumed cash flow but were more than offset by substantial increases in the company's air traffic liability, more commonly known as deferred revenue, and by increases in accounts payable and accrued liabilities.

Reporting operating cash flow that was nearly three times net income was primarily a function of the capital-intensive nature of the company's business and the manner in which its tickets were sold. To support the rollout of its route structure, JetBlue invested heavily in property, plant, and equipment. The expenditures made to purchase these assets were reported as investing uses of cash and did not weigh on operating cash flow. However, the resulting depreciation of those assets did lower net income without reducing cash flow. In addition, through the use of accelerated methods of depreciation for tax purposes on those property, plant, and equipment accounts, the company recorded income taxes on earnings, the payment of which was postponed to future years. The resulting deferred taxes also reduced net income without reducing operating cash flow.

In terms of ticket sales, like other airlines, JetBlue offered its customers discounts for

Exhibit 8.2 JetBlue Airways Corp, Operating Section, Statement of Cash Flows, Years Ended December 31, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Net income	\$ 38,537	\$ 54,908	\$103,898
Adjustments to reconcile net income to net cash provided by operating activities:			
Deferred income taxes	3,373	39,659	69,753
Depreciation	9,972	24,730	44,133
Amortization	445	2,192	6,732
Changes in certain operating assets and liabilities:			
Decrease (increase) in receivables	430	6,851	(4,047)
Increase in inventories, prepaid and other	(2,120)	(3,992)	(11,491)
Increase in air traffic liability	23,788	45,968	37,185
Increase in accounts payable and accrued liabilities	30,894	34,734	37,335
Other, net	5,960	11,427	2,839
Net cash provided by operating activities	\$111,279	\$216,477	\$286,337

Source: JetBlue Airways Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 53.

early ticket purchases. When tickets were paid for in advance, the company reported the cash received as deferred revenue, referred to by them as air traffic liability. Such receipts boosted cash flow without boosting net income.

Although in each of the three years presented, the company reported significantly more operating cash flow than net income, the relationship between net income and operating cash flow was relatively stable. Between 2001 and 2003, net income increased by approximately 169 percent. During that period, operating cash flow increased by approximately 157 percent. While the two rates of growth were not identical, short-term changes in operating assets and liabilities, which can be somewhat volatile, cause these benign departures in the rates of growth of earnings and operating cash flow. Longer periods of time would be needed to determine whether departures in the rates of growth for earnings and cash flow are cause for concern. Later in the chapter, more is said about how to recognize problems with differences in these rates of growth.

As one final example, consider Beazer Homes USA, Inc. Excerpts from the operating section of the company's statement of cash flows are presented in Exhibit 8.3.

Riding a housing boom in the United States, between 2001 and 2003 net income at Beazer Homes increased steadily. From \$74,876,000 in 2001, net income increased approximately 64 percent to \$122,634,000 in 2002 and another 41 percent to \$172,745,000 in 2003. However, during that period, the company's ability to generate operating cash flow was somewhat spotty. In 2001, the company consumed \$25,578,000 in operating cash. Although it provided \$59,464,000 of operating cash flow in 2002, it once again consumed cash flow in the amount of \$41,049,000 in 2003.

A major factor that explains the company's difficulty in generating positive operating

Exhibit 8.3 Beazer Homes USA, Inc., Operating Section, Statement of Cash Flows, Years Ended September 30, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Net income	\$ 74,876	\$122,634	\$172,745
Adjustments to reconcile net income to net cash provided/(used) by operating activities:			
Depreciation and amortization	9,253	9,453	13,220
Loss on extinguishments of debt	1,202	—	7,570
Deferred income tax provision (benefit)	(7,906)	(6,613)	87
Tax benefit from stock transactions	3,837	12,235	11,502
Changes in operating assets and liabilities:			
Increase in accounts receivable	(15,814)	(13,601)	(11,674)
Increase in inventory	(153,668)	(152,990)	(328,893)
Decrease/(increase) in other assets	(1,023)	15,611	(3,028)
Increase/(decrease) in trade accounts payable	(26,676)	23,481	16,967
Increase in other liabilities	65,397	48,300	79,257
Change in book overdraft	20,095	—	—
Other changes	4,849	954	1,198
Net cash provided/(used) by operating activities	\$(25,578)	\$ 59,464	\$(41,049)

Source: Beazer Homes USA, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 36.

cash flow is the increase in inventory that it reported in all three years. In 2001 and 2002, the company's inventory increased by over \$150,000,000. In 2003, the increase in inventory ballooned to \$329,000,000. The company indicated that these inventory increases were needed "to support our significant growth and higher year end backlog."³ In theory, as the rate of revenue and earnings growth slows and inventory needs decline, the company should generate significantly higher amounts of operating cash flow, bringing it more in line with earnings. Of course, if the company were unable to realize its investments in inventory, it could become value impaired, necessitating a write-down. Such a write-down, which would reduce earnings but not operating cash flow, also would bring the amounts of earnings and operating cash flow closer together in amount.

Even in the absence of the increase in inventory at Beazer Homes, operating cash flow normally will exceed net income. The primary reason is that expense charges for depreciation and amortization, which lower net income, typically do not require operating uses of cash. Cash disbursements for such items—for example, the acquisition of property, plant, and equipment or the purchase of intangible assets such as patents—usually are reported as investing uses of cash.

However, as was observed in the cases of Brown-Forman and JetBlue Airways, a stable relationship between earnings and operating cash flow, where the two amounts grow at similar rates, should be expected. Although short-term, firm-specific developments—a relaxation of credit terms that increases accounts receivable, a buildup in inventory, or

an extension of the time taken to settle accounts payable—may disrupt the relationship in the short run, over time the two amounts should grow at similar rates. That expectation can be useful in anticipating developing earnings problems.

As noted earlier, beyond firm-specific developments, there are other factors that, in the short run, may upset the relationship between earnings and operating cash flow. Here we look more carefully at seasonal factors, cyclical developments, and transition periods in a firm's life cycle.

Seasonal Factors

During interim periods, companies with strong seasonal components to their operations, where demand ebbs and flows during certain periods of the year, could report significantly different amounts of earnings and operating cash flow. Consider a retailer, for example. During slower periods of the year, inventory stocks often are increased in anticipation of surging holiday demand. As inventory is increased during a period of reduced sales, operating cash flow is consumed. Later in the year, as holiday sales build, earnings increase substantially. During that time, inventory, which was acquired earlier, is liquidated. As a result, operating cash flow grows markedly and may exceed net income by a substantial amount.

Consider Toys “R” Us, Inc., for example. Earnings and cash flow performance for the four quarters of the company's fiscal year ended February 1, 2003 are provided in Exhibit 8.4.

In reviewing the exhibit, it can be seen that Toys “R” Us lost money in each of the interim periods for its fiscal year ended February 1, 2003. Net losses were \$4 million, \$17 million, and \$28 million for the quarters ended May 4, 2002, August 3, 2002, and November 2, 2002, respectively. During those same interim periods, due primarily to additions to its toy inventories, the company consumed considerably more operating cash flow than the amounts of these losses. The company reported operating cash flow of negative \$322 million, negative \$57 million, and negative \$299 million for the May, August, and November quarters, respectively. However, in the fourth quarter, during the three months ended February 1, 2003, Toys “R” Us was profitable and generated a significant amount of operating cash flow. That quarter net income was \$278 million and operating cash flow, which turned positive as inventories were liquidated, was a source of cash of \$1,252 million.

Exhibit 8.4 Toys “R” Us, Inc., Net Income and Operating Cash Flow, Quarters Ended May 4, 2002, August 3, 2002, November 2, 2002, and February 1, 2003 (\$ millions)

Quarter Ended	May 4	August 3	November 2	February 1
Net income (loss)	\$ (4)	\$(17)	\$ (28)	\$ 278
Operating cash flow	\$(322)	\$(57)	\$(299)	\$1,252

Source: Toys “R” Us, Inc., Form 10-Q quarterly report to the Securities and Exchange Commission, May 4, 2002, p. 4; August 3, 2002, p. 4; November 2, 2002, p. 4; and Form 10-K annual report to the Securities and Exchange Commission, February 1, 2003, p. 33.

Although seasonal effects may distort the relationship between earnings and operating cash flow for interim periods, annual results should be unaffected by seasonal factors. Measured before the nonrecurring effects of a restructuring charge, net income at Toys “R” Us increased to \$229 million in the year ended February 1, 2003, from \$185 million in the year ended February 2, 2002. During that same time period, operating cash flow increased to \$574 million from \$553 million.⁴ While short-term swings in deferred taxes and income taxes payable weighed on operating cash flow during the year ended February 1, 2003, seasonal effects were absent.

Cyclical Developments

Seasonal factors affect the relationship between earnings and operating cash flow during interim periods. Cyclical developments—more specifically, the effects on operations of changes in the business cycle, for example, between periods of recession and expansion, or even general cyclical slowdowns during expansion periods—can affect the relationship between earnings and operating cash flow over longer periods.

We include industry-specific developments in this discussion because often they are difficult to separate from changes in the business cycle. For example, the airline industry was hit very hard by a downturn in business experienced in the months and quarters following the destruction of the World Trade Center on September 11, 2001. However, the United States also was experiencing a recession at that time. Separating developments that were specific to the airline industry from those that were related more to a general weakness in the overall economy would be next to impossible. It certainly would not be practical, or necessary. The key is to understand that as companies and industries go through cyclical changes, the relationship between earnings and operating cash flow is altered.

During a recession, a cyclical company likely will experience a decline in revenue and net income. Net losses may ensue. However, once the company is able to respond to a decline in business demand, for example, by reducing the amount of inventories carried, operating cash flow may even improve, at least temporarily. Then as business begins to improve, cash flow may decline as inventory levels are replenished. Consider the effects of the business cycle on the results of Carpenter Technology Corp.

Due at least partially to the recession of 2001, Carpenter Technology, a specialty steel company, saw revenue decline in its years ended June 30, 2002, and 2003. After reporting positive earnings for more than 10 years, the company reported a net loss in 2002. Before a special charge, earnings rebounded slightly in 2003. However, during the same time period, operating cash flow moved in a countercyclical manner. The company’s net income and operating cash flow for each of the three years ended June 30, 2001, 2002, and 2003 are presented in Exhibit 8.5.

In reviewing Carpenter’s income (loss) and cash flow from continuing operations as reported in the exhibit, the lingering effects of the 2001 recession can be seen. Revenue declined markedly in the year ended June 30, 2002, and pushed the company into a reported loss for the year. However, even as earnings declined, cash flow improved. In 2002, primarily due to a decline in accounts receivable and inventory, the company generated \$143.7 million in operating cash flow, up from \$118.6 million in 2001.

Revenue continued to decline in the year ended June 30, 2003. However, due to cost reductions that year, the company was able to report a profit. This rebound in income was

Exhibit 8.5 Carpenter Technology Corp., Revenue, Net Income (Loss) and Operating Cash Flow, Years Ended June 30, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Revenue	\$1,324.1	\$ 977.1	\$871.1
Income (loss) from continuing operations ^a	\$57.5	\$ (6.0)	\$8.1
Cash flow provided by continuing operations	\$ 118.6	\$ 143.7	\$ 92.2

^a Amount excludes the after-tax effects of a special charge of \$36 million in 2001 and \$30.6 million in 2003.

Source: Carpenter Technology Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, pp. 34 and 35.

not accompanied by an improvement in operating cash flow. Even as income from continuing operations improved to \$8.1 million in 2003 from a loss of \$6 million in 2002, cash flow provided by continuing operations declined to \$92.2 million in 2003 from \$143.7 million in 2002. In 2003 there was less support provided to operating cash flow from the liquidation of operating working capital accounts than there was in 2002. Gradually, as the company moves beyond the effects of business-cycle changes on its operations, a more stable relationship between earnings and operating cash flow should return.

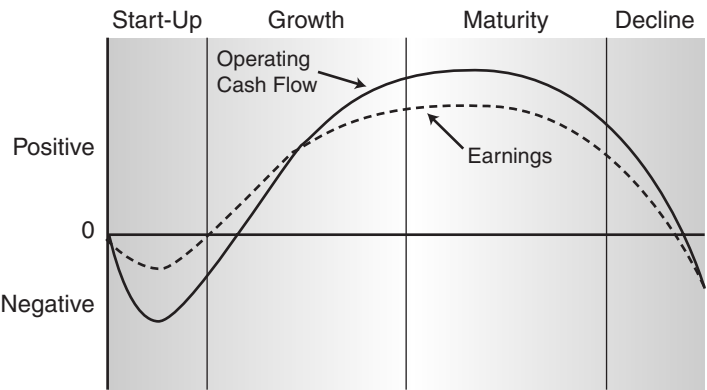
Life Cycle Transition Periods

A company's earnings and operating cash flow have certain characteristic relationships that depend on the stage of the life cycle in which it operates. That is, operating cash flow may be positive or negative and higher or lower than earnings depending on whether the firm is in the start-up, growth, maturity, or decline stage of its life cycle. A graphical depiction of a firm's life cycle is presented in Exhibit 8.6.

In the exhibit, the life of a hypothetical firm is divided into quadrants. Lines are drawn through the quadrants to depict a natural progression of earnings and operating cash flow over the firm's lifetime. The two lines start out together at zero. They turn negative during the start-up phase as losses are reported and operating cash flow is consumed. As the company enters its growth stage, earnings become positive. At some point in this phase of the company's life, operating cash flow catches up to earnings and likely surpasses it. The two amounts continue growing into maturity, although at slower rates of growth. A firm enters the decline phase with consistent declines in revenue and earnings. In the absence of changes to the business or without new investments to reinvigorate growth, earnings eventually will turn to consistent losses. A decline in operating cash flow likely will lag the earnings decline, but cash flow also will become negative as losses mount.

It can be seen in Exhibit 8.6 that in the absence of seasonal or cyclical developments and without short-term, firm-specific events, a stable relationship between earnings and operating cash flow can exist for extended periods. This is especially true during the growth and maturity phases of a company's life, during which times operating cash flow and earnings grow at similar rates. However, during transition periods, especially the

Exhibit 8.6 Life Cycle Relationship between Earnings and Operating Cash Flow



transition from start-up to growth and from maturity to decline, the stable relationship between earnings and operating cash flow likely will be altered.

A more detailed look at the relationship between earnings and operating cash flow at various life cycle stages is provided in the sections that follow. Also examined are the effects of a transition between life cycle segments.

Start-Up

A start-up firm may report little or no revenue and net losses as it spends on selling, general and administrative expense items, and, for technology firms, research and development. It may consume even more operating cash flow as early sales result in increases in accounts receivable and base-stock inventories are accumulated. Consider the results for Aastrom Biosciences, Inc. provided in Exhibit 8.7.

During the 2001 through 2003 time frame, Aastrom Biosciences was a development-stage company that researched human cell therapy for various medical applications. Although the company reported revenue, most of it was from the receipt of research grants and was not from selling products and services.

As can be seen in Exhibit 8.7, Aastrom reported losses that increased from \$5,926,000 in 2001 to \$9,579,000 in 2003. Over that same time period the company's operations consumed cash. In 2001 and 2002, due primarily to increases in inventory, the amount of cash consumed, \$6,362,000 in 2001 and \$8,749,000 in 2002, exceeded the net losses reported. However, in 2003, due to the use of noncash, stock-based compensation and an inventory write-down, the company reported a net loss that exceeded the \$8,990,000 in operating cash flow consumed for the year.

Aastrom will continue reporting losses and consuming cash from operations until revenue from product sales and services begins to grow. Until that time, because the company has little in the way of noncash expenses such as depreciation and amortization, the amount of cash consumed by operations likely will follow closely the amount of net losses reported.

Exhibit 8.7 Start-up Company, Aastrom Biosciences, Inc., Revenue, Net Income, and Operating Cash Flow, Years Ended June 30, 2001, 2002, and 2003 (\$ thousands)

	2001	2002	2003
Revenue ^a	\$ 899	\$ 877	\$ 844
Net (loss)	\$(5,926)	\$(7,939)	\$(9,579)
Operating cash flow	\$(6,362)	\$(8,749)	\$(8,990)

^a Primarily research grants.

Source: Aastrom Biosciences, Inc., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, pp. 36 and 38.

Growth

As a start-up's business model begins to gain traction, revenue will grow. Eventually earnings will turn positive, although the timing of that turn will depend on the company's gross margin and its required spending on operating expenses. Even as earnings turn positive, continued increases in accounts receivable and inventory may cause the company to report negative operating cash flow. Whether it reports positive or negative operating cash flow also will depend on other factors, including the company's underlying profitability and the extent to which it reports noncash expenses such as depreciation and amortization. As an example, consider the results for DHB Industries, Inc., presented in Exhibit 8.8.

DHB Industries, an early-stage growth company, manufactures and distributes protective apparel, including bullet- and projectile-resistant garments. Over the 2000 to 2002 time period, the company enjoyed significant growth in revenue and net income. As shown in the exhibit, DHB's revenue increased from \$70,018,000 in 2000 to \$130,347,000 in 2002. As growth accelerated, with the exception of a small amount of operating cash flow provided in 2000, the company consumed increasing amounts of cash from operations.⁵ Most of that cash was used for increases in accounts receivable and inventory.

Note the contrast in the relationship between earnings and operating cash flow for Aastrom Biosciences, a start-up, and DHB Industries, an early-stage growth company. Aastrom reported losses and consumed cash from operations. DHB reported profits and consumed operating cash flow. Thus, in the transition between start-up and growth, earnings turned positive in advance of a similar turn in operating cash flow.

As DHB becomes more established in the growth stage of its life cycle, increases in operating working capital such as accounts receivable and inventory at rates that exceed the rate of growth in earnings should not be necessary. Operating cash flow should turn positive. Moreover, as depreciation continues to grow, lowering net income without consuming operating cash, operating cash flow should eventually exceed earnings. Consider the earnings and cash flow data for an established growth company, Wal-Mart Stores, Inc., presented in Exhibit 8.9.

As a growth company, Wal-Mart's revenue is growing faster than the rate of growth of the overall economy. As shown in the exhibit, between 2001 and 2003, revenue increased from \$191.329 million to \$244,524 million, an overall increase of 27.8 percent. During

Exhibit 8.8 Early-Stage Growth Company, DHB Industries, Inc., Revenue, Net Income, and Operating Cash Flow, Years Ended December 31, 2000, 2001, and 2002 (\$ thousands)

	2000	2001	2002
Revenue	\$ 70,018	\$ 98,015	\$130,347
Net income	\$ 6,007	\$ 10,133	\$ 15,980
Operating cash flow	\$ 1,946	\$ (2,574)	\$ (15,490)

Source: DHB Industries, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. F-5 and F-7.

Exhibit 8.9 Established Growth Company, Wal-Mart Stores, Inc., Revenue, Net Income, and Operating Cash Flow, Years Ended January 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Revenue ^a	\$191,329	\$217,799	\$244,524
Net income	\$ 6,295	\$6,671	\$8,039
Operating cash flow	\$ 9,604	\$ 10,260	\$ 12,532

^a Excludes other income of \$1.8 billion, \$1.9 billion, and \$2 billion in 2001, 2002, and 2003, respectively.

Source: Wal-Mart Stores, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 31, 2001, 2002 and 2003, pp. 29 and 32.

that same time period, net income increased 27.7 percent from \$6,295 million to \$8,039 million. Operating cash flow grew in line with net income and exhibited a relatively stable relationship with it. Between 2001 and 2003, operating cash flow increased 30.5 percent. An increase in deferred income tax liabilities related to property, plant, and equipment in 2003 temporarily pushed the rate of growth in operating cash flow above the rate of growth in earnings.

A company may operate in the growth stage of its life cycle for considerable periods, possibly decades. During that period often a relatively stable relationship between earnings and cash flow is exhibited. Looking at a firm like Wal-Mart, there is no reason to expect that operating cash flow would grow at a rate that is significantly at odds with the rate of growth in earnings. If it were to begin growing much faster or slower, a closer look would be warranted.

At some point, a firm begins to report revenue growth that does not exceed the rate of growth of the overall economy. The firm is likely still profitable. Also, due to cost control and improvements in economies of scale, earnings may even increase at a rate that is faster than the rate of growth in revenue. However, the overall rate of growth will have slowed. Here the firm is moving toward the late stages of growth and the early stages of maturity. For the same reasons just provided, operating cash flow still can be expected to exceed earnings, and likely a stable relationship between the two will continue to be exhibited. Consider the performance of Anheuser Busch Cos., Inc., presented in Exhibit 8.10.

Exhibit 8.10 Established Growth Company, Anheuser Busch Cos., Inc.,
Revenue, Net Income, and Operating Cash Flow, Years Ended
December 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Revenue ^a	\$12,912	\$13,566	\$14,147
Net income	\$ 1,705	\$ 1,934	\$ 2,076
Operating cash flow	\$ 2,361	\$ 2,765	\$ 2,971

^a Net of excise taxes.

Source: Anheuser Busch Cos., Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 41 and 43, and Form 8-K special report to the Securities and Exchange Commission, February 4, 2004, Exhibit 99.

The exhibit presents selected financial results for Anheuser Busch Cos., Inc., for the years 2001, 2002, and 2003. During that period revenue increased 9.6 percent, from \$12,912 million in 2001 to \$14,147 million in 2003—a rate that was generally in line with the rate of increase in nominal gross domestic product.⁶ Net income also increased, from \$1,705 million in 2001 to \$2,076 million in 2003, an increase of 21.8 percent. Growth in operating cash flow was slightly faster than net income. Boosted in 2003 by an increased distribution from an affiliate company, operating cash flow grew 25.8 percent from \$2,361 million in 2001 to \$2,971 million in 2003.

Over extended periods, established growth companies can be expected to grow earnings and operating cash flow at consistent rates. The established growth companies Wal-Mart and Anheuser Busch are two cases in point.

Maturity

As revenue growth continues to slow, it becomes progressively difficult to describe a firm as a growth company. In maturity, revenue may grow, although slower than the rate of growth in the economy. During maturity, revenue also may flatten out, or, in the later stages of maturity, it may even start to decline. Such a company may continue to report income, although the longer that revenue continues without meaningful increase, the higher the likelihood becomes that losses will be reported. Here restructuring events take on increased probability as the company tries to reinvent and reposition itself for growth. During maturity, at least until the late stages, the stable relationship between earnings and cash flow likely will remain. Only when the company begins taking significant noncash restructuring charges will the spread between operating cash flow and earnings increase. Consider the financial performance of Eastman Kodak Co. presented in Exhibit 8.11.

In its current configuration, Eastman Kodak is in the late stages of maturity. The firm, which over the years has depended on film-related products for much of its revenue, is finding it necessary to make some significant changes in the direction of its business as electronic imaging replaces film.

The company's problems are evident in Exhibit 8.11. Between 2001 and 2003, revenue at the company was virtually flat. Revenue in 2001 was \$13,229 million; it fell to \$12,835 million in 2002 and increased again to \$13,317 million in 2003. At that point, it

Exhibit 8.11 Mature Company, Eastman Kodak Co., Revenue, Net Income, and Operating Cash Flow, Years Ended December 31, 2001, 2002, and 2003 (\$ millions)

	2001	2002	2003
Revenue	\$13,229	\$12,835	\$13,317
Net income	\$81	\$793	\$238
Operating cash flow	\$ 2,213	\$ 2,218	\$ 1,626

Source: Eastman Kodak Co., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, pp. 79 and 83, and Form 8-K special report to the Securities and Exchange Commission, January 22, 2004, Exhibit 99.2.

was almost unchanged from 2001. Over the three years, the company remained profitable, but only marginally. Net income was \$81 million in 2001; it grew to \$793 million in 2002 and declined again to \$238 million in 2003. Restructuring charges taken in all three years along with generally weak operating profitability help explain the company's poor earnings performance.

Between 2001 and 2003, because of noncash expenses such as depreciation and amortization, and noncash restructuring charges, operating cash flow at Kodak remained well above net income. However, as the company transitioned through late maturity and the risk of decline increased, the likelihood of a stable relationship between net income and operating cash flow declined.

Kodak may begin reporting losses as it grapples with restructuring and a change in its business direction. In the near term, however, because many of its needed restructuring actions entail noncash charges, it would not be surprising to see the company continue generating positive operating cash flow. Only if the company were to remain unprofitable and enter an extended period of decline would it run the risk of beginning to consume cash from operations.

Decline

A company in decline may report losses but provide ample amounts of operating cash flow as investments in working capital accumulated during earlier periods of growth are liquidated. As the decline continues, however, positive operating cash flow likely will turn negative. Consider the results for Polaroid Corp. presented in Exhibit 8.12.

Although Polaroid had struggled for years to generate any meaningful revenue growth, a concerted decline in revenue began sometime around 1996. As noted in the exhibit, revenue at the company declined from \$2,275 million in 1996 to \$1,846 million in 1998. However, during that time period, while the company's profits of \$15 million in 1996 turned to losses of \$127 million in 1997 and \$51 million in 1998, as is often the case with companies in decline, its operating cash flow remained positive as accounts receivable and inventory were liquidated. Cash provided by operations was \$312 million in 1996, \$122 million in 1997, and \$98 million in 1998.

After 1998 Polaroid began showing some signs of improvement. Evidence of that improvement is presented in Exhibit 8.13.

As noted in the exhibit, between 1998 and 2000, the decline in revenue at Polaroid was stopped as the company reported revenue of \$1,979 million in 1999 and \$1,856 billion in 2000, up from \$1,846 million in 1998. During that time period, the company even became profitable as net income increased to \$9 million in 1999 and \$38 million in 2000, up from a net loss of \$51 million in 1998. However, by 2000, as large amounts of unsold inventory began to build, the company was unable to continue generating positive cash flow. That year, operating cash flow turned to a use of cash of \$1 million, down from a source of cash of \$98 million in 1998 and \$131 million in 1999.

During 2001, Polaroid's financial performance turned from bad to worse. Exhibit 8.14 provides evidence of the company's continued decline.

As noted in the exhibit, revenue dropped to \$664 million during the six months ended July 1, 2001, from \$888 million during the same period in 2000. Net income also dropped precipitously, turning to a loss of \$201 million in 2001 from income of \$25 million in 2000. During this time period, the company continued to have difficulty generating cash; it reported negative operating cash flow of \$39 million in 2000 and negative \$33 million in 2001.

The last financial statements filed by Polaroid Corp. as a public entity were the quar-

Exhibit 8.12 Decline Company, Polaroid Corp., Revenue, Income (Loss) and Cash Flow from Continuing Operations, Years Ended December 31, 1996, 1997, and 1998 (\$ millions)

	1996	1997	1998
Revenue	\$2,275	\$2,146	\$1,846
Income (loss) from continuing operations ^a	\$15	\$ (127)	\$ (51)
Operating cash flow	\$ 312	\$ 122	\$ 98

^a In 1996, income from continuing operations excludes an extraordinary loss of \$56.1 million on early retirement of debt.

Source: Polaroid Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 1998, Exhibit 13.

Exhibit 8.13 Decline Company, Polaroid Corp., Revenue, Net Income, and Operating Cash Flow, Years Ended December 31, 1998, 1999, and 2000 (\$ millions)

	1998	1999	2000
Revenue	\$1,846	\$1,979	\$1,856
Net income (loss)	\$ (51)	\$ 9	\$ 38
Operating cash flow	\$ 98	\$ 131	\$ (1)

Source: Polaroid Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2000, Exhibit 13.

Exhibit 8.14 Decline Company, Polaroid Corp., Revenue, Net Income, and Operating Cash Flow, Six Months Ended July 2, 2000, and July 1, 2001 (\$ millions)

	2000	2001
Revenue	\$888	\$ 664
Net income (loss)	\$ 25	\$(201)
Operating cash flow	\$ (39)	\$ (33)

Source: Polaroid Corp., Form 10-Q quarterly report to the Securities and Exchange Commission, July 1, 2001, pp. 1 and 3.

terly financials for the six months ended July 1, 2001. As the company's financial problems worsened, it filed for bankruptcy protection in October 2001.

Growth and Maturity Dominate

The growth and maturity segments dominate the graph of the life cycle relationship between earnings and operating cash flow provided in Exhibit 8.6. Successful companies can expect to spend the majority of their collective lifetimes operating in these two segments. Note that for much of that time period, subject to short-term changes caused by firm-specific items, seasonal factors, and cyclical developments, a relatively stable relationship between earnings and operating cash flow can be expected. Although the relationship between earnings and operating cash flow may change as a company transitions through these segments of its life cycle, such transition effects will tend to develop slowly.

Earnings and operating cash flow also will follow characteristic patterns during start-up and decline. However, during these life cycle segments, the relationship between earnings and cash flow is less stable and can be expected to change over short periods as a company transitions through them.

EARNINGS SUPPORTED BY ARTIFICIAL MEANS

During the late 1990s and the early part of this decade, we witnessed untold numbers of companies that resorted to creative accounting practices to prop up or manage earnings by artificial means. As recently as 1998, such practices were not widely viewed as a problem. However, a former commissioner of the Securities and Exchange Commission, Arthur Levitt, thought differently. He referred to the accounting actions being taken by corporate managers at the time as a game and sounded an alarm bell regarding the developing problem:

I'd like to talk to you about another widespread, but too little-challenged custom: earnings management. This process has evolved over the years into what can best be characterized as a game among market participants. A game that, if not addressed soon, will have adverse consequences.⁷

Levitt's words were prophetic. At the time of his talk, the average person had never heard of Enron Corp., HealthSouth Corp., and Tyco International, Ltd. However, within only a few years of his admonishment, those companies, plus hundreds of others, became an unfortunately large part of everyday talk in the United States and abroad.

To varying degrees, the managers at these companies and others used creative accounting practices to cover up operational problems and alter otherwise disappointing financial results into measures of performance that pleased investors. In the process, investors were misled as they made investment decisions based on reported numbers that were false.

In the aftermath and cleanup that followed the accounting debacle of the late 1990s and early 2000s, we witnessed the restatement of financial statements at hundreds of companies that reversed the effects of aggressive and often fraudulent accounting practices. New regulations were put in place, including the far-reaching Sarbanes-Oxley Act, in an effort to maintain the integrity of our financial reporting system and the all-important trust and confidence of investors.⁸

It remains to be seen whether Sarbanes-Oxley "fixed" the U.S. accounting system. Importantly, it does appear that investors' trust and confidence in U.S. financial reporting has been maintained. However, unfortunately, it is only a matter of time before the next big accounting fiasco is uncovered. The potential rewards for playing the financial numbers game are too great. Such rewards include higher stock-based compensation and bonuses, lower borrowing costs, and less stringent loan terms, and for some firms for which lower earnings might lessen the public glare, lower political costs. With rewards like these and human nature being what it is, civil and criminal penalties notwithstanding, there will be managers who succumb.

However, it does not require accounting steps that take a company's reporting practices beyond the boundaries of generally accepted accounting principles (GAAP) to mislead investors. Aggressive accounting practices that are within the boundaries of GAAP likely would not result in a restatement, but they can mislead investors. Such practices still can lend a positive spin to financial results, helping a firm meet the earnings expectations of investors.

Earnings but No Cash Flow Provided

Earnings that have been inflated, whether through aggressive accounting practices that are within the boundaries of GAAP or due to steps taken that extend beyond GAAP, will not provide operating cash flow. Instead, other assets on the balance sheet, possibly accounts receivable or inventory, maybe even prepaid expenses, other assets, or property, plant, and equipment, will increase. Sometimes liabilities may be reduced. The point is that such practices will result in earnings growth that is not accompanied by growth in cash flow, disrupting any characteristic relationship between the two. Accordingly, when earnings growth exceeds the rate of growth in operating cash flow, especially for extended periods, it may provide evidence that accounting practices are being employed to provide a temporary boost to earnings. At a minimum, the financial statements should be examined to find out why.

Some of the more common actions used to inflate earnings artificially, both within the boundaries of GAAP and beyond them, include:

- Premature or fictitious revenue recognition
- Aggressive cost capitalization
- Extended amortization periods
- Overvalued assets
- Undervalued liabilities

Premature or Fictitious Revenue

Generally, before revenue can be recognized, there must be a valid order, a completed shipment, and a collectible sales amount. If any one of these parts is missing, revenue recognition should be postponed.

Revenue is recognized prematurely when a valid order has been received but shipment has not yet occurred. For example, Twinlab Corp. restated results for 1997 and 1998 because “some sales orders were booked but not ‘completely shipped’ in the same quarter.”⁹ As another example, Peritus Software Services, Inc., recorded revenue in its quarter ended September 30, 1997, for an order received during the quarter even though shipment did not take place until November of that year.¹⁰

Fictitious revenue recognition entails the recording of revenue for nonexistent sales. Such acts might involve revenue recorded for shipments made that have not been ordered. For example, Digital Lightwave, Inc., recorded revenue on the shipment of demonstration units for which there was never a firm commitment for purchase.¹¹

At least in the Digital Lightwave example, a shipment was made to a potential customer. In more egregious cases such shipments are not made. For example, Boston Scientific Corp. leased commercial warehouses to which it shipped its medical devices. Disturbingly, the company recognized revenue even though it had no order and had not shipped to a customer.¹²

Of course, it gets even worse. Some companies do not even bother to manufacture or ship a product. California Micro Devices Corp. employed a policy of “booking bogus sales to fake companies for products that didn’t exist.”¹³

The biggest difference between premature and fictitious revenue is one of degree. Premature revenue entails early recognition for legitimate sales. In particular, a customer order exists. Fictitious revenue is revenue recorded for nonexistent sales. However, both premature and fictitious revenue recognition are considered to be practices that extend beyond the boundaries of GAAP.

Revenue recognized in an aggressive manner but within the boundaries of GAAP would involve aggressive sales-related assumptions. For example, optimistic estimates of sales returns might be employed. Or a company that issues rebate coupons might optimistically understate its estimate of the rebates that will need to be paid. Both actions could be used to increase revenue. As long as the estimates employed are considered to be reasonable in the circumstances, they would not be viewed as violating GAAP. If it were determined later that the judgment-based estimates were overly optimistic, a special charge would be needed to lower current-year earnings.

