

# Chapter 5

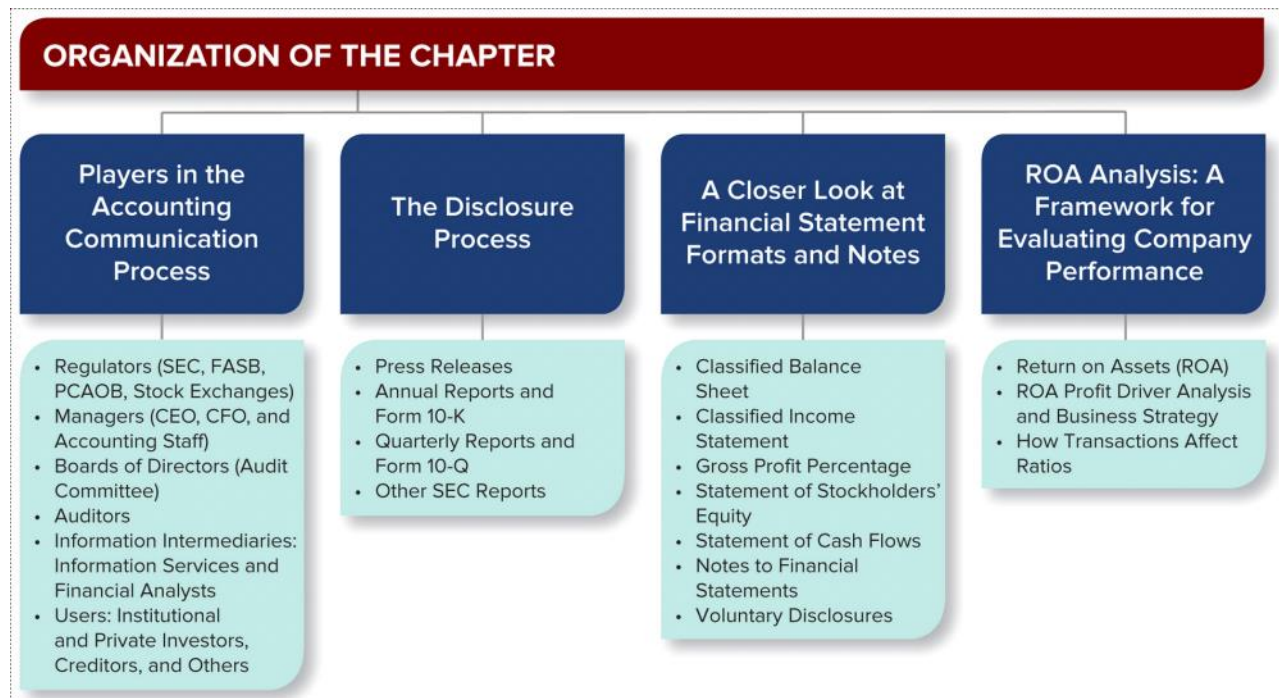
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## Communicating and Interpreting Accounting Information

By Yunhao Cao, for UGBA 102A Spring 2022 by Prof. Gary Pieroni.

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Financial statements reflect sales and profit growth, and conveys information to the stock market.

Financial statement will **ONLY affect a company's stock price** if the market believes in the **integrity of the financial communication process**.

## Understanding the Business

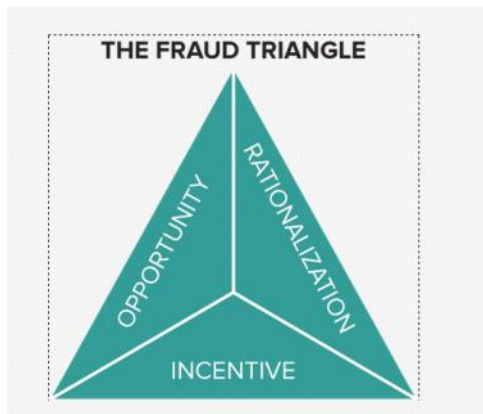
corporate governance: procedures designed to ensure that the company is managed in the interests of the shareholders.

Good corporate governance eases the company's access to capital, lowering both the costs of borrowing (interest rates) and the perceived riskiness of company's stock.

