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Cash Economics in the New Economy

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Volume 9

- **This report outlines a practical framework for analyzing the cash economics of business models.**
- **Our analysis indicates that New Economy companies tend to have superior cash economics than their Old Economy counterparts.**
- **Exemplifying this trend, the earnings of Internet companies such as Dell, Yahoo!, and Amazon dramatically understate their ability to generate cash.**
- **These higher cash flows offer one explanation for the highflying valuations in the Internet sector.**

Table of Contents

Executive Summary

- ***Cash is king***. Ever since the first Internet IPO, traditional valuation metrics—such as P/Es and earning growth rates—have offered little or no guidance to investors trying to value Internet stocks. We disagree with the consensus view that hype and hysteria drive the highflying valuations of Internet stocks. Like all businesses, Internet companies are valued on their ability to generate cash. If Internet companies have higher valuations than their offline counterparts, the market must believe that they have higher cash flows.

- ***What you see is NOT what you get***. Our analysis indicates that this is the case. Free cash flow is calculated by netting a company's cash earnings and investments. Most Old Economy companies have a cash *inflow* from earnings and a cash *outflow* from investments. Thus, cash earnings for most Old Economy companies will typically *overstate* their free cash flow. To illustrate, Barnes and Noble generated $150 million in cash earnings for the twelve months ending on October 31, 1998. However, it also had to invest over $240 million during this period, translating into free cash flow of negative $95 million.

- ***What you see is NOT what you get, part 2***. The Internet companies we analyzed all have superior cash economics than their Old Economy counterparts, although they generate cash in a totally different way. For example, while Amazon.com incurred a cash *outflow* from earnings of $58 million in 1998, it generated a cash *inflow* of $54 million from investments—coming very close to generating positive free cash flow. This means that cash earnings for a New Economy company can dramatically *understate* the company's total free cash flow.

- ***Heed the balance sheet***. In the past, investors anxious to own cash cows have naturally focused on the income statement. However, our analysis indicates that looking at the balance sheet of a New Economy company can unveil an important source of cash. Investors must look at both financial statements, as it is free cash flow—the sum of a firm's cash earnings and investments—that drives shareholder value creation. We believe that understanding these fundamental differences in the cash economics of business models will become increasingly important as the digital revolution transforms the world.

On the final exam [for a business valuation course], I'd probably take an Internet company, and [ask], "How much is it worth?" And anybody that gave me an answer*, I'd* flunk*...*

—Warren Buffett[1]

Introduction

Internet stocks are the paradox of Wall Street. Their valuations have skyrocketed with no seeming connection to fundamentals. Everything seems backwards: the faster many Internet companies grow sales, the greater their reported losses. And the more money they lose, the greater appetite investors appear to have for these stocks.

This spectacular run-up in Internet stocks has inspired some pointed questions. Is it reasonable that Amazon's equity market value is more than six times the combined value of Barnes and Noble and Borders? Should a "New Media" company like Yahoo! really trade at over 280 times 2000 estimated earnings, while a traditional print media company like the New York Times trades at 17 times?

These questions have prompted some investors to claim that we are in a new age where old rules do not apply. We disagree. Yes, for companies with no earnings, old valuation rules-of-thumb like price-to-earnings ratios have lost their relevance. But the fundamental drivers of value remain the same. When investors spend their hard-earned cash to buy a piece of a company's equity, they are buying a share of the company's future cash flows. And whether investors are purchasing nascent Internet companies or mature food companies, the goal is the same—to buy into a stream of cash flows with a current value greater than the price they paid.

To understand how the market values any company, then, we first need to understand the *cash economics of business models*—a company's propensity to generate or consume cash. ***Importantly, as an exemplar of the New Economy, Internet companies tend to have drastically different cash economics than their Old Economy counterparts***. What is obvious is that many Internet companies are currently incurring losses as they spend millions in marketing, while their off-line competitors reap cash earnings. What is less obvious is that New Economy companies invest much less in their computers and office space than Old Economy companies spend on bricks-and-mortar and working capital. We believe that understanding these fundamental differences in the cash economics of business models will become increasingly important as the digital revolution transforms the world.

This report is broken into four parts. First, we outline a practical framework for analyzing the cash economics of business models. Second, we introduce a graphical way of highlighting differences between business models—the *cash economics matrix—and* apply this framework to compare Old and New Economy companies. Third, we generalize from our case studies to outline a cash economics lifecycle for typical Old and New Economy companies. Finally, since the market values a company's ability to generate cash, we use this cash economics analysis to explain one possible source of the relatively high valuations of New Economy companies.

[1] *Outstanding Investor Digest*. September 24, 1998. Page 41.

There are businesses ... where you just constantly keep pouring [cash] in and pouring it in, but where no cash ever comes back. ... One of the things that keeps our life interesting is trying to avoid those and trying to get into the other kind of business that just drowns you in cash...

—Charlie Munger[2]
Vice Chairman, Berkshire Hathaway

Cash Economics of Business Models

Earnings growth rates and P/Es may dominate Wall Street banter, but as any small business owner knows, a company's value stems from its ability to generate cash. Common sense dictates—and the empirical evidence corroborates—that the same currency that pays the bills also drives shareholder value.[3]

An investor's first step in valuing a company, then, is to assess how much cash a firm generates or consumes in future years. There are two components to this:

- *Cash earnings*. A company can generate or consume cash from its after tax operating profit. We can calculate this figure by subtracting a firm's cash taxes from its operating income.[4] Note that a company's cash earnings may be radically different from accounting metrics such as net income, owing to distortions from non-cash accounting entries such as goodwill amortization and financing costs such as interest expense.

- *Cash investments*. A company can consume or generate cash by investing different amounts in its on- and off-balance sheet assets. This investment includes both changes in net working capital—such as accounts receivable, which serve as cash loans extended to finance customer purchases—and in fixed assets—such as investments in property, plant and equipment, and any investments in mergers or acquisitions.[5]

This analysis tells us exactly how much cash a company generates or consumes from these two components. In addition, the sum of these two amounts gives us free cash flow for that period—the cash pool available to pay the firm's capital providers. This is critical because the market values a company by discounting its best guess of future cash flows to the present value at the firm's opportunity

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[2] *Outstanding Investor Digest*. September 24, 1998. Page 37.

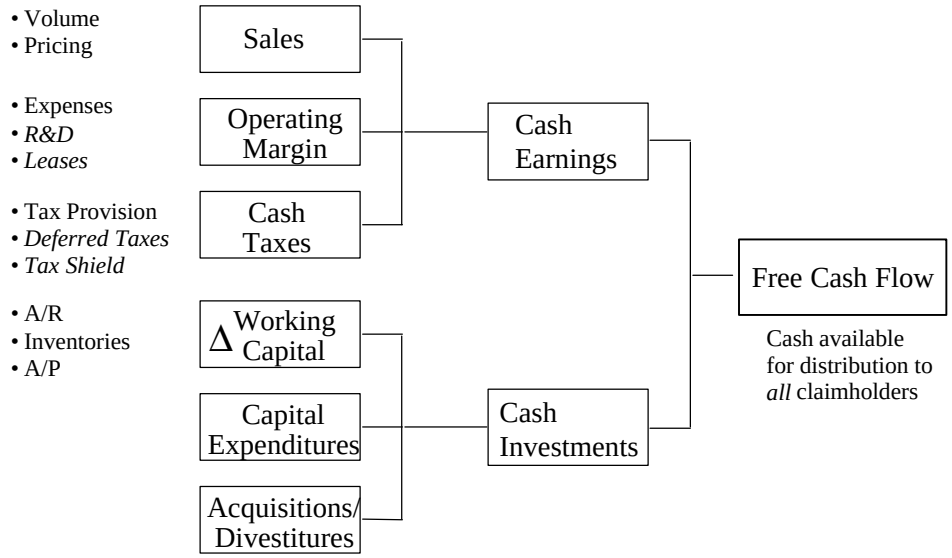
[3] "Wolf Bytes 20—Earnings are an Opinion, Cash is a Fact," Charles R. Wolf and Bob Hiler, Credit Suisse First Boston Equity Research, December 20, 1997.

[4] In accounting terms, we start with a firm's Earnings Before Interest and Taxes (EBIT). We then subtract cash taxes—the amount the company would have paid if it were entirely equity financed, with no interest payments on its debt to shield the company from taxes. Accordingly, to calculate cash taxes, we first add the tax shield from interest expense to the income tax provision reported on the income statement. We also have to add back the tax benefit of the implied interest expense of off-balance sheet debt-equivalents, such as capitalized operating leases. These tax shields will be equal to the interest expense multiplied by the marginal tax rate. Next, we do an equivalent calculation to add back the tax impact of non-operating income or expenses to isolate the tax burden of the firm's operating income. Finally, we subtract any increase in the deferred tax balance, since we wish to arrive at cash taxes paid; this difference represents taxes that have been accrued, but will not be paid until a later period.

[5] As a technical detail, note that we calculate cash earnings net of depreciation to measure a company's economic earnings. To make sure that free cash flow is not understated, we also calculate cash investments to be net of depreciation. That is, cash investment measures the cash that a company must invest over and above its annual depreciation. Also, to avoid seasonal fluctuations and quarterly swings, we calculate both figures by summing the appropriate numbers for the last twelve months.

cost of capital—a blended average of the firm's cost of debt and equity. The higher the cash flows, the more valuable the firm.

Figure 1
Drivers of Cash Earnings and Investments



Source: CSFB Analysis.

A company's propensity to generate or consume cash through earnings or investments determines the nature of its business model. As Figure 2 illustrates, companies tend to fall into one of four categories:

1. *Profitable Buildout*. Traditionally, successful companies have a cash *inflow* from earnings, and a cash *outflow* from its investments in working capital and bricks-and-mortar stores or factories. Companies that fit this profile are in the upper-left *Profitable Buildout* quadrant of our diagram.

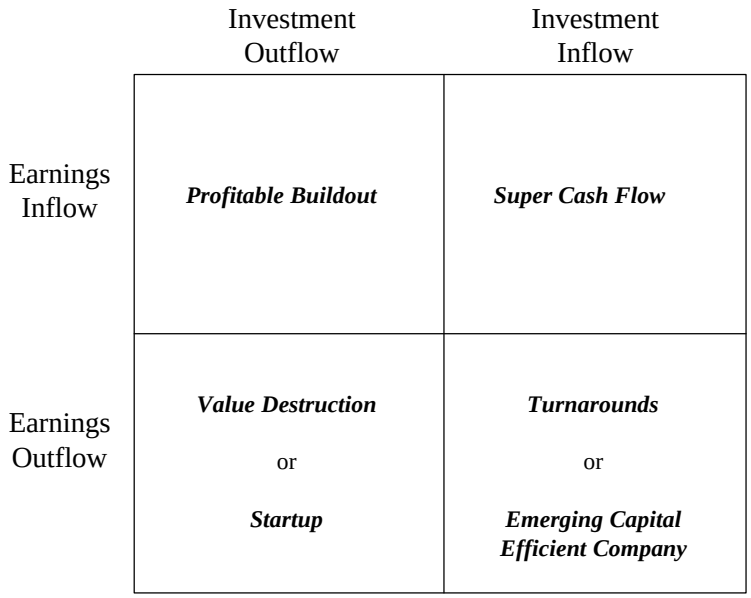
2. *Startups and Value Destroyers*. There are two kinds of companies in the lower-left quadrant, with earnings and investment as *outflows*. The first type is a *Startup* that is both investing in the business and incurring losses as it grows. The second type—a *Value Destroyer*—makes significant investments in negative-return businesses. Since both of these scenarios necessarily imply a high cash burn-rate, companies in this quadrant face bankruptcy unless they start generating positive cash flow—or have deep-pocketed owners.

3. *Turnarounds and Emerging Capital Efficient Companies*. Business models that are in the lower-right quadrant—companies with investment as an *inflow* and earnings as an *outflow*—tend to be quite uncommon. In one scenario, a struggling *Turnaround* company liberates cash tied up in its balance sheet, while incurring income statement losses. This usually is a temporary phenomenon. A second scenario involves an *Emerging Capital Efficient Company* with negative earnings, but with a capital efficient business model that generates cash from working capital as sales increase. Since most companies that can manage their working capital this efficiently are also profitable, this scenario occurs infrequently.

4. *Super Cash Flow*. Companies in the upper-right *Super Cash Flow* quadrant have both earnings and investment as a cash *inflow*. This kind of company is not only profitable, but embarks on a one-time or continuous reduction in its net

working capital. A company can do this by lowering the amount of capital it has tied up in current assets like accounts receivable or inventory, or by increasing the credit it receives from suppliers in the form of accounts payable. Only a company with a cash-efficient business model—its customers pay it *before* it has to pay its suppliers—can stay in this quadrant for long.