Premature and fictitious revenue as well as revenue recognized aggressively but within the boundaries of GAAP will be accompanied by an otherwise unexplained increase in assets, typically accounts receivable, or reduction in liabilities, primarily deferred revenue. Revenue and earnings will grow, although operating cash flow growth will lag.

Aggressive Cost Capitalization

Under GAAP, expenses incurred that benefit future periods should be capitalized, that is, reported as assets. Later, as those assets are consumed, they are expensed in the form of amortization. Examples of costs that are properly capitalized include software development, direct-response advertising, interest on borrowed funds related to construction activities, and costs related to oil exploration and movie production.

Whether costs will benefit future periods is a judgment call. Some managers may take a particularly aggressive stance in the matter and capitalize costs that others expense. An aggressive stance would not necessarily make the decision to capitalize an incorrect one or one that is in violation of GAAP. Much depends on whether the capitalized costs ultimately were realized.

For example, many software companies expense all software development costs when those costs are incurred. Questions of realizability and whether software development reaches what is referred to as technological feasibility—the software will do what it is designed to do—lead them to a conservative decision.

For software firms that do capitalize such costs, approximately 26 percent of software development costs incurred is capitalized.¹⁴ Among the firms on the higher end of those that capitalize such costs is American Software, Inc. In 1999 and 2000, the company capitalized approximately 50 percent of software development costs incurred.¹⁵

A decision to capitalize more software development costs than the average firm does not mean that American Software violated GAAP. However, questions concerning realizability did force the company to take a \$9.1 million charge in 2001 for the “write-off of certain capitalized software development costs.”¹⁶ Had the company capitalized a lesser proportion of software development costs incurred, that charge may not have been necessary. Perhaps acknowledging a rather aggressive stance on its capitalization practices, in 2001, American Software reduced the capitalization percentage of software development costs incurred to approximately 25 percent.¹⁷

Unfortunately there have been numerous examples of companies that have ventured well beyond the boundaries of GAAP in their capitalization practices. WorldCom, Inc., is a case in point. The company capitalized billions of dollars of what amounted to “charges paid to local telephone networks to complete calls.”¹⁸ Such costs do not benefit future periods and should have been expensed as incurred.

Aggressive cost capitalization will result in increases in any number of assets, including prepaid expenses, property, plant, and equipment, and other assets. Expenses will be reduced, increasing earnings. However, those increases in earnings will not result in similar increases in operating cash flow.

Extended Amortization Periods

The cost of assets that benefit future periods must be amortized, that is, expensed over the periods receiving benefit. For example, property, plant, and equipment items, excluding land and construction in progress, are depreciated. Intangible assets, such as patents, franchise rights, and capitalized software development costs, but excluding goodwill, which has an indefinite life, are amortized. Natural resources are depleted. All are examples of the broader concept of amortization.

Generally accepted accounting principles provide no specifically defined asset amortization periods. That decision is left to judgment. Much like the cost capitalization decision, some companies will decide optimistically that the usefulness of assets will extend over longer periods. As a result, amortization charges will be lower and income higher.

Selection of an extended amortization period is a GAAP violation when it is determined that judgment has been applied improperly. However, whether reasonable or unreasonable, if judgment calls have been employed in the selection of an amortization period that is longer than an underlying asset's usefulness, prior-year earnings and asset balances will have been overstated. Typically, a charge is needed to write down the book values of any overstated assets.

For example, in 1997, Qualcomm, Inc., took a \$8.8 million charge to write down long-lived assets that had become value impaired. Had the company used a shorter period in amortizing the assets, such a charge may not have been necessary.¹⁹

Extended amortization periods reduce amortization expense. The resulting increase in earnings is not accompanied by an increase in operating cash flow but rather by otherwise higher valuations for assets subject to amortization. This can include property, plant, and equipment; natural resources; and intangible assets with finite lives.

Overvalued Assets

The focus here is on assets that are not subject to amortization. Examples include accounts receivable, inventory, investments, and goodwill. Judgment plays a significant role in the valuation of these assets. Aggressive judgment decisions may be used to value them at overstated amounts, boosting earnings in the process.

For example, accounts receivable are reported at amounts due less an estimate of uncollectible accounts. An optimistic assessment of collectibility can lead to an understatement of an expense provision for uncollectible accounts and an overstatement of accounts receivable.

Inventory is valued at the lower of cost or an estimate of market value. An aggressive assumption about the market value of obsolete inventory can lead to an overstatement of inventory and an understatement of cost of goods sold.

Investments in debt securities that are held to maturity are carried at cost. However, such investments must be written down when a nontemporary decline reduces market value below cost. Such a write-down may be postponed by judging that a market value decline is temporary.

Goodwill is subject to annual impairment reviews. Judgment is clearly needed in deciding whether the fair value of an acquired entity has declined below book value, necessitating a write-down.

As an example of the application of judgment in the valuation of goodwill, consider AOL-Time Warner, Inc. In the first quarter of 2002, the company took a \$54.2 billion pre-tax charge to write down a portion of the goodwill recorded in the merger with Time Warner, Inc. However, even after the write-down, over \$80 billion of goodwill remained on the balance sheet. During 2002, as the market value of the company continued to decline, management argued that "it's absolutely premature and inappropriate to take an impairment charge at this time."²⁰ Yet within a few months of that statement, the company took an additional goodwill impairment charge for approximately \$46 billion.

The overstatement of earnings that accompanies an overvaluation of assets does not provide operating cash flow. The resulting boost to earnings will show up as increases in such items as accounts receivable, inventory, investments, and goodwill.

Undervalued Liabilities

Earnings may be overstated when liabilities, such as accrued expenses payable or estimated reserves for future payment commitments, are understated. As was the case with an overvaluation of assets, judgment enters into the valuation of liability accounts. For example, an optimistic assessment of an estimated warranty obligation may lead to an understatement of that liability and an overstatement of earnings.

When pushed beyond reasonable limits, so-called optimistic assessments stretch beyond the boundaries of GAAP. That is what happened at Miniscribe Corp., a company that filed for bankruptcy protection in 1990. In 1986, the company reduced its warranty reserve even as revenue increased to \$185 million from \$114 million in 1985.²¹ Normally, an increase in revenue would indicate that an increase in the warranty reserve was needed. Earnings were later restated downward as the warranty reserve, among other accounts, was adjusted.

An undervaluation of liabilities will raise earnings but will not be accompanied by an increase in operating cash flow. Earnings boosted in this manner will result in reductions in liabilities such as accrued expenses payable and reserves for future payment commitments.

Losses but No Cash Flow Used

Some managers may use overly conservative accounting practices to lower current earnings while providing a boost to future earnings. For example, an overly conservative restructuring charge may be used to write down property, plant, and equipment and intangible assets or to expense currently future operating costs and report them in a restructuring reserve. The charge may be taken in a down year when earnings expectations are low. Future earnings then can be reported at higher amounts as depreciation and amortization expenses are reduced, as operating costs are charged to the previously recorded restructuring reserve or the reserve is simply reversed into earnings.

In 1996, after taking a special pretax charge to earnings for \$337.6 million, Sunbeam Corp. reported a pretax operating loss of \$285.2 million.²² Then in 1997, after reporting pretax operating income of \$199.4 million, Albert Dunlap, the company's chief executive officer, enthused about what an amazing year the company experienced.²³ Later the company was forced to restate those pretax earnings downward to \$104.1 million for, among other things, the overly aggressive nature of the special charge taken in 1996.²⁴

Although not to the degree of Sunbeam Corp., Microsoft Corp. also was somewhat conservative in its accounting. The company deferred revenue that arguably should have been recognized currently. In fulfilling accounting guidance from Statement of Position No. 98-9, the company changed its policy and reduced the portion of software revenue that was deferred.²⁵

When earnings are artificially understated, assets will have been written down and liability balances raised. In the process, operating cash flow will increase relative to earnings.

An Early Warning Signal

What we propose is a means for identifying early the development of potential problems in a company's stream of earnings or operating cash flow. Our interest is in isolating cases where earnings and operating cash flow are growing at different rates. To facilitate our analysis, we employ a ratio we term "excess cash margin."

EXCESS CASH MARGIN²⁶

The objective is to detect developing earnings problems with sufficient lead time to permit corrective action. We are interested in identifying firms where there is evidence that earnings have been supported by artificial means. We would not be able to say specifically why a firm's management had taken such steps. For example, we would not know whether management was attempting to cover up developing operational problems or make an already impressive earnings picture look even better. Sometimes the real reason may not become known until later.

It is also possible that eventually any underlying operational problems will be cured. Such is the nature of financial analysis. Analysis entails professional judgment. Questions raised cannot be answered with certainty.

In some cases, the firms identified with the procedures outlined here will have employed accounting steps that fall within the boundaries and flexibility afforded by GAAP. In fact, their actions may entail nothing more than optimistic judgment calls. In other instances, managers may have employed accounting practices that extend well beyond GAAP. They may even entail fraud. Restatements may follow. There are clearly differences of degree here. However, regardless of how far a firm's accounting practices are pushed, at a minimum the astute analyst would want to question why such steps were necessary. It is possible that operational problems had developed that were more significant than initial appearances or public statements by management would suggest. Reported earnings may be at risk for decline.

Defining Excess Cash Margin

Our concern is with companies where earnings growth exceeds growth in operating cash flow. An effective statistic for measuring the two rates of growth employs the difference between operating cash flow (OCF) and operating earnings (OE) divided by revenue (REV). We refer to the quotient, which is multiplied by 100 so that it is not expressed in decimals, as excess cash margin (ECM).

$$\begin{aligned} \text{Excess cash margin} &= ((\text{Operating cash flow} - \text{Operating earnings}) / \text{Revenue}) \times 100, \\ &\text{or} \\ \text{ECM} &= ((\text{OCF} - \text{OE}) / \text{Rev}) \times 100 \end{aligned}$$

To be effective for purposes of this analysis, operating cash flow should be adjusted first to reclassify certain operating items and remove nonrecurring items using the adjustment process described in Chapter 7. The earnings measure employed, operating earnings, refers to income from continuing operations adjusted for more obvious nonrecurring items. For example, items such as restructuring charges, asset write-downs, and

litigation settlements should be removed from earnings. Such nonrecurring items produce noise that will affect the usefulness of ECM.²⁷

In the calculation of ECM, we divide the difference between OCF and OE by REV so that changes in each can be read relative to changes in the scale of a firm's operations. For example, while the difference between OCF and OE may be growing, that difference takes on added significance when it is growing at a rate that is different from the rate of growth in revenue. In addition, the difference between OCF and OE that has been scaled by revenue can be compared across firms more readily than a similarly calculated difference that has not been scaled.

We refer to the ECM ratio as excess cash margin because it measures the excess of operating cash flow over operating earnings as a margin, a percent of revenue, much as operating cash flow might be measured as a percent of revenue (i.e., cash margin) or operating earnings might be measured as a percent of revenue (i.e., net margin). Viewed in this manner, excess cash margin is the excess of cash margin over net margin, expressed in percentage terms.

Because operating earnings are measured after depreciation and amortization and operating cash flow is measured before depreciation and amortization, generally we expect firms to exhibit ECM that is above zero. Using this reasoning, more capital-intensive firms with higher depreciation charges and firms that have invested heavily in intangibles subject to amortization generally will exhibit levels of ECM that are higher than other firms.

Of course, such generalizations do not always hold. The same factors that affect operating cash flow, including seasonal and cyclical developments, a firm's stage in its life cycle, and whether a firm is moving between life cycle stages, will affect ECM and make it rise and fall.

Although there is information in the level of a firm's ECM and how it compares with that of other firms, especially in its own industry, our interest in ECM is focused more on changes in the ratio through time. That is, changes in ECM measure changes in a company's ability to generate operating cash flow relative to its operating earnings.

Declines in ECM

ECM will decline when operating earnings grow more quickly or decline more slowly than operating cash flow. As a result, there will be increasing levels of noncash accounts building up on the balance sheet. Such buildups usually will take the form of increases in assets, such as accounts receivable, inventory, other assets, or property, plant, and equipment. Liabilities may also decline, as cash payments exceed new expense accruals.

Over extended periods, such balance sheet developments are not sustainable. Ultimately noncash accounts must be realized, raising cash flow, or new liability accruals must be recorded, lowering earnings. Either development would increase ECM. If affected assets were not realized, ultimately they would become value impaired, necessitating a write-down and a reduction in earnings. Continued reductions in liability accounts would, at some point, demonstrate the need for new accruals, which too would lower earnings.

If management were increasing earnings with accounting steps that extend beyond the boundaries of GAAP, then a restatement is likely in the offing. Affected assets may never be realized. Reduced liability balances may not reflect amounts actually due. A

restatement would reduce prior-year earnings as assets were written down and liabilities increased.

Certainly the explanation for a decline in ECM may be benign. Many such possibilities were provided earlier. For example, as business picks up after a slowdown, earnings at a firm may grow for a while at a rate that is faster than the rate of growth in operating cash. Also, a fundamental change in the stage of a firm in its life cycle—for example, a transition from start-up to growth—may alter the relationship between earnings and operating cash flow.

Even in the absence of such cyclical or life cycle changes, the relationship between operating earnings and operating cash flow may be altered by firm-specific actions. For example, large sales on open account may boost earnings but may not be collected until a subsequent year. An extensive buildup in inventory in anticipation of an increase in sales would reduce operating cash flow only to increase it again as the purchased inventory is sold in future periods.

In the end, careful analysis is required to determine if a buildup in assets or reduction in liabilities accompanying earnings growth at a rate that is faster than the rate of growth in operating cash flow ultimately will lead to earnings declines or to future increases in operating cash flow.

Declining ECM and Future Earnings Declines

We begin by looking at ECM for three companies that boosted earnings through the use of accounting practices that extended beyond the boundaries of GAAP.

Xerox Corp. Before the company filed its financial statements with the Securities and Exchange Commission for the year ended December 31, 2000, Xerox was forced to restate results for several years during the late 1990s to correct for premature recognition of lease revenue. Xerox agreed and noted that “it had ‘misapplied’ a range of accepted accounting rules, including some related to its huge copier-leasing business.”²⁸

Revenue recognized prematurely is not collected. Accordingly, one would expect that earnings resulting from such a practice would grow at a rate that exceeds the rate of growth in operating cash flow. As presented in Exhibit 8.15, that was the case at Xerox Corp. in the late 1990s.

In the exhibit, we present selected financial statistics for Xerox Corp. for the years ending December 31, 1994, through 1999. Reported operating cash flow was adjusted to remove nonrecurring cash payments related to restructuring activities and the proceeds from the securitization of finance receivables, a financing-type transaction. Reported income from continuing operations was adjusted to remove nonrecurring charges and a gain on sale of an affiliate’s stock. We calculated ECM by subtracting adjusted OE from adjusted OCF, dividing their difference by REV and then multiplying the resulting quotient by 100.

For Xerox, ECM was negative each year in the 1994 through 1999 time frame, indicating that the company’s adjusted operating earnings exceeded its adjusted operating cash flow. However, it is not a negative ECM that is of concern as much as it is the statistic’s trend. Note that as the company applied more aggressive accounting practices in the later years of the period studied, ECM became more negative. It declined rather consistently from –.40 percent in 1994 to –13.05 percent in 1998, before improving somewhat to –7.45 percent in 1999. The decline in ECM was acute in 1996 and 1997, although it

Exhibit 8.15 Xerox Corp., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending December 31, 1994, 1995, 1996, 1997, 1998, and 1999 (\$ millions)

	1994	1995	1996	1997	1998	1999
Obtained from statement of cash flows:						
Reported operating cash flow	\$ 479	\$ 599	\$ 324	\$ 472	\$(1,165)	\$ 1,224
Adjustments:						
Cash payments related to restructuring—net of tax ^a	254	199	118		199	262
(423 ? .6)	(331 × .6)	(197 × .6)			(332 × .6)	(437 × .6)
Proceeds from securitization of finance receivables						(1,495)
Adjusted operating cash flow (OCF)	\$733	\$ 798	\$ 442	\$ 472	\$ (966)	\$ (9)
Obtained from income statement:						
Revenue (REV)	\$15,084	\$16,588	\$17,378	\$18,144	\$19,447	\$19,228
Obtained from income statement:						
Reported income from continuing operations	\$ 794	\$ 1,174	\$ 1,206	\$ 1,452	\$ 585	\$ 1,424
Adjustments:						
Restructuring charge and asset impairment—net of tax ^a					919	
					(1,531 × .6)	
Inventory charge—net of tax ^a					68	
					(113 × .6)	
Gain on affiliate sales of stock—net of tax ^a			(7)			
			(11 × .6)			
Adjusted operating earnings (OE)	\$794	\$ 1,174	\$1,199	\$ 1,452	\$ 1,572	\$ 1,424
ECM: ((OCF – OE)/REV) × 100)	–.40%	–2.27%	–4.36%	–5.40%	–13.05%	–7.45%

^a A combined federal and state income tax rate of 40% was used. Thus, to tax effect each item, 1 minus the 40% tax rate was used, or 60%.

Source: Xerox Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 1996, pp. 26 and 42 and December 31, 1999, pp. 42 and 44.

worsened even more dramatically in 1998. At a minimum, such a decline in ECM should indicate to an analyst to take a closer look at the company's operations. Something was amiss.

Interestingly, during this entire period, the company's share price marched ever upward. It peaked at over \$63 per share in mid-1999, before declining to under \$4 per share in late 2000.

Sunbeam Corp. Consider again the example of Sunbeam Corp. raised earlier in this chapter. Readers may recall that Albert Dunlap became CEO at Sunbeam Corp. in 1996 and immediately began restructuring the company's operations. That year, including the effects of sizable restructuring and other special charges, the company reported a net loss of \$197 million. However, as early as 1997, it appeared that the company's moves had been effective because it reported income from continuing operations that year of \$123 million.

We now know, however, that much of the improved performance in 1997 was fabricated. Reversals of restructuring reserves and fictitious revenue, among other actions, were used to increase earnings in 1997. Such actions would not increase operating cash flow and should lead to a decline in ECM. As noted in Exhibit 8.16, that is exactly what happened.

This exhibit presents data for the calculation of ECM for Sunbeam Corp. across the years ended December 31, 1995, 1996, and 1997. As can be seen, ECM remained around 4 percent for the years ended December 31, 1995, and 1996. Then in the so-called amazing year of 1997, ECM declined in earnest indicating that the increase in earnings that year was not backed by operating cash flow. Ultimately, the Securities and Exchange Commission forced a restatement of the company's results for 1996 and 1997.

Enron Corp. The term "fraudulent accounting" will be inextricably linked with Enron Corp. forever. The company's notorious use of off-balance sheet entities, so-called special purpose entities (SPEs), to boost earnings artificially provided a wake-up call to accounting regulators that earnings management in the United States had truly gotten out of hand. The company routinely reported gains on its own self-dealing with these entities. Although Enron controlled the entities, the company accounted for them as if they were independent third parties.

During the late 1990s and into 2000, Enron's accounting practices became more and more aggressive. As it did, earnings grew, but operating cash flow, once adjusted to reclassify certain operating items and remove nonrecurring items, did not. The net result was a decline in ECM, as seen in Exhibit 8.17.

As presented in the exhibit, between 1996 and 2000, earnings growth at Enron was not accompanied by growth in operating cash flow once adjustments were made to reclassify certain operating items and remove nonrecurring items. As a result, ECM declined from 3.70 percent in 1996 to -4.07 percent in 2000. Recall that the company's operations hit a wall in 2001, and it filed for bankruptcy protection in the fall of that year. Certainly, based on ECM, there was reason to be suspicious of the company's reported results.

Declining ECM and Future Increases in Operating Cash Flow

We find that ECM is most effective in uncovering reported earnings that have been boosted by artificial means. Often such accounting actions will be used to help cover up developing operational problems. Management's hope is that the problems plaguing a company can be fixed before the accounting charade is uncovered.

ECM also will help to point out the potential for developing operational problems that may not be accompanied by aggressive accounting. In these cases, operating cash flow should improve on its own as the problems are corrected. If operating cash flow does not improve, then there is an increased likelihood of an earnings decline. Consider Target Corp., for example.

Exhibit 8.16 Sunbeam Corp., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending December 31, 1995, 1996, and 1997 (\$ thousands)

	1995	1996	1997
Obtained from statement of cash flows:			
Reported operating cash flow	\$ 81,516	\$ 14,163	\$ (8,249)
Adjustments:			
Payment on restructuring accrual—net of tax ^a			26,027 (43,378 × .6)
Adjusted operating cash flow (OCF)	\$ 81,516	\$ 14,163	\$ 17,778
Obtained from income statement:			
Revenue (REV)	\$1,016,883	\$ 984,236	\$1,168,182
Obtained from income statement or statement of cash flows:			
Reported income (loss) from continuing operations	\$ 37,594	\$(196,671)	\$ 123,128
Adjustments:			
Restructuring, impairment and other costs ^a		92,921 (154,869 × .6)	
Other noncash special charges ^a		77,280 (128,800 × .6)	
Adjusted operating earnings (OE)	\$ 37,594	\$ (26,470)	\$ 123,128
ECM: ((OCF – OE)/REV) × 100	4.32%	4.13%	–9.02%

^a A combined federal and state income tax rate of 40% was used. Thus, to tax effect each item, 1 minus the 40% tax rate was used, or 60%.

Source: Sunbeam Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 1997, pp. F–3 and F–6.

Target Corp. In its fiscal year ended February 2, 2002, Target introduced its own credit card. In the early going the new card boosted earnings but did not provide operating cash flow. The problem was a dramatic increase in credit card receivables that consumed operating cash. As a result, ECM declined. Selected results for the company are presented in Exhibit 8.18.

The exhibit provides data for the calculation of ECM for Target Corp. for the years ended February 3, 2001, through January 31, 2004. Note that ECM was 2.36 percent in the year ended February 3, 2001, which was the year before it introduced its own credit card. During the year in which its card was introduced, the year ended February 2, 2002, accounts receivable increased \$1,193 million, creating a drag on operating cash flow. As a result, as earnings increased to \$1,368 million that year from \$1,264 million in 2001, operating cash flow declined to \$2,012 million from \$2,134 million in 2001. ECM declined to 1.62 percent in 2002 from 2.36 percent in 2001.

Exhibit 8.17 Enron Corp., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending December 31, 1996, 1997, 1998, 1999, and 2000 (\$ millions)

	1996	1997	1998	1999	2000
Obtained from statement of cash flows:					
Reported operating cash flow	\$ 884	\$ 211	\$ 1,640	\$ 1,228	\$ 4,779
Adjustments:					
Extended vendor payment terms ^a					(4,365)
Increase in net customer deposits ^b					(1,881)
Cash provided by other operating activities ^c					(1,113)
Net (proceeds) from sale or cash used to purchase investments	192	(31)	(713)	(1,390)	(543)
Adjusted operating cash flow (OCF)	\$ 1,076	\$ 180	\$ 927	\$ (162)	\$ (3,123)
Obtained from income statement:					
Revenue (REV)	\$13,289	\$20,273	\$31,260	\$40,112	\$100,789
Obtained from income statement:					
Reported income from continuing operations	\$ 584	\$ 105	\$ 703	\$ 1,024	\$ 979
Adjustments:					
Contract restructuring charge ^d		405			
		(675 × .6)			
Impairment of long-lived assets ^d			196	265	
			(326 × .6)	(441 × .6)	
Adjusted operating earnings (OE)	\$ 584	\$ 510	\$ 899	\$ 1,289	\$ 979
ECM: ((OCF – OE)/REV) × 100	3.70%	–1.63%	.09%	–3.62%	–4.07%

^a The cash flow effect of an increase in accounts payable at a rate (353.9%) that was in excess of the rate of increase in revenue (151.3%).

^b Increase in net deposits reported as liabilities less net deposits reported as assets. Related cash flow appeared nonrecurring given that customer deposits were inconsequential until 2000.

^c Cash provided by other operating activities appeared to be nonrecurring because it had historically been of a limited amount.

^d A combined federal and state income tax rate of 40% was used. Thus, to tax effect each item, 1 minus the 40% tax rate was used, or 60%.

Source: Enron Corp. Form 10-K annual report to the Securities and Exchange Commission, December 31, 1998, pp. F-3, F-4, and F-6; and December 31, 2000, pp. F-3, F-4, and F-6.

During the year ended February 1, 2003, accounts receivable increased another \$2,194 million. That year, operating cash flow declined even more and ECM became negative, dropping to –.15 percent. Clearly the trend was not a promising one.

The increase in credit card receivables slowed to \$744 million in the year ended January 31, 2004. As a result, that year the company generated significantly more operating cash flow, \$3,160 million, than it had in any recent reporting period. ECM also improved

Exhibit 8.18 Target Corp., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending February 3, 2001, February 2, 2002, February 1, 2003, and January 31, 2004 (\$ millions)

	2001	2002	2003	2004
<i>Obtained from statement of cash flows:</i>				
Adjusted operating cash flow (OCF) ^a	\$ 2,134	\$ 2,012	\$ 1,590	\$ 3,160
(Increase) in accounts receivable ^b	—	(1,193)	(2,194)	(744)
<i>Obtained from income statement:</i>				
Revenue (REV)	\$36,851	\$39,826	\$43,917	\$46,781
<i>Obtained from income statement:</i>				
Adjusted operating earnings (OE) ^a	\$ 1,264	\$ 1,368	\$ 1,654	\$ 1,841
ECM: ((OCF - OE)/REV) × 100	2.36%	1.62%	-.15%	2.82%

^a No significant adjustments were noted.

^b Increase in company's credit card receivables was biggest factor explaining year-to-year changes in operating cash flow.

Source: Target Corp. Form 10-K annual report to the Securities and Exchange Commission, February 1, 2003, pp. 24 and 26, and Form 8-K special report to the Securities and Exchange Commission, January 31, 2004, pp. 4 and 6.

to 2.82 percent, higher than it was in the year ended February 3, 2001, before the company introduced its own credit card.

The increase in operating cash flow and ECM at Target Corp. suggest that potential problems with uncollectible credit card receivables may have been overcome. Of course, the story continues to develop and may change at any time. ECM provides a useful alert mechanism for identifying developing problems early.

Increases in ECM

Like declines in ECM, consistent increases in ECM, caused by growth in operating cash flow at rates that are faster than the rates of increase in operating earnings, are also not sustainable. Increases in ECM are the result of operating cash flow that is either consistently growing more quickly or falling more slowly than operating earnings. Such developments typically are due to reductions in working capital—either operating-related assets are being reduced or liabilities are being increased.

For example, accounts receivable, inventory, and other assets are being converted to cash at a rate that is faster than earnings can replenish them. Or operating cash flow is being provided through increases in such liabilities as accounts payable or accrued expenses payable. As discussed earlier, there are times when such developments should not be unexpected. Importantly, however, operating cash flow generated in this manner is not sustainable because assets cannot be reduced or liabilities increased indefinitely.

Loss firms that report positive operating cash flow or such firms whose operating loss

is larger than its consumption of operating cash flow will report a positive ECM. For example, a company that reports positive operating cash flow of \$100 and negative operating earnings of \$160 on revenue of say \$1,000 will report positive ECM of 26.0 percent $((\$100 - -\$160) / \$1,000)$. However, given the company's operating loss position, its positive operating cash flow is not sustainable because it does not have earnings support.

Long-term cash flow growth requires earnings support. When it is lacking, earnings growth must pick up or operating cash flow will begin to decline. Thus, a continued increase in ECM may indicate that operating cash flow cannot be maintained at existing levels without increases in earnings. Either operating cash flow will decline relative to earnings or operating earnings must increase relative to operating cash flow.

As an example of a company with an increasing ECM, consider Toys "R" Us. Relevant cash flow and earnings data for the company are presented in Exhibit 8.19.

The exhibit presents data needed to calculate ECM for Toys "R" Us for the four years ended February 3, 2001, through January 31, 2004. In 2001 the company used \$38 million in adjusted operating cash flow as cash was consumed by increases in inventory and declines in operating liabilities. That year adjusted operating earnings were \$215 million, and ECM was -2.23 percent. Over the next three years, 2002, 2003, and 2004, adjusted operating earnings were somewhat volatile, but declined to \$139 million in 2004. Over the same time period, adjusted operating cash flow increased to \$797 million as inventory was liquidated and operating liabilities remained generally flat. ECM gradually increased to 5.69 percent during the year ended January 31, 2004. In future years, however,

Exhibit 8.19 Toys "R" Us, Inc., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending February 3, 2001, February 2, 2002, February 1, 2003, and January 31, 2004 (\$ millions)

	2001	2002	2003	2004
<i>Obtained from statement of cash flows:</i>				
Adjusted operating cash flow (OCF) ^a	\$ (38)	\$ 575	\$ 574	\$ 797
(Increase) decrease in inventory	(486)	217	(100)	104
Increase (decrease) in operating liabilities	(178)	(241)	112	111
<i>Obtained from income statement:</i>				
Revenue (REV)	\$11,332	\$11,019	\$11,305	\$11,566
<i>Obtained from income statement:</i>				
Adjusted operating earnings (OE) ^b	\$ 215	\$ 179	\$ 229	\$ 139
ECM: ((OCF - OE)/REV) × 100)	-2.23%	3.59%	3.05%	5.69%

^a Adjustments were made in 2001 for taxes on nonoperating gains and in 2001 and 2003 for after-tax nonrecurring operating items.

^b Adjustments were made for restructuring charges in 2002 and 2004 and a nonrecurring gain in 2001.

Source: Toys "R" Us, Inc. Form 10-K annual report to the Securities and Exchange Commission, February 1, 2003, pp. 31 and 33, and Form 8-K special report to the Securities and Exchange Commission, March 3, 2004, pp. 8 and 12.

there is a high likelihood that ECM will decline as inventory stocks are replenished, reducing operating cash flow.

Stable ECM

A stable relationship through time between operating cash flow and operating earnings is a useful indicator of the sustainability of the two measures. When ECM is stable, earnings are being realized and are manifest as operating cash flow, their ultimate confirmation. Importantly, noncash assets are not building on the balance sheet at a rate that is faster than the rate of growth in operations, keeping the risk of an asset impairment charge in check. In addition, when ECM is stable, operating cash flow can better be maintained through support provided by operating earnings.

Anheuser Busch Cos. provides a useful example. Information for the company is presented in Exhibit 8.20.

The exhibit presents data needed to calculate ECM for the years ended December 31, 2000, 2001, 2002, and 2003. Note that over that four-year period, adjusted operating cash flow increased approximately 33 percent, to \$2,971 million in 2003 from \$2,229 million in 2000. Over the same period, adjusted operating earnings increased approximately 34 percent to \$2,076 million in 2003 from \$1,552 million in 2000. Between 2000 and 2002, ECM remained around 5 percent, increasing to 6.33 percent in 2003. Although adjusted operating cash flow and adjusted operating earnings increased at similar rates, revenue, the divisor in the ECM calculation, increased at a slower rate of approximately 13 percent. As a result, ECM increased slightly. Nonetheless, comparable rates of growth in adjusted operating cash flow and adjusted operating earnings lend support to the sustainability of both measures.

Exhibit 8.20 Anheuser Busch Cos., Inc., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Years Ending December 31, 2000, 2001, 2002, and 2003 (\$ millions)

	2000	2001	2002	2003
Obtained from statement of cash flows:				
Adjusted operating cash flow (OCF) ^a	\$ 2,229	\$ 2,336	\$ 2,682	\$ 2,971
Obtained from income statement:				
Revenue (REV)	\$12,499	\$12,912	\$13,566	\$14,147
Obtained from income statement:				
Adjusted operating earnings (OE) ^b	\$ 1,552	\$ 1,705	\$ 1,934	\$ 2,076
ECM: ((OCF – OE)/REV) × 100)	5.42%	4.89%	5.51%	6.33%

^a Adjustments were made across 2000, 2001, and 2002 for declines in overdrafts, tax benefits from stock options, and capitalized interest. No adjustments were made to operating cash flow for 2003.

^b No significant adjustments were noted.

Source: Anheuser Busch Cos., Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 41 and 43, and Form 8-K special report to the Securities and Exchange Commission, February 4, 2004, pp. 9 and 13.

Interim Financials

At times, it is useful to measure ECM using interim data. Interim data can provide more timely assessments of developing threats to earnings and operating cash flow. Confounding such measures, however, are the effects of seasonal factors and the increased volatility of interim amounts.

In Exhibit 8.21, we present interim operating cash flow, revenue, operating earnings, and ECM measures for Anheuser Busch for the quarters ending March 31, June 30, September 30, and December 31, 2001, 2002, and 2003.

Although annual earnings and cash flow are relatively stable for Anheuser Busch, quarterly amounts are much less so. Also, the company's results show a decided seasonal effect as earnings and cash flow typically decline in the fourth quarter of each year. The noted volatility and seasonal effects in the company's results show up in the first of two ECM measures presented in the exhibit.

The first ECM measure presented, ECM (by Qtr), calculates ECM using data for each quarter. There is significant volatility in the measure as quarterly operating cash flow and earnings bounce around from quarter to quarter. During the three years presented, ECM fell as low as 1.56 percent during the quarter ended June 30, 2001, and increased as high as 8.27 percent during the quarter ended September 30, 2003. Such volatility limits the usefulness of the statistic.

The second ECM measure presented in the exhibit, ECM (4 Qtr), calculates excess cash margin using cumulative data for four quarters. That is, cumulative operating earnings for four quarters are subtracted from cumulative operating cash flow for the same period, the difference is divided by cumulative revenue, and the resulting quotient is multiplied by 100. The resulting ECM measure is much more stable than ECM calculated for each quarter. As can be seen in the exhibit, the measure ranged between 5.08 percent for the four quarters ended December 31, 2001, to 6.33 percent for the four quarters ended December 31, 2003. Because it is more stable, ECM (4 Qtr) would be more sensitive in identifying developing problems than ECM calculated separately for each quarter.