In an attempt to restore investor confidence, Congress passed the Public Accounting Reform and Investor Protection Act (the Sarbanes-Oxley Act), which strengthens financial reporting and corporate governance for public companies.

## The Fraud Triangle

Three conditions are necessary for financial fraud to occur.

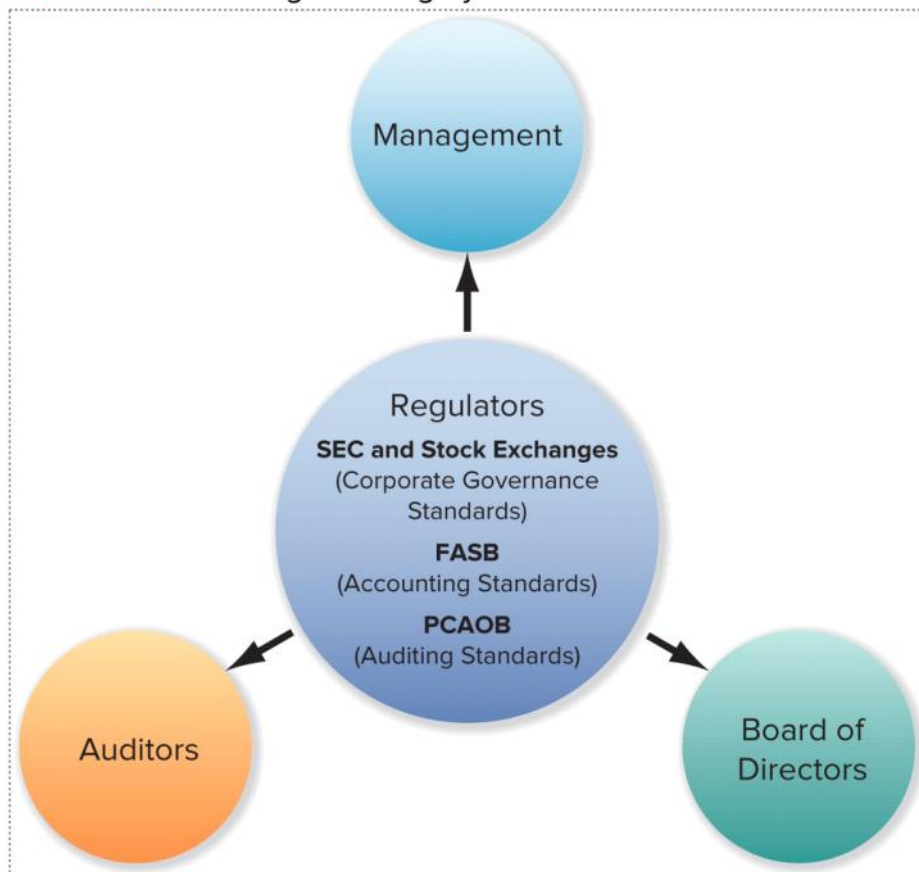


1. An incentive to commit fraud
2. The opportunity to commit fraud
3. The ability to rationalize(合理化) the misdeed(不当行为)

Ch. 2-4 focuses on how to prepare statements, now we'll look into people involved and regulations that govern the process.

## Major Actors Ensuring Financial Report Integrity

**EXHIBIT 5.1** Ensuring the Integrity of Financial Information



### Regulators

1. U.S. Securities and Exchange Commission (SEC)
  - a. To protect investors and maintain the integrity of the securities markets
  - b. Oversees work of FASB and PCAOB
  - c. Reviews reports filed with it for compliance with its standards
  - d. Investigates irregularities, punishes violators
2. Financial Accounting Standards Board (FASB)
  - a. Sets generally accepted accounting principles (GAAP)
3. Public Company Accounting Oversight Board (PCAOB)
  - a. Sets auditing standards for independent auditors(CPAs) of public companies

## Managers

1. Chief Executive Officer (CEO) & Chief Financial Officer(CFO)
  - a. Certify that:
    - i. Each report filed with the Securities and Exchange Commission does not contain any untrue material statement or omit a material fact and fairly presents in all material respects the financial condition, results of operations, and cash flows of the company.
    - ii. There are no significant deficiencies and material weaknesses in the internal controls over financial reporting.
    - iii. They have disclosed to the auditors and audit committee of the board any weaknesses in internal controls or any fraud involving management or other employees who have a significant role in financial reporting.