Figure 2
Cash Economics of Four Categories of Business Models



Source: CSFB Analysis.

This emerging new economy... has its own distinct opportunities and its own new rules. Those who play by the new rules will prosper; those who ignore them will not.

— Kevin Kelly[6]

Cash Economics in the Old versus the New Economy

One useful way of summarizing trends in cash earnings and investments—and shifts in business models—is to plot these figures as a time series in a scatter-plot. This diagram—which we have dubbed the C*ash Economics Matrix*—also shows a company's ability to generate free cash flow, as all points on a 45-degree diagonal will have the same free cash flow. Significantly, the diagonal running through the center of the chart distinguishes whether a company is generating positive or negative free cash flow.

[6] Kevin Kelly. "New Rules for the New Economy". Wired Magazine. September 1997. http://www.wired.com/wired/archive/5.09/newrules_pr.html.

Case Study #1: Barnes and Noble versus Amazon.com

To illustrate this approach, we calculated generated cash economics matrices for Barnes and Noble and Amazon.com—a pair of Old and New Economy companies largely competing in the book retailing industry (see Figure 3 on next page). What is most striking about this diagram is the contrast between the cash economics of the two companies:

Barnes and Noble shows it has consistently been in the *Profitable Buildout* quadrant—the company has generated a cash earnings *inflow* and a cash investment *outflow* for every quarter since its January 1995 fiscal year. Most striking is the magnitude of the company's cash investments. For example, for the twelve-month period ending on October 31, 1998, the company had to invest $118 million to stock the shelves with books and extend credit to customers. Offsetting this investment was $48 million in cash generated from increased accounts payable. Combined with $172 million invested in new megastores, this $70 million net investment in working capital resulted in a total cash investment of over $240 million.

Thus, even though Barnes and Noble generated almost $150 million in cash earnings over the same period, its large investments more than consumed this amount, translating into free cash flow of negative $95 million. Notably, Barnes and Noble's operations have not generated positive free cash flow since it has been public.

Amazon's cash economics matrix tells a completely different story. Indeed, as skeptics have emphasized, the company's low prices, high marketing expenses and relatively small sales have resulted in increasing losses. However, during the twelve-month periods ending on its two most recent quarters, Amazon has *generated* considerable cash from its balance sheet—an astounding feat for a growing company less than four years old.[7] This places Amazon squarely in the *Emerging Capital Efficient Company* quadrant.

For example, in 1998, Amazon's ship-to-order business required less than $40 million to stock its warehouses with books, extend credit to customers, and prepay expenses. At the same time, the company generated about $120 million in cash by increasing its accounts payable and other forms of interest-free cash loans from suppliers, employees and customers. This resulted in Amazon generating $80 million in cash from reducing its net working capital. Amazingly, the company only invested approximately $26 million in fixed assets—largely spent on computers—over this period. Thus, even though Amazon incurred cash losses of $58 million in 1998, it *generated* a net of $54 million from its balance sheet—coming very close to achieving positive free cash flow!

This comparison between B&N and Amazon yields two powerful insights:

- Amazon's combination of earnings *outflows* and investment *inflows* is the exact opposite of Barnes and Noble's more traditional combination of earnings *inflows* and investment *outflows*. With this reversal, it is not surprising that Amazon's high valuation confuses investors who rely on conventional tests designed to measure the success of Old Economy companies, such as having positive and growing accounting earnings per share.

- In the past, investors anxious to own companies that "just drown you in cash" have naturally focused on the income statement. However, as Amazon clearly

[7] To make this a "clean" number, we have excluded investments—in cash and stock—in web technology-enabling companies that generate little or no cash earnings.

demonstrates, looking at the balance sheet of a New Economy company can unveil an important source of cash. Investors must look at both financial statements, as it is free cash flow—the sum of a firm's cash earnings and investments—that drives shareholder value creation.

Figure 3A
Cash Economics Diagram
Barnes and Noble
January 1995 — October 1998

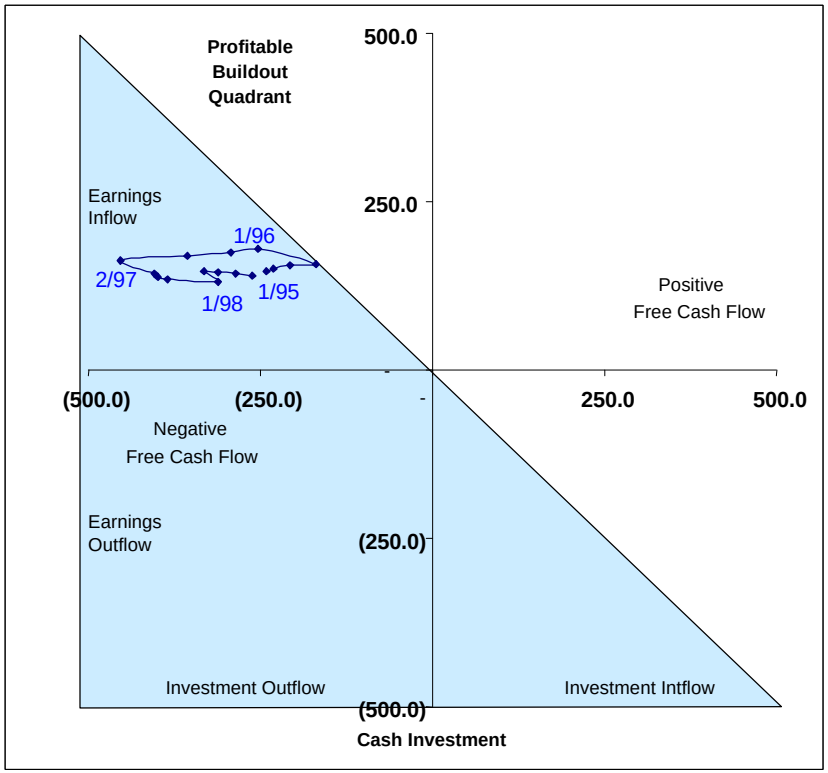
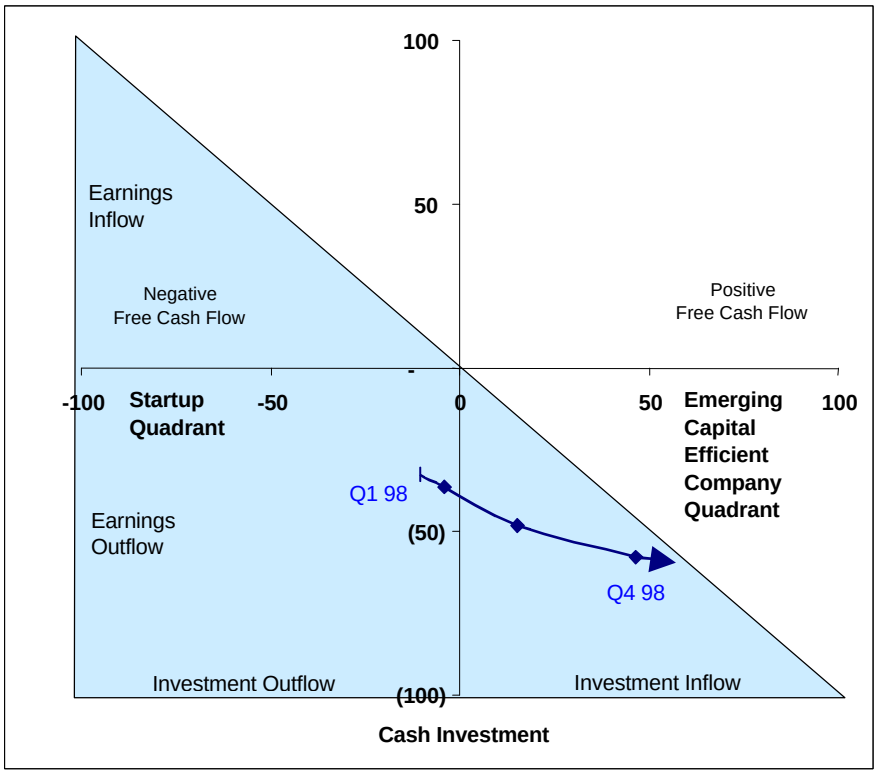


Figure 3B
Cash Economics Diagram
Amazon.com
1998



Source: Company SEC filings and CSFB Analysis.

Note: Cash Economics Matrices for Barnes and Noble and Amazon.com are not on the same scale.

Case Study #2: New York Times versus Yahoo!

Our second case study compares the New York Times—a largely Old Economy print media company—with Yahoo!—a decidedly New Economy company in the "New Media" industry. As with our previous case study, a side-by-side comparison of the cash economics matrices for these two companies reveals dramatically different business models (see Figure 4).

Along with most successful Old Economy companies, the New York Times generates a cash *inflow* from earnings and a cash *outflow* from investments—placing it in the *Profitable Buildout* quadrant. In the twelve months ending on September 27, 1998, the Times brought in $368 million in cash earnings from its New York Times, Boston Globe and regional newspapers, its magazines such as Golf Digest, its network and radio station, and its investments in paper mills and the International Herald Tribune. At the same time, the company made significant investments to support its earnings growth. For example, the company recently invested millions to upgrade the printing presses at its flagship New York Times newspaper to transform the "Old Gray Lady" into a full-color newspaper. Together with other investments, this resulted in a cash investment of $87 million during this period.[8] The New York Times is a successful and well run Old Economy company. However, the very nature of its capital-intensive print publishing business means that cash earnings growth will inevitably be accompanied by cash investments.

In contrast, Yahoo!'s on-line publishing model means that it can reach new customers and grow sales without spending lots of cash. This has several benefits. First, because consumers can access web sites from any Internet connection, Yahoo! can grow its revenues rapidly without having to endure long delays as it scales its physical infrastructure. This increases sales, and allows the company to "lock-in" customers before other competitors acquire them.[9] Second, because Yahoo! does not have to spend much money to serve an incremental customer, revenue growth translates rapidly into higher margins. This helped Yahoo! achieve sales of $201 million and cash earnings of $48 million in 1998. This growth is even more impressive when compared to the company's sales of $67 million and breakeven cash earnings in 1997.Further, the on-line business model allows the company to grow without cash-consuming investments. For example, the company only spent $8 million to increase its fixed asset base in 1998, despite an increase in sales of $134 million.

Yahoo! also receives large amounts of cash from customers, suppliers and employees that are classified as increases in a balance sheet liability. For example, one such line item—deferred revenues—generated $33 million in cash, as it ballooned from $5 million in 1997 to $38 million in 1998. This line item increased because Yahoo! usually guarantees that a certain number of customers will view its on-line ads. Thus, even though Yahoo! receives cash up front for its online ads, the company can not recognize this cash as revenue until the agreed-upon mini-

[8] Fortunately for shareholders, this still translated into positive free cash flow of $281 million, which helped fund the $422 million spent on share repurchases and dividends.

[9] "In contrast, the New York Times has to invest in physical printing presses—or partner with other newspapers—to expand distribution of its flagship "National Edition" to other regions. For example, it just announced the expansion of daily delivery to the non-metropolitan areas of Arizona. See "The New York Times Begins Printing National Edition At Phoenix Print Site". New York Times Company Press Release. http://biz.yahoo.com/bw/990212/ny_the_new_2.html. (February 12, 1999).