SUMMARY

This chapter demonstrates the use of operating cash flow for detecting developing earnings problems. Eleven key points were raised in the chapter:

1. Meaningful insight into a company's financial health can be obtained by analyzing the relationship between earnings growth and growth in operating cash flow.
2. In the short run, valid explanations for differences in the rates of growth of earnings and operating cash flow include seasonal factors, cyclical developments, life cycle transition periods and firm-specific actions.
3. A continuing excess of earnings growth over the rate of growth in operating cash flow may indicate that earnings have been boosted by artificial means, including premature or fictitious revenue recognition, aggressive cost capitalization, extended amortization periods, or intentionally overstated assets or understated liabilities. Earnings are at increased risk for decline.
4. A continuing excess of operating cash flow growth over earnings growth may in-

Exhibit 8.21 Anheuser Busch Cos., Inc., Operating Cash Flow, Revenue, Operating Earnings, and Calculation of Excess Cash Margin, Quarters Ending March 31, June 30, September 30, and December 31, 2001, 2002 and 2003 (\$ millions)

	3/01	6/01	9/01	12/01	3/02	6/02	9/02	12/02	3/03	6/03	9/03	12/03
OCF ^a	\$482	\$578	\$1,008	\$293	\$ 562	\$ 859	\$ 894	\$ 450	\$ 598	\$ 866	\$ 985	\$522
REV ^b	\$3,044	\$3,452	\$3,522	\$2,894	\$3,137	\$3,626	\$3,706	\$3,097	\$3,281	\$3,770	\$3,881	\$3,215
OE ^c	\$394	\$524	\$559	\$228	\$ 456	\$587	\$ 622	\$269	\$485	\$633	\$ 664	\$294
ECM ^d												
(by Qtr)	2.89%	1.56%	12.75%	2.25%	3.38%	7.50%	7.34%	5.84%	3.44%	6.18%	8.27%	7.09%
ECM ^e												
(4 Qtr)				5.08%	5.18%	6.77%	5.35%	6.13%	6.11%	5.77%	6.04%	6.33%

^a Reported operating cash flow for indicated quarter.

^b Reported net sales for indicated quarter.

^c Reported net earnings for indicated quarter.

^d Calculated as $(OCF - OE)/REV \times 100$ using quarterly data.

^e Calculated using cumulative data for four quarters.

Source: Anheuser Busch Cos., Inc., Form 10-Q quarterly reports to the Securities and Exchange Commission for quarters ending March 30, June 30, and September 30, 2001, 2002, and 2003, and Form 10-K annual reports to the Securities and Exchange Commission for years ending December 31, 2001, 2002, and 2003.

dicating that the balance sheet is being liquidated, calling into question the sustainability of operating cash flow.

5. A truly sustainable relationship between earnings and operating cash flow requires that the two measures grow at comparable rates over the long term.
6. Excess cash margin (ECM) is an effective tool for measuring the relative growth rates in earnings and operating cash flow.
7. $ECM = ((\text{Operating cash flow} - \text{Operating earnings}) / \text{Revenue}) \times 100$.
8. ECM can be measured with annual or quarterly data. Given the effects of seasonality and the increased volatility of quarterly data, quarterly ECM should be calculated with cumulative data covering four quarters.
9. A declining ECM indicates that earnings are either growing more rapidly or declining more slowly than operating cash flow.
10. An increasing ECM indicates that earnings are either growing more slowly or declining more rapidly than operating cash flow.
11. A stable ECM indicates that earnings and operating cash flow are growing at similar rates.

NOTES

1. R. Fink, "Mind the Gap: The Cash Flow Scorecard." *CFO Magazine* (December 2003): 53.
2. Ibid.
3. Beazer Homes USA, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2003, p. 26.
4. Net income was adjusted for the after-tax effects of a \$186 million restructuring charge. Operating cash flow was adjusted for the \$77 million cash component of that charge. Both amounts were tax-effected at the company's marginal tax rate of 36.5 percent.
5. The year 2000 was the only year for which financial statements were available when the company reported positive operating cash flow. Cash flow was provided by operations that year primarily because of temporary increases in accounts payable and accrued expenses payable.
6. Between 2001 and 2003 nominal U.S. gross domestic product (GDP) increased 7.2 percent.
7. A. Levitt, "The Numbers Game," Remarks to New York University Center for Law and Business by the Chairman of the Securities and Exchange Commission (New York: New York University Center for Law and Business, 1998), para. 4. The speech is available at www.sec.gov/news/speeches/spch220.txt.
8. The Sarbanes-Oxley Act of 2002 was signed into law on July 30, 2002. The Act tightened the oversight of firms that audit public companies, added criminal penalties for earnings management, and took steps generally to improve company internal controls and corporate governance.
9. For a much more detailed look at actions that managers may take to support earnings artificially, refer to C. Mulford and E. Comiskey, *The Financial Numbers Game: Detecting Creative Accounting Practices* (Hoboken, NJ: John Wiley & Sons, 2002).
10. D. Starkman, "Twinlab Restates 1998 Earnings; Stock Falls 26% to 52-Week Low," *The Wall Street Journal*, February 25, 1999, p. A1.

11. Securities and Exchange Commission, *Accounting and Auditing Enforcement Release No. 1247, In the Matter of Peritus Software Services, Inc., Respondent* (Washington, DC: SEC, April 13, 2000).
12. Securities and Exchange Commission, *Accounting and Auditing Enforcement Release No. 1243, In the Matter of Beth A. Morris and Steven H. Grant, Respondents* (Washington, DC: SEC, March 29, 2000).
13. L. Johannes, "SEC Says Boston Scientific Managers Schemed to Report Fake Sales in Japan," *The Wall Street Journal*, August 22, 2000, p. B11.
14. E. MacDonald, "Regulators Seek to Penalize Auditors Who Missed Fraud," *The Wall Street Journal*, January 6, 2000, p. A1.
15. K. Ely and G. Waymire, *Application of Software Cost Capitalization: Does It Fulfill the Intent?* Working Paper (Atlanta, GA: Georgia Institute of Technology, March 11, 2003).
16. American Software, Inc., Form 10-K annual report to the Securities and Exchange Commission, April 30, 2001, p. 54. In 1999, the company capitalized \$10,902,000 of \$22,410,000 incurred. In 2000 it capitalized \$10,446,000 of \$20,121,000.
17. Ibid., p. 60.
18. Ibid., p. 54. In the year ended April 30, 2001, the company capitalized \$3,949,000 of \$15,573,000 in software development costs incurred.
19. J. Sandberg, D. Solomon, and R. Blumenstein, "Disconnected: Inside WorldCom's Unearthing of a Vast Accounting Scandal Internal Auditor Discovered An Unorthodox Treatment of Long-Distance Expenses," *The Wall Street Journal*, June 27, 2002, p. A1.
20. Qualcomm, Inc., Form 10-K annual report to the Securities and Exchange Commission, September 27, 1998, p. F-8.
21. J. Weil, "Another Write-Off May Loom for AOL," *The Wall Street Journal*, August 23, 2002, p. C1.
22. C. Mulford and E. Comiskey, *Financial Warnings* (New York: John Wiley & Sons, 1996), p. 226.
23. Sunbeam Corp., annual report, December 1996. Information obtained from Disclosure, Inc., *Compact D/SEC: Corporate Information on Public Companies Filing with the SEC* (Bethesda, MD: Disclosure, Inc., September 1997).
24. Sunbeam Corp., annual report, December 1997, pp. i-ii.
25. Sunbeam Corp., Form 10-K/A amended annual report to the Securities and Exchange Commission, December 1997, p. F-31.
26. Statement of Position No. 98-9, *Modification of SOP 97-2, Software Revenue Recognition with Respect to Certain Transactions* (New York: AICPA, 1998).
27. Portions of this section of the chapter are excerpts from C. Mulford and M. Ely, *Excess Cash Margin and the S&P 100* (Atlanta, GA: Georgia Tech Financial Analysis Lab, 2003).
28. For a detailed discussion of nonrecurring items affecting the income statement, refer to E. Comiskey and C. Mulford, *Guide to Financial Reporting and Analysis* (Hoboken, NJ: John Wiley & Sons, 2000), chapters 2 and 3.
29. M. Maremont and J. Bandler, "Xerox Restates Results from Past Three Years," *The Wall Street Journal*, June 1, 2001, p. C1.

Analyzing Operating Cash Flow

*Though my bottom line is black, I am flat upon my back,
My cash flows out and customers pay slow.
The growth of my receivables is almost unbelievable;
The result is certain—unremitting woe!
And I hear the banker utter an ominous low mutter,
“Watch cash flow.”¹*

We first quoted that poem in our book *Financial Warnings*, published in 1996.² The advice contained in it, which dates to 1975, is timeless, and gets to the heart of what really matters to an investor or creditor. It is cash flow—the lifeblood of any business organization.

The importance of cash flow and its sustainability notwithstanding, many analysts are content simply to view the firm as a cash-generating black box. Cash goes in, taking the form of equity investments and loans. Then, after the passage of an appropriate amount of time during which some amount of management magic is applied, cash comes out and provides the financial wherewithal to service the loans and provide a return on the equity investments. In this line of reasoning, what more can be asked of a company than to generate cash flow that is sufficient to cover the claims of lenders, to provide for reinvestment, and to generate a return for investors?

Of course, from what we have seen in earlier chapters of this book, much more can be asked of such firms. Managers may take numerous steps to boost cash flow artificially, making it appear to be sustainable when in fact it is drawn from nonrecurring sources. Just because a company appears to be generating sufficient cash to service its claims, to invest in itself, and to pay dividends does not mean that it will be able to continue to do so. Adjustments were proposed in earlier chapters to clean up operating cash flow by reclassifying certain operating items and removing nonrecurring items. However, even after such adjustments have been made, a careful analysis of the sources of operating cash flow still is needed to determine whether it is being generated from sustainable sources.

Consider, for example, how changing fundamentals may threaten an otherwise robust

cash flow performance. The operating cash flow performance for Blockbuster, Inc., for the five years ended December 31, 2001, is presented in Exhibit 9.1.

A casual view of the cash flow generated by Blockbuster would suggest that the company was healthy and growing. Between December 31, 1997, and 2001, cash provided by operating activities increased from \$991.3 million to \$1,395.1 million, respectively, an increase of over 40 percent. Moreover, as measured by cash used for investing activities, which for Blockbuster consisted primarily of rental library purchases and capital expenditures, the company continued to make investments, ostensibly for the purpose of generating future returns. More recently, it had even begun repaying its debt obligations, as reflected in cash used for financing activities.

Adjustments to operating cash flow, as described in earlier chapters, would not change Blockbuster's overall cash performance over the time period presented. Yet based on its reported cash performance, it would be erroneous to assume that the company's business over that time period was improving. For example, in each year between 1997 and 2001, the company lost money. Exhibit 9.2 presents evidence of the company's poor earnings performance.

Exhibit 9.1 Blockbuster, Inc., Excerpts from Statements of Cash Flows, Years Ended December 31, 1997, 1998, 1999, 2000, and 2001 (\$ millions)

	1997	1998	1999	2000	2001
Cash flow provided by operating activities	\$991.3	\$1,234.5	\$1,142.8	\$1,320.8	\$1,395.1
Cash flow used for investing activities	(1,188.1)	(1,022.2)	(1,258.1)	(1,056.8)	(945.2)
Cash flow provided by (used in) financing activities	269.3	(241.1)	137.2	(187.2)	(441.2)
Effect of exchange rate changes on cash	(1.5)	(1.8)	(1.3)	(2.2)	(2.7)
Net increase in cash and cash equivalents	\$ 71.0	\$ (30.6)	\$ 20.6	\$ 74.6	\$ 6.0

Source: Blockbuster, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 1999, p. 57, and December 31, 2001, p. 48.

Exhibit 9.2 Blockbuster, Inc., Excerpts from Statements of Income, Years Ended December 31, 1997, 1998, 1999, 2000, and 2001 (\$ millions)

	1997	1998	1999	2000	2001
Net loss	\$(318.2)	\$(336.6)	\$(69.2)	\$(75.9)	\$(240.3)

Source: Blockbuster, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 1999, p. 54, and December 31, 2001, p. 45.

As noted in the exhibit, in every year between 1997 and 2001, Blockbuster reported losses. However, because a significant portion of the company's operating expenses was in the form of noncash depreciation charges on its rental library, even as it reported losses, Blockbuster was able to generate positive operating cash flow. Changes in operating-related accounts, such as increases in deferred tax liabilities, accounts payable, and accrued expenses payable, and reductions in accounts receivable and inventory, also increased operating cash flow. Such balance sheet changes, however, are not sustainable. A truly solid and sustainable cash flow performance requires support from profitable operations and would not be derived primarily from noncash expenses and changes in operating-related balance sheet accounts.

Blockbuster's story continues to unfold. Recent changes in its business model, including a heavier emphasis on sales of merchandise, did boost profitability, at least temporarily. For example, net income, before the effects of an accounting change, improved to \$189.4 million for the year ended December 31, 2002, from a loss of \$240.3 million in 2001. However, due to an impairment charge and continuing operational difficulties, the company reported a loss from continuing operations of \$979.5 million for the year ended December 31, 2003.³ During this period, the company continued to generate positive operating cash flow, increasing to \$1,451.2 million for the year ended December 31, 2002, from \$1,395.1 million in 2001 and continuing at \$1,416.1 million for the year ended December 31, 2003.⁴

We cannot know the ultimate direction of Blockbuster's fortunes. Our point is that regardless of how ample operating cash flow appears to be, even after it is adjusted to reclassify certain operating items and remove nonrecurring items as described in earlier chapters, a careful consideration of changes in a company's underlying fundamentals is needed before informed conclusions about cash flow performance can be reached.

Because of Blockbuster's recurring losses through 2001, improvements in operating cash flow were not necessarily indicative of improving financial performance. In contrast, there may be reason to be optimistic about future results even in the presence of negative operating cash flow. Consider Pharmacy Buying Association, Inc.

Exhibit 9.3 presents selected income and cash flow data for Pharmacy Buying Association for the three years ended December 31, 2000, 2001, and 2002.

As is apparent from the data provided in the exhibit, Pharmacy Buying Association is enjoying significant revenue and earnings growth. Over the time period between December

Exhibit 9.3 Pharmacy Buying Association, Inc., Selected Income and Cash Flow Data, Years Ended December 31, 2000, 2001, and 2002 (\$ thousands)

	2000	2001	2002
Revenue	\$22,005	\$90,415	\$136,997
Net income	\$987	\$ 1,310	\$1,542
Cash flow provided (used) by operating activities	\$ 1,538	\$ (740)	\$ (2,795)

Source: Pharmacy Buying Association, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, pp. 28 and 30.

31, 2000, and 2002, revenue increased from \$22,005,000 to \$136,997,000. During that same time period, net income also increased, from \$987,000 in 2000 to \$1,542,000 in 2002. However, due to a decline in gross margin, the percentage increase in net income was less than the increase in revenue.

As revenue and income at Pharmacy Buying Association have grown, operating cash flow has declined. In fact, it appears that the more profits the company generates, the less operating cash flow it enjoys. Referring again to Exhibit 9.3, as net income has increased from \$987,000 in the year ended December 31, 2000, to \$1,542,000 in the year ended December 31, 2002, cash provided by operating activities has declined from a source of cash of \$1,538,000 in 2000 to a use of cash of \$2,795,000 in 2002—a sizable swing.

Focusing on 2002, significant increases in accounts receivable and inventory were the primary reasons why the company consumed so much operating cash flow. On closer examination, however, it can be seen that the increases in these accounts were generally in line with the growth in the scale of the company's operations, as measured by the growth in sales. Sales growth typically requires comparable growth in operating assets, draining operating cash flow. When growth levels off, assuming operations remain profitable, the company should be in a position to begin generating positive operating cash flow again.

Thus, negative operating cash flow is not necessarily indicative of worsening financial performance. In fact, for the year ended December 31, 2003, even as revenue increased by 13 percent, Pharmacy Buying Association generated positive operating cash flow of \$5,142,062.⁵

In this chapter, we move beyond the adjustments to operating cash flow proposed in earlier chapters that were designed to reclassify certain operating items and remove non-recurring items. Here we provide an approach to cash flow analysis that considers the fundamental drivers underlying a company's ability to generate operating cash flow. Instrumental to our understanding of cash flow is a revised format for the statement of cash flows, referred to as the cash flow analysis statement.

CASH FLOW ANALYSIS STATEMENT

Exhibit 9.4 presents a format for the cash flow statement that is useful in analysis. Parts of it are similar to the Uniform Credit Analysis® (UCA)® format of the cash flow statement presented in Chapter 1. Lenders and other credit professionals often use the UCA® format cash flow statement when analyzing cash flow. However, we have introduced changes that adjust for, and at times reclassify, certain operating items and remove non-recurring items as noted in earlier chapters. Moreover, the design of the cash flow analysis statement considers the needs of equity analysts and investors.

Cash flow statements prepared in accordance with generally accepted accounting principles (GAAP) report only three main categories of cash flow: cash provided or used by operating, investing, and financing activities. Operating cash flow in a GAAP-based indirect-method format starts with net income and reconciles to a single cash flow figure, cash provided by operating activities. A GAAP-based direct-method format presents the actual cash flows comprising cash provided by operating activities, categories of cash flow such as cash collected from customers and cash paid to suppliers. Operating cash flow is computed by summing these operating-related cash flow items.

As seen in Exhibit 9.4, the cash flow analysis statement is a combination of the indi-

Exhibit 9.4 Cash Flow Analysis Statement

Company name: _____

Amounts in: (000s)

Fiscal year-end: (December 31,)

2002**2003****2004****Revenue**

Change in operating receivables _____

Change in deferred revenue _____

Cash from revenue _____

Cost of revenue (excluding depreciation & amortization) _____

Change in inventory _____

Change in operating payables _____

Cash cost of revenue _____

Cash gross margin _____

Selling, general and admin. expense (excluding
depreciation & amortization) _____Research and development expense (excluding
depreciation & amortization) _____

Capitalized operating expense _____

Change in prepaids _____

Change in accruals _____

Cash operating expense _____

Core operating cash flow _____

Other cash income (expense) _____

Income taxes paid _____

Cash flow available for debt service _____

Total interest paid _____

Cash flow from operations _____

Required principal payments on long-term debt &
capital lease obligations _____

Cash flow after debt service _____

Dividends paid _____

Cash flow after dividends _____

Short-term investments and trading securities _____

Long-term investments _____

Capital expenditures, net of dispositions _____

Investments in notes receivable _____

Investments in other assets _____

Investments in goodwill and intangibles _____

Cash paid for investments, capital expenditures, and
intangibles _____

Change in cash before external financing _____

Overdraft financing _____

Short-term debt financing _____

Long-term debt financing _____

Capital lease financing _____

Sale and leaseback financing _____

(continues)

Exhibit 9.4 *(Continued)*

Fiscal year-end: (December 31,)	2002	2003	2004
Receivables-related financing			
Tax benefits from stock options			
Other financing			
Common equity financing			
Preferred equity financing			
Treasury stock transactions			
External financing			
Change in accumulated other comprehensive income			
Change in cash and equivalents after external financing			
Actual change in cash and equivalents			
Free cash flow:			
Cash flow from operations			
Preferred dividends			
Depreciation proxy for replacement capital expenditures			
Growth-related capital expenditures, net of dispositions			
Free cash flow			

rect and direct formats. Similar to an indirect-method cash flow statement, the cash flow analysis statement provides a reconciliation of income to cash flow. However, rather than only reconciling net income to operating cash flow, on the cash flow analysis statement each line item of the income statement is reconciled to its cash flow counterpart. For example, among the line items presented on the statement, revenue is reconciled to cash from revenue by removing balance sheet changes in operating receivables and deferred revenue. Similarly, cost of revenue is reconciled to the cash cost of revenue by removing depreciation and amortization expense and changes in inventory and operating payables. Also, selling, general, and administrative expense and research and development expense are reconciled to cash operating expense by removing, in addition to depreciation and amortization expense, changes in prepaids and accruals. Similar to the presentation on a direct-method cash flow statement, each resulting cash flow item—for example, cash from revenue, cash cost of revenue, and cash operating expense—is an actual source or use of cash for a particular function. Added to the cash flow analysis statement are key subtotals, such as cash gross margin and core operating cash flow. These subtotals help the analyst more readily determine if sources of cash are sufficient to cover key operating needs.

Both the indirect and direct cash flow statements present key components of cash provided or used by investing activities drawn to a single total. Cash provided or used by

financing activities is presented similarly. No distinction is made among priorities of various claims. The cash flow analysis statement can be considered to be a cash flow coverage statement, as it uses subtotals to highlight whether superior claims on cash flow are being covered by cash collections. For example, interest paid is subtracted from cash available for debt service to derive cash flow from operations. From this subtotal, required principal payments on long-term debt and capital lease obligations are subtracted to yield cash flow after debt service. Dividends then are subtracted to yield cash flow after dividends, which is cash available for investments and capital expenditures. Subtracting investments and capital expenditures yields the change in cash before external financing. As the title suggests, cash would have increased or decreased by this amount in the absence of any external financing, whether through debt or equity. The actual change in cash and equivalents is determined once external financing and the change in accumulated other comprehensive income are taken into account.⁶

In preparing the cash flow analysis statement, revenue and other income items should be recorded as sources of cash, that is, as positive amounts. Decreases in assets as well as increases in liabilities and shareholders' equity accounts also are entered as sources of cash. Expenses and dividends, as well as increases in assets and reductions in liabilities and shareholders' equity, should be entered as uses of cash.

As noted, the cash flow analysis statement format is attuned to adjustments to reclassify certain operating items and remove nonrecurring items discussed in earlier chapters. For example, capitalized operating expense is included with cash operating expense, which is part of core operating cash flow. On a GAAP-based cash flow statement, often such costs are reported as part of cash used for investing activities. When interest is capitalized to inventory or property, plant, and equipment, it is reclassified on the cash flow analysis statement to total interest paid.

On the cash flow analysis statement, cash invested in trading securities is reported as part of cash paid for investments and is not included with cash provided by operating activities as called for by GAAP. Also, securitized receivables are excluded from operating cash flow and are reported as a component of external financing, a line item referred to as receivables-related financing on the cash flow analysis statement. Adjustments such as these were deemed necessary to get a clearer picture of a company's sustainable cash-generating ability.⁷

Creditors and Equity Investors

The cash flow analysis statement is designed with the needs of both credit and equity professionals in mind. For credit professionals, cash flow available for debt service is cash flow that is available for the payment of interest and principal on debt. Creditors can determine readily whether cash flow is sufficient to cover not only interest but also required principal payments on long-term debt and capital lease obligations. To facilitate loan structuring, the time frame of debt financing, that is, current versus long-term, also is provided.

The ability of a company to service its debt is important information for equity investors. Debt-service difficulties, made apparent when cash flow available for debt service is insufficient to cover interest and required principal payments, can be an early indicator of credit quality downgrades or even default. Companies unable to cover debt-service requirements also would have difficulty covering dividends on a recurring basis.

However, of particular interest to equity investors is an addendum to the cash flow analysis statement that provides information regarding free cash flow. As defined in the cash flow analysis statement, free cash flow is discretionary cash flow available for equity holders and may be used for such purposes as incremental debt reductions, common dividends and stock buybacks. The free cash flow calculation begins with cash flow from operations, as reported on the cash flow analysis statement, and subtracts preferred dividends and capital expenditures. Note that the free cash flow computations separate capital expenditures into two amounts, replacement capital expenditures, as proxied by depreciation, and growth-related capital expenditures. Replacement capital expenditures are designed to replace productive capacity consumed in operations. Basically, it maintains productive capacity. Growth-related capital expenditures are based on actual capital expenditures and incorporate the incremental spending needed to maintain a company's rate of growth in operations. The topic of free cash flow and questions of whether replacement capital expenditures or actual capital expenditures should be used in its calculation is addressed more carefully in Chapter 10.

Details of Selected Accounts

The cash flow analysis statement presents summaries of certain cash flow items, the details of which are important to cash flow analysis. Most of the items are self-explanatory, and an analyst will be able to determine from an item's description the specific accounts to include when completing the calculations.

For example, operating receivables should include only customer-related receivables. However, even notes receivable should be included with operating receivables if those notes were received from customers and are sale-related. For contractors, operating receivables also should include cost plus profit recognized on contracts less amounts billed, often referred to as unbilled receivables. When billings exceed cost plus profit recognized, the account balance should be included with deferred revenue along with other advance collections from customers. For companies that employ receivables-based financing, the balance of securitized receivables should be removed from operating receivables and reclassified to the financing section of the cash flow analysis statement.

Similar to operating receivables, operating payables consist of amounts due vendors, including accounts payable and notes payable for purchases made. Floor-plan financing should be included with operating payables.

When completing the cash flow analysis statement, noncash expenses, for example, depreciation and amortization expense, should be excluded from such operating expenses as cost of revenue, selling, general and administrative expense, and research and development expense.

Prepaid expenses, referred to as prepaids, consist of all operating expenses paid in advance of being incurred. Accrued expenses payable, referred to as accruals, are comprised of operating expenses incurred that have not been paid.

Two line items on the cash flow analysis statement, other cash income and income taxes paid, require more clarification. Details for other cash income are provided in Exhibit 9.5. Exhibit 9.6 provides the components of income taxes paid.

As seen in Exhibit 9.5, other cash income consists generally of cash flow that is not classified elsewhere. It is important to identify the source of other cash income so that sustainability can be assessed. For example, sustainable sources of other cash income include interest and dividend income, recurring distributions from associate companies,

Exhibit 9.5 Details of Other Cash Income

Revenue from noncore operations	
Interest income	
Dividend income	
Distributions from associate companies	
Trading income	
Rental income	
Royalty income	
Other income (expense)	
Restructuring charge	
Change in restructuring reserve	
Net cash paid in buyback of shares for options	
Discontinued operations, extraordinary items, and changes in accounting principle	
Change in other operating current and noncurrent assets	
Change in other operating current and noncurrent liabilities	
Other cash income	

and rental and royalty income. Revenue from noncore operations, trading income, and unidentified other income or expense are likely less sustainable, although judgment is needed in making that decision. A restructuring charge, adjusted for changes in the restructuring reserve in order to derive the cash component of the restructuring, is also an unlikely recurring use of cash.

Other nonrecurring items include discontinued operations, extraordinary, items and the effects of changes in accounting principle. Balance sheet changes, including changes in other operating current and noncurrent assets and other operating current and noncurrent liabilities, also result in nonrecurring sources and uses of cash.

The caption “net cash paid in buyback of shares for options” reflects the buyback of shares that were issued when employees exercised stock options received as compensation. The cash paid in such buybacks should be reduced for any tax benefits received. Consistent with the compensation-like nature of the item, its treatment as other cash income moves its effects to operating cash flow from financing. It should be adjusted out of treasury stock transactions in the financing section of the cash flow statement.

As presented in Exhibit 9.6, income taxes paid reflect disbursements for income taxes related to continuing operations.

Exhibit 9.6 Details of Income Taxes Paid (Refunded)

Income tax (expense) benefit	
Change in deferred tax assets	
Change in deferred tax liabilities	
Change in tax refund receivable	
Change in income taxes payable	
Income taxes (paid) refunded	

In the calculations presented in this exhibit, income tax expense is the tax provision recorded on income from continuing operations. It is adjusted for changes in current and noncurrent deferred tax assets and liabilities.⁸ It also is adjusted for the change in any tax refund receivable or income taxes payable.

On the cash flow analysis statement, tax benefits from stock options are reported as a separate line item within the external financing section. The company will have reported these benefits as a component of additional paid-in capital. For separate recognition of the benefits, they will need to be moved from common equity financing to a separate tax benefits line. However, if shares have been repurchased to serve as an offset to shares issued as a result of stock option exercises, then tax benefits from stock options should be netted against the cash paid in such a buyback. The net buyback amount is reported as a component of other cash income.

On the cash flow analysis statement, total interest paid consists of interest expense adjusted for changes in accrued interest payable. Interest paid also should include interest capitalized to inventory and property, plant, and equipment. Related to interest paid is the line item “required principal payments on long-term debt and capital lease obligations.” This disbursement line reflects principal amounts scheduled for payment during the year. As such, the current portion of long-term debt and capital leases at the beginning of the current year should be entered here as a use of cash. The dividends paid line includes dividends on outstanding preferred and common issues. Any dividends paid on preferred stock also should be used in computing free cash flow.

Changes in investments, notes receivable, goodwill, and other intangibles are all reported in the investments section of the cash flow analysis statement. Capital expenditures are included in this section too. Net capital expenditures can be computed by adjusting the book value change in property, plant, and equipment by depreciation and amortization and any gain or loss resulting from asset dispositions.⁹

All external financing is reported in a single section of the cash flow analysis statement. Financing amounts are calculated by computing the change in each debt or equity caption.¹⁰ Sale and leaseback financing consists of the proceeds received from sale and leaseback transactions. To the extent these proceeds serve to reduce the book value of property, plant, and equipment, capital expenditures will need to be adjusted upward. Receivables-related financing refers to incremental proceeds received from the sale of operating receivables. Common and preferred equity financing reflect proceeds received for new shares issued, including shares issued resulting from the exercise of stock options.

USING THE CASH FLOW ANALYSIS STATEMENT

To demonstrate use of the cash flow analysis statement, we present four cases using assumed company results. Each cash flow case begins with the same revenue amount and ends with no net change in cash. However, each case presents a markedly different cash flow situation with different implications for the company’s current performance and future cash flow. Although income statements are presented for each of the four cases, balance sheets are not. Relevant balance sheet changes are, however, presented on the cash flow analysis statements. Cash flow cases 1 and 2 employ the income statement presented in Exhibit 9.7.

As seen in the exhibit, the income results for cash flow cases 1 and 2 are positive. The

Exhibit 9.7 Assumed Income Statement Data for Cash Flow Cases 1-2
(\$ thousands)

Revenue		\$8,000
Cost of revenue (including depreciation of \$600)	\$4,760	
Selling, general, and administrative expense	1,920	6,680
Operating income		1,320
Other income	40	
Interest expense	(140)	(100)
Pretax income		1,220
Tax provision		410
Net income		\$ 810

company reported an operating margin (operating income divided by revenue) of 16.5 percent and a net margin (net income divided by revenue) of 10.1 percent. The origin of other income is not known. However, the amount is not an especially large component of pretax income.

Cash flow results for cases 1 and 2, both of which employ the income statement presented in Exhibit 9.7, are presented in Exhibits 9.8 and 9.9, respectively. The exhibits present a summarized cash flow analysis statement.

The cash flow analysis statement for case 1 is presented in Exhibit 9.8. The company generated sufficient cash flow available for debt service, \$950,000, to cover interest and required principal payments on its debt. The majority of the company's cash flow was generated through core operations. That is, other cash income was not significant. Also, income taxes paid were approximately 34 percent of pretax income, a level that is reasonably close to the federal statutory tax rate of 35 percent. When income taxes paid extend well above approximately 40 percent of pretax income or well below 30 percent, the reasons should be identified and a determination made as to whether those taxes paid may decline or increase in the future.

After debt service, the company in case 1 had \$500,000 to use toward capital expenditures of \$700,000. The shortfall was filled with long-term debt financing, a proper match of long-term needs with long-term financing. After external financing, there was no change in cash during the period.

The case 1 company generated positive free cash flow of \$110,000. Cash flow from operations of \$810,000 was sufficient to cover the depreciation proxy for replacement capital expenditures of \$600,000 and add \$100,000 to property, plant, and equipment to support the company's growth.

Additional analyses would be needed to better understand the factors causing increases in such working capital accounts as operating receivables, inventory and operating payables. However, overall the case 1 company appeared to be doing an ample job of generating cash flow. It was able to service debt with cash generated by core operations and, for shareholders, was providing positive free cash flow. Of course, of concern is the amount of free cash flow that the company generated. On an equity market capitalization of, say \$12,150,000, or 15 times net income ($15 \times \$810,000$), free cash flow of \$110,000

**Exhibit 9.8 Cash Flow Analysis Statement Case 1, Profitable Company,
Sufficient Cash Flow to Service Debt and Positive Free Cash
Flow. Source (Use) of Cash (\$ thousands)**

Revenue	\$8,000
Change in operating receivables	(500)
Cash from revenue	7,500
Cost of revenue (excluding depreciation & amortization)	(4,160)
Change in inventory	(300)
Change in operating payables	200
Cash cost of revenue	(4,260)
Cash gross margin	3,240
Cash operating expense	(1,920)
Core operating cash flow	1,320
Other cash income	40
Income taxes paid	(410)
Cash flow available for debt service	950
Total interest paid	(140)
Cash flow from operations	810
Required principal payments on long-term debt & capital lease obligations	(310)
Cash flow after debt service	500
Dividends paid	0
Cash flow after dividends	500
Cash paid for capital expenditures	(700)
Change in cash before external financing	(200)
Short-term debt financing	
Long-term debt financing	200
Equity financing	
External financing	200
Change in cash and equivalents after external financing	\$ 0
Free cash flow:	
Cash flow from operations	\$ 810
Preferred dividends declared	
Depreciation proxy for replacement capital expenditures	(600)
Growth-related capital expenditures, net of dispositions	(100)
Free cash flow	\$ 110

(continues)

Exhibit 9.8 (Continued)

Selected Details:

Other income (expense)	\$ 40
Change in other operating assets and liabilities	
Other cash income	\$ 40
Income tax expense	\$ (410)
Change in deferred tax assets	
Change in deferred tax liabilities	42
Change in tax refund receivable	
Change in income taxes payable	(42)
Income taxes paid	\$ (410)

would provide a free-cash return on investment to shareholders of less than 1 percent (\$110,000 / \$12,150,000).

The cash flow analysis statement for case 2 is presented in Exhibit 9.9. The company's cash flow available for debt service was a use of cash of \$850,000 and did not provide the cash needed to pay interest and principal on its debt. The problem was not due to other cash income or income taxes paid, but rather to a lack of cash flow being generated by core operations. The company's core operating cash flow was a use of cash of \$480,000.