## Board of Directors (Audit Committee)

1. Elected by the stockholders
2. Oversees the CEO and other senior management in the competent and ethical operation of company on a day-to-day basis and ensures that the long-term interests of shareholders are being served

The Audit Committee of the board,

1. Must be composed of nonmanagement (independent) directors with financial knowledge
2. Responsible for ensuring that processes are in place for maintaining the integrity of the company's accounting, financial statement preparation, and financial reporting
3. Members meet separately with the auditors to discuss management's compliance with their financial reporting responsibilities

## Auditors

SEC requires publicly traded companies to have their statements and their control systems over the financial reporting process audited by an independent registered public accounting firm (independent auditor) following standards established by the FACOB.

Unqualified (Clean) Audit Opinion: Auditor's statement that the financial statements are fair presentations in all material respects in conformity with GAAP.

By signing an unqualified (clean) audit opinion, a CPA firm assumes part of the financial responsibility for the fairness of the financial statements and related presentations. This opinion, which adds credibility to the statements, also is often required by agreements with lenders and private investors.

## Big 4 CPA Firms

Ernst & Young	Deloitte & Touche
KPMG	PricewaterhouseCoopers

Each of these firms employs thousands of CPAs in offices scattered throughout the world. They audit the great majority of publicly traded companies as well as many that are privately held.

## Data Are Affecting What Auditors Do

The availability of more data from clients' enterprisewide accounting systems, which combine the various record-keeping functions within an organization, has allowed access now to entire populations of transactions instead of smaller statistical samples as in the past. This eases identification of trends, patterns, and outliers, which become the focus for further investigation.

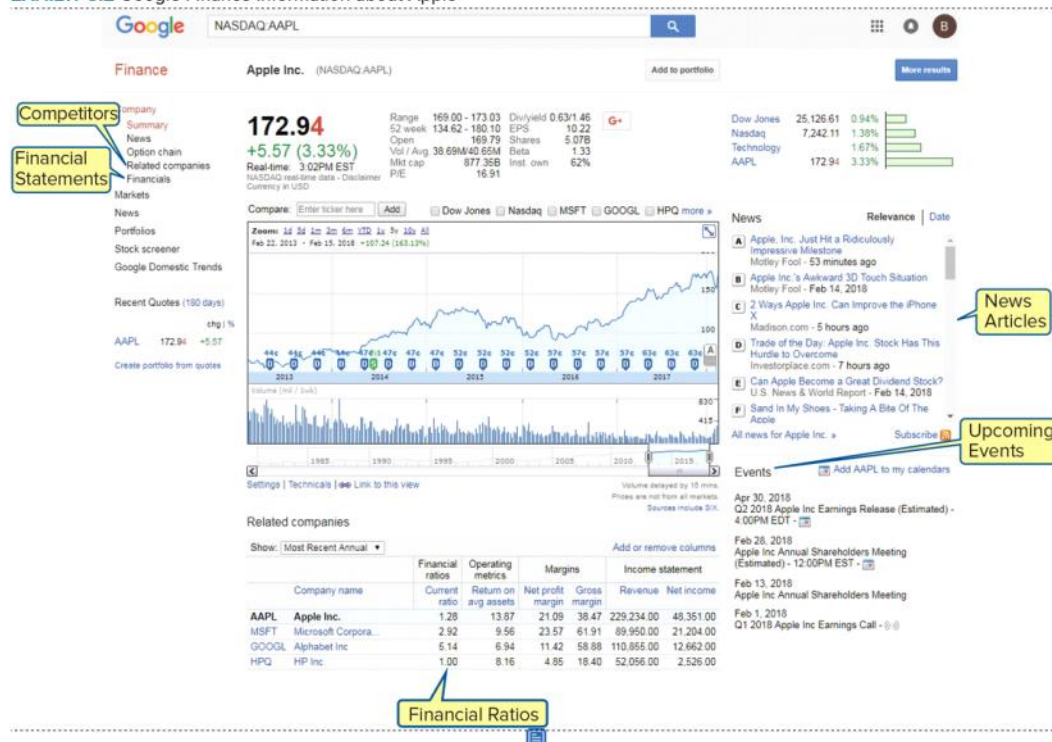
Data analytics also make it easier to correlate information from various parts of the clients' accounting systems such as sales invoices, shipping records, and cash receipts to identify areas where undetected misstatements may exist (audit risks).