Figure 4A
Cash Economics Diagram
New York Times
September 1996 — September 1998

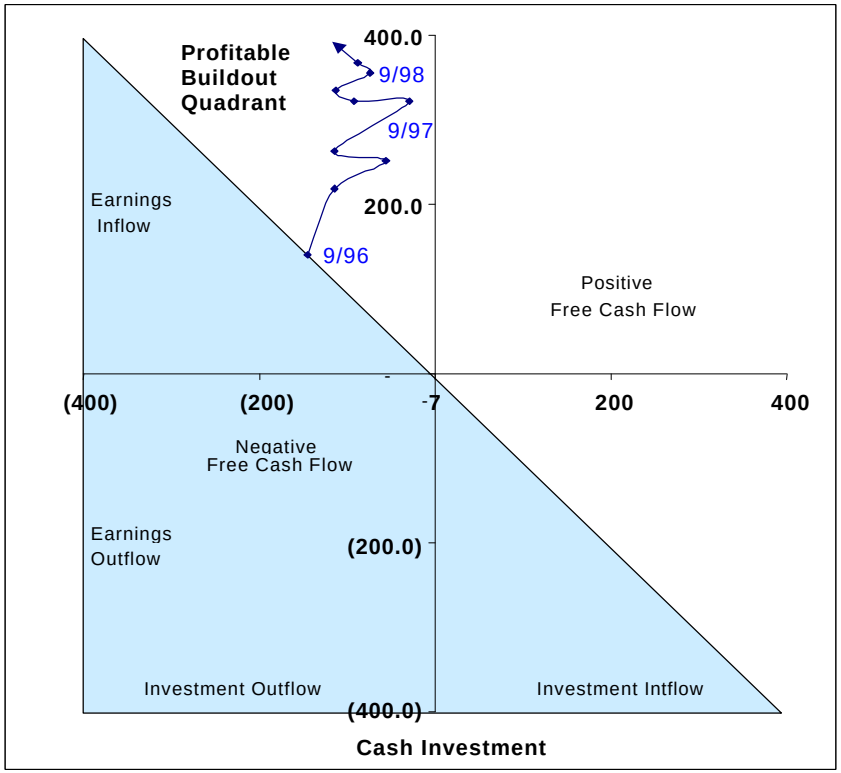
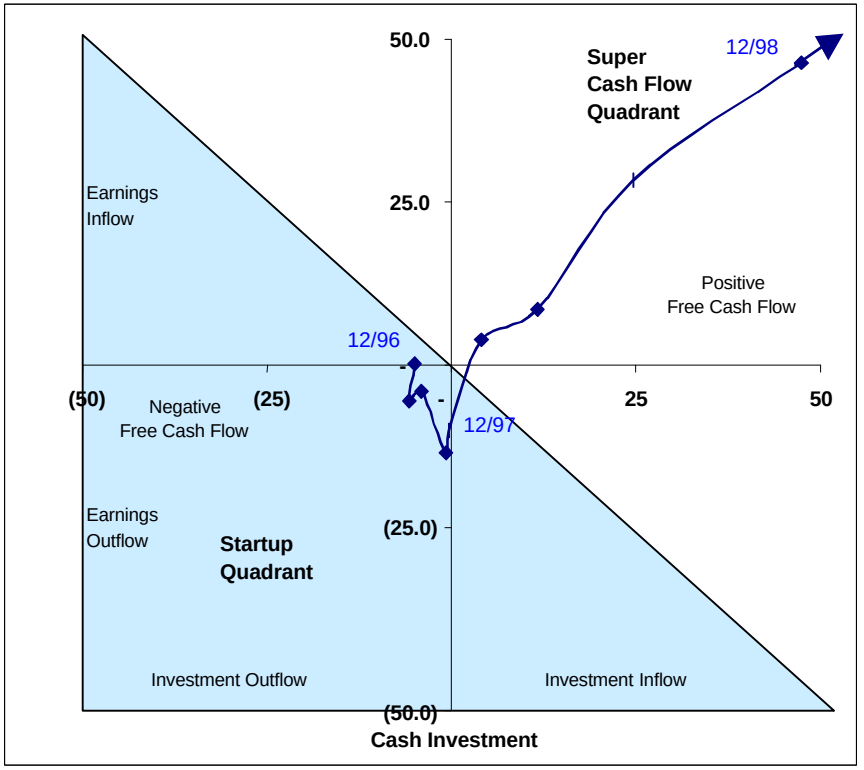


Figure 4B
Cash Economics Diagram
Yahoo!
December 1996 — December 1998



Source: Company SEC filings and CSFB Analysis.
Note: Cash Economics Matrices for New York Times and Yahoo! are not on the same scale.

mum number of customers view the ad.[10] Note that if Yahoo! did recognize this cash as revenue, its sales growth rate in 1998 would increase from 199% to 248%. All together, Yahoo! generated $62 million in cash in the form of increases in deferred revenues, accounts payable and accrued expenses. At the same time, the company only consumed $14 million in cash by extending accounts receivable credit to its customers. Thus, the company's working capital generated a net of $54 million in 1998.

This amount more than covered the company's investment of $8 million in fixed assets, resulting in a net cash *inflow* from investments of $46 million. As the company also generated cash earnings of $48 million, Yahoo! managed to generate a cash *inflow* from its income statement *and* balance sheet, making it one of the rare companies in the *Super Cash Flow* quadrant.

This case study provides three further insights about Old versus New Economy companies:

- The scalability of a New Economy company's business model means that cash earnings can quickly reverse from losses to profits—and then grow at a much faster rate than sales. For example, Yahoo!'s trailing twelve month sales has grown at a 32% rate for the last 3 quarters, while its trailing cash earnings have grown at 127%—about four times that rate. Further, because Yahoo!'s cash inflow from investments also grew at a similar rate, the company's overall free cash flow grew at 128% during this period.

- Cash earnings for an Old Economy company will typically *overstate* a company's free cash flow. For example, for the twelve months ending on September 27, 1998, the New York Times generated free cash flow of $281 million—only 76% of its cash earnings of $368 million.

- On the other hand, cash earnings for a New Economy company like Yahoo! can dramatically *understate* the company's total free cash flow. Indeed, Yahoo!'s free cash flow of $94 million in 1998 is approximately double its cash earnings of $48 million.

[10] This increase in cash will only be captured with a detailed balance sheet analysis, showing the importance of analyzing more than a company's income statement.

[AOL] indicated they expect to be self-funding within twelve months. The core of the bearish argument on AOL is that it is cash negative and requires infusions of cash to keep operating. The earnings they report are not real earnings because AOL is not really making any money, when money is defined as having free cash flow after tax. ... Consequently, the fact that this company expects to get cash neutral or cash positive in twelve months is extremely bullish.

— Bill Miler[11]
President, Legg Mason Fund Advisors

Cash Economics Lifecycle in the Old versus the New Economy

After calculating cash economics matrices for a slew of Old and New Economy companies, it becomes evident that each category follows a distinct trend over time. In fact, the pattern is so clear that we can generally say that Old Economy companies have a certain cash economics lifecycle. Further, although the cash economics of New Economy companies differ dramatically from their Old Economy counterparts, they too have their own lifecycle.

Cash Economics Lifecycle of the Typical Old Economy Company

Like all companies, Old Economy companies tend to start in the *Startup* quadrant. However, every successful Old Economy company that we studied moved into the *Profitable Buildout* quadrant, where it spends the majority of the rest of its life. A prime example of this is Wal-Mart. Like most mature and successful companies with a bricks-and-mortar infrastructure, Wal-Mart has enjoyed an *inflow* from cash earnings, while incurring an *outflow* from its investments for 17 out of its last 20 quarters (see Figure 5A).[12] For example, Wal-Mart generated $5.4 billion from cash earnings in the twelve months ending on October 31, 1998.

However, as the company is still opening new stores and expanding internationally, it also invested $3.1 billion in fixed assets during this period. Typically, Wal-Mart also invests in working capital to support this growth. However, by paying its bills at a slower rate than it bought new inventory, the company achieved a secular improvement in working capital management and actually generated an impressive $1.4 billion. This resulted in a total cash investment outflow of approximately $1.7 billion. In total, then, Wal-Mart generated positive free cash flow of $3.6 billion in this period.

Just in case one thinks that Wal-Mart's current cash economics are a temporary phenomenon, we also calculated a similar matrix for the company from 1973 to 1975 (see Figure 5B).[13] Similarly to its recent history, the Wal-Mart of this period was also in the *Profitable Buildout* quadrant.

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[11] "Bill Miller's Mutual Fund Forum." http://www.leggmason.com/Funds/fundform2.html. August 12, 1996.

[12] One point of note is that Wal-Mart did have 3 quarters—the 9 months from November 1996 and until July 1997—in the *Super Cash Flow* quadrant with cash inflows from earnings *and* investment. This resulted from a secular improvement in Wal-Mart's ability to generate earnings without tying up so much cash in working capital. Specifically, over the 12 months ending on April 30, 1997, Wal-Mart reduced cash tied up in current assets—such as accounts receivable, inventory, and prepaid expenses—by over $600 million, while increasing cash advances from suppliers—in the form of accounts payable and other current liabilities—by an impressive $1.9 billion. This generated over $2.5 billion in cash, which more than covered its approximately $1.4 billion investment in new stores, netting an approximately $1.2 billion investment inflow.. Wal-Mart has continued to improve its working capital management, although not to the extent of generating a cash investment inflow since that period.

[13] Note that while Amazon is being called the "Wal-Mart of the Web", it currently has drastically different cash economics than Wal-Mart did when its revenues were at a similar run-rate.

Figure 5A
Cash Economics Diagram
Wal-Mart
January 1994— October 1998

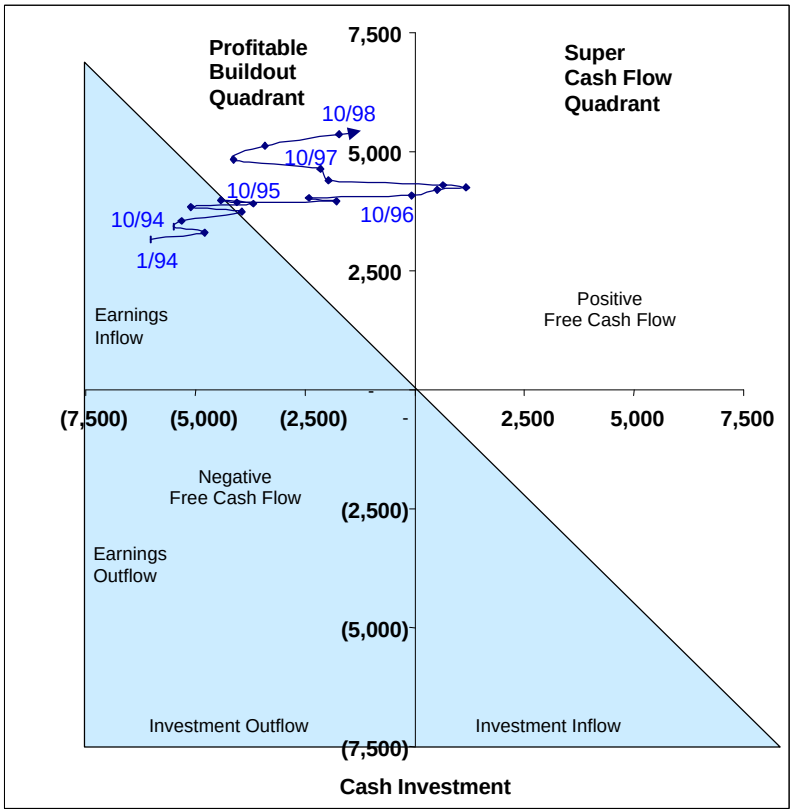
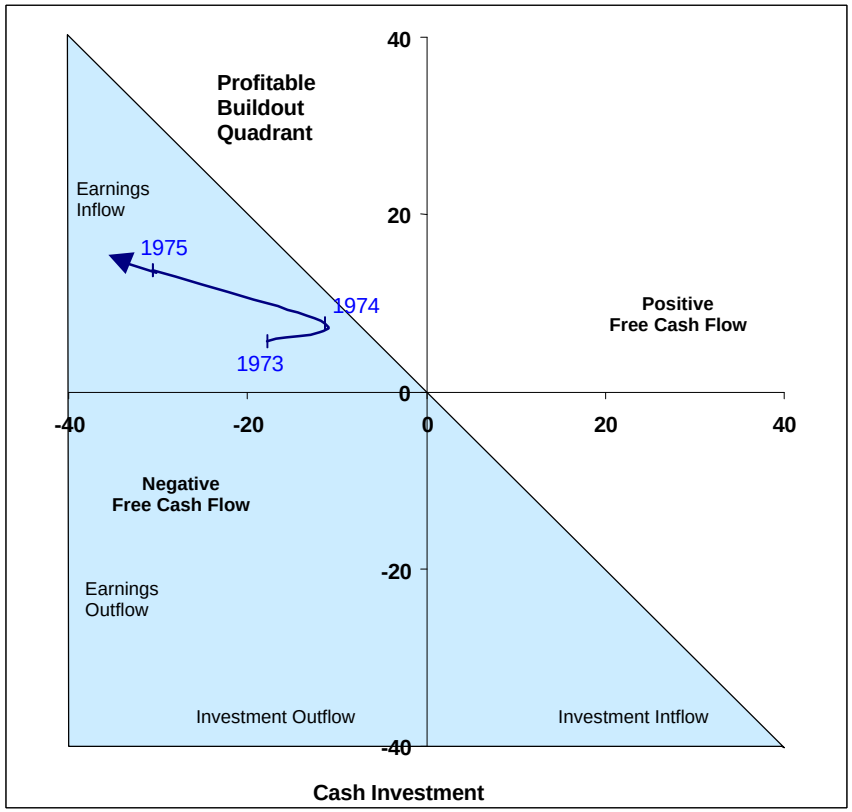