The case 2 company had the same operating margins as the company in case 1. However, in case 2, significant increases in operating receivables and inventory that were not offset by increases in operating payables consumed large amounts of cash flow. What is unknown and would require additional analysis is whether the increases in these working capital accounts were due to seasonal factors, growth, or collection problems and problems related to product demand. More is said later about how to analyze changes in working capital accounts.

It appears that the company financed its working capital needs with short-term debt. On the surface, such a move would appear to be a good match of financing needs (working capital) and sources (short-term debt). However, only a seasonal need for working capital could be expected to liquidate in the near term and provide the cash needed to repay a short-term loan. Growth needs for working capital are longer term.

Additional financing in the amount of \$700,000 was obtained to complete the company's \$2,000,000 overall shortfall in cash flow. The company apparently financed its capital expenditures needs with long-term debt. Because the company in case 2 generated negative cash flow from operations, its free cash flow was also negative.

Cash flow case 3 employs the income statement data presented in Exhibit 9.10. The company is profitable; however, less so than cases 1 and 2.

As presented in the exhibit, the case 3 company was profitable. However, while the company generated a net margin of 13 percent (\$1,042,000 / \$8,000,000), core operations were barely above break-even, reflecting an operating margin of only 2 percent (\$160,000 / \$8,000,000). Most of the company's earnings were generated by other income, the origin of which is unknown. Moreover, the company's effective tax rate (tax

**Exhibit 9.9 Cash Flow Analysis Statement Case 2, Profitable Company,
Insufficient Cash Flow to Service Debt and Negative Free Cash
Flow. Source (Use) of Cash (\$ thousands)**

Revenue	\$8,000
Change in operating receivables	(1,800)
Cash from revenue	6,200
Cost of revenue (excluding depreciation & amortization)	(4,160)
Change in inventory	(1,200)
Change in operating payables	600
Cash cost of revenue	(4,760)
Cash gross margin	1,440
Cash operating expense	(1,920)
Core operating cash flow	(480)
Other cash income	40
Income taxes paid	(410)
Cash flow available for debt service	(850)
Total interest paid	(140)
Cash flow from operations	(990)
Required principal payments on long-term debt & capital lease obligations	(310)
Cash flow after debt service	(1,300)
Dividends paid	0
Cash flow after dividends	(1,300)
Cash paid for capital expenditures	(700)
Change in cash before external financing	(2,000)
Short-term debt financing	1,300
Long-term debt financing	700
Equity financing	
External financing	2,000
Change in cash and equivalents after external financing	\$ 0
Free cash flow:	
Cash flow from operations	\$ (990)
Preferred dividends declared	
Depreciation proxy for replacement capital expenditures	(600)
Growth-related capital expenditures, net of dispositions	(100)
Free cash flow	\$(1,690)

(continues)

Exhibit 9.9 (Continued)

Selected Details:

Other income (expense)	\$ 40
Change in other operating assets and liabilities	
Other cash income	\$40
Income tax expense	\$ (410)
Change in deferred tax assets	
Change in deferred tax liabilities	42
Change in tax refund receivable	
Change in income taxes payable	(42)
Income taxes paid	\$ (410)

Exhibit 9.10 Assumed Income Statement Data for Cash Flow Case 3 (\$ thousands)

Revenue		\$8,000
Cost of revenue (including depreciation of \$600)	\$5,600	
Selling, general and administrative expense	2,240	7,840
Operating income		160
Other income	1,200	
Interest expense	(140)	1,060
Pretax income		1,220
Tax provision		178
Net income		\$1,042

provision of \$178,000 divided by pretax income of \$1,220,000), at 14.6 percent, was unusually low, reduced by the assumed utilization of operating loss carryforwards. At the end of the reporting period, the company had fully utilized its remaining operating loss carryforwards.

The cash flow analysis statement for case 3 is presented in Exhibit 9.11. Cash flow available for debt service of \$1,182,000 was sufficient to cover interest and required principal payments on debt and capital leases. However, of concern is the fact that most of this cash flow was derived from other cash income, which may not be sustainable. Thus, it is not clear whether the company will be able to continue servicing its debt.

Cash flow available for debt service also was boosted by an unusually low amount of income taxes paid. At only 14.6 percent of pretax income (\$178,000 / \$1,220,000) and lowered by fully utilized operating loss carryforwards, income taxes paid by the company will increase in future periods even if pretax income remains unchanged.

**Exhibit 9.11 Cash Flow Analysis Statement Case 3, Profitable Company,
Sufficient Cash Flow to Service Debt and Positive Free Cash
Flow. Source (Use) of Cash (\$ thousands)**

Revenue	\$8,000
Change in operating receivables	(500)
Cash from revenue	7,500
Cost of revenue (excluding depreciation & amortization)	(5,000)
Change in inventory	(300)
Change in operating payables	200
Cash cost of revenue	(5,100)
Cash gross margin	2,400
Cash operating expense	(2,240)
Core operating cash flow	160
Other cash income	1,200
Income taxes paid	(178)
Cash flow available for debt service	1,182
Total interest paid	(140)
Cash flow from operations	1,042
Required principal payments on long-term debt & capital lease obligations	(310)
Cash flow after debt service	732
Dividends paid	0
Cash flow after dividends	732
Cash paid for capital expenditures	(700)
Change in cash before external financing	32
Short-term debt financing	
Long-term debt financing	(32)
Equity financing	
External financing	(32)
Change in cash and equivalents after external financing	\$0
Free cash flow:	
Cash flow from operations	\$1,042
Preferred dividends declared	
Depreciation proxy for replacement capital expenditures	(600)
Growth-related capital expenditures, net of dispositions	(100)
Free cash flow	\$342

(continues)

Exhibit 9.11 (Continued)

Selected Details:

Other income (expense)	\$1,200
Change in other operating assets and liabilities	
Other cash income	\$1,200
Income tax expense	\$ (178)
Change in deferred tax assets	
Change in deferred tax liabilities	42
Change in tax refund receivable	
Change in income taxes payable	(42)
Income taxes paid	\$ (178)

The company used its cash flow after debt service, \$732,000, for capital expenditures of \$700,000 and debt reduction of \$32,000.

Free cash flow for the company in case 3 was positive. At \$342,000, it was more than three times the amount reported in case 1. However, concerns about the sustainability of free cash flow remain.

Cash flow case 4 employs the income statement data presented in Exhibit 9.12. The related cash flow analysis statement for case 4 is presented in Exhibit 9.13. This company is losing money. Because of the loss, its income tax provision was a benefit.

Although the case 4 company lost money, it generated significant amounts of cash flow. Cash flow available for debt service was \$1,160,000 and was sufficient to cover interest and debt principal.

After debt service, the company had \$710,000 available, which it returned to shareholders in the form of dividends and stock buybacks. The company did not make any new

Exhibit 9.12 Assumed Income Statement Data for Cash Flow Case 4
(\$ thousands)

Revenue		\$8,000
Cost of revenue (including depreciation of \$600)	\$5,600	
Selling, general, and administrative expense	2,440	8,040
Operating income		(40)
Other income	0	
Interest expense	(140)	(140)
Pretax income		(180)
Tax (benefit)		(63)
Net loss		\$ (117)

**Exhibit 9.13 Cash Flow Analysis Statement Case 4, Loss Company,
Sufficient Cash Flow to Service Debt and Positive Free Cash
Flow. Source (Use) of Cash (\$ thousands)**

Revenue	\$8,000
Change in operating receivables	500
Cash from revenue	8,500
Cost of revenue (excluding depreciation & amortization)	(5,000)
Change in inventory	300
Change in operating payables	(200)
Cash cost of revenue	(4,900)
Cash gross margin	3,600
Cash operating expense	(2,440)
Core operating cash flow	1,160
Other cash income	0
Income taxes (paid) benefit	0
Cash flow available for debt service	1,160
Total interest paid	(140)
Cash flow from operations	1,020
Required principal payments on long-term debt & capital lease obligations	(310)
Cash flow after debt service	710
Dividends paid	(300)
Cash flow after dividends	410
Cash paid for capital expenditures	0
Change in cash before external financing	410
Short-term debt financing	
Long-term debt financing	
Equity financing	(410)
External financing	(410)
Change in cash and equivalents after external financing	\$ 0
Free cash flow:	
Cash flow from operations	\$1,020
Preferred dividends declared	
Depreciation proxy for replacement capital expenditures	(600)
Growth-related capital expenditures, net of dispositions	600
Free cash flow	\$1,020

(continues)

Exhibit 9.13 (Continued)

Selected Details:

Other income (expense)	\$	0
Change in other operating assets and liabilities		
Other cash income		\$0
Income tax (expense) benefit	\$	63
Change in deferred tax assets		
Change in deferred tax liabilities		
Change in tax refund receivable		(63)
Change in income taxes payable		
Income taxes paid	\$	0

capital expenditures during the year. The decline in property, plant, and equipment during the year was equal to the amount of depreciation recorded.

In case 4, free cash flow was the highest amount yet, \$1,020,000. It was due to a high amount of cash flow from operations and no capital expenditures.

Certainly the sustainability of cash flow in case 4 should be questioned. During the reporting period, the company partially liquidated itself. Operating receivables and inventory were reduced. Operating payables were also paid. Even property, plant, and equipment, which were not being replaced, were effectively liquidated through operations.

Periods of decline are mirror images of periods of growth. Although growth requires cash investments in working capital and property, plant, and equipment, decline results in the liquidation of those investments. In the process, cash flow is generated. However, in the absence of a return to profitable operations, positive cash flow will be generated only as long as there are assets available for liquidation.

Summary of the Cash Flow Analysis Cases

In all four of the cash flow cases presented, the top line of the cash flow analysis statement, revenue, was the same. Each company generated revenue of \$8,000,000. In addition, in all four cases, the bottom line of the cash flow analysis statement, the change in cash and equivalents after external financing, was the same. All four companies showed no net change in cash and equivalents. Yet all four cases presented very different scenarios. Those differences were the result of changes in the underlying fundamentals, including the fundamentals of profitability and the fundamentals of efficiency, changes in other cash income, and changes in income taxes paid.

Cases 1 and 2 were the more profitable of the four cases examined. In case 1, the company was able to service its debt with cash flow available for debt service. The company used cash flow after debt service for capital expenditures, which required a small amount of long-term debt financing. The company generated positive free cash flow. Although the company in case 2 was as profitable as the company in case 1, increases in working capital, operating receivables, and inventory that were not offset by an increase in operating payables resulted in negative cash flow available for debt service. The company

needed substantial amounts of external financing to meet its working capital and capital expenditure needs. Free cash flow was decidedly negative in case 2.

The company in case 3 was less profitable than in cases 1 and 2; however, other cash income and low income taxes paid resulted in the company having sufficient cash flow available for debt service to service its debt. The company also was able to meet its capital expenditure needs with cash flow after debt service. The change in cash before external financing, a positive amount, was used to reduce debt principal. The company generated more than three times the amount of free cash flow generated by the company in case 1. However, important questions remained regarding the sustainability of the company's other cash income and whether income taxes paid will increase in future periods.

The company in case 4 lost money. Yet because this company liquidated its working capital accounts, sufficient cash flow available for debt service was generated to service its debt. There was even cash flow available after debt service to pay dividends and to buy back stock. With positive cash flow from operations and no capital expenditures, the company in case 4 generated more free cash flow than cases 1 through 3. In the absence of profitable operations, however, such cash flow performance cannot be expected to continue.

The role played by other cash income and income taxes paid in the cash flow analysis of the four cases is readily apparent. Increases in other cash income improved operating cash flow performance. The unknown is whether other cash income is sustainable. A study of the detail of the components of other cash income would help to address that issue and aid in the determination of whether a company's reported cash flow can continue.

As to income taxes paid, a careful analysis of the amount of income taxes paid relative to pretax income and an assessment of whether income taxes paid may grow or decline in future periods would provide useful insight into the sustainability of cash flow. In particular, the analyst should consider many tax-related factors, including:

- Unsustainable changes in the effective tax rate caused by such factors as operating loss carryforwards, tax credits, tax holidays, or audit adjustments,
- Increases or declines in deferred tax asset or liability accounts at rates that are inconsistent with the rate of change in pretax income, and
- Increases or declines in tax refunds receivable or income taxes payable also at rates that are inconsistent with the rate of change in pretax income.

The company in case 3 saw its effective tax rate decline, reducing income taxes paid, due to the use of operating loss carryforwards.¹¹ As another example, a company that discontinued capital expenditures for a few years may see deferred tax liabilities resulting from depreciation temporary differences begin to reverse, that is, decline, resulting in an increase in income taxes paid. The payment of those income taxes will continue until either the related deferred tax liability is reduced to zero or the company begins making capital expenditures again, increasing its deferred tax liabilities. Also, a company with an extremely profitable fourth quarter one year may end the year with a large balance in income taxes payable. Those taxes will be paid early in the first quarter of the following year, resulting in a decline in income taxes payable. The increase in income taxes paid related to a reduction in income taxes payable likely would be nonrecurring.

Beyond other cash income and income taxes paid, additional analysis is needed to de-

termine the effects of changes in the underlying fundamentals of profitability and efficiency on cash flow. In particular, in terms of profitability, our interest turns to changes in the profitability measures of gross margin and operating expenses as a percentage of revenue. As to efficiency, we consider investments in operating receivables and inventory less financing provided by the use of operating payables. Because their implications for future cash flow generation are so different, our focus is on determining the effects on cash flow of growth and period-to-period changes in underlying fundamentals of profitability and efficiency.

CASH FLOW DRIVERS

We refer to growth and changes in fundamentals of profitability and efficiency as cash flow drivers. These factors drive changes in cash flow. In particular, when referring to the cash flow analysis statement, they are the fundamental reasons for surpluses or shortfalls of core operating cash flow and changes in that measure over time.

The cash effects of growth are pervasive, impacting virtually every source and use of cash flow. In terms of core operating cash flow, growth increases revenue, which provides cash flow, and also increases cost of revenue, which consumes cash flow. The net effects of growth on the two measures combined, gross margin, or revenue less cost of revenue, will be positive provided gross margin is positive. Growth also increases such operating expenses as selling, general and administrative expense, and research and development expense, which consume cash flow.

There is also a growth impact on the working capital accounts included in the calculation of core operating cash flow. With growth in revenue comes the need for accompanying increases in operating receivables and inventory, which consume core operating cash flow, and are offset by increases in operating payables, which provide cash flow.

The effects of an assumed rate of growth on all of these factors—gross margin, operating expense, operating receivables, inventory, and operating payables—must be considered when projecting core operating cash flow.

Beyond the cash flow effects of growth on these income statement and balance sheet accounts are the effects of changes in underlying profitability and efficiency. In terms of profitability, we mean changes in the gross margin ratio and the operating expense ratio. Here operating expense refers to selling, general and administrative expense plus research and development expense. However, importantly, because we are calculating cash flow impacts, the effects of depreciation and amortization, which are noncash expenses, are not included in the gross margin and operating expense ratios.

The term “operating profit,” also known as operating income, is used to refer to a firm’s core pretax profit from operations. It is measured as gross margin, or revenue less cost of revenue, minus the operating expenses of selling, general and administrative expense, and research and development expense. When operating profit or operating income is measured before or without the effects of depreciation and amortization expense, we refer to the resulting profit measure as operating cushion. Thus, operating cushion is revenue minus cost of revenue, selling, general and administrative expense, and research and development expense, where all expenses are measured without depreciation and amortization expense.

Changes in efficiency refer to changes in effectiveness in managing operating receivables, inventory, and operating payables. Efficiency in managing such working capital accounts can be measured in different ways. For example, receivables turnover might be used for measuring efficiency in collecting operating receivables. Calculated as revenue divided by operating receivables, receivables turnover measures the number of times during a year that operating receivables are collected and replaced with new revenue transactions. Receivables turnover for a company with revenue of \$1,000,000 and operating receivables of \$100,000 would be 10 ($\$1,000,000 / \$100,000$). The higher the turnover measure, the more efficient the company is in managing its operating receivables.

Receivables days, also commonly referred to as days sales outstanding (DSO), is a related measure of efficiency, calculated as 365 divided by receivables turnover. The receivables days statistic measures the length of time it takes for a firm to collect its outstanding operating receivables balance. For the company with a receivables turnover measure of 10, receivables days would be 36.5 ($365 / 10$).

There are similar measures for inventory and operating payables, although often cost of revenue is used in measuring turnover for inventory and operating payables.

We will use a turnover-related measure of efficiency, where operating receivables, inventory, and operating payables are expressed as a percentage of revenue. This measure of efficiency is actually the reciprocal of a turnover ratio and is unconventional. However, as will be developed later, by expressing these working capital accounts as a percentage of revenue, we will be able to develop a better profile of a firm's expected cash flow performance given an anticipated rate of growth in revenue.

For example, a company with revenue of \$1,000,000, operating receivables of \$100,000, and a receivables turnover ratio of 10, operating receivables to revenue would be 10.0 percent ($\$100,000 / \$1,000,000$). That is, 10 percent of the company's revenue is uncollected and reflected in operating receivables.

Inventory and operating payables also will be measured as a percent of revenue. Measured in this way, efficiency improves as a lower percentage of revenue is tied up in working capital.

We have not included other working capital accounts, such as prepaid expenses, deferred revenue, and accrued expenses payable, in this discussion. When material, such accounts should be included with operating receivables, inventory, and operating payables in computing measures of efficiency for purposes of analyzing core operating cash flow. Taken collectively, the sum of operating receivables, inventory, and prepaid expenses, less deferred revenue, operating payables, and accrued expenses payable comprise a company's operating working capital and represent its investment in net current assets needed to support operations.

Exhibit 9.14 provides a summary of the calculation of the profitability and efficiency measures to be used here.

Calculating Cash Flow Impacts

We refer to cash flow impacts, or simply cash impacts, as the measured effects of the cash flow drivers of growth and changes in profitability and efficiency on core operating cash flow. Such impacts are helpful in better understanding why a company generated positive cash flow or consumed cash and how those cash flows might change in future periods.

Calculating the cash impact of growth on core operating cash flow entails measuring the effects of period-to-period revenue growth on the profitability factors of gross mar-

Exhibit 9.14 Calculation of Cash Flow Profitability and Efficiency Measures

Profitability Measure	Calculation Formula
Gross margin ratio	Gross margin divided by revenue ^a
Operating expense ratio	Operating expense divided by revenue ^b
Operating cushion ratio	Operating cushion divided by revenue ^c
Efficiency Measure	Calculation Formula
Receivables to revenue ratio	Operating receivables divided by revenue
Inventory to revenue ratio	Inventory divided by revenue
Prepays to revenue ratio	Prepaid expenses divided by revenue
Payables to revenue ratio	Operating payables divided by revenue
Accruals to revenue ratio	Accrued expenses payable divided by revenue
Operating working capital to revenue ratio	Operating working capital divided by revenue ^d

^a Gross margin is calculated as revenue less cost of revenue, excluding depreciation and amortization expense.

^b Operating expense consists of selling, general, and administrative expense plus research and development expense, excluding depreciation and amortization expense.

^c Gross margin to revenue less operating expense to revenue, excluding depreciation and amortization expense.

^d The sum of receivables to revenue plus inventory to revenue and prepaids to revenue less the sum of payables to revenue and accruals to revenue.

gin and operating expense and on the efficiency factors of operating receivables, inventory, and prepaid expenses, deferred revenue, operating payables, and accrued expenses payable. To make the calculation, the profitability and efficiency factors are kept at their prior year's levels and revenue is changed for the actual rates of growth experienced during the ensuing year. The year-to-year change, that is, growth in revenue, is applied to prior-year measures of the underlying factors of profitability and efficiency to derive growth-related cash flow measures. To calculate the cash impact of changes in profitability and efficiency, increases and decreases in those underlying factors are applied to revenue for the year being analyzed.

An example will help demonstrate the calculations. For this purpose, cash flow case 1 from the previous section is used, though additional information is provided.

The income statement for the company in cash flow case 1 is presented in Exhibit 9.7. Its cash flow analysis statement is presented in Exhibit 9.8. As noted earlier, the company was profitable and provided sufficient cash flow available for debt service to cover the interest and required principal reduction on its outstanding debt. However, the company's free cash flow as a percentage of its equity market capitalization, at less than 1 percent, was rather weak.

Income statement data for the company in cash flow case 1 for the current year, as provided in Exhibit 9.7, together with assumed prior-year data, are presented in Exhibit 9.15. Assumed balance sheet data for the company as of the end of the prior year and current year are presented in Exhibit 9.16.

Exhibit 9.15 Income Statement Data For Calculating Cash Flow Impacts (\$ thousands)

	Prior Year	Current Year
Revenue	\$7,000	\$8,000
Cost of revenue (including depreciation of \$525 and \$600)	4,165	4,760
Selling, general and administrative expense	1,470	1,920
Operating income	1,365	1,320
Other income	40	40
Interest expense	(165)	(140)
Pretax income	1,240	1,220
Tax provision	422	410
Net income	\$ 818	\$ 810

Exhibit 9.16 Selected Balance Sheet Data for Calculating Cash Flow Impacts (\$ thousands)

	Prior Year	Current Year
Cash	\$ 350	\$ 350
Accounts receivable	575	1,075
Inventory	838	1,138
Total current assets	1,763	2,563
Accounts payable	300	500

Using income statement and balance sheet data presented in Exhibits 9.15 and 9.16, ratios and other statistics relevant for calculating cash flow impacts can be computed. Those ratios and statistics together with supporting data are presented in Exhibit 9.17.

According to the exhibit, revenue increased \$1,000,000 during the year to \$8,000,000 from \$7,000,000, an increase of 14.3 percent. Although gross margin was unchanged between the two reporting periods, the operating expense ratio worsened to 24.0 percent of revenue during the current year from 21.0 percent in the prior year. As a result, the company's operating cushion declined to 24.0 percent of revenue in the current year from 27.0 percent in the prior year.

Other operating statistics also worsened. Receivables to revenue increased to 13.4 percent in the current year from 8.2 percent while inventory to revenue increased to 14.3 percent from 12.0 percent. Helping to offset the increased investment in these operating current assets was an increase in payables to revenue. That ratio increased to 6.3 percent from 4.3 percent. Taken collectively, operating working capital to revenue increased to 21.4 percent in the current year from 15.9 percent in the prior year.

Exhibit 9.17 Statistics for Calculating Cash Flow Impacts (\$ thousands, except ratios)

Profitability or Efficiency Measure	Prior Year	Increase (Decrease)	Current Year
Revenue	\$7,000	\$1,000	\$8,000
Cost of revenue (excluding depreciation)	\$3,640	\$445	\$4,160
Gross margin (excluding depreciation)	\$3,360	\$555	\$3,840
Operating expense	\$1,470	\$450	\$1,920
Operating cushion ^a	\$1,890	\$105	\$1,920
Gross margin ratio (excluding depreciation)	48.0%	0%	48.0%
Operating expense ratio	21.0%	3.0%	24.0%
Operating cushion ratio ^b	27.0%	(3.0)%	24.0%
Operating receivables ^c	\$575	\$500	\$1,075
Receivables to revenue ratio	8.2%	5.2%	13.4%
Inventory	\$838	\$300	\$1,138
Inventory to revenue ratio	12.0%	2.3%	14.3%
Operating payables ^d	\$300	\$200	\$ 500
Payables to revenue ratio	4.3%	2.0%	6.3%
Operating working capital ^e	\$1,113	\$ 600	\$1,713
Operating working capital to revenue ratio	15.9%	5.5%	21.4%

^a Operating profit excluding the effects of depreciation and amortization expense.

^b Operating cushion divided by revenue.

^c Accounts receivable.

^d Accounts payable.

^e Operating receivables plus inventory, less operating payables.

Although the potential negative implications of a decline in operating cushion to 24.0 percent from 27.0 percent can be readily appreciated, an increase in operating working capital to revenue from a measure of 15.9 percent in the prior year to 21.4 percent in the current year is less intuitive. In the prior year, 15.9 percent of every revenue dollar was tied up in operating working capital. Finding the reciprocal, operating working capital turnover was 6.3 times ($1 / 15.9$ percent). Dividing 365 by the turnover figure to obtain an operating working capital days figure, we note that in the prior year the company had approximately 58 days' worth of revenue tied up in operating working capital ($365 / 6.3$). In the current year that statistic worsened to approximately 78 days' worth of revenue ($365 / \text{the reciprocal of } 21.4 \text{ percent}$). Thus, in the current year the company carried approximately 20 more days of revenue in its operating working capital.

Cash Flow Impact of Growth

The cash impact of growth is computed by applying changes in revenue for the year to measures of profitability and efficiency from the prior year. In effect, our interest is in determining how the company's core operating cash flow has changed during the year as a

result of growth, keeping measures of profitability and efficiency unchanged. Calculations of the cash impact of growth are presented in Exhibit 9.18.

As shown in the exhibit, the company's growth in revenue of \$1,000,000 translated into an increase in operating cushion of \$270,000. If the company were operating on strictly a cash basis, the increase in operating cushion would translate directly into an increase in core operating cash flow.

Of course the company did not operate on a cash basis and needed to invest in operating working capital, including growth-related increases in operating receivables and inventory, less operating payables, to support its growth. Using the prior-year ratio of operating working capital to revenue as a benchmark, 15.9 percent of every dollar increase in revenue must be invested in working capital to support that growth. As a result, the cash impact of growth on operating working capital was a use of cash of \$159,000.

Combining the cash impact of growth on operating cushion and the cash impact of growth on operating working capital, the total cash impact of growth for the company was a source of cash of \$111,000, or 11.1 percent of the growth in revenue.

It is important to note that the cash impact of growth for this company was a positive

Exhibit 9.18 Calculations of Cash Impact of Growth

Cash Flow Determinant	Computations	Source (Use) of Cash ^a
<i>Profitability:</i>		
Cash impact of growth on gross margin	$\$1,000,000 \times 48.0\%^b$	\$ 480,000
Cash impact of growth on operating expense	$\$1,000,000 \times 21.0\%^c$	\$(210,000)
Total cash impact of growth on operating cushion	$\$1,000,000 \times 27.0\%^d$	\$ 270,000
<i>Efficiency:</i>		
Cash impact of growth on operating receivables	$\$ 1,000,000 \times 8.2\%^e$	\$ (82,143)
Cash impact of growth on inventory	$\$1,000,000 \times 12.0\%^f$	\$(119,714)
Cash impact of growth on operating payables	$\$ 1,000,000 \times 4.3\%^g$	\$ 42,857
Total cash impact of growth on working capital	$\$1,000,000 \times 15.9\%^h$	\$(159,000)
Total cash impact of growth	$\$1,000,000 \times 11.1\%^i$	\$ 111,000

^a The cash impact of growth on gross margin and operating payables are sources of cash. The cash impact of growth on operating expense, operating receivables, and inventory are uses of cash. Negative growth would generate opposite results. The source (use) of cash was computed without rounding of relevant ratios. Thus amounts differ slightly from what would be derived using the rounded ratios of cash impacts listed above. Gross margin, operating expense, and operating cushion are calculated excluding the effects of depreciation and amortization expense.

^b Growth in revenue times prior year gross margin ratio.

^c Growth in revenue times prior year operating expense ratio.

^d Growth in revenue times prior-year operating cushion ratio.

^e Growth in revenue times prior-year receivables to revenue ratio.

^f Growth in revenue times prior-year inventory to revenue ratio.

^g Growth in revenue times prior-year payables to revenue ratio.

^h Growth in revenue times prior-year operating working capital to revenue ratio.

ⁱ Growth in revenue times difference of prior-year operating cushion ratio less operating working capital to revenue ratio.

amount. Specifically, growth provided cash flow. We often think of companies as consuming cash as they grow. However, that is not always the case. Whether a company consumes cash or generates cash as a result of growth depends on its operating cushion and the percentage of every revenue dollar that must be invested in operating working capital. We refer to the combination of these factors for a company as its growth cash flow profile.

Growth Cash Flow Profile At 27.0 percent, the company in this example enjoyed a high operating cushion ratio. Such an operating cushion can support significant operating working capital needs. That is, as long as its operating working capital is not more than 27.0 percent of revenue, growth in revenue will add to the core operating cash flow generated by the company.¹²

The growth cash flow profile is a combination of operating cushion and operating working capital to revenue designed to highlight the capacity of a firm to generate core operating cash flow as it grows. Firms with even higher operating cushion and lower operating working capital to revenue ratios will generate even more core operating cash flow as revenue increases.

The company analyzed here entered the year with an operating cushion of 27.0 percent and a ratio of operating working capital to revenue of 15.9 percent. Thus, its growth cash flow profile ratio was a positive 11.1 percent of revenue (27.0 percent – 15.9 percent). As noted, the company generated core operating cash flow as a result of growth in revenue. Firms for which operating working capital to revenue exceeds operating cushion will consume increasing amounts of core operating cash flow as revenue grows.

Different industries will have differing growth cash flow profiles. As an example, consider various beverage-manufacturing industries. Exhibit 9.19 presents the operating cushion ratio and operating working capital to revenue ratio for each of four beverage-manufacturing industries. The exhibit combines the operating cushion ratio and working capital to revenue ratio into the growth cash flow profile ratio. It is a percentage figure, calculated by subtracting the operating working capital to revenue ratio from the operating cushion ratio. As discussed, the statistic measures the percentage of every revenue dollar increase that will translate into core operating cash flow.

As presented in the exhibit, breweries and soft drink manufacturers enjoy the highest growth cash flow profile ratio. For them, every dollar of revenue increase translates into 4.8 cents of core operating cash flow. Breweries have a higher operating cushion ratio than the soft drink manufacturers. However, their businesses require a higher investment in operating working capital. The operating cushion at the coffee manufacturers is 7.1 percent and exceeds working capital to revenue by only 0.8 percent. For these firms, growth in revenue would provide very little core operating cash flow.

Among the four industries, the wineries enjoy the highest operating cushion ratio, at 14.0 percent. However, the 40 percent of revenue working capital requirement for these firms, caused primarily by significant investments in wine inventories as they age, exceeds the operating cushion. As a result, the growth cash flow profile ratio for this industry is –26.0 percent. A \$1 increase in revenue requires firms in this industry to raise, on average, 26 cents in funds from other sources.

Because they combine many firms of different sizes or firms whose lines of business may differ slightly, industry statistics can be misleading. Accordingly, we examine the growth cash flow profile for several individual firms. Exhibit 9.20 presents the growth

Exhibit 9.19 Growth Cash Flow Profile of Selected Beverage Manufacturing Industries

Industry	SIC ^a	Operating Cushion Ratio ^b	Working Capital-to-Revenue Ratio ^c	Growth Cash-Flow Profile Ratio ^d
Breweries	2082	11.1%	6.3%	4.8%
Coffees	2095	7.1%	6.3%	.8%
Soft drinks	2086	7.7%	2.9%	4.8%
Wineries	2084	14.0%	40.0%	(26.0)%

^a Standard Industrial Classification.

^b Operating profit before depreciation and amortization as a percent of revenue.

^c As reported. Amounts may include nonoperating assets such as short-term investments or nonoperating liabilities such as interest payable or short-term debt, which will misstate the ratio slightly.

^d Operating cushion ratio minus working capital to revenue ratio. The ratio measures the contribution of each dollar of revenue growth to core operating cash flow.

Source: Annual Statement Studies: Financial Ratio Benchmarks, (Philadelphia, PA: Risk Management Association, 2003).

Exhibit 9.20 Growth Cash Flow Profile of Selected Beverage Manufacturers

Company	Year	Industry	Operating Cushion Ratio ^a	Working Capital-to-Revenue Ratio ^b	Growth Cash-Flo Profile Ratio ^c
Adolph Coors Co.	2002	Breweries	14.2%	(2.1)%	16.3%
Farmer Brothers Co.	2003	Coffees	14.7%	6.8%	7.9%
Coca-Cola Co.	2002	Soft drinks	32.0%	6.7%	25.3%
Robert Mondavi Corp.	2003	Wineries	15.0%	98.7%	(83.7)%

^a Revenue less cost of revenue and selling, general, and administrative expense, before charges for depreciation and amortization.

^b Calculated using operating working capital, consisting of trade receivables, inventory, and prepaid expenses less accounts payable and accrued expenses payable, all as a percentage of revenue.

^c Operating cushion less working capital to revenue ratio.

Source: Company Form 10-K annual report filings with the Securities and Exchange Commission for the years indicated.

cash flow profile for four beverage manufacturers taken from each of the industries just reviewed.

As presented in the exhibit, Coca-Cola Co. has the highest growth cash flow profile ratio of the group. The growth cash flow profile statistic of 25.3 percent of revenue is derived primarily from the company's high operating cushion. On the other end of the spectrum, Robert Mondavi Corp. has a negative growth cash flow profile ratio. Due to significant operating working capital requirements, the company consumes 83.7 cents of core operating cash flow for every dollar increase in revenue.

The working capital to revenue ratio for Adolph Coors Co. is interesting. The company reports higher operating current liabilities than current assets, resulting in a negative op-

erating working capital to revenue ratio and boosting its growth cash flow profile ratio above its operating cushion ratio.

Calculations of the cash impact of growth sets prior-year levels of operating cushion and operating working capital as a benchmark to be used in cash flow calculations. In effect, the cash impact of growth determines the implications for core operating cash flow of growth assuming no change in those opening operating statistics.

Of course, those statistics do change. Operating cushion improves or worsens. Operating working capital needs change as well. A complete analysis of core operating cash flow requires, in addition to the growth impact, an analysis of the cash flow impact of changes in profitability and efficiency.

Cash Flow Impact of Changes in Profitability and Efficiency

Management has a certain level of control over changes in profitability and efficiency and their effects on cash flow. Steps taken to improve profitability and efficiency will manifest directly by increasing core operating cash flow. Declines in such measures will reduce it. Moreover, changes in profitability and efficiency will alter a company's growth cash flow profile for future periods.

In calculating their cash impact, year-to-year changes in profitability and efficiency are applied to current year revenue. Calculations of such cash impacts for the example company being studied here are presented in Exhibit 9.21.