## How Information are passed

Companies actually file their SEC forms electronically through the EDGAR (Electronic Data Gathering, Analysis, and Retrieval) Service, which is sponsored by the SEC. Each fact in the report is now tagged to identify its source and meaning using a language called XBRL. Users can retrieve information from EDGAR within 24 hours of its submission, long before it is available through the mail.

**Information services** allow investors to gather their own information about the company and monitor the recommendations of a variety of analysts. Financial analysts and other sophisticated users obtain much of the information they use from the wide variety of commercial online information services. Fee-based services such as Compustat and Thomson Reuters provide broad access to financial statements and news information. A growing number of other resources offering a mixture of free and fee-based information exist on the web. These include: [finance.google.com/finance](http://finance.google.com/finance), [finance.yahoo.com](http://finance.yahoo.com), [www.marketwatch.com](http://www.marketwatch.com), [www.bloomberg.com](http://www.bloomberg.com)

EXHIBIT 5.2 Google Finance Information about Apple



**Financial analysts** receive accounting reports and other information about the company from online information services. They also gather information through **conversations with company executives and visits to company facilities and competitors**. The results of their analyses are combined into **analysts' reports**. Analysts' reports normally include forecasts of future quarterly and annual earnings per share and share price; a buy, hold, or sell recommendation for the company's shares; and explanations for these judgments. In making their **earnings forecasts**, the analysts rely heavily on their knowledge of the way the accounting system translates business events into the numbers on a company's financial statements.

## Users of financial statement

Institutional and private investors, creditors, and others.

### Institutional investors

1. include pension funds (associated with companies, unions, or government agencies); mutual funds; and endowment, charitable foundation, and trust funds (such as the endowment of your college or university).
2. usually employ their own analysts
3. control the majority of publicly traded shares of U.S. companies

### Private Investors

1. large individual investors such as the venture capitalists who originally invested directly in the company, as well as small retail investors who buy shares of publicly traded companies through brokers such as Fidelity.
2. often lack the expertise to understand financial statements and the resources to gather data efficiently.
3. often rely on the advice of information intermediaries or turn their money over to the management of mutual and pension funds

### Lenders / Creditors

1. Suppliers, banks, commercial credit companies, and other financial institutions that lend money to companies.
2. Lending officers and financial analysts in these organizations use the same public sources of information. They also use **additional financial information** (e.g. monthly statements) that companies often agree to provide as part of the lending contract.
3. Primary external user group for financial statement for private companies.

### Supplier <=> Customer

1. Customers evaluate the financial health of suppliers to determine whether they will be reliable, up-to-date sources of supply.
2. Suppliers evaluate their customers to estimate their future needs and ability to pay debts.
3. Competitors also attempt to learn useful information about a company from its statements.
  - a. The potential loss of competitive advantage is one of the costs of public financial disclosures.
  - b. Accounting regulators consider these costs as well as the direct costs of preparation when they consider requiring new disclosures.
  - c. Cost-effectiveness requires the benefits of accounting for and reporting information to outweigh the costs.
    - i. Small amounts do not have to be reported separately or accounted for precisely according to GAAP if they would not influence users' decisions.
    - ii. Accountants usually designate such items and amounts as **immaterial**. Determining material amounts is often very subjective.

## The Disclosure Process

SEC regulation FD, for "Fair Disclosure," requires that companies provide all investors equal access to all important company news. Managers and other insiders also are prohibited from trading their company's shares based on nonpublic (insider) information so that no party benefits from early access.

### Press Release

To provide timely information to external users and to limit the possibility of selective leakage of information, Apple and other public companies announce quarterly and annual earnings through a **press release** as soon as the verified figures (audited for annual and reviewed for quarterly earnings) are available.