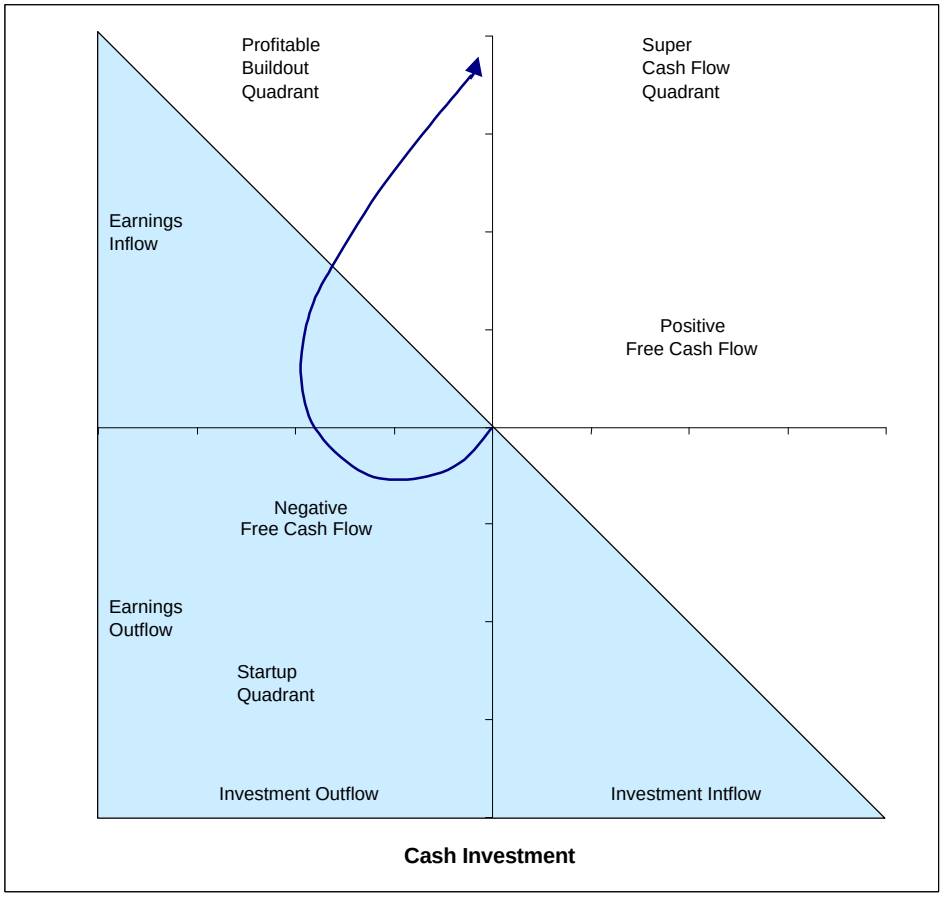
Figure 5B
Cash Economics Diagram
Wal-Mart
1973 — 1975



Source: Company SEC filings and CSFB Analysis.
Note: Cash Economics Matrices for different times in Wal-Mart's history are not on the same scale.

Generalizing from our 4 Old Economy matrices—including Barnes and Noble, the New York Times, and a nascent and mature Wal-Mart—we can see a distinct trend. After a stint in the *Startup* quadrant, most successful Old Economy companies become cash earnings positive. After making increasing cash investments, diminishing marginal returns eventually forces a company to lower its investments until its annual investment nears its economic depreciation, resulting in a net investment of approximately zero and a stable cash earnings base (this is represented graphically in Figure 6).[14]

Figure 6
Cash Economics Matrix
Average Old Economy Company



Source: CSFB Analysis.

Cash Economics Lifecycle of the Typical New Economy Company

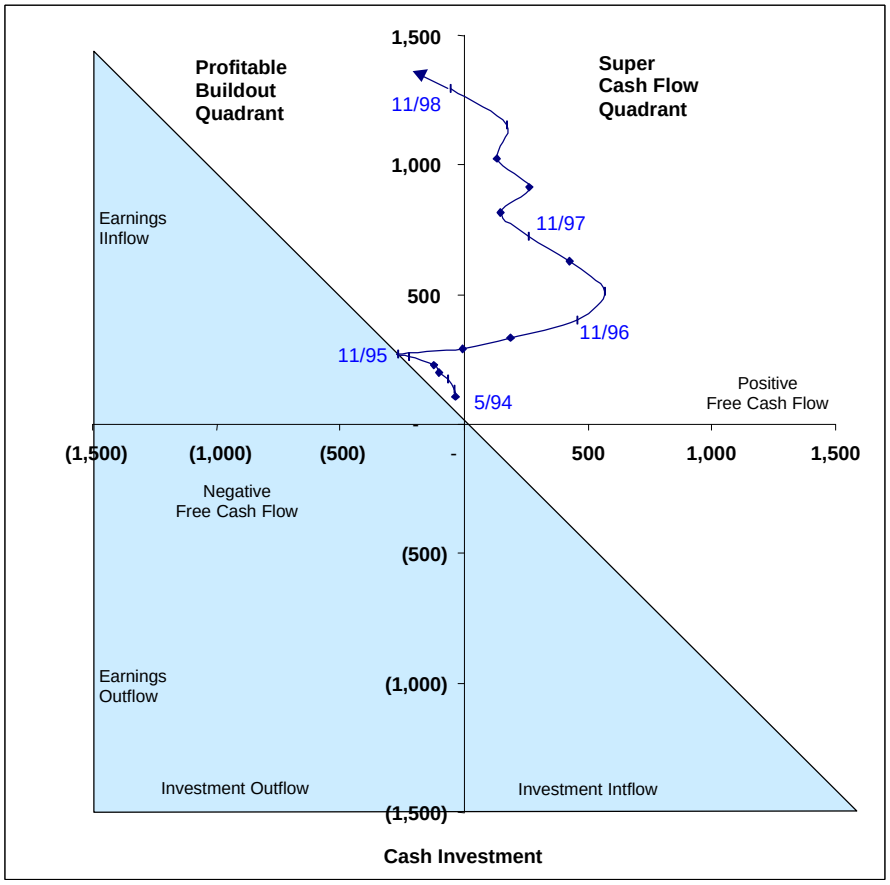
The cash economics lifecycle of a New Economy company tends to follow a dramatically different pattern. New Economy companies also start in the *Startup* quadrant, but as Amazon's cash economic matrix indicates, a favorable cash conversion cycle often translates into a cash *inflow* from investment, even in the

14

face of mounting losses. This moves them to the *Emerging Capital Efficient Company* quadrant.

Then, if all goes well, New Economy companies evolve into the *Super Cash Flow* quadrant. Yahoo!'s most recent quarters attest to this pattern. Another example is Dell Computer, which builds personal computers to the custom specifications of customers who order from mail-order catalogs, and increasingly, from the company's Internet web site (see Figure 7). For over two years—except for the two most recent quarters—Dell generated a cash inflow from cash earnings and investments, as its ability to generate cash from its working capital has more than paid for its investments in fixed assets.[15]

Figure 7
Cash Economics Matrix
Dell Computer
May 1994 – November 1998

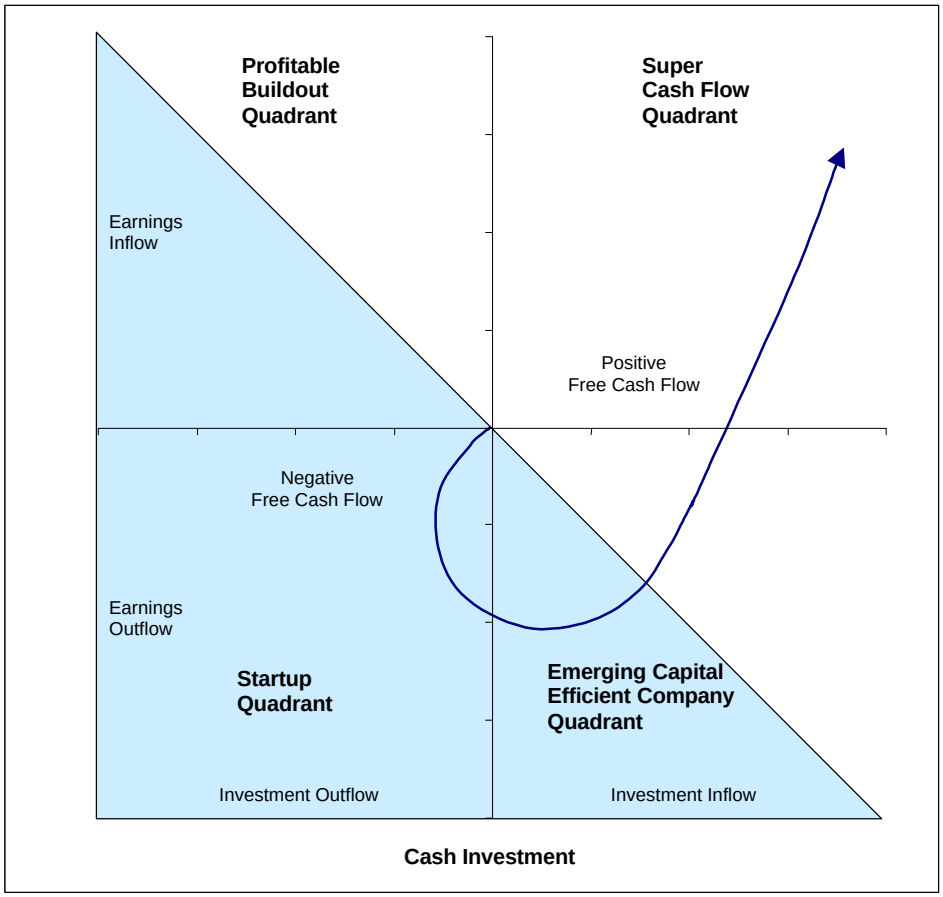


[15] In the two most recent quarters, Dell has continued to have negative working capital, i.e. its working capital is still financed by interest-free cash loans from suppliers, customers and employees. However, perhaps owing to Dell's increased sales to large business accounts with longer sales and payment cycles, the company has actually invested net cash in its working capital, at least temporarily moving from the *Super Cash Flow* to the *Profitable Buildout* quadrant. We do not believe that this invalidates our New Economy company lifecycle theory, as it represents a start-up cost for Dell's new target market, rather than a continuation of growth from its familiar markets.

Source: CSFB Analysis.

Generalizing from our 3 New Economy matrices—including Amazon.com, Yahoo! and Dell—we see another distinct trend, albeit one different from their Old Economy counterparts. After starting the *Startup* quadrant, many New Economy companies move into the *Emerging Capital Efficient Company* quadrant. Then, as their business model scales and they start to report earnings, both cash earnings and investments generate cash inflows. This places them in the *Super Cash Flow* quadrant (this is represented graphically in Figure 8).

Figure 8
Cash Economics Matrix
Average New Economy Company



Source: CSFB Analysis.

In The Theory of Investment Value*, written over 50 years ago, John Burr Williams set forth the equation for value, which we condense here: The value of any stock, bond or business is determined by the cash inflows and outflows—discounted at the appropriate interest rate—that can be expected to occur during the remaining life of the asset.*

— Warren Buffett[16]

Valuation in the Old versus New Economy

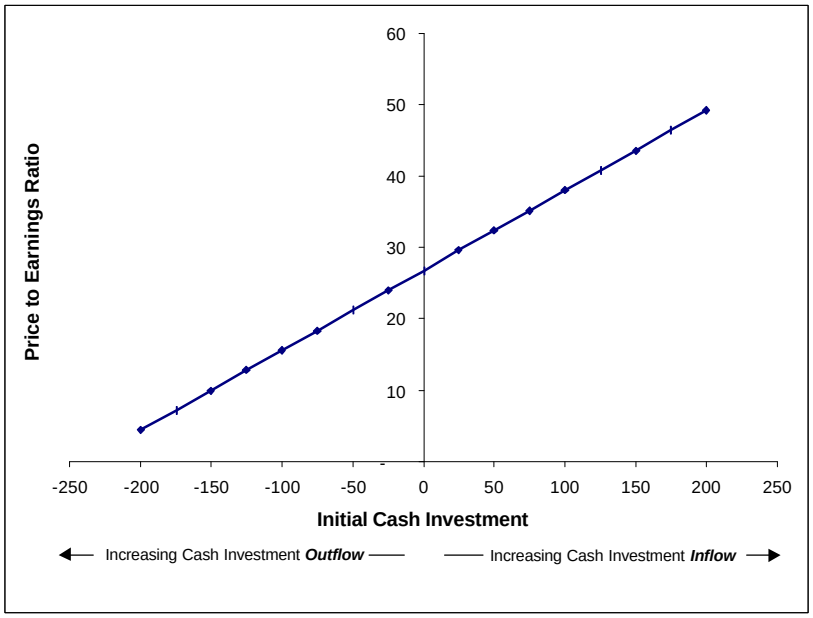
Investors care about the cash economics of businesses because they determine the magnitude, timing, and riskiness of future cash flows. And as Buffett notes, the value of any stock is the present value of these cash flows.