The exhibit presents calculations of the cash flow impact of changes in profitability and efficiency for the example company. Recall that the company's operating expense ratio worsened during the year, resulting in a decline in its operating cushion and a \$240,000 reduction in core operating cash flow. The increase in operating working capital to revenue from 15.9 percent to 21.4 percent cost the company an additional \$441,000 of core operating cash flow. Combined, the worsening of the company's profitability and efficiency cost the company \$681,000 in core operating cash flow during the year. Stated another way, had underlying profitability and efficiency remained unchanged from the prior year, the company would have generated \$681,000 more than it did. Steps taken to improve these measures in the future would once again increase core operating cash flow.

Of course, there is likely an interaction effect between growth and changes in profitability and efficiency. For example, higher spending on advertising, which would increase the operating expense ratio, might have been needed to provide the growth in revenue enjoyed during the year. Similarly, a relaxed credit policy, which would manifest as an increase in operating receivables as a percent of revenue, might have been needed to grow revenue. Such interaction effects are not captured in this analysis. Isolating such interaction effects would require additional analysis, likely including a discussion with management.

Exhibit 9.22 summarizes the cash impacts of growth and of changes in profitability and efficiency on each component of core operating cash flow. The exhibit provides a check on the calculations.

In reviewing the exhibit, it can be seen that for measures of profitability, including gross margin, operating expense, and their difference, operating cushion, current-year amounts are derived by adding to prior-year measures the effects of growth and changes in profitability. For measures of efficiency, including operating receivables, inventory, operating payables, and their sum, operating working capital, the cash impact of growth and

Exhibit 9.21 Calculations of Cash Impact of Changes in Profitability and Efficiency

Cash Flow Determinant	Computations	Source (Use) of Cash ^a
Profitability:		
Cash impact of change in gross margin ratio	\$ 8,000,000 × 0% ^b	\$ 0
Cash impact of change in operating expense ratio	\$ 8,000,000 × 3.0% ^c	\$(240,000)
Total cash impact of change in operating cushion ratio	\$8,000,000 × (3.0)% ^d	\$(240,000)
Efficiency:		
Cash impact of change in receivables to revenue ratio	\$ 8,000,000 × 5.2% ^e	\$(417,857)
Cash impact of change in inventory to revenue ratio	\$ 8,000,000 × 2.3% ^f	\$(180,286)
Cash impact of change in payables to revenue ratio	\$ 8,000,000 × 2.0% ^g	\$ 157,143
Total cash impact of change in operating working capital to revenue ratio	\$ 8,000,000 × 5.5% ^h	\$(441,000)
Total cash impact of change in profitability and efficiency	\$ 8,000,000 × 8.5% ⁱ	\$(681,000)

^a The cash impact of an increase in gross margin ratio and payables to revenue ratio are sources of cash. The cash impact of an increase operating expense ratio, operating receivables to revenue ratio, and inventory to revenue ratio are uses of cash. Decreases in these ratios would generate opposite results. Gross margin, operating expense, and operating cushion were calculated without the effects of depreciation and amortization expense. The source (use) of cash was computed without rounding of relevant ratios. Thus amounts differ slightly from what would be derived using the rounded ratios of cash impacts listed above.

^b Change in gross margin ratio times current year revenue.

^c Change in operating expense ratio times current year revenue.

^d Change in operating cushion ratio times current year revenue.

^e Change in receivables to revenue ratio times current year revenue.

^f Change in inventory to revenue ratio times current year revenue.

^g Change in payables to revenue ratio times current year revenue.

^h Change in operating working capital to revenue ratio times current year revenue.

ⁱ Change in operating cushion ratio plus change in operating working capital to revenue ratio, times current year revenue.

of changes in each item as a percent of revenue are totaled to derive the actual account balance change.

The overall effects of both growth and changes in profitability and efficiency on core operating cash flow was a use of cash of \$570,000 for the year. Growth provided \$111,000 of core operating cash flow during the year; changes in profitability and efficiency consumed \$681,000 of operating cash flow.

Recall that earlier, as presented in Exhibit 9.8, the company being analyzed here reported free cash flow for the current year of \$110,000. That amount was less than 1 percent of an assumed market capitalization of equity for the firm. We now know something about why the company was not generating more cash flow. Changes in its underlying

Exhibit 9.22 Summary of Cash Impacts on Operating Cushion and Operating Working Capital

Components of Profitability and Efficiency	Source (Use) of Cash
Profitability:	
Prior-year gross margin (excluding depreciation)	\$ 3,360,000
Cash impact of growth on gross margin	480,000
Cash impact of change in gross margin ratio	0
Current-year gross margin (excluding depreciation)	\$ 3,840,000
Prior-year operating expense	\$(1,470,000)
Cash impact of growth on operating expense	(210,000)
Cash impact of change in operating expense ratio	(240,000)
Current-year operating expense	\$(1,920,000)
Prior-year operating cushion	\$ 1,890,000
Cash impact of growth on operating cushion	270,000
Cash impact of change in operating cushion ratio	(240,000)
Current-year operating cushion	\$ 1,920,000
Efficiency:	
Cash impact of growth on operating receivables	\$(82,143)
Cash impact of change in receivables to revenue ratio	(417,857)
Total change in operating receivables	\$ (500,000) ^a
Cash impact of growth on inventory	\$ (119,714)
Cash impact of change in inventory to revenue ratio	(180,286)
Total change in inventory	\$ (300,000) ^b
Cash impact of growth on operating payables	\$ 42,857
Cash impact of change in payables to revenue ratio	157,143
Total change in operating payables	\$ 200,000 ^c
Total change in operating working capital	\$ (600,000) ^d

^a Operating receivables increased to \$1,075,000 in the current year from \$575,000 in the prior year.

^b Inventory increased to \$1,138,000 in the current year from \$838,000 in the prior year.

^c Operating payables increased to \$500,000 in the current year from \$300,000 in the prior year.

^d Operating working capital increased to \$1,713,000 in the current year from \$1,113,000 in the prior year.

fundamentals, its profitability and efficiency, consumed significant amounts of cash. An analyst would need to determine whether improvements in profitability and efficiency might be gained in future periods, supplementing core operating cash flow, or if deterioration in those factors might continue.

A Changing Growth Cash Flow Profile During the year under review, the deterioration noted in the sample company's fundamentals of profitability and efficiency reduced its core operating cash flow. In addition, as a result of those changes, the company's growth

cash flow profile will limit its ability to generate core operating cash flow with increases in revenue in future periods.

During the year, the company's operating cushion declined to 24.0 percent from 27.0 percent. Operating working capital to revenue also worsened, increasing to 21.4 percent from 15.9 percent. As a result, the company's growth cash flow profile declined to 2.6 percent of revenue (24.0 percent – 21.4 percent) from 11.1 percent (27.0 percent – 15.9 percent). Thus, in the following year only 2.6 percent of any revenue increase will add to core operating cash flow, down from 11.1 percent.

Management can have a very direct effect on altering a company's growth cash flow profile. Consider recent changes at Home Depot, Inc. In Chapter 4, we highlighted the cash flow effects of extensions in vendor payment terms at Home Depot. During the year ended February 2, 2002, the company increased the length of time taken to settle accounts payable to approximately 34 days from 22 days in 2001. The change added approximately \$1.1 billion to operating cash flow that year. The payment period was increased further to 41 days in the year ended February 2, 2003, adding another \$800 million to operating cash flow for the year.

As noted, such changes in operating efficiency provide nonrecurring sources of operating cash flow. Only an additional increase in vendor payment terms would provide incremental cash flow. However, such changes in operating efficiency will alter a company's growth cash flow profile. As a result, future revenue increases will provide more core operating cash flow.

Exhibit 9.23 summarizes Home Depot's operating cushion ratio and operating working capital to revenue ratio for four years through the year ending February 2, 2003.

In reviewing the exhibit, it can be seen that after a decline in 2001, Home Depot's growth cash flow profile ratio, that is, its operating cushion ratio less its operating working capital to revenue ratio, improved markedly in 2002 and 2003. From a low of 3.3 percent in 2001, the growth cash flow profile statistic increased to 7.7 percent in 2002 and 8.4 percent in 2003. As a result, the company was in a much better position to generate increases in core operating cash flow with growth in revenue. A closer look at the components of the company's growth cash flow profile provides useful insight into how the improvement was achieved.

Due primarily to an improvement in gross margin, the company's operating cushion improved to 11.6 percent of revenue in 2003 from 10.5 percent in 2001. After a decline in 2002, current assets to revenue remained at 16.6 percent of revenue, the same percentage as in 2001. However, over that same two-year period, reflecting an increase in the length of time taken to settle accounts payable, operating current liabilities increased to 13.4 percent of revenue from 9.4 percent. Thus, the improvement in Home Depot's growth cash flow profile can be attributed to an improvement in gross margin and an extension of the payment period for accounts payable. Whether the company continues to improve its growth cash flow profile remains to be seen.

CLOSER LOOK AT CORE OPERATING CASH FLOW

As noted in Exhibit 9.20, due primarily to significant inventory needs, the growth cash flow profile ratio for Robert Mondavi Corp. was -83.7 percent at June 30, 2003. That is, in future years the wine company was expected to consume 83.7 cents of core operating

Exhibit 9.23 Changing Growth Cash Flow Profile, Home Depot, Inc., Years Ended January 30, 2000, January 28, 2001, February 3, 2002, and February 2, 2003.

Cash-Flow Determinant	2000	2001	2002	2003
Profitability:				
Gross margin ratio ^a	29.7%	29.9%	30.1%	31.1%
Operating expense ratio ^b	18.6%	19.4%	19.5%	19.5%
Operating cushion ratio ^c	11.1%	10.5%	10.6%	11.6%
Efficiency:				
Operating current assets to revenue ratio ^d	16.2%	16.6%	14.6%	16.6%
Operating current liabilities to revenue ratio ^e	9.3%	9.4%	11.7%	13.4%
Operating working capital to revenue ratio ^f	6.9%	7.2%	2.9%	3.2%
Growth CashFlow Profile ratio ^g	4.2%	3.3%	7.7%	8.4%

^a Gross margin, excluding depreciation and amortization expense, divided by revenue.

^b Operating expense, excluding depreciation and amortization expense, divided by revenue.

^c Gross margin less operating expense, excluding depreciation and amortization expense, divided by revenue.

^d Operating current assets consist of accounts receivable, inventory, and other current assets.

^e Operating current liabilities consist of accounts payable, deferred revenue and accrued expenses payable.

^f Operating current assets to revenue ratio minus operating current liabilities to revenue ratio.

^g Operating cushion ratio minus operating working capital to revenue ratio.

Source: Home Depot, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 28, 2001, pp. 19, 20 and 22, and February 2, 2003, pp. 28, 29 and 31.

cash flow for every dollar of growth in revenue. The growth statistic compared with positive growth cash flow profile ratios for manufacturers of other beverages, ranging from 7.9 percent for Farmer Brothers Co., a coffee manufacturer, to 25.3 percent for Coca-Cola Co.

Given the extreme nature of the growth cash flow profile for Robert Mondavi, we chose to look more closely at the company's core operating cash flow. To this end, the cash flow analysis statement through core operating cash flow for Mondavi for the year ended June 30, 2003, is presented in Exhibit 9.24.

In reviewing Mondavi's cash flow analysis statement as presented in the exhibit, it is readily seen that even with a negative growth cash flow profile, during 2003 the company generated positive core operating cash flow of \$61,453,000. Recall that the growth cash flow profile ratio measures the extent to which increases in revenue will result in sources or uses of core operating cash flow. In the absence of revenue growth, given its positive operating cushion, the company should be expected to generate positive core operating cash flow provided it is not consumed by changes in operating working capital accounts.

However, positive core operating cash flow notwithstanding, it is important to look carefully at the cash flow drivers—that is, profitability factors consisting of gross margin and the operating expense ratio and efficiency factors, including operating current assets

Exhibit 9.24 Cash Flow Analysis Statement through Core Operating Cash Flow, Robert Mondavi Corp., Year Ended June 30, 2003.

Company name: Robert Mondavi Corp.

Amounts in: (\$000s)

Fiscal year-end (June 30)

2003

Net revenue	\$452,673
Change in operating receivables	(3,556)
Change in deferred revenue	
Cash from revenue	449,117
Cost of revenue (excluding depreciation & amortization)	(254,643)
Change in inventory	(5,815)
Change in operating payables	5,715
Cash cost of revenue	(254,743)
Cash gross margin	194,374
Selling, general and admin. expense (excluding depreciation & amortization)	(129,993)
Change in prepaids	(366)
Change in accruals	(2,562)
Cash operating expense	(132,921)
Core operating cash flow	\$ 61,453

and operating current liabilities to revenue—to get a better understanding of core operating cash flow and where it might be headed.

To help with the analysis, selected income statement and balance sheet data are presented in Exhibits 9.25 and 9.26, respectively. Exhibit 9.27 provides statistics for measuring the cash flow impacts of each of the cash flow drivers. Exhibit 9.28 presents the cash flow impact of growth and changes in profitability and efficiency.

The income statement and balance sheet data presented in Exhibits 9.25 and 9.26 provide the information needed to calculate the cash flow impact of growth and of changes in profitability and efficiency for Robert Mondavi Corp. The data in the exhibits were taken directly from the company's financial statements. These data were used in calculating statistics for profitability and efficiency as presented in Exhibit 9.27. Among the statistics presented in the exhibit are the company's operating cushion ratio, its operating working capital to revenue ratio, and its growth cash flow profile ratio. Exhibit 9.28 employs the data presented in Exhibit 9.27 to calculate the cash flow impacts of growth and of changes in profitability and efficiency.

As shown in Exhibit 9.27, Mondavi ended 2002 and began 2003 with a negative growth cash flow profile of 79.4 percent. As a result of that profile, the \$11,315,000 growth in revenue reported during 2003 resulted in a \$8,979,000 reduction of core operating cash flow for the year. Had revenue not increased during 2003, but remained unchanged at 2002 levels, core operating cash flow would have been higher by \$8,979,000. The calculations are presented in Exhibit 9.28.

Exhibit 9.25 Income Statement Data for Calculating Cash Flow Impacts, Robert Mondavi Corp., Years Ended June 30, 2002, and 2003 (\$ thousands)

	2002	2003
Revenue	\$441,358	\$452,673
Cost of goods sold ^a	249,020	278,208
Selling, general and administrative expense	125,760	129,993
Operating income ^b	\$ 66,578	\$ 44,472

^a Depreciation and amortization expense of \$23,088 in 2002 and \$23,565 assumed included in cost of goods sold.

^b Excludes special charges of \$12,240 in 2002 and \$2,111 in 2003.

Source: Robert Mondavi Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 18.

Exhibit 9.26 Selected Balance Sheet Data for Calculating Cash Flow Impacts, Robert Mondavi Corp., Years Ended June 30, 2002, and 2003 (\$ thousands)

	2002	2003
Operating current assets:		
Accounts receivable	\$ 92,555	\$ 96,111
Inventory	388,574	394,389
Prepaid expenses	12,179	12,545
Operating current assets	493,308	503,045
Operating current liabilities:		
Accounts payable	23,012	28,727
Accrued expenses payable ^a	30,374	27,812
Operating current liabilities	53,386	56,539
Operating working capital ^b	\$439,922	\$446,506

^a Includes noncurrent deferred executive compensation.

^b Operating current assets minus operating current liabilities.

Source: Robert Mondavi Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, p. 17.

During 2003, Mondavi saw its operating cushion ratio decline as a percent of revenue by 5.3 percent. Offsetting that decline was an improvement in its operating working capital as a percent of revenue. The ratio improved by 1.0 percent of revenue during 2003. Combining these measures, the company's growth cash flow profile worsened as a percent of revenue by 4.3 percent during 2003. The impact of that decline, as reported in Exhibit 9.28, was a \$19,234,000 reduction in core operating cash flow during 2003. The

Exhibit 9.27 Statistics for Calculating Cash Flow Impacts, Robert Mondavi Corp., Years Ended June 30, 2002 and 2003 (\$ thousands, except ratios)

Profitability or Efficiency Measure	2002	Increase (Decrease)	2003
Net Revenue	\$441,358	\$ 11,315	\$452,673
Cost of revenue (excluding depreciation)	\$225,932	\$ 28,711	\$254,643
Gross margin (excluding depreciation)	\$215,426	\$(17,396)	\$198,030
Operating expense	\$125,760	\$4,233	\$129,993
Operating cushion	\$ 89,666	\$(21,629)	\$ 68,037
Gross margin ratio (excluding depreciation)	48.8%	(5.1)%	43.7%
Operating expense ratio	28.5%	.2%	28.7%
Operating cushion ratio	20.3%	(5.3)%	15.0%
Receivables to revenue ratio	21.0%	.2%	21.2%
Inventory to revenue ratio	88.0%	(.9)%	87.1%
Prepays to revenue ratio	2.8%	0%	2.8%
Operating current assets to revenue ratio	111.8%	(.7)%	111.1%
Payables to revenue ratio	5.2%	1.1%	6.3%
Accruals to revenue ratio	6.9%	(.8)%	6.1%
Operating current liabilities to revenue ratio	12.1%	.3%	12.4%
Operating working capital to revenue ratio	99.7%	(1.0)%	98.7%
Growth Cash Flow Profile Ratio	(79.4)%	(4.3)%	(83.7)%

Source: Selected income statement and balance sheet data from Exhibits 9.25 and 9.26.

primary reason for the decline during 2003 in the company's growth cash flow profile ratio was a decline in its operating cushion ratio, caused mostly by a reduction in gross margin. The company attributed the decline in its gross margin generally to "intense competition in the premium wine industry resulting from a weak U.S. economy." More specifically, the company noted that reasons for the decline in gross margin were "higher cost surplus wines in the Company's popular and super-premium brands [and the] result of inventory write-downs . . . and grape contract buyouts."¹³ To the extent that a portion of the decline in gross margin can be attributed to nonrecurring items, then gross margin and core operating cash flow can be expected to improve in future years.

Combining the cash flow impact of growth, a use of cash of \$8,979,000, and the cash flow impact of changes in profitability and efficiency, \$19,234,000, an overall cash flow impact of \$28,213,000 is obtained. That is, had revenue not grown during 2003 and had the company maintained the same levels of profitability and efficiency in 2003 as those reported in 2002, it would have generated \$28,213,000 more in core operating cash flow than it did. Such observations provide the analyst with insight into the company's ability to generate core operating cash flow and highlights where management attention is needed in improving the company's cash flow in the future.

Exhibit 9.28 Calculations of Cash Flow Impact of Growth and Changes in Profitability and Efficiency (\$ thousands, except ratios)

Cash Flow Determinant	Computations	Source (Use) of Cash ^a
Growth:		
Cash impact of growth on operating cushion	$\$11,315 \times 20.3\%^b$	\$2,299
Cash impact of growth on working capital	$\$11,315 \times 99.7\%^c$	(11,278)
Total cash impact of growth	$\$11,315 \times 79.4\%^d$	\$ (8,979)
Changes in Profitability and Efficiency:		
Cash impact of change in operating cushion ratio	$\$452,673 \times 5.3\%^e$	\$(23,928)
Cash impact of change in working capital to revenue ratio	$\$ 452,673 \times 1\%^f$	4,694
Total cash impact of changes in profitability and efficiency	$\$452,673 \times 4.3\%^g$	\$(19,234)

^a The source (use) of cash was computed without rounding of relevant ratios; thus amounts will differ slightly from what would be derived with rounding.

^b Growth in revenue times 2002 operating cushion ratio.

^c Growth in revenue times 2002 operating working capital to revenue ratio.

^d Growth in revenue times 2002 growth cash flow profile ratio.

^e Revenue for 2003 times decrease in operating cushion ratio.

^f Revenue for 2003 times decrease in operating working capital to revenue ratio.

^g Revenue for 2003 times decrease in growth cash flow profile ratio.

Source: Data provided in Exhibit 9.27.

Reconciling 2003 Results to 2002

It may be instructive for some to reconcile the cash flow impacts of growth and changes in profitability and efficiency in 2003 with results reported for 2002. In 2002 Robert Mondavi generated an operating cushion, operating profit before depreciation and amortization, of \$89,666,000. If operations remained static in 2003, leaving revenue, the operating cushion ratio, and operating working capital as a percent of revenue ratio unchanged in 2003, the company would have generated core operating cash flow of an amount equal to its operating cushion, \$89,666,000. Incorporating the cash flow impacts of growth and changes in profitability and efficiency yields the actual core operating cash flow reported for 2003. These calculations are presented in Exhibit 9.29.

SUMMARY

This chapter provides a framework for analyzing cash flow. Seven key points were raised in the chapter:

1. An understanding of a company's underlying fundamentals is needed to form conclusions about cash flow performance.

Exhibit 9.29 Reconciliation of 2002 Operating Cushion with 2003 Core Operating Cash Flow, Robert Mondavi Corp.

2002 Operating cushion	\$89,666,000
2003 Total cash impact of growth	(8,979,000)
2003 Total cash impact of changes in profitability and efficiency	(19,234,000)
2003 Core operating cash flow	<u>\$61,453,000</u>

2. A cash flow analysis statement, a special format for the cash flow statement, is useful in gaining insight into sustainable sources and uses of cash flow.
3. Fundamental cash flow drivers are growth and changes in profitability and efficiency.
4. Although growth may result in negative core operating cash flow, decline often results in positive cash flow due to the liquidation of working capital accounts.
5. A company's growth cash flow profile determines whether growth in revenue will provide or consume core operating cash flow.
6. The growth cash flow profile ratio consists of the operating cushion ratio minus the operating working capital to revenue ratio.
7. Changes in profitability and efficiency affect current-period core operating cash flow and alter a firm's growth cash flow profile for future periods.

NOTES

1. H. S. Bailey, Jr. "Watch Cash Flow," *Publishers Weekly*, January 13, 1975, p. 34.
2. C. Mulford and E. Comiskey, *Financial Warnings* (New York: John Wiley & Sons, 1996).
3. Blockbuster, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 63.
4. *Ibid.*, p. 66.
5. Pharmacy Buying Association, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Item 8.
6. Changes in accumulated other comprehensive income could be due to any number of items, including the effects of foreign currency movements on balance sheet accounts when the current-rate method is applied, changes in the fair value of investments classified as available for sale, adjustments for underfunded pension plans, and changes in the fair value of certain derivatives, especially those accounted for as cash flow hedges. An allocation of a change in accumulated other comprehensive income to various affected line items on the cash flow analysis statement should be made when the cause of the change can be identified. Often, however, no such allocation can be made. For example, foreign currency movements can affect virtually all accounts on the financial statements. Information on the effects of foreign currency movements on various accounts typically

is not presented, making an allocation of the change in accumulated other comprehensive income impractical.

7. In Chapter 7, we present a sustainable cash flow worksheet that is designed to adjust reported operating cash flow by reclassifying certain operating items and by removing nonrecurring items. Adjustments for nonrecurring items are presented in layers depending on the extent to which each item is perceived as being nonrecurring. In preparing the cash flow analysis statement, no provisions are made for a layering of nonrecurring items. Thus, decisions must be made on which nonrecurring items to remove.
8. Where possible, deferred tax assets and liabilities related to discontinued operations, extraordinary items, the cumulative effect of changes in accounting principle, and accumulated other comprehensive income should be moved to those sections of the cash flow analysis statement.
9. Depreciation and amortization expense lower asset book values but provide no cash inflow. Accordingly, they should be combined with the change in property, plant, and equipment as an offsetting use of cash. Any gains generated by the sale of property, plant, and equipment should be recorded in the capital expenditures line as a source of cash while losses on sale should be recorded as a use of cash.
10. The current portion of long-term debt and capital leases reported as a use of cash in the debt-service section of the cash flow analysis statement also must be reported as a source of long-term debt financing or capital lease financing, respectively.
11. The assumption here is that the loss carryforwards were recognized and realized in the same time period.
12. To put operating working capital to revenue of 27 percent into perspective, consider that 27 percent of revenue translates into an operating working capital turnover ratio of 3.7 times ($1 / 27$ percent). A turnover ratio of 3.7 converts into an operating working capital days statistic of approximately 99 days. At 99 days, a company could take 30 days to collect operating receivables, 90 days to sell inventory, and 21 days to settle operating payables, yielding operating working capital days of 99 ($30 + 90 - 21$). However, while calculating inventory days and operating payables days in a more traditional manner based on cost of revenue and not revenue would change the calculations, the general observations remain intact. Kellogg Co. is one firm that makes reference to improvements in its management of working capital as a percent of revenue. Refer to Kellogg Co. annual report, December 31, 2002, p. 18.
13. Robert Mondavi Corp., Form 10-K annual report to the Securities and Exchange Commission, June 30, 2003, pp. 9 and 11.

Understanding Free Cash Flow

Free cash flow is the lifeblood of a company.¹

Unless a company can generate cash to fund growth and pay dividends, its shares are essentially worthless.²

If you want a fair measure of extractable cash, the ultimate end in running a business, try free cash flow.³

References to free cash flow and its importance to financial analysis and firm valuation can be found with great frequency in investment literature and the financial press. Consider the quotes provided above. In different ways, each one attests to the absolute importance of free cash flow to a firm's valuation. For an investor or creditor to disagree with such statements would be like arguing with a sun worshiper about the desirability of blue skies over the beaches of Florida or taking exception to the wishes of skiers for more snow. Ultimately, the interest of investors and creditors in free cash flow is why for-profit firms are formed. The objective of such business enterprises is to generate cash flow for the purpose of servicing claims and providing returns to owners.

Business managers are gaining an appreciation for the importance to investors and creditors of generating free cash flow. Consider Borders Group, Inc., for example. The next statement was made in a comment about corporate strategy in the management's discussion and analysis section of the company's annual report for the year ended January 25, 2004: "The Company is continuing to implement its plan for the optimization of the Waldenbooks' store base in order to improve sales, net income and free cash flow."⁴

Consider also this comment from a spokesperson at Amazon.com, Inc., where the importance to management of free cash flow is stressed: "We think all the GAAP (generally accepted accounting principles) numbers are important, but the one management is most focused on is free cash flow."⁵ That statement is consistent with the company's stated objective, which, according to its annual report is "long-term, sustainable growth in free cash flow."⁶

Managers at other firms have embraced the concept of free cash flow to the point of incorporating it into formulas used for calculating incentive compensation. For example,

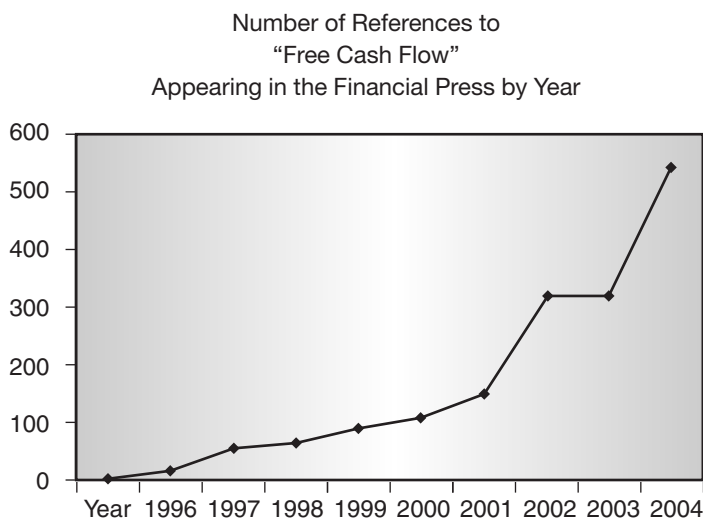
the next statement reflects a change in the compensation agreements at Delta Air Lines, Inc., to incorporate free cash flow: “Last year, company documents show, the board of directors changed the rules to award bonuses based on so-called ‘free cash flow.’”⁷

The importance of free cash flow to analysis and valuation is not of recent vintage. Cash flow in general and free cash flow in particular always have been of ultimate importance to investors and creditors, or, at least, such cash flow measures are what should have been of importance to them. Yet recently there has been a growing “discovery” of sorts of the measure by investors, creditors, and the financial press. Consider, for example, Exhibit 10.1, where we graph references to free cash flow noted in the financial press for the period 1996 through early 2004.

In the exhibit, we graph the number of references to the term “free cash flow” appearing in *The Wall Street Journal*, *Barron’s*, and Dow Jones Newswires for each year starting in 1996 and running through the quarter ended March 31, 2004. Although these citations included in-depth stories about free cash flow and how it was measured, most of them were short references to improvements or declines in free cash flow noted in company press releases or analyst reports. These announcements were then picked up by Dow Jones Newswires and included in our survey count.

As seen in the exhibit, a growing interest in free cash flow is unmistakable. In the financial press outlets we reviewed, only 15 references were made to free cash flow during 1996. There was a jump to 55 references in 1997 and a gradual upward trend to 108

Exhibit 10.1 References to Free Cash Flow in the Financial Press, January 1, 1996–March 31, 2004 (2004 amount annualized)



Source: *The Wall Street Journal.com*. Search was made for all references to “free cash flow” in *The Wall Street Journal*, *Barron’s*, and Dow Jones Newswires for each year, 1996 to 2003, and for the quarter ended March 31, 2004. References for the quarter ended March 31, 2004, were annualized.

references in 2000. After 2000, the number of references to free cash flow in the financial press increased dramatically each year to 322 in 2003. The increase continued during 2004, rising to 136 references during the first quarter ended March 31, 2004, which annualizes to a total of 544 references for the full year.

Earlier we noted that both Border's Group and Amazon.com incorporated free cash flow into their stated corporate strategies. We were interested in determining whether this was a recent development. For that purpose, we looked at earlier annual reports for Border's and noted that a reference to free cash flow first appeared in the company's report for the year ended January 27, 2002. In annual reports prior to that, the company's stated business strategy was focused on growth and profits, but not free cash flow. This statement describes the company's strategy in the year ended January 28, 2001: "The Company's business strategy is to continue its growth and increase its profitability."⁸ Consistent with Border's, Amazon.com did not mention free cash flow as part of its business objective in years prior to December 31, 2001.

What is remarkable about the growing interest in free cash flow is that, as noted, its importance to analysis and valuation is not new. The value of a share always has been the present value of the expected cash flows to which that share entitles its owner. Also, cash flow always has been what pays principal and interest on loans. So why are we now seeing such increased interest in free cash flow? We think that it is a natural reaction to the numerous and well-publicized accounting problems and examples of egregious acts of earnings management witnessed in recent years.

The accounting debacle we know as Enron Corp. occurred in 2001, the same year that interest in free cash flow began to increase dramatically. Certainly Enron was not the first accounting fraud of recent times. We had already seen serious accounting-rule violations and material restatements at such firms as Cendant Corp., Sunbeam Corp. and Xerox Corp. Enron, however, was a larger, more pervasive fraud in which a significant number of average people lost large amounts of money. Many of them lost their retirement plans and life savings. The story captured the attention of many as terms such as "accounting fraud" and "earnings management" became part of our national lexicon.

After Enron, there was an extended period during which new accounting frauds seemed to be announced almost every day. Names like Dynege, Inc., Adelphia Communications Corp., and certainly WorldCom, Inc., were constantly in the news. We almost began to expect "perp walks" as alleged perpetrators of accounting frauds were taken into custody.

To differing degrees, each of the cases mentioned here along with many others entailed the reporting of fictitious earnings and restatements of prior-year amounts. Enforcement actions taken by the Securities and Exchange Commission against these firms and others often demonstrated the lengths to which managers would go in their quest to report fake profits.

Understandably, investors, creditors, and analysts began to question earnings more than ever. They longed for something better, a metric on which they could place more reliance and trust for purposes of analysis and valuation. Free cash flow was a natural candidate. It was viewed as an antidote of sorts to creative accounting and earnings management. It was somehow more pure, above the fray and immune to the problems besetting reported earnings.

Several quotes, provided in Chapter 1, capture this view well. We repeat two of them here:

*Cash is fact and accounting profit is opinion.*⁹

*Unlike some items that can be clouded with financial reporting issues, cash is real, finite, and measurable. Cash is cash.*¹⁰

The common theme in both of these quotes is that although earnings can be manipulated, cash cannot. And although the quotes themselves do not use the term “free cash flow,” they do demonstrate why interest in various measures of cash flow, including free cash flow, has grown so quickly of late.

We welcome the growing attention placed on free cash flow. We think that it provides evidence that investors and creditors are emphasizing what really matters to analysis and valuation. However, we are not advocating a single focus. We have made the point throughout this book and others that one cannot focus on cash flow and ignore earnings, or vice versa. A company services its debt and creates value for its shareholders through the generation of sustainable cash flow. To be sustainable, cash flow requires earnings support. Thus, a company’s ability to generate both earnings and cash flow is important to all claimants.

We are concerned that there is not much understanding of what constitutes free cash flow. Definitions of the measure vary as does its calculation. Moreover, contrary to the quote made by a spokesperson at Amazon.com, where it was noted that free cash flow is a GAAP measure, GAAP does not define free cash flow.

Because there is a general lack of understanding as to what constitutes free cash flow, there is a real risk that managers, knowing that investors and creditors are focused on it, will turn their attention to using creative means toward giving them what they want. If financial statement users are not properly armed to see through this obfuscation, they may become disillusioned and lose interest in what is a very intuitively appealing measure. If so, attention paid to free cash flow will fade, and we may look back at this period of heightened attention to it as little more than a passing fad.

Our hope is that free cash flow only grows in importance. We think that by helping investors and creditors better understand how it is measured and how it might be manipulated, which is the objective of this chapter, use of free cash flow in analysis and valuation will continue and grow.

USES OF FREE CASH FLOW

Free cash flow is normally thought of first in the context of firm valuation. Consider this quote, which refers to the stock-picking approach of a successful money manager,

The . . . manager of JPMorgan Mid Cap Value Fund favors strong free cash flow—which he defines as cash from operations minus capital spending—when selecting undervalued companies that he thinks will do well in the long run.¹¹

The comment about how free cash flow might be used is rather vague. However, its importance to valuation is clear. The likelihood is that the manager, like others who use

free cash flow in valuation, incorporates it into some discounted cash flow model for the purpose of determining an intrinsic value for a share.