Apple normally issues its earnings press releases within four weeks of the end of the accounting period. The announcements are sent electronically to the major print and electronic news services, including Dow Jones, Thomson Reuters, and Bloomberg, which make them immediately available to subscribers.

Many companies, including Apple, follow these press releases with a **conference call** during which senior managers answer analysts' questions about the quarterly results. These calls are open to the investing public. (Go to [investor.apple.com/index.cfm](http://investor.apple.com/index.cfm) to listen to Apple's most recent conference call).

### Annual Reports

For privately held companies, **annual reports** are relatively simple documents photocopied

on white paper. They normally include only the following:

1. Four basic financial statements: income statement, balance sheet, stockholders' equity or retained earnings statement, and cash flow statement.
2. Related notes (footnotes).
3. Report of Independent Accountants (Auditor's Opinion) if the statements are audited.

The annual reports of public companies filed on **Form 10-K** are significantly more elaborate mainly because of additional SEC reporting requirements.

SEC reports are normally referred to by number (for example, the "10-K"). The principal components of the financial disclosures in the 10-K include:

Item 1. **Business:** Description of business operations and company strategy.

Item 6. **Selected Financial Data:** Summarized financial data for a 5-year period.

Item 7. **Management's Discussion and Analysis of Financial Condition and Results of Operations:** Management's views on the causes of its successes and failures during the reporting period and the risks it faces in the future.

Item 8. **Financial Statements and Supplemental Data:** The four basic financial statements and related notes, the report of management, and the auditor's report (Report of Independent Registered Public Accounting Firm).

## Quarterly Reports (and Form 10-Q)

Quarterly reports for private companies include condensed financial statements providing fewer details than annual statements and only key notes to the statements. They are not audited and so are marked **unaudited**. Private companies normally prepare quarterly reports for their lenders.

Public companies file their quarterly reports on **Form 10-Q** with the SEC. The Form 10-Q contains most of the information items provided in the financial section of the 10-K and some additional items.

## Other SEC Reports

Public companies must file other reports with the SEC.

These include the current events report **Form 8-K**, which is used to disclose any material event not previously reported that is important to investors (e.g., auditor changes, mergers). Other filing requirements for public companies are described on the SEC website.

## Financial Statement Formats & Notes

### Classified Balance Sheet



APPLE INC. Consolidated Balance Sheets (In millions, except number of shares which are reflected in thousands and par value)*		
	September 30, 2017	September 24, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 20,289	\$ 20,484
Short-term marketable securities	53,892	46,671
Accounts receivable, less allowances of \$58 and \$53, respectively	17,874	15,754
Inventories	4,855	2,132
Vendor non-trade receivables	17,799	13,545
Other current assets	13,936	8,283
Total current assets	128,645	106,869
Long-term marketable securities	194,714	170,430
Property, plant, and equipment, net	33,783	27,010
Goodwill	5,717	5,414
Acquired intangible assets, net	2,298	3,206
Other non-current assets	10,162	8,757
Total assets	<u>\$375,319</u>	<u>\$321,686</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 49,049	\$ 37,294
Accrued expenses	25,744	22,027
Deferred revenue	7,548	8,080
Commercial paper	11,977	8,105
Current portion of long-term debt	6,496	3,500
Total current liabilities	100,814	79,006
Deferred revenue—non-current	2,836	2,930
Long-term debt	97,207	75,427
Other non-current liabilities	40,415	36,074
Total liabilities	241,272	193,437
Commitments and contingencies		
Shareholders' equity:		
Common stock and additional paid-in capital, \$0.00001 par value; 12,600,000 shares authorized; 5,126,201 and 5,336,166 shares issued and outstanding, respectively	35,867	31,251
Retained earnings	98,330	96,364
Accumulated other comprehensive income/(loss)	(150)	634
Total shareholders' equity	134,047	128,249
Total liabilities and shareholders' equity	<u>\$375,319</u>	<u>\$321,686</u>

\*Apple's statements have been simplified for purposes of our discussion.

1. Intangible assets (discussed in Chapter 8) have no physical existence and a long life. Examples are patents, trademarks, copyrights, franchises, and goodwill from purchasing other companies.
2. Just as tangible fixed assets are reported net of accumulated depreciation, **intangible assets are reported net of accumulated amortization** on the balance sheet.
3. **Goodwill** is a more general intangible asset representing the excess of the price paid for another company over the value of its identifiable assets.