Because New Economy companies have dramatically different cash flows than Old Economy companies, we would expect them to have dramatically different valuations as well. To demonstrate this theoretical point, we valued a range of companies with different cash economics. Specifically, we assumed the companies had initial cash earnings of $100, which grew at a constant rate of 15% for 11 years. We also assumed that each company had different initial cash investment requirements—ranging from a cash *outflow* of $(200) to a cash *inflow* of $200—which also grew at a constant rate of 15% for ten years.

We can sum the cash earnings and investments to obtain a projected stream of free cash flows for each company. Using a cost of capital of 10%, we performed a discounted cash flow analysis to value each hypothetical company. We then plotted the resulting price-to-earnings ratio versus the initial cash investments for each company (see Figure 9).

[16] Letters to Shareholders. 1992. http://www.berkshirehathaway.com/letters/1992.html.

Figure 9
Price to Earnings Ratio versus Initial Cash Investment



Source: CSFB Analysis.

As we would expect, all things equal, the larger the cash *inflow* from cash investments, the more valuable the company. Conversely, a larger cash *outflow* from cash investments translates into a lower valuation.

We see this pattern in the real world as well. The Internet companies we profiled all have significantly less investment needs than their Old Economy counterparts. Thus, we believe that there are solid fundamental underpinnings behind the high valuations in the Internet sector. (see Table 1).

Table 1
Valuation Metrics for Old and New Economy Companies

Company	Price to Sales		Enterprise Value to Sales		Price to Earnings	
	1999E	2000E	1999E	2000E	1999E	2000E
	in millions		in millions		per share	
Amazon	14.5	9.5	14.5	9.5	NMF	NMF
Barnes and Noble	0.5	0.5	1.2	1.1	24.2	18.2
Yahoo!	50.0	38.7	48.7	37.7	419.9	330.6
New York Times	2.3	2.1	2.5	2.3	19.4	17.4
Dell Computer	4.2	3.1	4.1	3.0	55.6	41.5
Wal-Mart	1.2	1.1	1.3	1.2	38.1	33.6

Source: FactSet, CSFB Estimates, ValueLine Estimates.

Conclusion

The high valuations accorded to Internet companies may be the most prominent symptom of the shift towards knowledge-based New Economy companies. As

people, ideas and networks continue to become the major sources of competitive advantage for companies, we believe this shift will only become more intractable. Hence, we believe that an understanding of the different cash economics of New Economy companies is essential—not only for the technology investors of today, but for the generalist investors of tomorrow.

N.B.: CREDIT SUISSE FIRST BOSTON CORPORATION may have, within the last three years, served as a manager or co-manager of a public offering of securities for or makes a primary market in issues of any or all of the companies mentioned.

All prices as of 2/25/99.

Amazon.com (AMZN, 125, Buy) *
American Online (AOL, 87 3/16, Buy) *
Barnes and Noble (BKS, 28 ¾, NR) *
Borders Book Group (BGP, 13 ¾, NR) *
The New York Times (NYT, 32 1/16, Buy) *
Wal-Mart (WMT, 85, Buy) *
Yahoo! (YHOO, 155 3/8, Buy) *

* Covered by a different CSFB analyst.

Table 2
Amazon's Accumulated Cash Investments, or Invested Capital
in millions, 1996 to present

	Q4/96	Q1/97	Q2/97	Q3/97	Q4/97	Q1/98	Q2/98	Q3/98	Q4/98
Assets									
Cash and ST Investments	6.2	7.2	56.4	48.2	125.1	116.8	339.9	337.3	373.4
Excess cash	1.2	2.2	51.4	43.2	120.1	111.8	334.9	332.3	368.4
Required cash	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Inventories	0.6	0.9	1.7	2.7	9.0	11.7	17.0	19.8	29.5
Prepaid expenses and other	0.3	0.9	1.2	1.8	3.3	4.4	12.5	17.6	21.3
Current Assets	**5.9**	**6.9**	**7.8**	**9.5**	**17.3**	**21.1**	**34.5**	**42.4**	**55.8**
Accounts payable	2.9	5.7	10.3	15.4	32.7	34.4	47.6	60.0	113.3
Accrued advertising	0.6	1.3	3.2	-	3.5	5.3	10.0	11.9	13.1
Accrued product development	0.5	-	-	-	-	8.1	13.7	26.9	-
Other liabilites and accrued expenses	0.9	2.1	3.9	4.5	6.2	-	-	-	34.5
Non-Interest Bearing Current Liabilities	**4.9**	**9.0**	**17.4**	**19.8**	**42.3**	**47.8**	**71.2**	**98.8**	**160.9**
Net Working Capital	**1.0**	**(2.1)**	**(9.5)**	**(10.3)**	**(25.0)**	**(26.7)**	**(36.7)**	**(56.4)**	**(105.1)**
Net P,P&E	1.0	1.5	3.6	4.4	9.3	9.8	14.0	23.8	29.8
Present Value of Oper Leases	4.1	16.7	29.0	39.5	38.5	38.5	38.5	38.5	38.5
Deposits	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.6	0.6
Deferred charges	-	-	-	-	2.2	2.0	7.6	7.6	7.4
Phantom goodwill from pooling acquisition of PlanetAll	-	-	-	-	-	-	-	87.8	87.8
Goodwill and other purchased intangibles	-	-	-	-	-	-	52.4	213.1	186.4
Total accumulated amortization	-	-	-	-	-	-	5.4	21.6	45.8
Fixed Assets	**5.2**	**18.4**	**32.9**	**44.2**	**50.1**	**50.6**	**118.2**	**392.9**	**396.3**
Invested capital	***6.3***	***16.3***	***23.4***	***33.9***	***25.1***	***23.9***	***81.5***	***336.5***	***291.2***

Source: Company SEC filings and CSFB Analysis.

Table 3
Amazon's Cash Earnings, or Net Operating Profit After Taxes
in millions, 1996 to present

	Q1/97	Q2/97	Q3/97	Q4/97	Q1/98	Q2/98	Q3/98	Q4/98
Net Sales	16.0	27.9	37.9	66.0	87.4	116.0	153.7	252.9
Total COS	12.5	22.6	30.7	53.1	68.1	89.8	118.8	199.5
Gross income	3.5	5.2	7.2	12.9	19.3	26.2	34.9	53.5
Marketing and sales	3.9	7.8	11.0	16.3	19.5	26.5	37.5	49.6
Product development	1.6	2.8	3.6	4.5	6.7	8.1	13.4	18.6
General and administrative	1.1	1.7	1.8	1.9	2.0	3.3	5.0	5.6
M&A related costs	-	-	-	-	-	5.4	20.5	24.2
Operating Expenses	6.6	12.3	16.4	22.7	28.2	43.2	76.4	98.0
Adjusted EBIT	(3.1)	(7.1)	(9.2)	(9.9)	(8.9)	(17.0)	(41.5)	(44.6)
+ Goodwill amortization	-	-	-	-	-	5.4	20.5	24.2
Adjusted EBITA	(3.1)	(7.1)	(9.2)	(9.9)	(8.9)	(11.6)	(21.0)	(20.3)
+ Interest expense of cap O L	0.1	0.3	0.6	0.8	0.8	0.8	0.8	0.8
Net Adjustment for Capitalized Expenses	0.1	0.3	0.6	0.8	0.8	0.8	0.8	0.8
Adjusted Net Operating Profit	(3.0)	(6.7)	(8.6)	(9.1)	(8.1)	(10.8)	(20.2)	(19.6)
+ Change in reserves	-	-	-	-	-	-	-	1.0
Income Equivalents	-	-	-	-	-	-	-	1.0
Net Operating Profit Before Taxes	(3.0)	(6.7)	(8.6)	(9.1)	(8.1)	(10.8)	(20.2)	(18.6)
Income Tax Provision	-	-	-	-	-	-	-	-
+ Net tax impact from interest	(0.0)	(0.1)	(0.2)	(0.2)	(0.6)	0.1	1.5	1.3
+ Tax benefit from capitalization of op leases	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.3
- Increase deferred taxes	-	-	-	-	-	-	-	-
Cash Operating Taxes	0.0	(0.0)	(0.0)	0.1	(0.3)	0.4	1.7	1.6
Net Operating Profit After Taxes	(3.0)	(6.7)	(8.6)	(9.2)	(7.8)	(11.2)	(22.0)	(20.1)

Source: Company SEC filings and CSFB Analysis.

Table 4
Summary of Amazon's Cash Earnings and Investments
in millions, 1996 to present

	Q1/97	Q2/97	Q3/97	Q4/97	Q1/98	Q2/98	Q3/98	Q4/98
Quarterly Cash Earnings	(3.0)	(6.7)	(8.6)	(9.2)	(7.8)	(11.2)	(22.0)	(20.1)
Quarterly Changes:								
Inventory	0.4	0.7	1.1	6.2	2.7	5.4	2.7	9.7
Prepaid expenses and other	0.6	0.2	0.6	1.5	1.1	8.1	5.1	3.7
Curent Assets	1.0	0.9	1.7	7.8	3.8	13.4	7.9	13.4
Accounts payable	2.8	4.7	5.1	17.3	1.7	13.2	12.5	53.2
Accrued advertising	0.7	1.9	(3.2)	3.5	1.9	4.6	1.9	1.2
Accrued product development	(0.5)	-	-	-	8.1	5.6	13.2	(26.9)
Other liabilites and accrued expenses	1.1	1.8	0.6	1.7	(6.2)	-	-	34.5
Current Liabilities	4.1	8.4	2.5	22.5	5.5	23.4	27.5	62.1
Investment in net working capital	(3.1)	(7.5)	(0.8)	(14.7)	(1.7)	(10.0)	(19.7)	(48.7)
Investment in fixed assets	13.1	14.6	11.3	5.9	0.4	9.8	10.1	5.8
Acquisitions	-	-	-	-	-	57.8	264.6	(2.4)
Total Investment	10.0	7.1	10.5	(8.8)	(1.2)	57.6	255.0	(45.3)
Free cash flow	(13.0)	(13.8)	(19.1)	(0.4)	(6.6)	(68.8)	(277.0)	25.2
Normalized Cash Investment Inflow (Outflow)	(10.0)	(7.1)	(10.5)	8.8	1.2	0.2	9.6	42.9
Cash Earnings Inflow (Outflow)	(3.0)	(6.7)	(8.6)	(9.2)	(7.8)	(11.2)	(22.0)	(20.1)
Normalized Free Cash Flow	(13.0)	(13.8)	(19.1)	(0.4)	(6.6)	(11.0)	(12.4)	22.8
Trailing Twelve Months:								
Normalized Cash Investment Inflow (Outflow)					(7.6)	(0.3)	19.8	53.9
Cash Earnings Inflow (Outflow)					(32.3)	(36.8)	(50.2)	(61.1)
Normalized Free Cash Flow					(39.9)	(37.1)	(30.4)	(7.2)

Source: Company SEC filings and CSFB Analysis.