Although free cash flow normally is thought of first as a valuation metric, it has other important uses. For example, creditors might use it in financial covenants that are designed to restrict corporate behavior and increase the likelihood of repayment. Other firms, understanding the importance of free cash flow to valuation, may use it in developing an incentive compensation plan. Finally, because accounting standards call for the use of undiscounted cash flows in determining whether assets are value impaired, some firms have found that free cash flow is an appropriate measure to use for that purpose.

A broad understanding of free cash flow begins with an appreciation for how the measure is used. In this section we look closely and provide examples of how free cash flow is employed for the purposes mentioned—in share valuation, in management incentive compensation plans, in restrictive debt covenants, and for purposes of asset impairment testing.

Valuation

A traditional model for valuing any asset is to find the present value of the expected future cash flows to be generated by the asset. The model can be expressed by the next equation:

$$\text{Value} = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

where

- t = time period
- n = life of the asset
- CF_t = cash flow in period t
- r = discount rate reflecting the riskiness of the estimated cash flow

Although the valuation model looks relatively simple, it is dependent on several key assumptions. For example, the model incorporates assumptions about the specific cash flow that is being discounted, the number of time periods over which that cash flow will be generated, and an assumed discount rate. Because our interest is in better understanding free cash flow, our attention here will address the first key assumption in the valuation model—the specific cash flow that is being discounted.

For valuation purposes, the cash flow of interest depends on the specific asset being valued. For example, if the asset were a bond, then the relevant cash flow would be the scheduled interest and principal payment stream. If the asset were a preferred share of stock, then preferred dividends, either into perpetuity or with an assumed liquidation value, would be used.

If the model were valuing the firm as a whole, the cash flow of interest would be cash flow available for all claimants, debt holders, preferred shareholders, and common shareholders, after operating expenses and taxes had been paid. For common shareholders, the cash flow of interest would be cash available after prior claims had been serviced, including taxes, interest, and preferred dividends.

Even though the asset valuation model described here does not explicitly use the term “free cash flow,” it certainly could. Typically, free cash flow is thought of from the

viewpoint of either the firm or the common shareholders. Thus, instead of referring to the present value of expected cash flow for purposes of valuing the firm or common equity, the valuation model could have referred to the present value of free cash flow available for each group.

In a subsequent section, we will turn our attention to the definition and calculation of free cash flow. We will look at free cash flow to the firm, that is, for all claimant groups including debt holders, preferred shareholders, and common shareholders, and free cash flow available for common shareholders only. What will become apparent is that the definition of free cash flow will depend on the claimant group for whom the measure is being defined.

Incentive Compensation

Given the importance of free cash flow to valuation, it is no surprise that the measure has found its way into incentive compensation plans. By linking incentive pay to free cash flow, compensation agreements are better able to tie an individual manager's success to an important component of firm-wide success. Moreover, like sales growth, earnings growth, or return on equity, which are more traditional indicators of corporate achievement, a manager can be viewed as having more direct control over free cash flow than a firm's share price, for example.

Because shareholders are, for obvious reasons, very concerned about increases in a company's share price, price often is used as the basis for incentive compensation. For example, it is of paramount importance in stock option plans. If share price does not increase after the option grant date, most options will expire worthless. The premise of such plans is to tie the financial rewards of a company's management in with the financial well-being of its owners. The problem with these plans is that share price may move in a direction that is seemingly unrelated to a company's financial performance. Share price may linger or even decline for years even as managers are successful in boosting sales, earnings, and cash flow. As a result, stock-related plans may not provide the kind of incentive that compensation committees seek.

Although traditional financial measures, such as sales growth, earnings growth, and return on equity, do reflect directly the efforts of management, the link between such measures and improvements in share price is not as compelling as the association between free cash flow and share price. According to most valuation models, increases in free cash flow will translate directly into increases in share price. While an actual share-price response may be delayed due to other extraneous factors outside of management's control—for example, a rise in interest rates or a threat of increased terrorist activity—over time, a company's share price will respond.

Thus, free cash flow offers an incentive measure that can be linked directly to share price and reflects the efforts of management. It is thus a very compelling gauge on which to base incentive compensation.

We surveyed corporate filings and found many examples of the use of cash flow in compensation agreements. The computations in some of the agreements referred to the use of cash flow in describing incentive compensation but provided no additional explanation. Others were a bit more descriptive and employed operating cash flow or cash provided by operating activities. In addition to these firms, we noted several firms that referred to the use of free cash flow in their incentive compensation calculations.

The results of our survey are presented in three exhibits. Exhibit 10.2 presents companies and references to incentive compensation agreements that used cash flow in their calculations without additional explanation. The companies in Exhibit 10.3 make reference to the use of *operating* cash flow in computing incentive compensation. Exhibit 10.4 presents those firms that made use of *free* cash flow in their incentive agreements.

In Exhibit 10.2, we list three firms that made reference to the use of cash flow in their compensation agreements but that provided no clarification of what specific cash flow amount was being measured. One can only wonder how the so-called cash flow measure was calculated and whether the intent was to focus on another measure, such as operating cash flow or free cash flow. Two of the three firms made reference to other, more traditional measures of financial performance in their compensation agreements. For example, Newell Rubbermaid, Inc., noted that bonuses were based on growth in sales, operating income, cash flow, and earnings per share. Washington Post Co. also made reference to revenue, operating income, and cash flow. Weyerhaeuser Co. mentioned only that it used “challenging performance benchmarks,” for which it provided 10 percent annual increase in cash flow as an example.

The firms listed in Exhibit 10.3 made use of the more descriptive operating cash flow in their compensation agreements. For example, Nextel Communications, Inc., based its performance goals on increases in operating cash flow and subscribers over a two-year period.

General Electric Co. is included in this list. The company’s description of how it uses operating cash flow in computing incentive compensation is rather pointed. According to

Exhibit 10.2 Cash Flow Used in Calculating Incentive Compensation

Company	Reference to Cash Flow in Compensation Agreement
<i>Newell Rubbermaid, Inc.</i> (Form DEF 14A, March 26, 2004)	The Company’s group presidents and other management level employees, including the Named Officers, are eligible to participate in the Company’s Bonus Plan. In 2003, payments to participants were based on a combination of sales growth, operating income, <i>cash flow</i> and earnings per share.
<i>Washington Post Co.</i> (Form DEF 14A, March 23, 2003)	In the case of executive officers with responsibility for a particular business unit, such unit’s financial results are also considered, including, depending on the business unit, revenue, operating income and <i>cash flow</i> .
<i>Weyerhaeuser Co.</i> (Form DEF 14A, March 10, 2004)	The restricted share program should utilize justifiable operational-performance criteria combined with challenging performance benchmarks for each criterion (e.g., 10% annual increase in <i>cash flow</i>).

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

Exhibit 10.3 Operating Cash Flow Used in Calculating Incentive Compensation

Company	Reference to Cash Flow in Compensation Agreement
<i>Comcast Corp.</i> (Form 10-K, December 31, 2003)	“Quantitative Performance Standards” means performance standards such as income, expense, <i>operating cash flow</i> , numbers of customers or subscribers for various services and products offered by the Company or a division, customer service measurements and other objective financial or service-based standards relevant to the Company’s business as may be established by the Committee.
<i>General Electric Co.</i> (Form DEF 14A, March 2, 2004)	125,000 of the performance share units will convert into shares of GE stock only if GE’s <i>cash flow from operating activities</i> has grown an average of 10% or more per year during the five-year period from 2003 through 2007.
<i>Nextel Communications, Inc.</i> (Form DEF 14A, April 25, 2003)	The compensation committee has adopted a long-term incentive plan intended to reward key members of Nextel’s management for achieving specific performance goals relating to <i>operating cash flow</i> and net subscriber additions over a two-year period commencing January 1, 2002.

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

the company, certain performance share units will convert into shares of stock in GE if GE’s cash flow from operating activities “increases an average of ten percent or more per year during the five-year period from 2003 through 2007.”¹²

In Exhibit 10.4, we see a list of firms that made reference to free cash flow in their compensation agreements. Most of the firms listed included free cash flow along with other, more traditional measures of financial performance. Often the use of these measures was defended because of their perceived link to shareholder returns. For example, Bausch & Lomb, Inc., noted that free cash flow, as well as sales and earnings among other measures, were used because they represent key shareholder return indicators. Motorola, Inc., indicated that it focused on operating earnings and free cash flow because the two measures were considered critical to improving shareholder returns. What is interesting about the company’s statement is that it did not use free cash flow in its compensation agreements prior to 2002. The company’s change is consistent with the observation made earlier that the embrace of free cash flow is a recent phenomenon.

Creative Cash Flow Reporting and Incentive Compensation

In Exhibits 10.2, 10.3, and 10.4, we saw many examples of companies that employed various measures of cash flow, including free cash flow, for the purpose of computing in-

Exhibit 10.4 Free Cash Flow Used in Calculating Incentive Compensation

Company	Reference to Cash Flow in Compensation Agreement
<i>American Standard Cos., Inc.</i> (Form 8-K, January 26, 2004)	Each year we establish an operating plan that sets goals for overall corporate and operating unit performance with specific financial and strategic measures. In 2003, these included sales growth, earnings per share, <i>free cash flow</i> , as well as individual goals.
<i>Bausch & Lomb, Inc.</i> (Form DEF 14A, March 25, 2004)	Operating unit performance is measured against targets established for sales, earnings, <i>free cash flow</i> , cost improvement initiatives, and strategic projects, tying incentive compensation to key shareholder return indicators.
<i>Kraft Foods, Inc.</i> Form DEF 14A, March 5, 2004)	In determining . . . compensation, the Committee considered individual performance with respect to the achievement of key strategic, financial, and leadership development objectives, including income growth, volume growth, productivity savings, new product development, increasing market share and increasing <i>free cash flow</i> .
<i>Motorola, Inc.</i> (Form DEF 14A, March 12, 2004)	The Motorola Incentive Plan (MIP) . . . focuses on operating earnings (OE) and <i>free cash flow</i> , two measures critical to improving shareholder returns. OE and free cash flow targets are established for the Company and each of its major sectors. While most employees are rewarded based on sector performance, high-level elected officers (including the executives named in the Summary Compensation Table) have a significant portion of their award based on the OE and cash flow of the entire Company.
<i>Tyco International, Ltd.</i> (Form DEF 14A Jan. 28, 2004)	Annual incentive bonus opportunities for segment presidents . . . were based upon the Compensation Committee's and senior management's assessment of the respective segment's financial performance, evaluated using earnings before interest and taxes ("EBIT") and Segment <i>Free Cash Flow</i> , with a portion of the annual incentive bonus based on the overall performance of Tyco, using Earnings Per Share ("EPS") and total Company <i>Free Cash Flow</i> as the measures.

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

centive compensation. Although cash flow appears to provide a sensible measure on which to base incentives, we wonder whether adjustments are being made to cash flow before incentives are computed.

For example, would managers earn a bonus if operating cash flow and correspondingly free cash flow were increased because management delayed the payment of vendor payables? What if free cash flow were increased because receivables were sold through a securitization agreement? A reclassification of investments to a trading designation also would boost free cash flow when the investments were sold. Would cash flow provided in this manner result in an increase in incentive compensation?

We do not think that nonrecurring cash flow provided through creative means, whether within or beyond the boundaries of GAAP, should provide the basis for increased compensation. However, as we have seen, cash flow is very open to so-called creative reporting. Accordingly, there is a risk that managers may employ such practices to increase free cash flow when corporate performance has not really improved.

We were not privy to the detailed computations of incentive compensation based on cash flow and whether adjustments were made for such nonrecurring items. We did note that in the case of GE, operating cash flow was “adjusted to exclude the effect of unusual events.”¹³ However, what constituted such unusual events was not described.

Loan Covenants

Loan covenants are express stipulations included in loan agreements that are designed to monitor corporate performance and restrict corporate acts. Their purpose is to increase the likelihood that principal and interest on loans will be repaid as originally agreed.

Covenants may be positive or negative, although lenders likely will use a combination of the two. Positive loan covenants typically express minimum or maximum financial measures that must be met. For example, a positive loan covenant might call for the borrower to maintain a current ratio (current assets / current liabilities) of 2, or a maximum amount of total liabilities to shareholders' equity of 1, or a minimum ratio of EBITDA (earnings before interest, taxes depreciation, and amortization) to interest of 5. If a borrower were to fail to meet one or more of these covenants, it would constitute a covenant violation. The lender may agree to waive the violation, on either a temporary or a permanent basis. However, in providing the waiver, the lender has the opportunity to change the loan's terms, increase its interest rate, seek loan security or guarantees, or even call the loan due.

Negative loan covenants tell a borrower what it cannot do. For example, restrictions may be placed on a firm's ability to borrow additional funds, pay cash dividends, or make acquisitions.

Loan covenants that employ free cash flow are positive covenants. For example, they may require a firm to generate a minimum amount of free cash flow or to make debt repayments when free cash flow rises above a certain level. Consider, for example, this description of certain covenants found in the debt agreement of National Properties Corp.

The Company has a revolving credit agreement dated February 8, 2001, with Wells Fargo Bank, N.A. The credit facility permits the Company to borrow up to \$15,000,000. At December 31, 2003, \$11,975,000 (\$11,250,000 at December 31, 2002) was outstanding under the agreement and matures on April 30, 2005. . . . The

credit agreement contains various covenants, including limitations on additional borrowings and maintaining a minimum free cash flow as defined in the agreement of \$1,800,000 per year measured as of the end of each fiscal quarter on an annualized basis. The Company was in compliance with all covenants at December 31, 2003.¹⁴

According to the covenants described here, the company is limited in its ability to take on additional borrowings (a negative covenant) and is required to generate a minimum level of free cash flow of \$1,800,000 per year (a positive covenant). The company points out that at December 31, 2003, it was in compliance with all of its covenants. By measuring and forecasting free cash flow, an analyst would be able to anticipate a covenant violation.

A loan agreement for IPC Acquisition Corp. also carried a positive covenant based on free cash flow. Consider this statement: “On September 30, 2002, the Company made an excess free cash flow repayment of \$30 million based upon 75% of the Company’s free cash flow for the period ended September 30, 2002.”¹⁵ Apparently, the company was required to earmark 75 percent of its free cash flow for loan principal reduction.

In addition to positive debt covenants based on revenue and EBITDA, Motient Corp.’s credit agreement expressly stipulated a minimum amount of free cash flow that must be generated each month. The company’s annual report provided a very detailed description of its progress on meeting or breaching these covenants. The company’s performance results for 2003 are provided in Exhibit 10.5.

In reviewing the exhibit, it can be seen that when it came to monitoring free cash flow, Motient’s lenders maintained a tight rein on the company. Careful monitoring was necessary because in the past the mobile communications and satellite radio company had

Exhibit 10.5 Motient Corp., Details of Free Cash Flow Covenant Compliance, Year Ended December 31, 2003 (\$ thousands)

Month	Original Covenant ^a	Actual Results ^a	Covenant Compliance
January 31, 2003	\$(2,700)	\$(2,224)	Met
February 28, 2003	\$(1,450)	\$(1,641)	Met on cumulative basis ^b
March 31, 2003	\$(1,250)	\$532	Met
April 30, 2003	\$(1,440)	\$(2,141)	Breach \$(701)
May 31, 2003	\$(1,150)	\$(729)	Met
June 30, 2003	\$(1,150)	\$(162)	Met
July 31, 2003	\$1,100	\$219	Breach \$(881)
August 31, 2003	\$(2,050)	\$(1,991)	Met
September 30, 2003	\$(1,050)	\$ 63	Met
October 31, 2003	\$(850)	\$(1,068)	Met on cumulative basis ^b
November 30, 2003	\$(1,450)	\$178	Met
December 31, 2003	\$2,200	\$2,170	Met on cumulative basis ^b

^a Source (use) of cash.

^b Cumulative basis computed over previous periods.

Source: Motient Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, Exhibit 10.31, Amendment No. 1 to Amended and Restated Term Credit Agreement, dated March 16, 2004, p. D-2.

experienced difficulty in servicing its debt and found it necessary to file for bankruptcy protection in January 2002.

During each month of 2003, Motient was presented with a minimum free cash flow amount that was needed to avoid a covenant breach. Note that because the company's financial results were poor, often the covenant-based minimum free cash flow figures were negative. During most months, the company met its covenant requirement for minimum free cash flow. During some months, the covenant was breached, although the credit agreement had provisions that permitted the company to "bank" free cash flow and meet its covenants on a cumulative basis if they were not met in any one particular month. At the end of 2003, the company noted: "On a cumulative basis, the Company is approximately \$4,652,000 ahead of what is required by the covenant plan."¹⁶

Changing Covenants

Fleetwood Enterprises, Inc., offers an interesting example of a company whose lenders changed to a covenant based on free cash flow and then changed away from that covenant, all within a matter of a few months. During the company's fiscal year ended April 28, 2002, this covenant change was announced:

Three amendments to the credit agreement were executed during fiscal 2002, mainly to redefine several financial performance covenants. Among the modifications to the credit agreement, the adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) covenant was replaced with a Free Cash Flow covenant.¹⁷

With this change, the company replaced its EBITDA covenant with one based on free cash flow. Then, after the end of fiscal 2002, the company's covenants were changed again.

In July 2002, the facility was further amended, effective as of April 28, 2002, to eliminate the Free Cash Flow covenant as well as a Fixed Charge Coverage Ratio covenant and replace them with a new adjusted EBITDA covenant and a covenant requiring the Company to maintain liquidity (which includes the daily average of cash equivalents and borrowing availability under the credit facility) of at least \$80 million.¹⁸

Here the free cash flow covenant was replaced with a covenant based again on EBITDA together with a minimum liquidity amount. Apparently, the company's lenders felt that EBITDA, when combined with a liquidity covenant, provided a more effective means for monitoring the firm's performance than free cash flow.

A Recent Phenomenon

Like the embrace of free cash flow by other groups, the move by lenders to incorporate free cash flow into loan covenants appears to be a relatively recent phenomenon. Traditionally, bankers have used such debt-service indicators as EBITDA or EBITDAR (earnings before interest, taxes, depreciation, amortization, and rent expense) as positive covenants.

It appears to us that measures of EBITDA or EBITDAR and free cash flow would

serve as complementary loan covenants. EBITDA or EBITDAR measure a borrower's ability to service loan interest. Free cash flow, which typically is measured after interest, taxes, and capital expenditures, provides a measure of cash flow available to repay loan principal. However, if the Fleetwood example is any indication, the trend for lenders to incorporate free cash flow into loan covenants could be short-lived.

Impairment Testing

The value of a long-lived asset or group of assets, such as property, plant, and equipment, capitalized costs, or intangible assets, is impaired when the asset's carrying amount exceeds its fair value. An impairment loss is recognized, however, only when the carrying amount of the impaired asset is not recoverable. Recoverability is determined by comparing the carrying amount of the asset with the sum of the undiscounted cash flows expected to result from the asset's use and eventual disposition.

According to SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," the relevant accounting standard on the subject of impairment, an asset is evaluated for recoverability when an event or circumstance indicates that the carrying value of the asset may not be recoverable.¹⁹ For example, any of these events or circumstances would call for an evaluation of recoverability:

- A significant decrease in the market price of an asset
- A significant adverse change in the extent or manner in which an asset is being used or in its physical condition
- A significant adverse change in legal factors, regulatory factors or business climate affecting an asset's market value
- An accumulation of costs significantly in excess of amounts originally expected for the acquisition or construction of an asset
- Current period losses from an asset's use combined with projections for continuing losses
- An expectation that an asset will be disposed of well before the end of its previously estimated useful life

If one or more of these events or circumstances occurs, management must estimate the total of the undiscounted cash flows expected to result from an evaluated asset's use and eventual disposition. If the asset's carrying value exceeds that total, then the fair value of the asset must be estimated and its carrying value written down to that fair value measure.

The specific details of how the amount of an impairment loss is determined—for example, the estimation of fair value—are beyond the scope of this book. Our focus here is on the undiscounted cash flows used in measuring recoverability.

SFAS No. 144 does not refer directly to the use of free cash flow in its test for recoverability. Rather, it refers to cash inflows minus associated cash outflows that are directly associated with the use and eventual disposition of an asset or asset group. Any expected cash inflow would be based on the asset's service potential. Outflows would include costs incurred to maintain that service potential.

Although SFAS No. 144 does not refer explicitly to the use of free cash flow in determining whether an asset's carrying value is recoverable, we noted several companies

that did use the term. Consider, for example, UnitedGlobalCom, Inc. As noted by the company:

As a result of this revised business plan, we determined that a triggering event had occurred with respect to this investment in the fourth quarter of 2001. . . . After analyzing the projected undiscounted free cash flows (without interest), an impairment charge was deemed necessary.²⁰

Consider also the annual report of Vectren Utility Holdings, Inc., which states:

The Company has investments in . . . notes receivable convertible into equity interests. When events occur that may cause one of these investments to be impaired, the Company performs an impairment analysis. An impairment analysis of notes receivable usually involves the comparison of the investment's estimated free cash flows to the stated terms of the note.²¹

We do not think that these companies have misapplied SFAS No. 144 in using free cash flow to determine whether an asset's carrying value is recoverable. Rather, we think that their descriptions reflect a lack of specificity in the use of the term "free cash flow." In these examples, the term appears to be used in a generic sense to mean cash flow or, more specifically, the cash inflows directly associated with the use and eventual disposition of the assets in question minus the related cash outflows.

WHAT IS FREE CASH FLOW?

Much of this book has been devoted to the definitions of cash flow, such as operating, investing, and financing cash flow. So where does free cash flow fit in?

Certainly the term "free" does not refer to a lack of price, as in "complimentary" cash flow. Rather, the term "free" refers to an absence of a superior claim. It is cash flow that is available for use with no strings attached. Spending it will not affect the firm's ability to generate more.

Valmont Industries, Inc., provides an insightful look into how a company planned to use its free cash flow. As stated by the company:

Our priorities in use of future free cash flows are as follows:

- Fund internal growth initiatives in core businesses
- Pay down interest-bearing debt
- Invest in acquisitions clearly connected to our core businesses or an existing competency
- Return money to our shareholders through increased dividends or common stock repurchases at appropriate share prices²²

Valmont's list of priorities helps make the point that free cash flow is available for use. Company management is free to use it as it sees fit. In the case of Valmont, the company

would first increase spending on growth initiatives, then reduce loan principal and invest in acquisitions, and, finally, pay common dividends or use available cash to repurchase stock.

Free to Whom?

Valmont was referring to free cash flow available for common shareholders. However, that is not always the case.

An essay question on the Uniform Certified Public Accountant's exam that dates from about 30 years ago asked CPA candidates to define net income. The question, however, contained a qualifier. Candidates were asked to define net income for different claimant groups, including lenders, preferred shareholders, and common shareholders. The question wanted to ensure that candidates understood that our traditional definition of net income was income available for shareholders, including preferred and common shareholders, after interest to lenders had been expensed. Preferred dividends needed to be subtracted from net income to derive income available for common shareholders.

As with net income, the definition of free cash flow also requires one to identify a claimant group. As noted earlier, free cash flow might be defined as available for the firm, which would consist of cash flow available for all claimant groups. Alternatively, it might be defined as available for a particular shareholder group, typically the common shareholder. As an example, consider this statement made by DRS Technologies, Inc., a company that defines free cash flow from the viewpoint of the common shareholder: "We disclose free cash flow because we believe that it is a measurement of cash flow generated that is available to common stockholders."²³ According to the company, free cash flow is available for common shareholders after other superior claims, such as debt holders and preferred shareholders, if any, have been covered.

Free Cash Flow to the Firm

Free cash flow to the firm consists of cash flow provided by operating activities before interest, but after capital expenditures. Cash flow provided by operating activities is defined as cash available for shareholders. Thus, it is computed after income taxes and interest have been paid. In computing free cash flow to the firm, we add back interest to get a measure of cash flow available for all claimants—debt holders, preferred shareholders, and common shareholders. Capital expenditures are subtracted to enable the firm to maintain its productive capacity before cash is considered available for any claimant group.

As an example, refer again to Chapter 1 and the data for Lowe's Companies, Inc., for the year ended January 31, 2003. That year the company reported cash provided by operating activities of \$2,696 million. Interest paid that was subtracted in arriving at operating cash flow totaled \$186 million, which, after federal and state taxes, assuming a combined marginal rate of 40 percent, translates into \$112 million (\$186 million – 40 percent of \$186 million).²⁴ Thus, operating cash flow before interest was \$2,808 million (\$2,696 million + \$112 million). We look more closely at capital expenditures in the calculation of free cash flow in a subsequent section of this chapter. For the time being, we will use actual capital expenditures net of dispositions in our calculations. During the year ended January 31, 2003, net capital expenditures were \$2,318 million.

Thus, free cash flow to the firm for the year was \$490 million (\$2,808 million – \$2.318 million).

Free Cash Flow to Common Equity

Free cash flow to common equity is computed after the superior claims of debt holders and preferred shareholders have been covered. Its calculation begins with cash provided by operating activities, which is after interest paid has been subtracted. Preferred dividends that have been paid must then be subtracted from operating cash flow to cover that claim. Capital expenditures net of dispositions are subtracted from the remainder to derive free cash flow to common equity.

As an example, we refer again to the amounts for Lowe's Companies for the year ended January 31, 2003. The company reported cash provided by operating activities of \$2,696 million. We subtract net capital expenditures of \$2,318 million to obtain free cash flow to common equity of \$378 million (\$2,696 million – \$2,318 million). The company had no preferred equity outstanding and thus paid no preferred dividends.

Free Cash Flow without a Claimant Group Identified

Each of our definitions of free cash flow identifies a claimant group. We identified free cash flow to the firm and free cash flow to common equity. In practice, it is likely that references to free cash flow will not identify a claimant group, referring instead simply to free cash flow.

When a particular claim is not identified, reference typically is being made to free cash flow available for common equity. That also will be the approach taken here. Thus, when we use the term “free cash flow” and a claimant group is not identified, our reference will be to free cash flow available for common shareholders. In addition, because most parties who are interested in free cash flow are interested in the amount that is available for common shareholders, free cash flow to common equity will be our primary focus.

Sustainable Operating Cash Flow

Our calculation of free cash flow, both free cash flow to the firm and free cash flow to common equity, begins with cash provided by operating activities or, more simply, operating cash flow. Much of this book is devoted to the identification and reclassification of certain operating items and the removal of nonrecurring items that may be included in reported operating cash flow. When we employ operating cash flow in the calculation of free cash flow, the assumption is that operating cash flow first has been adjusted to reclassify certain operating items and remove nonrecurring items. The net result is a cleaner, more sustainable, and ultimately more meaningful measure of free cash flow.

Using Net Income to Calculate Free Cash Flow

Often definitions of free cash flow begin with net income. For example, free cash flow to common equity for a firm with no preferred equity outstanding might be defined as:

$$\begin{aligned} \text{Free cash flow (to common equity)} = \\ \text{Net income} + \text{Depreciation} - \Delta \text{Operating working capital} - \text{Capital expenditures}^{25} \end{aligned}$$

This definition of free cash flow is equivalent to our definition, which begins with operating cash flow and subtracts capital expenditures. Net income adjusted for noncash expenses such as depreciation and for changes in operating working capital equals operating cash flow. Once capital expenditures are subtracted, the net result is free cash flow.

What about Changes in Debt Levels?

Some definitions of free cash flow, both to the firm and to common equity, add to free cash flow new borrowings and subtract debt repayments.²⁶ Such an approach has intuitive appeal if one views new borrowings as being used to finance new capital expenditures. It can be viewed as tantamount to the inclusion in free cash flow of increases in operating liabilities, such as accounts payable and accrued expenses payable, that are used to finance increases in operating assets, such as accounts receivable and inventory.

However, while changes in operating liabilities typically are geared to changes in operating assets, borrowings are less likely to be aligned with capital expenditures. For example, borrowed funds might be used to help pay for an acquisition. Borrowings also might be increased to repurchase common stock. Cash paid for acquisitions or cash used to repurchase stock are not expenditures that are normally subtracted in computing free cash flow. Accordingly, if the related borrowings were included as a source of cash, the computed free cash flow amount would be increased. Moreover, when compared with an equity-financed firm, a company that uses borrowings to pay for capital expenditures would, all else being equal, report higher free cash flow.²⁷ The problem is that those new borrowings are not “free.” They result in new claims on future cash flow. One additional concern with the inclusion of borrowings in the computation of free cash flow is that a company without operations could generate positive free cash flow simply by borrowing money. Such an outcome is counterintuitive and not in the spirit of the sustainable nature that we think of as free cash flow.

Thus, we are employing a definition of free cash flow that does not include changes in debt levels. That definition for free cash flow to equity is consistent with the majority of definitions of free cash flow seen in practice. The next statement, again from DRS Technologies, Inc., is consistent with this view.

Free cash flow represents cash generated after paying for interest on borrowings, income taxes, capital expenditures and changes in working capital, but before repaying outstanding debt and investing cash to acquire businesses and making other strategic investments. Thus, key assumptions underlying free cash flow are that we will be able to refinance our existing debt when it matures with new debt, and that we will be able to finance any new acquisitions we make by raising new debt or equity capital.²⁸

As seen in the company’s statement, DRS Technologies excludes changes in debt levels in its calculation of free cash flow. However, in calculating free cash flow, the company does make an important assumption that it will be able to refinance debt as it matures and use debt to finance acquisitions. If the company were to have difficulty in refinancing debt or using it to finance acquisitions, its ability to sustain growth in free cash flow could be hampered.

FREE CASH FLOW TO COMMON EQUITY: A CLOSER LOOK

Disclosure of free cash flow is not a GAAP requirement. In addition, free cash flow is not defined by GAAP and is referred to officially as a “non-GAAP measure.” Firms that disclose it must reconcile the measure to the closest GAAP-defined amount, typically operating cash flow. The non-GAAP nature of free cash flow notwithstanding, however, as the measure has gained in notoriety, increasing numbers of companies have opted to calculate and disclose it. As they have, disagreements over the definition of free cash flow have become apparent.

Operating Cash Flow Minus Capital Expenditures

In a survey of reporting practices for free cash flow, the more widely used definition of free cash flow observed in practice was the definition of free cash flow advocated here. For firms without preferred equity outstanding, it is calculated as operating cash flow minus capital expenditures. Exhibit 10.6 provides a collection of firms that defined free cash flow in this manner.

The companies identified in Exhibit 10.6 represent a wide collection of nonfinancial firms, including manufacturers such as American Standard Cos., Inc., and NCR Corp., and service firms such as Netflix, Inc., and Yahoo, Inc. The firms also include smaller companies, such as Esco Technologies, Inc., and School Specialty, Inc., and larger concerns, such as Gillette Co. and Raytheon Co.

Although operating cash flow minus capital expenditures was the more common definition of free cash flow noted in practice, some companies used slight variations on that definition. For example, in addition to capital expenditures, some firms subtracted dividends on common stock from operating cash flow in computing free cash flow. Other firms began with operating cash flow and subtracted investing cash flow instead of capital expenditures. A closer look at these alternative definitions is provided next.

Exhibit 10.6 Companies Defining Free Cash Flow as Operating Cash Flow Less Capital Expenditures

Company	Source
Airgas, Inc.	Form 8-K (July 24, 2003)
American Standard Cos., Inc.	Form 8-K (October 15, 2003)
Bausch & Lomb, Inc.	Form 10-K (December 28, 2002)
Esco Technologies, Inc.	Form 8-K (August 12, 2003)
Gillette Co.	Form 10-K (December 31, 2002)
Kaydon Corp.	Form 10-K (December 31, 2002)
NCR Corp.	Form 10-K (December 31, 2002)
Netflix, Inc.	Form 8-K (October 15, 2003)
Raytheon Co.	Form 8-K (July 24, 2003)
School Specialty, Inc.	Form 8-K (August 12, 2003)
Yahoo, Inc.	Form 8-K (January 14, 2004)

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

Operating Cash Flow Minus Capital Expenditures and Dividends on Common Stock

In Exhibit 10.7, we list firms that subtracted from operating cash flow not only capital expenditures but also dividends paid on common stock in computing free cash flow.

We found it interesting that some firms subtracted dividends paid on common stock in computing free cash flow. Free cash flow available to common shareholders should be cash that can be paid out to common shareholders, whether in the form of stock repurchases or dividends, without affecting the company's ongoing operations or its ability to continue generating more cash flow. In fact, increases in free cash flow can be viewed as evidence of a firm's ability to increase its common stock dividend. By subtracting dividends already paid on common stock in their computation of free cash flow, the companies listed in Exhibit 10.7 actually understate their ability to generate cash flow available for common shareholders. Evidence of that potential understatement is presented in Exhibit 10.8.

Exhibit 10.7 Companies Defining Free Cash Flow as Operating Cash Flow Less Capital Expenditures and Dividends on Common Stock

Company	Source
Radio Shack Corp.	Form 10-K (December 31, 2002)
Rayonier, Inc. ^a	Form 10-K (December 31, 2002)
Rohm & Haas Co.	Form 10-K (December 31, 2002)
Tyco International, Ltd.	Form 8-K (July 29, 2003)

^a The company noted that dividends were maintained at prior-year levels.

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

Exhibit 10.8 Free Cash Flow Computed before and after Dividends on Common Stock (\$ millions)

Company	Free Cash Flow before Dividends^a	Free Cash Flow after Dividends^b	Percent Reduction^c
Radio Shack Corp.	\$ 464.3	\$ 423.5	8.8%
Rayonier, Inc. ^d	\$ 122.9	\$ 83.0	32.5%
Rohm & Haas Co.	\$ 678.0	\$ 487.0	28.2%
Tyco International, Ltd.	\$4,176.5	\$4,075.6	2.4%

^a Reported operating cash flow less capital expenditures.

^b Free cash flow before dividends less dividends on common stock.

^c The difference between free cash flow before dividends and free cash flow after dividends, as a percentage of free cash flow before dividends.

^d Per the company, dividends at prior-year level were used in the calculations.

Sources: Company Form 10-K annual report filings with the Securities and Exchange Commission for the year ended December 31, 2003 (September 30, 2003 for Tyco International, Ltd).