## Classified Income Statement

APPLE INC. Consolidated Statements of Operations* (In millions, except number of shares which are reflected in thousands and per share amounts)			
	Years ended		
	September 30, 2017	September 24, 2016	September 26, 2015
Net sales	\$229,234	\$215,639	\$233,715
Cost of sales	141,048	131,376	140,089
Gross profit	88,186	84,263	93,626
Operating expenses:			
Research and development	11,581	10,045	8,067
Selling, general, and administrative	15,261	14,194	14,329
Total operating expenses	26,842	24,239	22,396
Operating income	61,344	60,024	71,230
Other income/(expense), net	2,745	1,348	1,285
Income before provision for income taxes	64,089	61,372	72,515
Provision for income taxes	15,738	15,685	19,121
Net income	<u>\$ 48,351</u>	<u>\$ 45,687</u>	<u>\$ 53,394</u>
Earnings per share:			
Basic	\$ 9.27	\$ 8.35	\$ 9.28
Shares used in computing earnings per share:			
Basic	5,217,242	5,470,820	5,753,421

\*Apple's statements have been simplified for purposes of our discussion.

1. **Nonoperating (other) Items** are revenues, expenses, gains, and losses that do not relate to the company's primary operations. Examples include interest income, interest expense, and gains and losses on the sale of investments. These nonoperating items are added to or subtracted from income from operations to obtain Income before Income Taxes (Pretax

- Earnings).
2. When a major component of a business is sold or abandoned, income or loss from that component earned before the disposal, as well as any gain or loss on disposal, is included as **Discontinued Operations**. The item is presented separately because it is not useful in predicting the future income of the company given its nonrecurring nature.
    - a. If discontinued operations are reported, an additional subtotal is presented before this item for Income from Continuing Operations.
  3. Earnings per share

$$\text{a. Earnings per Share} = \frac{\text{Net Income}^*}{\text{Average Number of Shares of Common Stock Outstanding during the Period}}$$

## Gross Profit Percentage

$$\text{Gross Profit Percentage} = \frac{\text{Gross Profit}^*}{\text{Net Sales}}$$

Where Gross Profit = Net Sales - Cost of Sales

## Statement of Stockholder's Equity

Issuing Shares - **Note that the number of shares and the dollar amount are both listed. It is important not to confuse them.**

**EXHIBIT 5.6** Statement of Stockholders' Equity of Apple Inc.

APPLE INC.					
Consolidated Statements of Shareholders' Equity (partial)* (in millions, except number of shares, which are reflected in thousands)					
	Common Stock and Additional Paid-In Capital		Retained Earnings	Accumulated Other	Total
	Shares	Amount		Income/(Loss)	Comprehensive Shareholders' Equity
Balances as of September 24, 2016	5,336,166	\$ 31,251	\$96,364	\$634	\$128,249
Net income	-	-	48,351		48,351
Other comprehensive income/(loss)	-	-	-	(784)	(784)
Dividends and dividend equivalents declared	-	-	(12,803)		(12,803)
Stock issued	36,531	4,616			4,616
Stock repurchased	(246,496)	-	(33,582)		(33,582)
<b>Balances as of September 30, 2017</b>	<b><u>5,126,201</u></b>	<b><u>\$35,867</u></b>	<b><u>\$98,330</u></b>	<b><u>(\$150)</u></b>	<b><u>\$134,047</u></b>

Source: Apple Inc.

## Statement of Cash Flows

Three cash flow statement classifications

1. Cash flow from operating activities
  - a. associated with earning income
2. Cash flow from investing activities
  - a. Associated with purchase or sale of productive assets (other than inventories) and investments in other companies
3. Cash flow from financing activities
  - a. Associated with financing the business through borrowing and repaying loans



from financial institutions, stock issuances and repurchases, and dividend payments.