Note: "Normalized" Cash Investment does not include stock or cash spent on acquisition of web technology companies with little or no cash earnings

Table 5
Barnes and Noble's Accumulated Cash Investments, or Invested Capital
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
Assets	4/27/96	7/27/96	10/26/96	2/1/97	5/3/97	8/2/97	11/1/97	1/31/98	5/2/98	8/1/98	10/31/98
Cash	9.3	16.6	19.0	12.4	10.3	8.8	11.8	12.7	10.8	9.6	10.6
Excess cash	4.3	11.6	14.0	7.4	5.3	3.8	6.8	7.7	5.8	4.6	5.6
Required cash	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Receivables	42.0	44.5	61.4	45.6	40.4	47.0	63.5	43.9	30.0	39.4	66.2
Inventory	705.6	682.7	827.8	732.2	731.5	733.3	936.9	852.1	856.6	821.3	1,056.4
LIFO reserve	7.8	6.4	6.0	8.8	8.8	8.3	7.3	5.1	4.4	3.6	2.9
Prepaid expenses and other current	45.7	51.2	42.6	76.7	76.7	86.9	88.9	68.9	99.2	92.7	72.9
Curent Assets	806.1	789.8	942.8	868.3	862.4	880.5	1,101.6	975.0	995.1	962.1	1,203.4
Accounts payable	348.0	323.0	477.9	373.3	364.2	394.0	555.6	459.8	432.7	392.3	623.9
Other current liabilities	180.1	182.6	187.4	240.9	209.2	191.3	218.2	253.1	215.5	201.2	182.0
Current Liabilities	528.0	505.6	665.3	614.3	573.3	585.3	773.8	712.8	648.2	593.6	805.9
Net Working Capital	278.1	284.2	277.5	254.0	289.0	295.2	327.9	262.1	346.9	368.5	397.4
Net P,P&E	358.8	387.9	421.6	434.8	444.0	450.8	458.1	482.1	479.9	500.2	524.5
Present value of operating leases	1,346.9	1,426.3	1,505.8	1,585.2	1,617.0	1,648.9	1,680.8	1,712.6	1,744.5	1,776.4	1,808.2
Intangible assets, net	96.0	95.2	94.2	93.5	92.7	91.9	91.1	90.2	89.4	88.6	87.8
Other noncurrent assets	59.1	59.4	65.1	51.4	51.6	59.2	59.4	41.2	40.7	42.5	40.8
After-tax asset writedown	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
Fixed Assets	1,941.3	2,049.2	2,167.1	2,245.3	2,285.7	2,331.2	2,369.8	2,406.7	2,435.0	2,488.2	2,541.8
Invested capital	2,219.3	2,333.4	2,444.6	2,499.4	2,574.8	2,626.4	2,697.6	2,668.8	2,781.9	2,856.7	2,939.2

Source: Company SEC filings and CSFB Analysis.

Table 6
Barnes and Noble's Cash Earnings, or Net Operating Profit After Taxes
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
	4/27/96	7/27/96	10/26/96	2/1/97	5/3/97	8/2/97	11/1/97	1/31/98	5/2/98	8/1/98	10/31/98
Net sales	508.8	524.3	532.6	1,231.2	595.7	617.7	614.8	619.8	666.3	675.0	674.1
Cost of sales, buying and occupancy	386.6	394.4	397.8	840.5	450.8	461.8	452.9	419.8	492.1	492.7	487.7
Gross income	122.2	129.9	134.7	390.7	144.9	155.9	161.9	200.0	174.2	182.3	186.4
Selling and administrative expenses	104.2	105.2	110.0	221.0	120.2	126.2	129.1	90.2	149.6	160.6	160.5
Depreciation and amortization	13.6	14.3	15.5	33.6	17.7	18.9	19.7	3.4	21.9	22.8	24.7
Pre-opening expenses	4.5	4.9	4.6	(1.1)	3.9	3.4	3.1	7.3	2.6	2.3	2.0
Total operating expenses	122.3	124.3	130.1	253.5	141.8	148.5	151.9	100.8	174.1	185.7	187.2
Adjusted EBIT	(0.1)	5.6	4.6	137.2	3.1	7.4	10.0	99.1	0.1	(3.4)	(0.8)
+ Goodwill amortization	-	-	-	-	-	-	-	-	-	-	-
Adjusted EBITA	(0.1)	5.6	4.6	137.2	3.1	7.4	10.0	99.1	0.1	(3.4)	(0.8)
+ Interest expense of capitalized operating leases	25.4	26.9	28.5	30.1	31.7	32.3	33.0	33.6	34.3	34.9	35.5
Net Adjustment for Capitalized Expenses	25.4	26.9	28.5	30.1	31.7	32.3	33.0	33.6	34.3	34.9	35.5
Adjusted Net Operating Profit	25.2	32.6	33.1	167.3	34.8	39.8	43.0	132.7	34.3	31.5	34.7
+ Decrease in LIFO reserve	0.5	1.4	0.4	(2.8)	-	0.5	1.0	2.2	0.8	0.8	0.8
Change in Capitalized Expenses	0.5	1.4	0.4	(2.8)	-	0.5	1.0	2.2	0.8	0.8	0.8
Net Operating Profit Before Taxes	24.7	31.2	32.7	170.1	34.8	39.3	42.0	130.5	33.6	30.7	33.9
Income tax provision	(3.1)	(1.8)	(2.4)	52.2	(2.7)	(0.9)	0.0	33.7	(2.3)	(4.0)	(3.2)
+ Net tax impact from interest	2.9	3.6	3.4	3.3	3.4	3.4	3.5	3.1	2.0	2.2	2.4
+ Tax benefit from capitalization of operating leases	8.9	9.4	10.0	10.5	11.1	11.3	11.5	11.8	12.0	12.2	12.4
- Increase deferred taxes	-	-	-	-	-	-	-	-	-	-	-
Cash operating taxes	8.7	11.2	10.9	66.1	11.8	13.8	15.1	48.7	11.7	10.4	11.7
Net Operating Profit After Taxes	16.0	20.0	21.8	104.0	23.0	25.5	26.9	81.9	21.9	20.3	22.3

Source: Company SEC filings and CSFB Analysis.

Table 7
Summary of Barnes and Noble's Cash Earnings and Investments
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
	4/27/96	7/27/96	10/26/96	2/1/97	5/3/97	8/2/97	11/1/97	1/31/98	5/2/98	8/1/98	10/31/98
Quarterly Cash Earnings	16.0	20.0	21.8	104.0	23.0	25.5	26.9	81.9	21.9	20.3	22.3
Quarterly Changes:											
Investment in net working capital	(47.5)	(6.1)	6.7	23.4	(35.0)	(6.1)	(32.7)	65.7	(84.8)	(21.6)	(28.9)
Investment in fixed plant	(126.2)	(107.9)	(117.9)	(78.2)	(40.4)	(45.5)	(38.6)	(36.9)	(28.3)	(53.2)	(53.6)
Quarterly Cash Investment	(173.7)	(114.1)	(111.2)	(54.7)	(75.4)	(51.6)	(71.2)	28.8	(113.1)	(74.8)	(82.5)
Free Cash Flow	(157.7)	(94.1)	(89.5)	49.2	(52.4)	(26.1)	(44.3)	110.7	(91.1)	(54.5)	(60.3)
Trailing Twelve Months:											
Receivables	(10.1)	(4.2)	5.7	3.5	1.6	(2.5)	(2.1)	1.7	10.4	7.6	(2.7)
Inventory & LIFO reserve	(194.5)	(161.3)	(40.0)	7.7	(26.9)	(52.5)	(110.4)	(116.2)	(120.7)	(83.4)	(115.1)
Prepaid expenses and other current assets	(16.0)	(19.4)	5.1	(27.2)	(31.0)	(35.7)	(46.3)	7.8	(22.5)	(5.8)	16.0
Accounts payable	58.1	40.9	(63.1)	(42.4)	16.2	71.0	77.7	86.5	68.5	(1.7)	68.3
Other current liabilities	57.9	64.3	63.3	34.9	29.1	8.7	30.7	12.1	6.4	10.0	(36.1)
Investment in net working capital	(104.5)	(79.7)	(29.0)	(23.5)	(11.0)	(11.0)	(50.4)	(8.1)	(57.8)	(73.3)	(69.6)
Investment in fixed plant	(360.4)	(400.3)	(455.7)	(430.2)	(344.5)	(282.0)	(202.6)	(161.4)	(149.3)	(157.0)	(172.0)
Cash Investments Inflow (Outflow)	(384.4)	(399.6)	(404.3)	(453.7)	(355.5)	(293.0)	(253.0)	(169.4)	(207.1)	(230.3)	(241.6)
Cash Earnings Inflow (Outflow)	134.2	138.2	143.0	161.7	168.7	174.2	179.4	157.3	156.2	151.0	146.4
Free Cash Flow	(250.2)	(261.4)	(261.3)	(292.0)	(186.7)	(118.8)	(73.6)	(12.1)	(50.9)	(79.3)	(95.3)

Source: Company SEC filings and CSFB Analysis.

Table 8
Yahoo!'s Accumulated Cash Investments, or Invested Capital
in millions, 1996 to present

	4Q/96	1Q/97	2Q/97	3Q/97	4Q/97	1Q/98	2Q/98	3Q/98	4Q/98
	12/31/96	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/31/98	12/31/98
Cash and cash equivalents	31.9	33.2	61.6	55.8	62.5	45.0	89.3	161.9	482.4
Short-term investments	60.7	56.6	37.3	42.7	27.8	71.9	53.9	226.7	-
Long-term investments	9.7	5.1	-	4.0	16.7	7.6	4.1	61.9	41.3
Actual cash and ST investments	102.3	94.9	98.9	102.5	107.0	124.5	147.2	450.5	523.8
Excess cash	97.3	89.9	93.9	97.5	102.0	119.5	142.2	445.5	518.8
Required cash	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Accounts receivable	4.6	4.9	6.7	8.3	11.0	13.0	16.8	19.8	24.8
Prepaid expense	0.4	4.7	3.9	7.2	5.9	4.8	4.2	3.7	-
Curent Assets	10.0	14.6	15.6	20.5	21.9	22.7	26.0	28.5	29.8
Accounts payable	1.0	1.0	0.8	1.9	4.7	4.3	4.5	5.8	6.5
Accrued expenses and other current liabilities	4.4	4.1	6.5	8.0	12.5	17.8	19.5	22.6	39.6
Deferred revenue	1.2	1.2	1.8	4.3	4.9	10.1	18.5	28.6	38.3
Current Liabilities	6.6	6.3	9.1	14.2	22.0	32.2	42.5	57.0	84.4
Net Working Capital	3.4	8.3	6.6	6.4	(0.2)	(9.5)	(16.5)	(28.5)	(54.6)
Net P,P&E	2.2	2.8	3.3	4.2	7.0	8.0	9.0	10.8	15.2
Present Value of Oper Leases	0.9	3.1	5.3	7.5	9.7	9.7	9.7	9.7	9.7
Investment in Yahoo! Japan	0.7	0.8	0.9	1.2	2.8	2.9	2.9	2.9	2.9
Other	-	2.6	2.1	2.3	8.1	7.2	11.5	9.8	55.2
Written-off in-process R&D from Viaweb	-	-	-	-	-	-	44.1	44.1	44.1
Accumulated goodwill amortization from Viaweb	-	-	-	-	-	-	0.1	0.5	0.5
Phantom goodwill from buyout of Visa's interest in Yahoo! Marketplace			21.5	21.5	21.5	21.5	21.5	21.5	21.5
Phantom goodwill from pooling acquisition of Four11	-	-	-	64.7	64.7	64.7	64.7	64.7	64.7
Phantom goodwill from pooling acquisition of WebCal	-	-	-	-	-	-	-	30.3	30.3
Phantom goodwill from pooling acquisition of Yoyodyne	-	-	-	-	-	-	-	-	12.4
Fixed Assets	3.9	9.3	33.0	101.4	113.8	114.0	163.4	194.2	256.5
Invested capital	7.3	17.6	39.6	107.7	113.7	104.5	146.9	165.7	201.9

Source: Company SEC filings and CSFB Analysis.