In this exhibit we present data on calculated free cash flow both before and after dividends on common stock for the firms that define free cash flow as operating cash flow minus capital expenditures and dividends. As seen in the exhibit, the impact can be significant. For example, in the case of Rohm & Haas, dividends reduced free cash flow by 28.2 percent. For Rayonier, the reduction was 32.5 percent.

Operating Cash Flow Minus Investing Cash Flow

In an interesting twist on the definition of free cash flow, two firms in our survey defined free cash flow as operating cash flow minus investing cash flow. The firms, Federal Express Corp. and Jostens, Inc., are presented in Exhibit 10.9.

As discussed in Chapter 3, investing cash flow includes capital expenditures. However, it also includes other cash flow that is not necessarily needed in maintaining or growing a firm’s productive infrastructure. For example, investing cash flow includes cash paid for acquisitions of other companies or cash received from their disposition. Investing activities also include cash flow associated with the purchase or sale of investments. Thus, the expansion of the definition of free cash flow to include the effects of investing activities appears to cloud the measure and render it less useful.

Consider Federal Express. In addition to net capital expenditures of \$1,222 million, \$1,050 million, and \$900 million in the years ended May 31, 2001, 2002 and 2003, respectively, other sources and uses of cash were reported among the items classified as investing cash flow. For example, in 2001, the company reported \$237 million in proceeds from a sale and leaseback transaction in the investing section. Also, the company reported that it invested \$14 million in a business acquisition during 2002. Finally, a classification titled “other, net” resulted in an investing use of cash of \$5 million in 2001 and a source of cash of \$13 million in 2002. The inclusion of any of these items in the computation of free cash flow is questionable.

Jostens’ use of investing cash flow instead of capital expenditures also can result in a misleading amount of free cash flow. For example in the five-month, postmerger period ending January 3, 2004, in addition to net capital expenditures of \$17,034,000, the company reported a \$10,936,000 use of cash for the acquisition of businesses and an \$18,000 use of cash for “other investing activities.”

Earnings-Based Definitions of Free Cash Flow

Earlier, we indicated that free cash flow defined as net income adjusted for noncash expenses and changes in operating-related working capital, minus capital expenditures, was

Exhibit 10.9 Companies Defining Free Cash Flow as Operating Cash Flow Less Investing Cash Flow	
Company	Source
Federal Express Corp.	Form 10-Q (November 30, 2002)
Jostens, Inc.	Form 8-K (August 7, 2003)
Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.	

tantamount to defining free cash flow as operating cash flow minus capital expenditures. However, what is unique about the earnings-based definitions of free cash flow found in the sections that follow is that the companies using them did not make adjustments to remove changes in operating working capital. Thus, their so-called free cash flow is not actually comprised of cash at all.

Some companies that used an earnings-based definition of free cash flow based it on EBITDA. Others began their calculation of free cash flow with net income. Others started with operating income.

Free Cash Flow Based on EBITDA

Three firms that based their definition of free cash flow on EBITDA are listed in Exhibit 10.10.

We find defining free cash flow using EBITDA to be troublesome. Because it does not include changes in operating working capital, EBITDA is not cash flow. For example, EBITDA may grow with increases in such working capital accounts as accounts receivable and inventory. But these asset increases do not provide cash.

Even more problematic, however, is the fact that two companies listed in Exhibit 10.10, DSL Net, Inc., and Western Wireless Corp., did not subtract interest or taxes in their computation of free cash flow. Earnings before interest and taxes are not earnings that are available for common shareholders. That is, interest and taxes must be deducted before earnings are available for shareholders. EBITDA after capital expenditures is more appropriately considered to be an earnings-related figure that is available for debt holders for the payment of interest. However, the two companies in question did not make that distinction.

The definition of free cash flow employed by NTN Communications, Inc., EBITDA minus cash interest, minus investing cash flow and minus financing cash flow, is a curious amalgam. In its 2002 annual report the company noted that “we generated free cash flow (defined as EBITDA less cash interest expense, cash used in investing activities and cash used in financing activities) of \$1,120,000, which has covered our business requirements over that period.”²⁹

By starting with EBITDA, the company’s definition of free cash flow suffers from the same shortcomings of EBITDA just mentioned. At least interest paid was subtracted. Moreover, because the company has been losing money for several years, it has

Exhibit 10.10 Companies Defining Free Cash Flow Based on EBITDA

Company	Definition of Free Cash Flow	Source
DSL Net, Inc.	EBITDA less capital expenditures	Form 8-K (May 13, 2003)
NTN Comm., Inc.	EBITDA less cash interest expense, less investing cash flow and less financing cash flow	Form 10-K (December 31, 2002)
Western Wireless Corp.	EBITDA less capital expenditures	Form 10-K (December 31, 2002)

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

paid little in the way of income taxes. In fact, no taxes were paid in 2000 and 2001 and only \$11,000 in income taxes were paid in 2002. Thus, the company's definition of EBITDA is closer to a measure of earnings that are available for common shareholders. However, because changes in operating working capital are excluded, EBITDA does not measure cash flow.

In 2002, by subtracting investing activities, NTN deducted \$102,000 in cash paid for the acquisition of a business in its calculation of free cash flow. This item was unique to 2002 and was not reflective of cash needed to maintain and grow productive capacity, as captured well by capital expenditures.

The subtraction of financing cash flow in the calculation of free cash flow is especially curious. During 2002, the company reported a net use of cash for financing activities of \$299,000. Most of that amount was for principal payments on capital leases. What is unclear is whether in a prior year the company would have included the proceeds from capital lease financing as a source of free cash flow in a year when the leased assets were included in capital expenditures. As discussed earlier, linking such financing activities with capital expenditures is tantamount to including changes in accounts payable in the definition of free cash flow along with increases in the inventory that those payables were used to purchase. What is counterintuitive here is why the company would include capital expenditures and asset-related borrowings in its calculation of free cash flow but exclude changes in operating working capital.

Change in the Definition of Free Cash Flow In 2002, Hollywood Entertainment Corp. based its definition of free cash flow on EBITDA. The company defined what it termed "discretionary free cash flow" as

EBITDA less cash paid for interest and taxes, less maintenance capital expenditures, but before discretionary investments in expenditures that are not required to maintain existing stores (e.g. investment in new store openings and new product platform roll-outs).³⁰

In a more recent move, the video-rental company disclosed a change in its EBITDA-based definition of free cash flow. The new definition is a more traditional definition comprised of operating cash flow minus capital expenditures, additions to its rental inventory, and intangible assets. The company described its calculation of free cash flow in this way:

Free cash flow is calculated on the Consolidated Statement of Cash Flows as Cash Flow Provided By Operating Activities of \$391 million, less Net Purchases of Rental Inventory of \$220 million, less Net Purchases of Property and Equipment of \$94 million, less the Increase in Intangibles and Other assets.³¹

Free Cash Flow Based on Net Income

In Exhibit 10.11, we identify three firms that based their definition of free cash flow on net income or, in the case of Charter Communications, Inc., operating income minus cash interest paid.

Exhibit 10.11 Companies Defining Free Cash Flow Based on Net Income

Company	Definition of Free Cash Flow	Source
Alltel Corp.	Net income plus depreciation and amortization less capital expenditures	Form 8-K (July 24, 2003)
Charter Comm., Inc.	Income from operations plus depreciation and amortization less interest on cash pay obligations (i.e., interest on debt paid in cash) less purchases of property, plant, and equipment	Form 8-K (July 31, 2003)
Regent Comm., Inc.	Net income plus depreciation, amortization and other noncash expenses less maintenance capital expenditures and other noncash income	Form 8-K (August 8, 2003)

Sources: Company filings with the Securities and Exchange Commission on the forms and dates indicated.

All three firms in the exhibit added back depreciation to obtain a quasi-measure of cash flow. However, because changes in operating working capital were not taken into account, their so-called free cash flow was not actually a measure of cash flow.

Unlike EBITDA, net income is computed after interest and taxes. As a result, net income is a measure of earnings that is available for common shareholders. In the case of Charter Communications, because the company has incurred sustained losses, it has not been in a tax-paying position. Thus, operating income after interest but before taxes is close in amount to net income, which is after taxes. The primary difference between the two would be other income or expense, which could be viewed as nonrecurring and inappropriate for inclusion when measuring free cash flow on a sustainable basis.

Other Definitions of Free Cash Flow

Among all of the firms in our survey, Akamai Technologies, Inc., provided the most unusual definition of free cash flow. The company defined it as the net change in cash and cash equivalents and marketable securities. Such a definition would include in the computation of free cash flow virtually all operating, investing, and financing activities, regardless of origin.

During the quarter ended September 30, 2003, the firm touted its performance on the basis of its definition of free cash flow and announced: “During the third quarter, Akamai achieved positive free cash flow, generating \$2.6 million of free cash flow.”³² During that same period, the company provided \$610,000 in positive operating cash flow and reported capital expenditures of \$2,082,000. Thus, for the third quarter ended September 30, 2003, Akamai’s free cash flow calculated as operating cash flow minus capital expenditures was – \$1,472,000 (\$610,000 – \$2,082,000). The primary reasons for the difference between the company’s so-called source of free cash flow of \$2.6 million and the

negative amount computed as operating cash flow less capital expenditures were financing proceeds generated by the sale of stock and the effects of changes in exchange rates on foreign currency cash balances. Neither of these items would appear to provide a sustainable source of free cash flow.

Reconciling Non-GAAP Measures of Free Cash Flow to GAAP-Defined Amounts

There is no GAAP mandate requiring companies to disclose free cash flow. However, if a public company were to disclose free cash flow or any other non-GAAP performance indicator, such as EBITDA or other so-called pro-forma measures, a reconciliation of that measure to the closest GAAP-based measure also must be provided.³³ Given the many definitions of free cash flow seen in practice, these SEC-mandated reconciliations are very helpful in understanding precisely how a company has defined free cash flow.

Consider Bausch & Lomb, Inc., for example. In its 2002 annual report, the company provided this statement:

The company employs free cash flow as a performance metric and has a stated goal to maximize free cash flow, which is defined as cash generated before the payment of dividends, the borrowing or repayment of debt, settlement of minority interest obligations, stock repurchases, the acquisition or divestiture of businesses, the acquisition of intangible assets and the proceeds from the liquidation of certain investments.³⁴

The company notes the importance of free cash flow, which management seeks to maximize. The company's definition of free cash flow is then provided, but the definition is not particularly clear. What precisely is "cash generated before the payment of dividends, the borrowing or repayment of debt, settlement of minority interest obligations, stock repurchases, the acquisition or divestiture of businesses, the acquisition of intangible assets and the proceeds from the liquidation of certain investments"?

Fortunately, the company provided a reconciliation of its reported free cash flow to the net change in cash and cash equivalents. The company determined that the net change in cash and cash equivalents was the closest GAAP measure to its reported free cash flow. The company's reconciliation of the change in cash and cash equivalents to free cash flow, as presented in Exhibit 10.12, provides a reader with a clearer understanding of the company's definition of free cash flow.

From the exhibit, we see that Bausch & Lomb's free cash flow excludes cash flow related to all financing activities. We also see that cash flow associated with certain investing activities, particularly cash paid for acquisitions and proceeds from the liquidation of investments, also are excluded. What is left to explain the change in cash and cash equivalents is operating cash flow and capital expenditures. Thus, the company actually is employing the definition of free cash flow advocated here—operating cash flow minus capital expenditures, although that fact was not particularly clear from the company's stated definition.

As noted, Charter Communications defined free cash flow based on income from operations. The company's derivation of free cash flow from income from operations and a reconciliation of that amount to GAAP-based operating cash flow for the three months ended June 30, 2002, and 2003 are provided in Exhibit 10.13.

Exhibit 10.12 Bausch & Lomb, Inc., Reconciliation of Free Cash Flow to Net Change in Cash and Cash Equivalents, Years Ended December 29, 2001, and December 28, 2002 (\$ millions)

	2001	2002
Net change in cash and cash equivalents	\$(126)	\$ (69)
Net cash used in financing activities	275	230
Net cash paid for acquisitions of business and other intangibles, including the \$23 sale price adjustment in 2002	49	30
Proceeds from liquidation of other investments	(97)	—
Free cash flow	\$ 101	\$191

Source: Bausch & Lomb, Inc. Form 10-K annual report to the Securities and Exchange Commission, December 28, 2002, p. 36.

Exhibit 10.13 Charter Communications, Inc., Derivation of Free Cash Flow from Income from Operations and Reconciliation to Net Cash Flows from Operating Activities (\$ millions)

	2002	2003
Income from operations	\$ 85	\$112
Depreciation and amortization	361	377
Option compensation expense, net	1	—
Special charge, net	—	8
Less: Interest on cash pay obligations	(276)	(281)
Less: Purchases of property, plant and equipment	(603)	(160)
Free cash flows	(432)	56
Purchase of property, plant, and equipment	603	160
Special charges, net	—	(8)
Other, net	(2)	(2)
Change in operating assets and liabilities	(34)	(83)
Net cash flows from operating activities	\$135	\$123

Source: Charter Communications, Inc., Form 8-K current report to the Securities and Exchange Commission, July 31, 2003, Addendum, p. 6.

The exhibit demonstrates how Charter Communications derives its definition of free cash flow from income from operations. The primary adjustments consist of depreciation and amortization, interest on so-called cash pay obligations and capital expenditures, referred to here as purchases of property, plant, and equipment.

As discussed earlier, our primary concerns with the company's definition of free cash flow were its failure to incorporate income taxes and the exclusion of changes in operating

working capital accounts. Due to sustained losses, the company did not pay income taxes in the periods presented. Thus, taxes were not a factor to be considered when computing free cash flow. However, changes in operating working capital—that is, changes in operating accounts, typically current assets and liabilities related to operations—were another matter. By excluding such changes, the company’s definition of free cash flow was not truly a measure of cash flow. This fact is highlighted in the required reconciliation of free cash flow to the GAAP-defined net cash flows from operating activities. Note the subtraction in Exhibit 10.13 of changes in “operating assets and liabilities” in the reconciliation of the company’s free cash flow to net cash flows from operating activities. Without the reconciliation, a reader might not have realized that the company’s definition of free cash flow did not incorporate changes in these accounts.

CAPITAL EXPENDITURES

The preferred definition of free cash flow to common equity employed here is operating cash flow minus capital expenditures and preferred dividends. Given the significance of capital expenditures to free cash flow, it is important to define carefully just what those capital expenditures comprise.

To provide some background, consider this definition of income provided by J. R. Hicks in his book, *Value and Capital*, first published in 1939:

*A man’s income [is defined] as the maximum value that he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning.*³⁵

Although Hicks’s focus was on income, his thoughts are instructive for considering the meaning of free cash flow and the need to include capital expenditures in its calculation.

Earlier we talked in terms of free cash flow as being available with no strings attached. We said that spending it would not affect a firm’s ability to generate more. This point is key to an understanding of free cash flow and the role of capital expenditures. If we focus on common shareholders, free cash flow should be available for discretionary use without impacting the firm’s ability to continue its generation. Such cash could be paid out in dividends or used to repurchase stock and have no impact on the firm’s ability to continue generating additional sums.

However, before cash can be used for discretionary purposes, the firm’s infrastructure, its productive capacity, must be maintained. Imagine the impact on a firm’s ability to generate future cash flow if equipment were liquidated and the proceeds from sale were paid out as dividends. Certainly future cash flow would decline. It would be tantamount to farmers feeding their families next year’s seed corn.

Productive capacity must be maintained. The need to do so is consistent with Hicks’s view that income is the maximum value that can be consumed during a period (he referred to a week) while remaining as well off at the end of that period as at the beginning. By deducting capital expenditures in computing free cash flow, productive capacity can be maintained. It is for this reason that we see the inclusion of capital expenditures in virtually every definition of free cash flow used in practice.

Replacement versus Actual Capital Expenditures

The next question that arises is whether replacement capital expenditures should be used in computing free cash flow or whether actual capital expenditures should be used. If we refer again to Hicks's definition of income, it would seem that replacement capital expenditures would be the logical choice. Replacement capital expenditures are designed to replace capital equipment consumed during a period, thus maintaining a firm's productive capacity. In Hicks's view, the firm would remain as well off at period's end as at the beginning.

Consider Rayonier, Inc., for example. The company defines free cash flow as operating cash flow minus capital expenditures and dividends. The amount of capital expenditures used in its calculation is referred to as "custodial" in nature. The firm defines custodial capital expenditures as "capital expenditures to maintain current earnings level over the cycle and to keep facilities and equipment in safe and reliable condition, and in compliance with regulatory requirements."³⁶ Such expenditures are just enough to maintain what Rayonier refers to as its current earnings level, which one could infer as maintaining current productive capacity.

Unlike Rayonier, however, most firms that provide a definition of free cash flow subtract actual capital expenditures and not a maintenance-level amount. Support for using actual capital expenditures comes from the notion that, in valuation, a certain growth rate is assumed. As the rate of growth increases, so does the valuation assigned to current free cash flow. If a certain rate of growth is assumed in valuing a firm, then before cash flow is "free," it must provide for growth in productive capacity and not simply its maintenance. Using a growth-related capital expenditure amount is also consistent with the use of growth-related increases in operating working capital when computing operating cash flow.

Given the importance of growth to valuation and the need to grow productive capacity as operations grow, we advocate the use of actual capital expenditures and not simply maintenance-level amounts when computing free cash flow. Typically actual capital expenditures are more representative of what a firm must invest to grow its productive infrastructure.

Of course, in any year, actual capital expenditures may run unusually high or low, resulting in a less meaningful measure of free cash flow. Thus, if actual capital expenditures were well outside a recent norm, say a two- or three-year average, we would advocate using a normalized amount that relies more heavily on recent average annual expenditures.

Gross versus Net Capital Expenditures

Another nuance in the measurement of capital expenditures for the purpose of calculating free cash flow is whether gross capital expenditures should be used or capital expenditures net of the proceeds from dispositions. Generally accepted accounting principles for cash flow reporting call for the disclosure of gross cash flows. In terms of capital expenditures, that means the separate disclosure of gross capital expenditures and the proceeds from asset dispositions.

For example, during the year ended December 31, 2002, Radio Shack Corp. reported additions to property, plant, and equipment of \$106.8 million. The company

also disclosed separately that it received \$8.6 million in proceeds from the sale of property, plant, and equipment.³⁷

Rayonier reported its capital expenditures in a slightly different fashion. For the year ended December 31, 2002, the company reported net capital expenditures of \$76.7 million.³⁸ However, in a parenthetical disclosure the company noted that \$773,000 in proceeds were received from asset sales and retirements.

Not all of the reviewed companies disclosed proceeds received from capital asset dispositions. The likely explanation was that cash received for those dispositions was not material.

In calculating free cash flow, we advocate the use of capital expenditures net of proceeds received for dispositions. Cash received for asset dispositions can be used to make replacements. As such, gross capital expenditures overstate the amount of cash needed to maintain and grow a firm's productive capacity.

Sale and Leaseback Transactions

As explored more in depth in Chapter 4, sale and leaseback transactions are, in substance, financing events. As such, one would expect to see reported as financing cash flow the proceeds received upon sale of assets that are simultaneously leased back. It is not unusual, however, when leasebacks are classified as operating leases, to see the proceeds received in a sale and leaseback transaction reported as investing cash flow. When sale and leaseback proceeds are reported in this manner, those proceeds should not be subtracted from gross capital expenditures in calculating net capital expenditures. In sale and leaseback transactions, gross capital expenditures do not include the purchase of replacement assets. Accordingly, subtracting the proceeds from asset sales in such cases would tend to understate net capital expenditures.

We would, however, admit to an exception to this recommendation. If a firm routinely purchases assets and then uses sale transactions with operating leasebacks to finance them, operating cash flow and free cash flow will adequately reflect payments made on the firm's operating leases. This treatment should capture sufficiently the cost of the assets being used in operations and provide a meaningful measure of free cash flow. Netting the sales proceeds from capital expenditures would be appropriate here. However, we do point out that this exception should not apply to isolated sale and leaseback transactions.

Disclosed in the Investing Section

As discussed in Chapter 3, purchases of property, plant, and equipment, known also as capital expenditures, and the disposition of these assets are reported prominently in the investing section of the statement of cash flows. Thus, the investing section of the statement of cash flows is the most convenient place to find the net amount of cash paid for capital expenditures.

Noncash Investing and Financing Activities

As discussed in Chapter 2, an important feature of the statement of cash flows is the separate disclosure of all noncash investing and financing activities outside the primary statement itself. For example, stock issued to make an acquisition or to settle a debt obligation would be disclosed in a supplement to the statement of cash flows as noncash in-

vesting and financing activities. Items of property, plant and equipment might also be acquired in noncash investing and financing transactions. For example, assets might be acquired in transactions in which the seller provides financing.

Property, plant, and equipment acquired in noncash investing and financing transactions will not be included with other capital expenditures reported in the body of the statement of cash flows. Thus, there is a real risk that in computing free cash flow, if non-cash investing and financing activities are not reviewed to identify noncash asset purchases, capital expenditures will be understated, overstating free cash flow.

Capital Leases

Common noncash investing and financing transactions that should be included in the calculation of capital expenditures and free cash flow is the acquisition of property, plant, and equipment assets through capital leases. As with other noncash investing and financing activities, assets acquired pursuant to capital leases will not impact capital expenditures reported among investing activities in the body of the statement of cash flows. Although subsequent principal payments on these leases could be viewed as expenditures made for the use of the assets, such payments are reported as financing and not investing uses of cash.

The dollar amounts of assets acquired through capital leases can be significant. Consider, for example, Flowers Foods, Inc. Excerpts from the company's statement of cash flows are provided in Exhibit 10.14.

As noted in the exhibit, without incorporating the effects of noncash investing and financing activities, Flowers Foods reported positive free cash flow of \$21,234,000 in 2001, \$77,715,000 in 2002, and \$44,371,000 in 2003. However, the company also disclosed that it acquired assets through noncash capital lease transactions in 2001 and 2003.

Exhibit 10.14 Flowers Foods, Inc., Free Cash Flow and Noncash Investing and Financing Activities, Years Ended December 29, 2001, December 28, 2002, and January 3, 2004 (labeled as 2003) (\$ thousands)

	2001	2002	2003
Reported operating cash flow	\$ 70,748	\$126,526	\$ 87,989
Net capital expenditures	(49,514)	(48,811)	(43,618)
Free cash flow before noncash investing and financing activities ^a	\$ 21,234	\$ 77,715	\$ 44,371
Non-cash investing and financing activities: Assets acquired through capital lease obligations	(59,665)	—	(54,815)
Free cash flow adjusted for noncash investing and financing activities	\$(38,431)	\$ 77,715	\$(10,444)

^a The company paid no preferred dividends.

Source: Flowers Foods, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 3, 2004, p. F-6.

In 2001, \$59,665,000 of assets were acquired through capital leases. In 2003, the amount was \$54,815,000. If free cash flow were reduced for these noncash transactions, it would turn decidedly negative.

As another example, consider U.S. Oncology, Inc. In the year ended December 31, 2002, the company reported operating cash flow of \$150.1 million. That year, net capital expenditures reported in the investing section of the cash flow statement were \$59.1 million. No preferred dividends were paid. Thus, in 2002, the company apparently generated \$91.0 million (\$150.1 million – \$59.1 million) of free cash flow. However, in its noncash investing and financing activities, the company disclosed that it sold fixed assets worth \$9.7 million and received treasury stock in return. Thus, a more accurate calculation of net capital expenditures would require one to subtract these noncash asset sales. As a result, net capital expenditures would be reduced in 2002 to \$49.4 million (\$59.1 million – \$9.7 million) and free cash flow increased to \$100.7 million (\$150.1 million – \$49.4 million).

What about Operating Leases?

The use of property, plant, and equipment gained through operating leases also will be excluded from capital expenditures reported on the statement of cash flows. However, operating leases entail the payment of rent expense, which is an operating use of cash. Accordingly, by reducing operating cash flow, such rental payments also reduce free cash flow. Thus, unlike capital leases entailing noncash investing and financing activities, unless there is a significant increase in operating lease commitments made in one year, no explicit adjustment is needed for operating leases when computing free cash flow.

Capital Expenditures and Accounts Payable

Capital expenditures made prior to the end of a fiscal year for which payment has not been made is another example of a noncash investing activity. The amount of the purchase is included in property, plant, and equipment and accounts payable on the company's balance sheet. However, because payment was not made for the acquired items, the purchase amount is not reported on the statement of cash flows. Rather, it is reported among the company's noncash investing and financing activities.

To illustrate how such noncash investing and financing transactions are reported, consider International Absorbents, Inc. For the year ended January 31, 2004, the company reported net cash flow from operating activities of \$1,769,000. The company's investing cash flow included \$6,110,000 for purchases of property, plant, and equipment. That amount was up significantly from \$2,910,000 in the year ended January 31, 2003, as the company expanded its productive capacity by the opening of a new manufacturing plant. Also reported as a supplement to the statement of cash flows in what was referred to as noncash investing activities was "increase in property, plant and equipment and accounts payable for purchase of plant and equipment" in the amount of \$661,000. That amount represented capital expenditures for which payment had not been made at year-end.

Unless amounts involved are especially material, say of sufficient magnitude to affect cash flow trends, when computing free cash flow, we do not advocate adding to capital expenditures purchases of property, plant, and equipment made with accounts payable. Unlike property, plant, and equipment purchased with capital leases on which payments do not appear among investing activities on the statement of cash flows, subsequent pay-

ments of accounts payable for purchases of property, plant, and equipment are included with capital expenditures when those amounts are paid. If purchases of property, plant, and equipment made with accounts payable were added to capital expenditures, there is a real risk that they would be double counted when payment was made in a subsequent period. Accordingly, in computing free cash flow, we recommend waiting until payment is made before including purchases of property, plant, and equipment in capital expenditures. It is a more straightforward practice and one that is consistent with the inclusion in capital expenditures of purchases of property, plant, and equipment when an actual cash disbursement takes place. However, to avoid double counting, if material amounts of property, plant, and equipment purchased with accounts payable are added to capital expenditures in computing free cash flow, the same amount also must be subtracted from capital expenditures in the following year.

ACQUISITIONS AND FREE CASH FLOW

Some analysts would subtract cash paid for acquisitions in the computation of free cash flow. Whether payments for acquisitions should be subtracted depends on how those payments are viewed.

For example, if such payments were viewed as discretionary investments, much like the deployment of cash for investments in bonds or equities, they should not be subtracted in computing free cash flow. In this view, acquisitions are a use of free cash flow but not a use required to generate current levels of free cash flow.

There are cases, however, where companies might be considered to be serial acquirers. Such firms devour others on a regular basis, effecting many acquisitions per year, sometimes many acquisitions per month. Here the answer becomes more difficult. In such cases, growth of operating cash flow and free cash flow may depend more on the acquiring firm's ability to close numerous acquisitions than its ability to grow its cash flow internally.

We think that during the late 1990s and into the early part of this decade, Tyco International, Ltd. could have been viewed as such a serial-acquiring firm. In the years ended September 30, 1998, 1999, and 2000, Tyco reported that it invested \$4.3 billion, \$4.9 billion, and \$4.8 billion, respectively, in acquisitions. In 2001, cash paid for acquisitions increased to \$11.0 billion, before declining to \$3.1 billion in 2002. During this time, acquisitions at Tyco were too routine and too much a part of the company's mode of operations to be ignored in the computation of free cash flow. We would subtract cash paid for them.

It is also important to note that a firm that effects numerous acquisitions may use stock or debt to pay for them, classifying the acquisitions among noncash investing and financing activities. If so, we would subtract the noncash payments made for the acquisitions in computing free cash flow.

SUMMARY

This chapter is designed to provide a deeper understanding of free cash flow. Twelve key points were raised in the chapter:

1. References to free cash flow by companies and the financial press have grown markedly in recent years.
2. Free cash flow has many uses, including share valuation, in computing incentive compensation, in loan covenants, and for determining whether long-lived assets are value impaired.
3. Measuring free cash flow requires identification of superior claims. Free cash flow might be defined as free cash flow to the firm or free cash flow to common equity.
4. Free cash flow to the firm is cash flow provided by operating activities before interest, but after capital expenditures.
5. Free cash flow to common equity is cash flow provided by operating activities after capital expenditures and dividends on preferred stock. This is the preferred definition of free cash flow used here.
6. References to free cash flow that do not identify a claimant group typically refer to free cash flow to common equity.
7. Many definitions of free cash flow to common equity are found in practice. Operating cash flow minus capital expenditures is the more common definition. Other definitions of free cash flow include operating cash flow minus capital expenditures and dividends on common stock, EBITDA minus capital expenditures, and net income minus capital expenditures. For firms that are not paying preferred dividends, operating cash flow minus capital expenditures is consistent with the preferred definition used here.
8. Free cash flow is a non-GAAP measure. When it is disclosed, it must be reconciled to the closest GAAP-defined amount. The reconciliation helps to clarify a company's definition of free cash flow.
9. A more accurate measure of operating cash flow needed for capital expenditures is capital expenditures net of the proceeds received from asset dispositions.
10. Actual capital expenditures, not just the amount needed to maintain productive capacity, provide the infrastructure needed for growth and should be deducted in computing free cash flow.
11. Because they exclude noncash investing and financing activities, capital expenditures reported in the investing section of the statement of cash flows may understate total capital expenditures.
12. Cash paid for acquisitions should be subtracted in computing free cash flow for companies that routinely and on a regular basis acquire other firms.

NOTES

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2. A. Rappaport, "Beyond Quarterly Earnings: How to Improve Financial Reporting," *The Wall Street Journal*, March 8, 2004, p. R2.
3. S. Hanke, "Where's the Cash?" *Forbes*, April 12, 2004, p. 230.
4. Borders Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 27, 2004, p. 16.
5. B. Curry, a spokesperson for Amazon.com, Inc., as quoted by N. Wingfield, "Options

- Move May Be at Expense of Accounting Purists,” *The Wall Street Journal*, July 14, 2003, p. C1.
6. Amazon.com, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 22.
7. R. Grantham, “Pinched Delta Gives Bonuses to Execs Last Year,” *The Atlanta Journal-Constitution*, March 26, 2003, p. A1.
8. Borders Group, Inc., Form 10-K annual report to the Securities and Exchange Commission, January 28, 2001, p. 13.
9. L. Wei, “This Manager Isn’t Rushing to Buy,” *The Wall Street Journal*, August 28, 2002, p. D11. Quote is by Scott Brayman, manager of the Sentinel Small Company Fund. Several variations on this “cash is fact, profit is opinion” quote were found.
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12. General Electric Co., Form DEF 14A, definitive proxy statement filed with the Securities and Exchange Commission, March 2, 2004, p. 22.
13. Ibid.
14. National Properties Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Exhibit 13.
15. IPC Acquisition Corp., Form 10-K annual report to the Securities and Exchange Commission, September 30, 2002, p. 42.
16. Motient Corp., Form 10-K annual report to the Securities and Exchange Commission, Exhibit 10.31, Amendment No. 1 to Amended and Restated Term Credit Agreement, dated March 16, 2004, p. D-2.
17. Fleetwood Enterprises, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 72.
18. Ibid.
19. Statement of Financial Accounting Standards Board, *SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets* (Norwalk, CT: FASB, 2002).
20. UnitedGlobalcom, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, p. 33.
21. Vectren Utility Holdings, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2003, Exhibit 13.
22. Valmont Industries, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 27, 2003, p. 22.
23. DRS Technologies, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 52.
24. The \$186 million was net of \$25 million in interest that was capitalized and reported as an investing use of cash.
25. For example, refer to A. Damodaran, *Investment Valuation* (New York: John Wiley & Sons, 1996), p. 219.
26. Ibid., pp. 219 and 237.

27. In *ibid.*, p. 103, Damodaran notes that when a levered firm increases debt levels, free cash flow for a levered firm will exceed that of an unlevered firm: "During the period when a firm finances its investments needs disproportionately with debt, the free cash flows to equity of this firm will exceed the free cash flows to equity of a firm that does not have this financing slack."
28. DRS Technologies, Inc., Form 10-K annual report to the Securities and Exchange Commission, March 31, 2003, p. 52.
29. NTN Communications, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, p. 24.
30. Hollywood Entertainment Corp., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, Item 7.
31. *Ibid.*, Form 8-K current report to the Securities and Exchange Commission, January 29, 2004, Exhibit 99.1.
32. Akamai Technologies, Inc., Form 8-K current report to the Securities and Exchange Commission, October 29, 2003, Exhibit 99.1.
33. Regulation G, *Conditions for Use of Non-GAAP Financial Measures* (Washington, DC: Securities and Exchange Commission, 2003).
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35. J. R. Hicks, *Value and Capital*, 2nd ed. (London: Clarendon Press, 1946), p. 172.
36. Rayonier, Inc., Form 10-K annual report to the Securities and Exchange Commission, December 31, 2002, Item 6.
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Glossary

Accounting Standards Board (ASB) The Accounting Standards Board issues Financial Reporting Standards (FRSs) for the United Kingdom. It took over the task of setting accounting standards from the Accounting Standards Committee in 1990.

Accounting Standards Committee (ASC) The predecessor to the United Kingdom's Accounting Standards Board. The ASC issued Statements of Standard Accounting Practice (SSAPs).

Accounts payable A liability that results from the purchase of goods or services on open account, that is, without a signed note payable.

Accounts receivable Amounts owed to a company by customers as a result of delivering goods or services and extending credit in the ordinary course of business. Also referred to as trade receivables.

Accrual-basis accounting The dominant basis of accounting that recognizes revenue as it is earned and expenses as they are incurred. The timing of the recognition of revenues and expenses is separated from the timing of the associated inflow and outflow of cash.

Accrued expenses payable Incurred costs or expenses that have not been paid. Also referred to as accruals.

Accumulated other comprehensive income Cumulative gains or losses reported in shareholders' equity that arise from changes in the fair value of available-for-sale securities, from the effects of changes in foreign-currency exchange rates on consolidated foreign-currency financial statements, from certain gains and losses on financial derivatives and from adjustments for underfunded pension plans.

Actual change in cash and equivalents A term used on the cash flow analysis statement that consists of the change in cash and cash equivalents between reporting periods.