APPLE INC. Consolidated Statements of Cash Flows* (in millions)			
	September 30, 2017	Years ended September 24, 2016	September 26, 2015
Cash and cash equivalents, beginning of the year	\$ 20,484	\$ 21,120	\$ 13,844
<b>Operating activities:</b>			
Net income	48,351	45,687	53,394
Adjustments to reconcile net income to cash generated by operating activities:			
Depreciation and amortization	10,157	10,505	11,257
Other noncash items	10,640	9,634	5,353
Changes in operating assets and liabilities:	(5,550)	(2)	11,262
Cash generated by operating activities	63,598	65,824	81,266
<b>Investing activities:</b>			
Purchases of marketable securities	(159,486)	(142,428)	(166,402)
Proceeds from maturities of marketable securities	31,775	21,258	14,538
Proceeds from sales of marketable securities	94,564	90,536	107,447
Payments for business acquisitions, net	(329)	(297)	(343)
Payments for acquisition of property, plant and equipment	(12,451)	(12,734)	(11,247)
Payments for acquisition of intangible assets	(344)	(814)	(241)
Other	(175)	(1,498)	(26)
Cash used in investing activities	(46,446)	(45,977)	(56,274)
<b>Financing activities:</b>			
Proceeds from issuance of common stock	555	495	543
Proceeds from issuance of term debt, net	28,662	24,954	27,114
Repayments of term debt	(3,500)	(2,500)	-
Payments for dividends	(12,769)	(12,150)	(11,561)
Repurchases of common stock	(32,900)	(29,722)	(35,253)
Other financing activities	2,605	(1,560)	1,441
Cash used in financing activities	(17,347)	(20,483)	(17,716)
<b>Total change in cash</b>	<b>(195)</b>	<b>(636)</b>	<b>7,276</b>
<b>Cash and cash equivalents, end of the year</b>	<b>\$ 20,289</b>	<b>\$ 20,484</b>	<b>\$ 21,120</b>
<b>Supplemental cash flow disclosure:</b>			
Cash paid for income taxes, net	\$ 11,591	\$ 10,444	\$ 13,252
Cash paid for interest	\$ 2,092	\$ 1,316	\$ 514

\*Apple's statements have been simplified for purposes of our discussion.

The Operating Activities section prepared using the indirect method helps the analyst understand the **causes of differences** between a company's net income and its cash flows.

In the indirect method, the Operating Activities section starts with net income computed under the accrual concept and then eliminates noncash items, leaving cash flow from operating activities:

Net income (loss)
+/-Adjustments for noncash items
Cash provided by operating activities

## Notes to Financial Statements

While the numbers reported on the various financial statements provide important information, users require additional details to facilitate their analysis. All financial reports include additional information in notes that follow the statements. Apple's 2017 notes include three types of information:

- Descriptions of the key accounting rules applied in the company's statements
  - generally accepted accounting principles (GAAP) permit companies to select from alternative methods for measuring the effects of transactions
  - summary of significant accounting policies tells the user which accounting methods the company has adopted
- Additional detail supporting reported numbers
  - supplemental information concerning the data shown on the financial statements
  - may show revenues broken out by geographic region or business segment, describe unusual transactions, and/or offer expanded detail on a specific classification
- Relevant financial information not disclosed on the statements
  - information on legal matters and contractual agreements that do not result in an asset or liability on the balance sheet

## Difference in IFRS and GAAP

Financial accounting standards and disclosure requirements are adopted by national regulatory agencies. Many countries, including the members of the European Union, have adopted International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). IFRS are similar to U.S. GAAP, but there are several important differences.

Difference	U.S. GAAP	IFRS	Chapter
Last-in first-out (LIFO) method for inventory	Permitted	Prohibited	7
Reversal of inventory write-downs	Prohibited	Required	7
Basis for property, plant, and equipment	Historical cost	Fair value or historical cost	8
Development costs	Expensed	Capitalized	8
Debt to be refinanced	Current	Noncurrent	9
Recognition of contingent liabilities	Probable	More likely than not	9
Stockholders' equity accounts	Common stock	Share capital	11
	Paid-in capital	Share premium	
Interest received on cash flow statement	Operating	Operating or investing	12
Interest paid on cash flow statement	Operating	Operating or financing	12

## Return On Assets(ROA) Analysis

A framework to evaluate company performance

$$\text{Return on Assets} = \frac{\text{Net Income}^*}{\text{Average Total Assets}^\dagger}$$