Table 9
Yahoo!'s Cash Earnings, or Net Operating Profit After Taxes
in millions, 1996 to present

	1Q/97	2Q/97	3Q/97	4Q/97	1Q/98	2Q/98	3Q/98	4Q/98
	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/31/98	12/31/97
Net revenue	9.5	13.5	17.3	27.1	30.2	41.2	53.6	76.4
Cost of revenue	1.2	2.0	2.0	4.1	3.9	4.7	5.6	7.9
Gross income	8.3	11.5	15.3	23.0	26.3	36.5	48.0	68.5
Sales and marketing	6.6	8.7	11.2	17.5	16.1	20.0	22.9	30.5
Product development	1.9	2.1	2.6	4.6	4.5	5.0	5.7	7.1
General and administrative	1.2	1.5	1.4	2.5	2.0	2.2	2.4	3.6
Total operating expenses	9.6	12.2	15.1	24.6	22.6	27.3	31.0	41.2
Adjusted EBIT	(1.4)	(0.8)	0.2	(1.6)	3.7	9.2	17.0	27.3
Goodwill amortization	-	-	-	-	-	0.1	0.4	0.4
Adjusted EBITA	(1.4)	(0.8)	0.2	(1.6)	3.7	9.3	17.3	27.7
+ Interest expense of capitalized operating leases	0.1	0.1	0.8	0.8	0.8	0.8	0.8	0.8
Net Adjustment for Capitalized Expenses	0.1	0.1	0.8	0.8	0.8	0.8	0.8	0.8
Net Operating Profit Before Taxes	(1.3)	(0.7)	1.0	(0.8)	4.4	10.1	18.1	28.5
Income tax provision	0.0	(0.0)	-	-	1.1	3.1	5.6	8.1
+ Net tax impact from interest	(0.5)	(0.4)	(0.4)	(0.4)	(0.5)	(0.6)	(1.8)	(2.1)
+ Tax benefit from capitalization of operating leases	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
+ Tax benefit from minority interest	(0.1)	(0.1)	(0.1)	(0.0)	(0.1)	(0.0)	(0.0)	0.1
- Increase deferred taxes	-	-	-	-	-	-	-	-
Cash Operating Taxes	(0.5)	(0.5)	(0.2)	(0.2)	0.8	2.6	4.0	6.4
Net Operating Profit After Taxes	(0.8)	(0.2)	1.2	(0.7)	3.7	7.5	14.1	22.1

Source: Company SEC filings and CSFB Analysis.

Table 10
Summary of Yahoo!'s Cash Earnings and Investments
in millions, 1996 to present

	1Q/97	2Q/97	3Q/97	4Q/97	1Q/98	2Q/98	3Q/98	4Q/98
	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/31/98	12/31/97
Quarterly Cash Earnings	(0.7)	0.0	1.1	(0.7)	3.7	7.5	14.1	22.1
Quarterly Changes:								
Investment in net working capital	4.9	(1.7)	(0.2)	(6.5)	(9.3)	(7.0)	(12.0)	(26.1)
Investment in fixed assets	2.8	2.7	3.1	5.0	1.0	1.0	1.8	4.4
Acquisitions	2.7	21.0	65.2	7.4	(0.8)	48.5	28.9	57.9
Total Investment	10.3	22.0	68.2	5.9	(9.2)	42.4	18.7	36.2
Free cash flow	(11.0)	(21.9)	(67.1)	(6.6)	12.9	(35.0)	(4.6)	(14.1)
Quarterly NOPAT	(0.7)	0.0	1.1	(0.7)	3.7	7.5	14.1	22.1
Normalized Cash Investment Inflow (Outflow)	7.7	0.9	2.9	(1.5)	(8.3)	(6.0)	(10.2)	(21.7)
Normalized Free Cash Flow	(8.3)	(0.9)	(1.8)	0.9	12.0	13.5	24.3	43.8
Trailing Twelve Months:								
Cash Earnings Inflow (Outflow)	(5.7)	(3.7)	(0.6)	(0.2)	4.2	11.6	24.6	47.4
Normalized Cash Investment Inflow (Outflow)	(7.8)	(8.4)	(11.3)	(10.0)	6.0	13.0	26.1	46.3
Normalized Free Cash Flow	(13.5)	(12.1)	(11.9)	(10.2)	10.2	24.6	50.7	93.6

Source: Company SEC filings and CSFB Analysis.
Note: Normalized Cash Investment does not include stock or cash spent on acquisition of web technology companies with little or no cash earnings

Table 11
New York Times' Accumulated Cash Investments, or Invested Capital
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98
	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/30/98
Cash	45.8	38.5	37.8	106.8	65.7	42.2	31.8
Excess cash	40.8	33.5	32.8	101.8	60.7	37.2	26.8
Required cash	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Accounts receivable, net	295.5	302.3	312.6	331.3	341.6	325.2	310.3
Inventories	37.7	31.7	30.2	32.1	38.1	36.9	34.6
Deferred subscription costs	-	-	-	-	-	-	-
Other current assets	90.3	89.8	93.8	145.6	150.0	115.0	115.0
Curent Assets	428.5	428.8	441.5	514.0	534.8	482.1	464.9
Accounts payable	199.9	175.3	186.1	189.6	168.1	172.9	174.7
Payrolls	73.9	82.7	96.1	103.5	69.1	75.8	83.2
Accrued expenses	259.8	236.3	233.0	217.7	249.9	166.0	152.9
Federal income taxes	-	-	-	-	-	-	-
Unexpired subscriptions	89.2	83.2	85.9	82.6	87.1	80.4	82.4
Current Liabilities	622.7	577.4	601.0	593.5	574.1	495.1	493.1
Net Working Capital	(194.2)	(148.7)	(159.5)	(79.4)	(39.3)	(13.0)	(28.2)
Investment in joint venture	137.0	137.1	137.3	133.1	135.7	130.8	128.3
Net PP&E	1,393.5	1,397.3	1,383.9	1,366.9	1,344.4	1,325.6	1,340.6
Intangible assets acquired	1,028.2	1,013.6	1,006.8	993.2	985.1	978.4	970.4
Accumulated amortization	189.9	198.6	204.4	210.8	218.9	225.7	233.7
Other intangible assets acquired	394.7	392.1	389.7	384.5	379.3	374.2	369.7
Accumulated amortization	27.5	31.8	38.7	44.0	49.2	54.2	59.1
Miscellaneous assets	140.8	133.4	138.9	145.5	155.2	152.4	153.5
Present value of operating leases	51.2	51.5	51.9	52.3	52.3	52.3	52.3
Fixed Assets	3,362.8	3,355.3	3,351.7	3,330.3	3,320.1	3,293.7	3,307.7
Invested capital	3,168.6	3,206.7	3,192.2	3,250.9	3,280.8	3,280.7	3,279.5

Source: Company SEC filings and CSFB Analysis.

Table 12
New York Times'Cash Earnings, or Net Operating Profit After Taxes
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98
	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/30/98
Total revenues	692.5	721.9	683.6	768.4	722.6	749.2	682.7
Cost of sales	341.3	335.9	350.0	385.1	363.3	358.2	357.7
Gross income	351.2	386.1	333.6	383.3	359.3	391.0	325.0
Selling, general and administrative expenses	249.9	258.7	242.2	248.2	242.9	245.9	223.6
Adjusted EBIT	101.3	127.3	91.3	135.2	116.4	145.1	101.4
+ Goodwill amortization	9.9	12.9	12.7	11.7	13.3	11.8	13.0
Adjusted EBITA	111.1	140.3	104.0	146.9	129.7	156.9	114.4
+ Interest expense of capitalized operating leases	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Net Adjustment for Capitalized Expenses	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Adjusted Net Operating Profit	112.1	141.3	105.0	147.9	130.8	157.9	115.4
Change in other reserves	-	-	-	-	-	-	-
Income Equivalents	-	-	-	-	-	-	-
Net Operating Profit Before Taxes	112.1	141.3	105.0	147.9	130.8	157.9	115.4
Income tax provision	42.4	34.1	36.8	61.8	50.6	63.8	41.4
+ Net tax impact from interest	2.9	4.0	4.1	3.7	3.6	3.7	3.6
+ Tax benefit from capitalization of operating leases	0.4	0.4	0.4	0.4	0.4	0.4	0.4
+ Net tax impact of non-operating charges/gains	(0.5)	(1.1)	(1.2)	(5.8)	(3.1)	(4.2)	(1.9)
- Increase deferred taxes	0.1	(33.6)	(0.2)	31.8	0.7	(2.7)	4.6
Cash operating taxes	45.1	70.9	40.3	28.3	50.7	66.3	38.9
Net Operating Profit After Taxes	67.0	70.4	64.8	119.7	80.1	91.6	76.5

Source: Company SEC filings and CSFB Analysis.

Table 13
Summary of New York Times'Cash Earnings and Investments
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98
	3/31/97	6/30/97	9/30/97	12/31/97	3/31/98	6/30/98	9/30/98
Quarterly Cash Eaarnings	251.0	263.1	322.1	321.9	334.9	356.1	367.9
Quarterly Changes:							
Investment in net working capital	34.0	(45.5)	10.8	(80.1)	(40.1)	(26.3)	15.2
Investment in fixed assets	(43.3)	7.5	3.7	21.4	10.2	26.4	(14.0)
Total Cash Investment	(9.3)	(38.0)	14.5	(58.7)	(30.0)	0.1	1.2
Free Cash Flow	241.7	225.0	336.6	263.2	305.0	356.3	369.1
Trailing Twelve Months:							
Investment in net working capital	107.1	2.8	(6.5)	(80.7)	(154.9)	(135.7)	(131.3)
Iinvestment in fixed assets	(162.6)	(116.7)	(22.1)	(10.9)	42.6	61.6	43.9
Total Cash Investment Inflow (Outflow)	(55.5)	(113.9)	(28.6)	(91.6)	(112.2)	(74.0)	(87.3)
Cash Earnings Inflow (Outflow)	251.0	263.1	322.1	321.9	334.9	356.1	367.9
Free Cash Flow	195.5	149.2	293.5	230.3	222.7	282.1	280.6

Source: Company SEC filings and CSFB Analysis.

Table 14
Wal-Mart's Accumulated Cash Investments, or Invested Capital
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
Assets	4/30/96	7/31/96	10/31/96	1/31/97	4/30/97	7/31/97	10/31/97	1/31/98	4/30/98	7/31/98	10/31/98
Cash	32	24	76	883	726	930	728	1,447	771	884	1,009
Excess cash	27	19	71	878	721	925	723	1,442	766	879	1,004
Required cash	5	5	5	5	5	5	5	5	5	5	5
Receivables	908	879	1,171	845	854	919	1,310	976	1,009	1,008	1,401
Inventory	16,213	16,375	19,044	15,897	15,919	16,397	19,303	16,497	17,512	17,617	20,620
LIFO reserve	307	304	300	296	309	322	335	348	361	374	387
Prepaid expenses and other	626	680	733	368	334	288	293	432	398	428	488
Curent Assets	18,059	18,243	21,253	17,411	17,421	17,931	21,246	18,258	19,285	19,432	22,901
Accounts payable	7,375	7,204	9,367	7,628	7,747	7,885	10,518	9,126	9,765	9,844	11,424
Other current liabilities	2,720	2,641	3,698	2,711	4,251	3,376	3,794	4,193	4,260	4,227	5,953
Current Liabilities	10,095	9,845	13,065	10,339	11,998	11,261	14,312	13,319	14,025	14,071	17,377
Net Working Capital	7,964	8,398	8,188	7,072	5,423	6,670	6,934	4,939	5,260	5,361	5,524
Net P,P&E	17,539	17,878	18,146	18,333	18,495	18,773	20,708	21,469	21,815	22,254	23,041
Net capitalized leases	1,800	1,893	1,903	1,991	1,984	1,974	2,052	2,137	2,189	2,144	2,250
Present value of operating leases	2,867	2,848	2,829	2,809	2,772	2,735	2,698	2,661	2,661	2,661	2,661
Other fixed assets	1,131	1,169	1,134	1,287	1,465	1,392	1,778	2,426	2,350	2,539	2,430
Fixed Assets	23,337	23,788	24,012	24,420	24,716	24,874	27,236	28,693	29,015	29,598	30,382
Invested capital	31,302	32,186	32,200	31,492	30,139	31,544	34,170	33,632	34,275	34,959	35,906

Source: Company SEC filings and CSFB Analysis.