Adjusted operating cash flow Reported operating cash flow adjusted for the reclassification of selected nonoperating items and for nonrecurring items of operating cash flow. See also *sustainable operating cash flow*.

Adjusted EBITDA Conventional earnings before interest, taxes, depreciation, and amortization (EBITDA) with additional adjustments for other noncash or nonrecurring items of revenue, expense, gain, and loss.

Aggressive cost capitalization Cost capitalization that stretches the flexibility of generally accepted accounting principles beyond its intended limits, resulting in reporting as assets items that should have been expensed.

AICPA The American Institute of Certified Public Accountants. The AICPA is the national association of CPAs in the United States.

Alternative minimum tax (AMT) A tax beyond that computed under the regular income tax system. Various adjustments are made to regular taxable income, for example, the excess of accelerated over straight-line depreciation, to arrive at alternative minimum taxable income. A preliminary tax is then computed on this revised earnings number using the AMT tax rate of 20 percent. If the AMT tax exceeds the regular tax, then this higher amount must be paid. Once paid, the additional tax beyond that under the regular system may be carried forward without limit. This AMT carryforward can reduce tax payments in future years when the regular tax exceeds the AMT tax.

Available-for-sale security A default classification for an investment in a debt or equity security that is not classified as either a held-to-maturity security or a trading security.

Bank overdraft Checks presented for payment that exceed a company's bank balance. A book overdraft becomes a bank overdraft when outstanding checks are presented for payment.

Bankruptcy remote entity The status of an entity, typically a special purpose entity, that protects its assets from the claims of creditors or shareholders of the company that created it and likely controls it, in the event that that sponsoring company experiences financial difficulties.

Book income Net income reported in the shareholder income statement as opposed to the tax return.

Book overdraft A negative cash balance for reporting purposes consisting of the excess of outstanding checks over a stated bank cash balance.

Books A shorthand reference to shareholder as opposed to income tax financial information.

Call option A contract that gives its holder the right to buy an asset, typically a financial instrument, at a specified price through a specified date.

Capital expenditures Expenditures made in the purchase of long-term productive assets, such as property, plant, and equipment, whose cost is amortized against income in future periods.

Capitalized interest Interest incurred during the construction period on monies invested in assets under construction that is added to the cost of the assets.

Capitalized operating cost Expenditure that is reported as an asset to be amortized against future revenue.

Capital lease A lease that transfers, in an economic sense, the risks and rewards of ownership to the lessee without transferring title. Lease payments made are comprised of interest and principal. Property held under a capital-lease agreement is accounted for as an asset. This cost is amortized over the relevant useful life.

Cash Currency, coin, and funds on deposit that are available for immediate withdrawal without restriction. Money orders, certified checks, cashier's checks, personal checks, and bank drafts are also considered cash.

Cash after operations A Uniform Credit Analysis®-defined cash flow amount that consists of gross cash profit less cash operating expense.

Cash-basis accounting In contrast to the accrual basis, under this accounting basis revenues are recognized as cash is received and expenses as cash is paid.

Cash cost of revenue A term used on the cash flow analysis statement that consists of cash payments to vendors and other suppliers, including employees, for the purchase of products and the procurement of services provided to customers.

Cash earnings Net income plus goodwill amortization.

Cash equivalents Short-term and highly liquid investments readily convertible into known amounts of cash and close enough to maturity that there is insignificant risk of changes in value from interest rate movements.

Cash flow An unspecified term that may refer to either total cash flow or operating cash flow. In most cases, use of the term refers to operating cash flow.

Cash flow after debt service A term used on the cash flow analysis statement that consists of cash flow from operations less required principal payments on long-term debt & capital leases.

Cash flow after dividends A term used on the cash flow analysis statement that consists of cash flow after debt service less dividends paid.

Cash flow analysis The search for the fundamental drivers that underlie a company's cash flow stream and affect its sustainability.

Cash flow analysis statement A cash flow statement designed to facilitate analysis by creditors, equity investors, and analysts that provides multiple partitions of the overall change in cash and cash equivalents and highlights sustainable and nonrecurring sources and uses of cash. An example of the cash flow analysis statement is provided in Exhibit 9.4.

Cash flow available for debt service A term used on the cash flow analysis statement that consists of core operating cash flow plus other cash income minus other cash expense and minus income taxes paid. Cash flow available for debt service is cash flow available for the payment of interest and required principal payments on debt and capital leases.

Cash flow drivers The fundamental factors of growth and changes in profitability and efficiency that serve to increase and decrease core operating cash flow.

Cash flow from operations A term used on the cash flow analysis statement that consists of cash flow available for debt service less total interest paid. The term also is used to refer to cash provided or used by operating activities and operating cash flow as those terms are defined by generally accepted accounting principles.

Cash flow impact The measured effects of cash flow drivers of growth and changes in profitability and efficiency on core operating cash flow.

Cash flow tracking Determining whether cash flows are associated with nonrecurring items of revenue, gain, expense, and loss. The timing of the cash flows is also investigated.

Cash from revenue A term used on the cash flow analysis statement that consists of cash collections from customers for product sales and services provided.

Cash from sales A Uniform Credit Analysis®-defined cash flow amount that consists of gross collections from customers for sales made and services provided.

Cash gross margin A term used on the cash flow analysis statement that consists of cash from revenue minus cash cost of revenue.

Cash operating expense A Uniform Credit Analysis®–defined cash flow amount that consists of cash paid for sales and marketing, general and administrative, and research and development expenditures. The term is defined the same way on the cash flow analysis statement.

Cash paid for investments, capital expenditures, and intangibles A term used on the cash flow analysis statement that consists of cash disbursements for short-term and long-term investments in debt and equity securities, for capital expenditures, and for investments in notes receivable, other assets, goodwill, and intangibles.

Cash production costs A Uniform Credit Analysis®–defined cash flow amount that consists of payments made for inventory purchased or manufactured and services provided.

Cash provided or used by financing activities A term defined by generally accepted accounting principles that consists of cash receipts and payments involving liability and stockholders' equity items, including obtaining cash from creditors and repaying amounts borrowed and obtaining capital from owners and providing them with a return on and a return of their investments.

Cash provided or used by investing activities A term defined by generally accepted accounting principles that consists of cash receipts and payments involving long-term assets, including making and collecting loans and acquiring and disposing of investments and property, plant, and equipment.

Cash provided or used by operating activities A term defined by generally accepted accounting principles that consists of the cash effects of transactions that enter into the determination of net income, such as cash receipts from sales of goods and services and cash payments to suppliers and employees for acquisitions of inventory and services. Interest and income taxes paid are also included. Also referred to as operating cash flow and cash flow from operations.

Cash surrender value of life insurance That portion of a life insurance premium that will be returned to the policyholder in the event the policy is canceled.

Cash tax rate The percentage computed by dividing the current portion of the total tax provision by pretax book earnings.

Change in accumulated other comprehensive income A term used on the cash flow analysis statement that refers to the change in accumulated other comprehensive income between reporting periods.

Change in cash and equivalents after external financing A term used on the cash flow analysis statement that refers to the change in cash before external financing plus cash provided from external financing minus cash used in external financing adjusted for the change in accumulated other comprehensive income.

Change in cash before external financing A term used on the cash flow analysis statement that consists of cash flow after dividends minus cash paid for investments, capital expenditures, and intangibles.

Core operating cash flow A term used on the cash flow analysis statement that con-

sists of cash gross margin minus cash operating expense. Core operating cash flow is cash flow generated by core or central operations, before income taxes, other cash income and interest paid.

Creative cash flow reporting Any and all steps used to alter operating cash flow and, in the process, provide a more positive signal about a firm's sustainable cash-generating ability. Creative cash flow reporting may entail steps taken within the boundaries of generally accepted accounting principles, beyond those boundaries, or by the inclusion of nonrecurring amounts in operating cash flow. Also see *opportunistic cash flow classification*.

Cumulative effect of a change in accounting principle The cumulative prior-year income effect of a change from one generally accepted accounting principle to another.

Current income tax provision The income tax for the period based on taxable income reported in the corporate tax return. In most cases this amount, with adjustments for changes in taxes payable and refundable, should approximate the income tax actually paid or recovered during the year.

Customer acquisition costs Initial direct costs incurred in adding to a company's customer base, including direct-response advertising, commissions, and related administrative costs. When capitalized, prospective customer-related revenues must be expected to exceed amounts capitalized. Depending on the industry, such costs may have other names, including subscriber acquisition costs and policy acquisition costs.

Cyclical developments Changes in business activity that are caused by moves in the overall economy between expansion and recession.

Debt issue costs The cost of issuing debt, including appraisal and recording fees, and commitment fees paid separately to a lender.

Debt security A security representing a debt relationship with an enterprise, including a government security, municipal security, corporate bond, convertible debt issue, and commercial paper. For accounting purposes, redeemable preferred stock also is considered to be a debt security.

Decline stage The fourth and final stage of a company's life cycle during which revenue declines and earnings turn to losses. Depending on the amount of noncash expenses reported, such as depreciation and amortization expense, operating cash flow may remain positive until very late in the decline stage.

Deductible temporary differences Temporary differences that, upon their reversal, reduce taxable income. The initial tax effects of these temporary differences are recorded as deferred tax assets.

Deferred revenue Revenue that is collected in advance of being earned and is reported as a liability. Also known as *unearned revenue*.

Deferred tax assets Future tax benefits that result from (1) the origination of a deductible temporary difference, that is, a tax deduction that can be used in a future period, or (2) a loss or tax-credit carryover. These future tax benefits are realized upon the reversal of deductible temporary differences. In addition, realization can occur by the offsetting of a loss carryforward against taxable income or a tax credit carryforward against taxes currently payable.

Deferred tax asset valuation allowance A contra-asset account established when it is judged probable that some or all of a deferred tax asset balance will not be realized. A probability threshold of 50 percent is used in making this assessment. A valuation allowance is set off against deferred tax assets that have a probability of not being realized that exceeds 50 percent.

Deferred tax liabilities Future tax obligations that result from the origination of taxable temporary differences. Upon origination, these temporary difference cause pretax financial income to exceed taxable income. These future tax obligations are paid later when temporary differences reverse, now causing taxable income to exceed pretax book income.

Deferred tax provision or benefit The income tax provision or benefit that is based on the tax effects of the change during the period in cumulative temporary differences.

Depreciation proxy for replacement capital expenditures A term used on the cash flow analysis statement that consists of depreciation and amortization of property, plant, and equipment used in operations and serves as an approximation of the cost of replacing that portion of property, plant and equipment consumed by operations during a reporting period.

Dilution Reduction in shareholders' equity per share or earnings per share that arises from some changes among shareholders' proportionate interests.

Direct-method format A format for the operating section of a cash flow statement prepared in accordance with generally accepted accounting principles that reports actual cash receipts and cash payments from operating activities.

Direct-response advertising Advertising designed to elicit sales to customers who can be shown to have responded specifically to the advertising in the past. Such costs can be capitalized when persuasive historical evidence permits formulation of a reliable estimate of the future revenue that can be obtained from incremental advertising expenditures.

Discontinued operations Net income and the gain or loss on disposal of a discontinued business segment or separately measured business unit.

Distributions from associated companies Dividends received from investee companies in which the investor has sufficient ownership to exert significant influence.

Dividends paid A term used on the cash flow analysis statement that refers to cash disbursements for dividends on common and preferred stock.

Earnings before interest, taxes, depreciation, and amortization (EBITDA) An earnings-based measure that often serves as a surrogate for cash flow. The measure actually represents working capital provided by operations before interest and taxes.

Earnings before interest and taxes (EBIT) Net income measured before interest expense and before income tax expense. EBIT has a long history of being used as a basis for measuring fixed-charge coverage.

Effective tax rate The income tax provision divided by income before the income tax provision.

Emerging Issues Task Force (EITF) The EITF assists the Financial Accounting Standards Board through the timely identification, discussion, and resolution of financial accounting issues based on existing authoritative literature.

Equity security An ownership interest in an enterprise, including preferred and common stock.

Excess cash margin (ECM) An interpretive ratio used to measure the relationship between adjusted operating cash flow and adjusted operating earnings. The ratio measures in percent terms the excess of cash margin (adjusted operating cash flow to revenue) over net margin (adjusted operating earnings to revenue). The ratio is calculated as $((\text{Adjusted operating cash flow} - \text{Adjusted operating earnings}) / \text{Revenue}) \times 100$. Increases in the ratio over time indicate that adjusted operating cash flow is growing faster or declining slower than adjusted operating earnings. Decreases in the ratio over time indicate that adjusted operating cash flow is growing slower or declining faster than adjusted operating earnings.

Exercise price The preestablished price contained in an option contract at which an asset may be purchased or sold.

Extended amortization period An amortization period that continues beyond a long-lived asset's economic useful life.

External financing A term used on the cash flow analysis statement that consists of net debt and equity capital raised from external sources.

Extraordinary item Gain or loss that is unusual and infrequent in occurrence.

Factored accounts receivable The sale of accounts receivable, typically without recourse, to a financial institution that collects the underlying accounts directly from the seller company's customers.

Fictitious revenue Revenue recognized on a nonexistent sale or service transaction.

Film production costs Costs incurred in producing a motion picture, including costs to obtain a screenplay, compensation of cast members, directors, producers, extras and other staff, set construction and operations, wardrobe and accessories, sound synchronization, on-location costs, and postproduction costs such as music, special effects and editing.

Financial Accounting Standards Board (FASB) The principal standard-setting body in the United States. Its primary standards are Statements of Financial Accounting Standards (SFASs).

Financial covenant Agreements between a debtor and a creditor that commit the debtor to the maintenance of, for example, certain financial ratios. A positive financial covenant would be the requirement to maintain a working capital ratio of at least 1.5 to 1 or a fixed-charge coverage of at least 3 to 1. A negative covenant could set a limit on a firm's ratio of debt to equity. Also referred to as loan covenants.

Financial Executives Institute (FEI) An international organization of financial professionals.

Financial Reporting Standard (FRS) A financial reporting standard issued by the Accounting Standards Board of the United Kingdom.

Financing cash flow See *cash provided or used by financing activities*.

Floor-plan financing A loan arrangement that is typically used to finance durable goods inventory such as automobiles, mobile homes, recreational vehicles, boats and mo-

torcycles, where the underlying inventory is pledged as loan security. Any outstanding loan balance is linked directly to inventory levels, increasing as inventory levels increase and requiring repayment as inventory levels decline.

Free cash flow Discretionary cash flow that is available for equity claims while maintaining a company's productive capacity. Generally calculated by subtracting dividends and capital expenditures from cash provided by operating activities. On the cash flow analysis statement, free cash flow consists of cash flow from operations minus preferred dividends, minus the depreciation proxy for replacement capital expenditures and minus growth-related capital expenditures, net of dispositions.

Funds Traditionally defined as working capital, that is, the excess of current assets over current liabilities.

Funds from operations (FFO) A term used by real estate investment trusts (REITs) and defined as net income or loss excluding gains or losses from debt restructuring and sales of property, plus depreciation and amortization of real estate assets.

Generally accepted accounting principles (GAAP) A common set of standards and procedures for the preparation of general-purpose financial statements that either have been established by an authoritative accounting rule-making body, such as the Financial Accounting Standards Board (FASB), or have over time become common accepted practice.

GAAP operating cash flow Cash flow from operating activities computed in accordance with generally accepted accounting principles. Also see *reported operating cash flow*.

Goodwill An intangible asset representing the amount paid in the acquisition of either significant influence or control of an entity over the fair value of the acquired entity's identifiable net assets.

Gross capital expenditures Capital expenditures before subtraction for the proceeds derived from the disposal of productive assets.

Gross cash profit A Uniform Credit Analysis (UCA)®-defined cash flow amount that consists of cash collected from sales less cash paid to suppliers.

Gross margin Revenue minus cost of goods sold. Also referred to as gross profit.

Growth stage The second period in a company's life cycle during which operating earnings turn positive and revenue increases faster than the rate of growth in the overall economy. Operating cash flow may be negative during the early part of the growth stage of a company's life cycle and turn positive as the firm becomes more established.

Growth cash flow profile The capacity of a firm to generate core operating cash flow as it grows reflecting a combination of its operating cushion and operating working capital requirements.

Growth-related capital expenditures, net of dispositions A term used on the cash flow analysis statement that consists of capital expenditures required to replace productive capacity consumed during a reporting period and to add infrastructure needed to maintain revenue growth. It is computed as capital expenditures net of cash received for dispositions of property, plant, and equipment less the depreciation proxy for replacement capital expenditures.

Held-to-maturity security A debt security for which the investing entity has both the positive intent and ability to hold until maturity.

Income from continuing operations After-tax net income before discontinued operations, extraordinary items, and the cumulative effect of changes in accounting principle.

Income-statement and balance-sheet change approach A method of computing operating cash flow by adjusting net income for noncash expenses and changes in operating-related balance sheet accounts.

Income taxes paid Cash disbursements for income taxes.

Income taxes payable Income taxes currently due and payable to a taxing authority.

Income tax provision Income tax expense as computed on income before taxes and reported on the income statement.

Income tax refund receivable A tax refund due from a taxing authority for income taxes paid in excess of amounts currently payable or as the result of the utilization of an operating loss or tax credit carryback.

Indirect-method format A format for the operating section of the cash flow statement that presents the derivation from net income of cash flow provided by operating activities. The format starts with net income and adjusts for nonoperating items, noncash income and expense, and changes in operating-related working capital accounts.

Internal-use software development costs Costs incurred in developing new software applications for a company's own use and not for licensing to customers. Internal-use software development costs are capitalized once the preliminary project stage is completed.

International Accounting Standard (IAS) An accounting standard issued by the International Accounting Standards Committee. This committee has been replaced by the International Accounting Standards Board (IASB). IAS standards have been adopted by the IASB.

International Accounting Standards Board (IASB) An international standard setting body. Its principal standard-setting products are International Financial Reporting Standards (IFRSs). The IASB assumed its duties from the International Accounting Standards Committee (IASC). Existing International Accounting Standards issued by the IASC were adopted by the IASB.

International Financial Reporting Standard (IFRS) A financial reporting standard issued by the International Accounting Standards Board.

Inventory days The number of days it would take to complete and sell the ending balance in inventory at the average rate of costs of goods sold per day. Calculated by dividing 365 by inventory turnover.

Inventory turnover The number of times during a year that inventory is sold and replaced. Calculated by dividing cost of goods sold by ending inventory.

Investing cash flow See *cash provided or used by investing activities*.

Layered adjustments Adjustments to reported operating cash flow for nonrecurring items grouped into layers based on the extent to which each item is perceived as being nonrecurring. The layered adjustments are employed in the process of measuring sustainable operating cash flow.

Life cycle The progression of a firm through various stages of its organizational life, consisting of start-up, growth, maturity, and decline, during which earnings and operating cash flow have certain characteristic relationships.

Lease receivables Amounts due from customers on long-term sales-type lease agreements.

Last-in first-out (LIFO) An inventory method that includes the earliest as opposed to most current inventory acquisition costs in cost of sales.

LIFO liquidation A reduction in the physical quantity of an inventory that is accounted for using the LIFO method. A LIFO liquidation usually produces a nonrecurring increase in earnings because the older costs associated with the liquidated units are lower than current inventory costs.

Long-term receivables Amounts due from customers, typically on an installment basis, which extend beyond one year.

Management's discussion and analysis of operations and financial position (MD&A) A presentation required by the Securities and Exchange Commission of registrants in their 10-K and 10-Q filings. The information includes commentary on changes in earnings, a discussion of liquidity and capital resources, and the provision of information concerning contractual cash obligations.

Mandatorily redeemable preferred stock Preferred stock that carries an unconditional obligation to be repurchased at a specified or determinable date, making the shares a hybrid security between debt and equity.

Marginal tax rate The tax rate used to compute the effect of incremental or marginal amounts of revenue, gain, expense, or loss on the tax provision. In most cases, the marginal rate is simply the combined statutory federal and state rates that are disclosed in the reconciliation of expected and actual taxes found in the tax note.

Maturity stage The third segment of a company's life cycle during which growth in revenue slows to or below the rate of growth in the overall economy, although earnings may continue to grow at a faster rate. Depending on the amount of noncash expenses reported, such as depreciation and amortization expense, operating cash flow usually will exceed earnings.

Mezzanine section A middle section on the balance sheet positioned between liabilities and shareholders' equity, where claims that have elements of both, including minority interests, typically are reported.

Minority interest in equity The interest in the equity of an entity that reflects the portion of shareholders' equity owned by noncontrolling or third-party investors, or investors outside the consolidated entity.

Modified accrual accounting An accounting basis that is a blend of cash and accrual accounting. Some items are accounted for on an accrual basis while others are accounted for on a cash basis.

Net capital expenditures Gross capital expenditures minus proceeds from the disposal of productive assets.

Net cash after operations A Uniform Credit Analysis®-defined cash flow amount that

consists of cash after operations plus other cash income minus other cash expense and minus income taxes paid.

Net debt Total debt minus cash on hand.

Net income plus depreciation Often referred to as traditional cash flow, its calculation removes an important noncash expense from net income.

Noncontrolling interest Generally, minority interest. However, the term is used to reflect a minority shareholder interest when the definition of control is extended beyond a simple majority share ownership interest. Any interest in an entity besides that of a controlling shareholder.

Nonqualified stock option An option to purchase stock that requires payment of ordinary income taxes by the option holder on the date of exercise on income equal to the excess of the market price of the purchased stock over the exercise price of the option. The company issuing the option receives an expense deduction equal to the ordinary income of the option holder.

Nonrecurring cash flow Operating cash flow that appears infrequently or that may appear with some regularity but is very irregular in amount. In addition, even though included in operating cash flow, nonrecurring cash flow often is not closely tied to the core operating activities of the firm.

Nonrecurring revenue, expense, gain, and loss Items that appear infrequently or that may appear with some regularity but are very irregular in amount. These items usually are not closely tied to the core operating activities of the firm.

Notes payable Promissory notes that are evidence of a debt and state the terms of interest and principal payment.

Oil exploration and development costs Costs incurred in exploring for new oil reserves and for preparing existing reserves for sale, including the drilling and equipping of wells.

Operating cash flow Cash flow from operating activities computed in accordance with generally accepted accounting principles.

Operating cushion Operating profit before depreciation and amortization expense.

Operating earnings After-tax income from continuing operations adjusted for nonrecurring items.

Operating income See *operating profit*.

Operating lease A lease that does not transfer the risks and rewards of ownership to the lessee. Operating lease payments are expensed as incurred.

Operating payables Amounts due vendors, including accounts payable and notes payable for purchases made.

Operating profit Core pretax profit from central operations calculated as revenue minus cost of goods sold, selling, general and administrative expense, and research and development expense.

Operating receivables Customer-related receivables including accounts receivable, notes receivable, and, for contractors, cost plus profit recognized in excess of amounts billed customers.

Operating working capital Current assets, including operating receivables, inventory, and prepaid expenses, that are used in operations minus current liabilities, including operating payables and accrued expenses payable that are incurred in operations.

Option premium The purchase price of a call option or put option that reflects both an intrinsic value for the option represented by the difference between the option's exercise price and the market price of the asset covered by the option and the time value of money.

Operating cash flow Cash inflow and outflow associated with the operating activities of a firm. Operating cash flow often is used interchangeably with cash flow from operating activities and is defined by generally accepted accounting principles.

Operating earnings An earnings measure that excludes selected items of nonrecurring gain, revenue, loss, and expense. This is not a GAAP measure, and its determination may vary widely among different companies.

Operating loss carryforward For tax purposes only, losses are first carried back for 2 years, eliminating previous profits and producing a tax refund. If losses remain, then these may be carried forward for as long as 20 years. These losses will shield future profits from taxation. Corporations also may elect to forgo the loss carryback and only carry the loss forward for 20 years.

Opportunistic cash flow classifications Cash flow classifications that are motivated by the desire to achieve a particular operating cash flow outcome. The presence of some degree of flexibility or ambiguity in cash flow classification is exploited. Also see *creative cash flow reporting*.

Originating temporary differences The initial creation of a temporary difference between pretax book income and taxable income.

Other cash income (expense) A Uniform Credit Analysis®-defined cash flow amount that consists of cash receipts and disbursements that are not part of core operations. The term is defined the same way on the cash flow analysis statement. Other cash income examples include collections for interest, dividends, rents, royalties, and miscellaneous collections. Other cash expense examples include payments for corporate restructuring, severance, and litigation.

Outsized cash outflow A cash outflow of which a portion is unlikely to be sustained. A common example is a dramatically increased contribution to underfunded defined benefit pension plans.

Overdraft A negative cash balance.

Payables days The number of days it would take to pay the ending balance in operating payables at the average rate of costs of goods sold per day. Calculated by dividing 365 by payables turnover.

Payables turnover The number of times during a year that operating payables are repaid and reincurred. Calculated by dividing cost of goods sold by ending operating payables.

Permanent difference A difference between book and tax return income that never reverses. Life insurance proceeds are considered to be revenue for book purposes but are exempt from taxation. A fine is never deductible in the tax return but is typically a deduction in the book income statement. Each of these is a permanent difference.

Pledge of accounts receivable A secured borrowing arrangement based on accounts receivable where selected accounts receivable serve as loan collateral.

Policy acquisition costs See *customer acquisition costs*.

Premature revenue Revenue recognized for a confirmed sale or service transaction in a period prior to that called for by generally accepted accounting principles.

Prepaid expenses Costs or expenses that have been paid in advance of being incurred. Also referred to as prepaids.

Pro-forma earnings A measures of earnings performance that selectively excludes nonrecurring as well as some noncash items.

Put option A contract that gives its holder the right to sell an asset, typically a financial instrument, at a specified price through a specified date.

Qualified stock option Option to purchase stock that provides the option holder with the right to postpone payment of any income taxes due on exercise of the option to the date on which the purchased stock is ultimately sold. The company issuing the option receives no tax deduction upon either the issue or exercise of the stock option.

Real Estate Investment Trust (REIT) An entity that may invest in real estate or mortgages on real estate and whose earnings are exempt from federal taxation. REITs must meet certain strict requirements contained in the Internal Revenue Code including distribution of at least 90 percent of their earnings to shareholders to avoid taxation of profit at the corporate level.

Realized stock option tax benefits The reduction in tax cash payments, or the recovery of previous tax payments, that result from the deduction of option expense in the tax return.

Receivables days The number of days it would take to collect the ending balance in operating receivables at the year's average rate of revenue per day. Calculated by dividing 365 by receivables turnover.

Receivables turnover The number of times during a year that operating receivables are collected and replaced with new revenue transactions. Calculated by dividing revenue by ending operating receivables.

Reclassification adjustment An adjustment to reported operating cash flow that moves a cash flow item from one classification to another, such as from operating cash flow to investing cash flow or from financing cash flow to operating cash flow. An example would be the reclassification of a tax benefit from stock options from operating cash flow to financing cash flow. The goal of these reclassifications is to produce a more sustainable measure of operating cash flow.

Recognized stock option tax benefits Option tax benefits that are recognized by additions to paid-in capital. These recognized benefits could equal, exceed, or fall short of the realized option tax benefits. A deferred tax asset normally is recorded for recognized benefits in excess of realized benefits. Alternatively, the deferred tax asset is reduced when the previously recognized excess benefits are realized.

Renewable sources of cash flow Cash that is generated from replenishable, nondepleting sources. The purchase and sale of inventory at a profit generates a renewable source of cash. The activity can be repeated. However, the purchase and sale of an in-

vestment generates an increment to cash only to the extent that the investment can be sold at a gain. Once the investment is sold, the ability to generate cash flow from the purchase and sale of an additional investment depends on the investment's uncertain change in price. Generally, when speaking of nonfinancial firms, such investing cash flow is not considered to be renewable. Similarly, cash provided by borrowed money, a financing activity, is not derived from a renewable source. Lenders may decide to stop loaning funds and funds provided must be repaid. Also see *sustainable cash flow*.

Replacement capital expenditures Capital expenditures required to replace productive capacity consumed during a reporting period.

Reported operating cash flow Cash flow from operating activities computed in accordance with generally accepted accounting principles. Also see *operating cash flow*.

Required principal payments on long-term debt and capital lease obligations A term used on the cash flow analysis statement that consists of the current portion of long-term debt and capital lease obligations at the beginning of the year.

Restricted cash Cash set aside for a particular purpose either through a legal restriction related to a third party or through a more informal internal company restriction.

Restructuring charge Costs associated with restructuring activities, including the consolidation and/or relocation of operations or the disposition or abandonment of operations or productive assets. Such charges may be incurred in connection with a business combination, a change in an enterprise's strategic plan, or a managerial response to declines in demand, increasing costs, or other environmental factors.

Restructuring reserve A liability reflecting restructuring costs to be paid or realized in future periods.

Reversing temporary differences The inclusion of an item of revenue, gain, expense, or loss in the tax return that has earlier been included in book earnings. Alternatively, the inclusion of a revenue, gain, expense, or loss in book earnings that has earlier been included in the tax return.

Sale and leaseback A sale followed by the immediate leaseback of the asset sold by its previous owner.

Sarbanes-Oxley Act An act of Congress signed into law on July 30, 2002, that tightened the oversight of firms that audit public companies, added criminal penalties for earnings management activities, and took steps generally to improve company internal controls and corporate governance.

Seasonal factors Natural ebbs and flows in business activity occurring annually that are caused by changes in the seasons.

Securitized accounts receivable A financing arrangement where accounts receivable are pooled and an undivided interest in the receivables pool, which represents a claim on the entire pool of receivables, is sold, effectively creating a security that is backed by the receivables. It is accounted for as a sale of accounts receivable.

Software development costs Costs incurred in developing new software applications. Software development costs incurred in developing software for licensing to customers are capitalized once technological feasibility is reached.

Special purpose entity (SPE) An entity established by a corporate sponsor to carry out

a limited business activity on behalf of the sponsor. The sponsor need not consolidate the SPE provided the sponsor is not a controlling owner and the entity's equity is sufficient to absorb any expected losses that may be generated. Also known as a variable interest entity (VIE).

Start-up stage The opening period in a company's life cycle during which operating losses often are reported and operating cash flow is consumed.

Statutory income tax rates The income tax rates for different levels of taxable income found in the applicable income tax law

Statements of Standard Accounting Practice (SSAPs) Statements issued by the United Kingdom's Accounting Standards Committee. These standards were adopted by the Accounting Standards Board, which is the successor to the Accounting Standards Committee.

Stock option A contract that gives its holder the right to buy (call option) or sell (put option) an interest in stock at a specified price through a specified date.

Stock warrant A contract, similar to an option, that gives its holder the right to buy stock at a specified price through a specified date. Warrants may be granted with the issue of other securities such as bonds or preferred stock, or may be granted with the issue of common stock, giving its holder the right to purchase additional shares. When granted as a form of compensation, stock warrants are more likely to be referred to as stock options.

Subscriber acquisition costs See *customer acquisition costs*.

Sustainable cash flow worksheet A worksheet that begins with reported operating cash flow and then adds and subtracts three different layers of nonrecurring operating cash flow items. Additions and subtractions also are made for reclassified operating cash flow items. Income tax adjustments are made where appropriate. Three different measures of sustainable cash flow are produced after the three different layers of adjustments have been recorded.

Sustainable financial performance See *sustainable operating cash flow*.

Sustainable operating cash flow (SOCF) Cash flow that is derived from renewable sources, supported by profitable operations, and is available to meet a firm's discretionary needs. Generally, reported operating cash flow is a useful starting point for computing sustainable operating cash flow. However, adjustments are needed for reclassifications of operating items and for nonrecurring items. Also referred to as sustainable cash flow. See also *adjusted operating cash flow*

Tax A shorthand reference to the tax return income statement.

Tax adjustments Restatements of nonrecurring items of operating cash flow to place them on an after-tax basis. For example, an outsized tax-deductible pension contribution of \$50 million would be reduced to an after-tax amount of \$30 million if a combined federal and state marginal tax rate of 40 percent is assumed: $\$50 \text{ million} \times (1 - 40 \text{ percent}) = \30 million .

Taxable temporary differences Temporary differences that, upon their reversal, increase taxable income. The initial tax effects of these temporary differences are recorded as deferred tax liabilities.

Tax credits A direct dollar-for-dollar reduction in taxes payable.

Tax loss carryback Taxes paid on previously reported taxable earnings may be recovered by carrying losses back and setting them off against such previously reported taxable earnings. The current carryback period is generally two years, although a temporary extension to five years was enacted in connection with the recession that followed September 11, 2001.

Tax loss carryforward Current tax-return losses that exceed tax-return earnings in the loss carryback period may be carried forward. The current net operating loss (NOL) carryforward period is 20 years.

Temporary difference A difference between the book and tax basis of both assets and liabilities. Alternatively, a temporary difference is a difference between book and tax return earnings that will reverse at some future point in time. Temporary differences give rise to deferred tax assets and liabilities.

Total cash flow The change in reported cash and cash equivalents during a reporting period.

Total interest paid A term used on the cash flow analysis statement that consists of cash payments for interest on debt and capital leases, including capitalized interest.

Trading security A debt or equity security bought and held for sale in the near term to generate income on short-term price changes.

Traditional cash flow Net income plus depreciation and amortization.

Treasury stock A corporation's issued stock that has subsequently been repurchased by the company and not retired.

Unbilled receivables Cost plus profit recognized on contracts in excess of amounts billed customers.

Unearned revenue See *deferred revenue*.

Uniform Credit Analysis® (UCA)® Cash Flow Format A cash flow statement, often used by lenders and credit analysts, that highlights key sources and uses of cash to facilitate analysis. The order of receipts and disbursements on the UCA cash flow statement is based upon their importance to operations and their priority of claim on cash flow. An example of the UCA cash flow statement with subtotals through net cash after operations is provided in Exhibit 1.8. Uniform Credit Analysis® and UCA® are registered trademarks of the Risk Management Association, Philadelphia, Pennsylvania.

Vendor financing Amounts owed vendors for purchased goods or services, reported as accounts payable.

Working capital Current assets minus current liabilities.

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