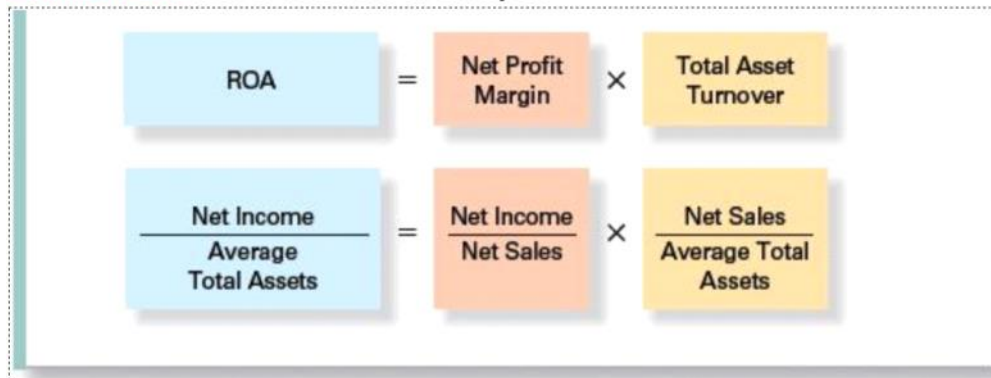
\*Net Income: In more complex return on assets analyses, interest expense (net of tax) and noncontrolling interest are added back to net income in the numerator of the ratio because the measure assesses return on capital independent of its source.

†Average Total Assets = (Beginning Total Assets + Ending Total Assets) ÷ 2.

## ROA Profit Driver Analysis (ROA Decomposition / Dupont Analysis)

breaks down ROA into the two factors. These factors are often called **profit drivers** or **profit levers** because they describe the two ways that management can improve ROA.

### EXHIBIT 5.8 ROA Profit Driver Analysis



1. **Net profit margin = Net Income ÷ Net Sales.** It measures how much of every sales dollar is profit. Reports on the effectiveness of operating activity. It can be increased by
  1. Increasing sales volume.
  2. Increasing sales price.
  3. Decreasing cost of goods sold and operating expenses.
2. **Total asset turnover = Net Sales ÷ Average Total Assets.** It measures how many sales dollars the company generates with each dollar of assets (efficiency of use of assets). Reports on the effectiveness of investing activity. It can be increased by
  1. Centralizing distribution to reduce inventory kept on hand.
  2. Consolidating production facilities in fewer factories to reduce the amount of assets necessary to generate each dollar of sales.

Successful manufacturers often follow one of two business strategies.

1. a **high-value** or **product-differentiation** strategy.
  1. rely on research and development
  2. product promotion to convince customers of the superiority or distinctiveness of their products.
  3. allows the company to charge higher prices and earn a higher net profit margin.
2. a **low-cost strategy**
  1. relies on efficient management of accounts receivable, inventory, and productive assets to produce high asset turnover.

## How Transactions Affect Ratios

Follow the three steps to do so..

1. Journalize the transaction to determine its effects on various accounts
2. Determine which accounts belong to the financial statement subtotals or totals in the numerator (top) and denominator (bottom) of the ratio and the direction of their effects.
3. Evaluate the combined effects from step 2 on the ratio.

## Ch 5 HW

✓ Answer is complete and correct.

HOME and OFFICE, INC.		
Consolidated Statement of Operations		
For the Year Ended December 31, 2011		
(dollars in thousands)		
Net sales	✓	\$ 5,887.7 ✓
Cost of products sold	✓	(3,671.5) ✓
Gross profit	✓	2,216.2 ✓
Operating expenses:		
Selling, general, and administrative expenses	✓	\$ 1,503.2 ✓
Other expense	✓	420.6 ✓
Total operating expenses		1,923.8
Operating income	✓	292.4 ✓
Interest and other non-operating expense	✓	(116.8) ✓
Income from continuing operations before income taxes	✓	175.6 ✓
Income tax expense	✓	(21.2) ✓
Income from continuing operations	✓	154.4 ✓
Loss on sale of discontinued operations, net of income taxes	✓	(10.5) ✓
Net income	✓	\$ 143.9 ✓