Table 15
Wal-Mart's Cash Earnings, or Net Operating Profit After Taxes
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
	4/30/96	7/31/96	10/31/96	1/31/97	4/30/97	7/31/97	10/31/97	1/31/98	4/30/98	7/31/98	10/31/98
Net sales	22,772	25,587	25,644	30,856	25,409	28,386	28,777	35,386	29,819	33,521	33,509
Other income, net	229	257	433	368	275	313	341	412	338	359	415
Total revenues	23,001	25,844	26,077	31,224	25,684	28,699	29,118	35,798	30,157	33,880	33,924
Cost of sales	18,064	20,376	20,450	24,773	20,127	22,478	22,680	28,153	23,526	26,422	26,380
Gross income	4,937	5,468	5,627	6,451	5,557	6,221	6,438	7,645	6,631	7,458	7,544
Operating, selling and general and administrative expenses	3,810	4,130	4,329	4,519	4,333	4,767	4,958	5,300	5,073	5,577	5,691
Adjusted EBIT	1,127	1,338	1,298	1,932	1,224	1,454	1,480	2,345	1,558	1,881	1,853
+ Goodwill amortization	-	-	-	-	-	-	-	-	-	-	-
Adjusted EBITA	1,127	1,338	1,298	1,932	1,224	1,454	1,480	2,345	1,558	1,881	1,853
+ Interest expense of capitalized operating leases	231	229	228	226	225	222	219	216	213	213	213
Net Adjustment for Capitalized Expenses	231	229	228	226	225	222	219	216	213	213	213
Adjusted Net Operating Profit	1,358	1,567	1,526	2,158	1,449	1,676	1,699	2,561	1,771	2,094	2,066
Change in LIFO reserve	-	-	-	-	-	-	-	-	-	-	-
Change in other reserves	-	-	-	-	-	-	-	-	-	-	-
Income Equivalents	-	-	-	-	-	-	-	-	-	-	-
Net Operating Profit Before Taxes	1,358	1,567	1,526	2,158	1,449	1,676	1,699	2,561	1,771	2,094	2,066
Income tax provision	336	414	402	642	383	467	474	791	505	627	611
+ Net tax impact from interest	77	76	74	68	66	67	69	72	68	65	71
+ Tax benefit from capitalization of operating leases	81	80	80	79	79	78	77	76	75	75	75
+ Tax benefit from minority interest	-	-	-	-	6	22	11	12	11	-	-
- Increase deferred taxes	-	-	-	-	-	-	-	-	-	-	-
Cash operating taxes	494	571	556	789	533	634	631	951	658	766	756
Net Operating After Taxes	864	997	970	1,369	915	1,042	1,068	1,610	1,113	1,328	1,310

Source: Company SEC filings and CSFB Analysis.

Table 16
Summary of Wal-Mart's Cash Earnings and Investments
in millions, 1Q97 to present

	1Q97	2Q97	3Q97	4Q97	1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99
	4/30/96	7/31/96	10/31/96	1/31/97	4/30/97	7/31/97	10/31/97	1/31/98	4/30/98	7/31/98	10/31/98
Quarterly Cash Eaarnings	864	997	970	1,369	915	1,042	1,068	1,610	1,113	1,328	1,310
Quarterly Changes:											
Investment in net working capital	935	(433)	210	1,116	1,649	(1,247)	(264)	1,995	(321)	(101)	(163)
Investment in fixed assets	(241)	(451)	(224)	(409)	(296)	(158)	(2,362)	(1,457)	(322)	(583)	(784)
Total Cash Investment	694	(884)	(14)	707	1,353	(1,405)	(2,626)	538	(643)	(684)	(947)
Free Cash Flow	170	1,881	984	662	(438)	2,447	3,694	1,072	1,756	2,012	2,257
Trailing Twelve Months:											
Investment inflow (outflow) in:											
Receivables	(85)	(21)	41	8	54	(40)	(139)	(131)	(155)	(89)	(91)
Inventory + LIFO reserve	(1,479)	(1,238)	(658)	107	292	(41)	(294)	(652)	(1,645)	(1,272)	(1,369)
Prepaid expenses and other	16	(112)	(67)	38	292	392	440	(64)	(64)	(140)	(195)
Investment inflow (outflow) in:											
Accounts payable	(1,421)	(766)	(837)	(1,186)	(372)	(681)	(1,151)	(1,498)	(2,018)	(1,959)	(906)
Other current liabilities	(551)	(279)	(1,089)	(488)	(1,531)	(735)	(96)	(1,482)	(9)	(851)	(2,159)
Investment in net working capital	424	(326)	1,242	1,827	2,541	1,728	1,254	2,133	163	1,309	1,410
Iinvestment in fixed assets	(2,211)	(2,080)	(1,314)	(1,324)	(1,379)	(1,086)	(3,224)	(4,272)	(4,298)	(4,724)	(3,146)
Total Cash Investment Inflow (Outflow)	(1,787)	(2,405)	(71)	503	1,162	641	(1,970)	(2,139)	(4,135)	(3,415)	(1,736)
Cash Earnings Inflow (Outflow)	3,951	4,026	4,083	4,200	4,251	4,296	4,395	4,636	4,833	5,119	5,360
Free Cash Flow	2,164	1,620	4,011	4,703	5,413	4,938	2,424	2,497	698	1,704	3,624

Source: Company SEC filings and CSFB Analysis.

Table 17
Wal-Mart's Accumulated Cash Investments, or Invested Capital
in millions, 1972-1975

	1972	1973	1974	1975
Cash	2.0	2.2	2.2	3.2
Excess cash	-	0.2	0.2	1.2
Required cash	2.0	2.0	2.0	2.0
Accounts receivable	0.4	1.1	1.2	1.4
Inventory	18.5	29.4	41.5	50.6
LIFO Reserve	-	-	-	4.7
Prepaid Expenses	0.2	0.1	0.3	0.7
Curent Assets	**21.1**	**32.6**	**45.0**	**59.4**
Accounts payable	6.8	8.0	13.3	14.1
Accrued liabilities	1.5	2.4	3.0	4.2
Income taxes payable	1.1	1.8	1.3	1.4
Current Liabilities	**9.5**	**12.1**	**17.7**	**19.7**
Net Working Capital	**11.6**	**20.5**	**27.4**	**39.7**
Net P,P&E	7.1	13.2	14.7	19.2
Present Value of Oper Leases	10.6	13.4	16.3	29.1
Other fixed assets	0.3	0.2	0.2	0.2
Fixed Assets	**18.0**	**26.8**	**31.1**	**48.4**
Invested capital	***29.6***	***47.3***	***58.5***	***88.1***

Source: Company SEC filings and CSFB Analysis.

Table 18
Wal-Mart's Cash Earnings, or Net Operating Profit After Taxes
in millions, 1972 - 1975

	1972	1973	1974	1975
Net sales	$ 78.0	$ 124.9	$ 167.6	$ 236.2
Rentals from leased departments	0.7	1.1	1.4	1.8
Other income, net	0.2	0.5	0.4	0.7
Total Revenues	78.9	126.4	169.4	238.7
Total COS	58.6	93.1	123.3	176.6
Gross income	20.3	33.4	46.0	62.1
-S, G & A	14.3	23.8	33.0	48.1
Operating Expenses	14.3	23.8	33.0	48.1
Adjusted EBIT	6.0	9.5	13.0	14.0
+ Goodwill Amortization	-	-	-	-
Adjusted EBITA	6.0	9.5	13.0	14.0
+ Interest expense of capitalized operating leases	0.9	1.1	1.3	2.4
Net Adjustment for Capitalized Expenses	0.9	1.1	1.3	2.4
Adjusted Net Operating Profit	6.9	10.6	14.3	16.4
Change in LIFO Reserve	-	-	-	4.7
Change in Other Reserves	-	-	-	-
Income Equivalents	-	-	-	4.7
Net Operating Profit Before Taxes	6.9	10.6	14.3	21.1
	5.6	8.9	11.9	12.2
Income Tax Provision	2.7	4.3	5.7	5.9
+ Net Tax Impact From Interest	0.2	0.3	0.5	0.8
+ Tax Benefit from Capitalization of Op Leases	0.4	0.5	0.6	1.1
- Increase Deferred Taxes	-	0.2	0.2	0.3
Cash Operating Taxes	3.3	4.9	6.6	7.5
Net Operating Profit After Taxes	3.6	5.7	7.7	13.6

Source: Company SEC filings and CSFB Analysis.

Table 19
Summary of Wal-Mart's Cash Earnings and Investments
in millions, 1973 - 1975

	1973	1974	1975
Investment inflow (outflow) in:			
Receivables	(0.7)	(0.1)	(0.2)
Inventory + LIFO reserve	(11.0)	(12.0)	(13.8)
Prepaid expenses and other	0.1	(0.3)	(0.4)
Investment inflow (outflow) in:			
Accounts payable	1.2	5.3	0.8
Accrued liabilities	0.8	0.7	1.1
Income taxes payable	0.6	(0.4)	0.1
Investment in net working capital	(8.9)	(6.9)	(12.3)
Iinvestment in fixed assets	(8.8)	(4.3)	(17.3)
Total Cash Investment Inflow (Outflow)	(17.7)	(11.2)	(29.6)
Cash Earnings Inflow (Outflow)	5.7	7.7	13.6
Free Cash Flow	(11.9)	(3.5)	(16.0)

Source: Company SEC filings and CSFB Analysis.

Table 20
Delll's Accumulated Cash Investments, or Invested Capital
in millions, 1997 to present

	Q1/98	Q2/98	Q3/98	Q4/98	Q1/99	Q2/99	Q3/99	Q4/99
	5/4/97	8/3/97	11/2/97	2/1/98	5/3/98	8/2/98	11/1/98	1/29/99
Cash and marketable securities	1442	1515	1615	1844	2409	2618	2797	3181
Excess cash	1437	1510	1610	1839	2404	2613	2792	3176
Required cash	5	5	5	5	5	5	5	5
Accounts receivable	991	1133	1350	1486	1536	1800	2157	2094
Inventory	266	273	301	233	254	288	281	273
Other	280	331	341	349	349	394	680	791
Curent Assets	1542	1742	1997	2073	2144	2487	3123	3163
Accounts payable	1146	1285	1488	1643	1727	1928	2313	2397
Accrued and other	707	778	891	1054	996	1209	1345	1298
Income taxes	0	0	0	0	0	0	0	0
Current Liabilities	1853	2063	2379	2697	2723	3137	3658	3695
Net Working Capital	-311	-321	-382	-624	-579	-650	-535	-532
Net P,P&E	252	288	301	342	391	446	511	523
Present Value of Oper Leases	78	76	74	72	72	72	72	72
Other	12	12	13	14	15	14	16	15
Fixed Assets	342	376	388	428	478	532	599	610
Invested capital	31	55	6	-196	-101	-118	64	78

Source: Company SEC filings and CSFB Analysis.

Table 21
Dell's Cash Earnings, or Net Operating Profit After Taxes
in millions, 1997 to present

	Q1/98	Q2/98	Q3/98	Q4/98	Q1/99	Q2/99	Q3/99	Q4/99
	5/4/97	8/3/97	11/2/97	2/1/98	5/3/98	8/2/98	11/1/98	1/29/99
Net revenue	2,588	2,814	3,188	3,737	3,920	4,331	4,818	5,173
Cost of revenue	2,030	2,190	2,471	2,914	3,047	3,346	3,732	4,012
Gross income	558	624	717	823	873	985	1,086	1,161
Selling, general and administrative	240	280	312	370	388	436	471	492
Research, development and engineering	41	48	59	56	56	66	76	74
Total operating expenses	281	328	371	426	444	502	547	566
Adjusted EBIT	277	296	346	397	429	483	539	595
Goodwill Amortization	-	-	-	-	-	-	-	-
Adjusted EBITA	277	296	346	397	429	483	539	595
Interest Expense of Cap O L	2	2	2	2	2	2	2	2
Net Adjustment for Capitalized Expenses	2	2	2	2	2	2	2	2
Net Operating Profit Before Taxes	279	298	348	399	431	485	541	597
Income Tax Provision	89	96	111	128	131	148	164	182
+ Net Tax Impact From Interest	(4)	(5)	(5)	(5)	(2)	(4)	(3)	(4)
+ Tax Benefit from Capitalization of Op Leases	1	1	1	1	1	1	1	1
- Increase Deferred Taxes	-	-	-	-	-	-	-	-
Cash Operating Taxes	86	92	107	123	129	145	161	178
Net Operating Profit After Taxes	193	206	241	275	302	340	379	418

Source: Company SEC filings and CSFB Analysis.

Table 22
Summary of Dell's Cash Earnings and Investments
in millions, 1997 to present

	Q1/98	Q2/98	Q3/98	Q4/98	Q1/99	Q2/99	Q3/99	Q4/99
	5/4/97	8/3/97	11/2/97	2/1/98	5/3/98	8/2/98	11/1/98	1/29/99
Quarterly Cash Eaarnings	193	206	241	275	302	340	379	418
Quarterly Changes:								
Investment in net working capital	53	10	61	242	(45)	71	(115)	(3)
Investment in fixed assets	(16)	(34)	(12)	(40)	(50)	(54)	(67)	(11)
Total Cash Investment	37	(24)	49	202	(95)	17	(182)	(14)
Free cash flow	230	182	290	477	207	357	197	404
Trailing Twelve Months:								
Investment in net working capital	488	339	227	366	268	329	153	(92)
Investment in fixed assets	(62)	(80)	(78)	(102)	(136)	(156)	(211)	(182)
Total Cash Investment	426	259	149	264	132	173	(58)	(274)
NOPAT Inflow (Outflow)	627	724	820	915	1,024	1,158	1,296	1,439
Free cash flow	1,052	983	969	1,179	1,156	1,331	1,238	1,165

Source: Company SEC filings and CSFB Analysis.