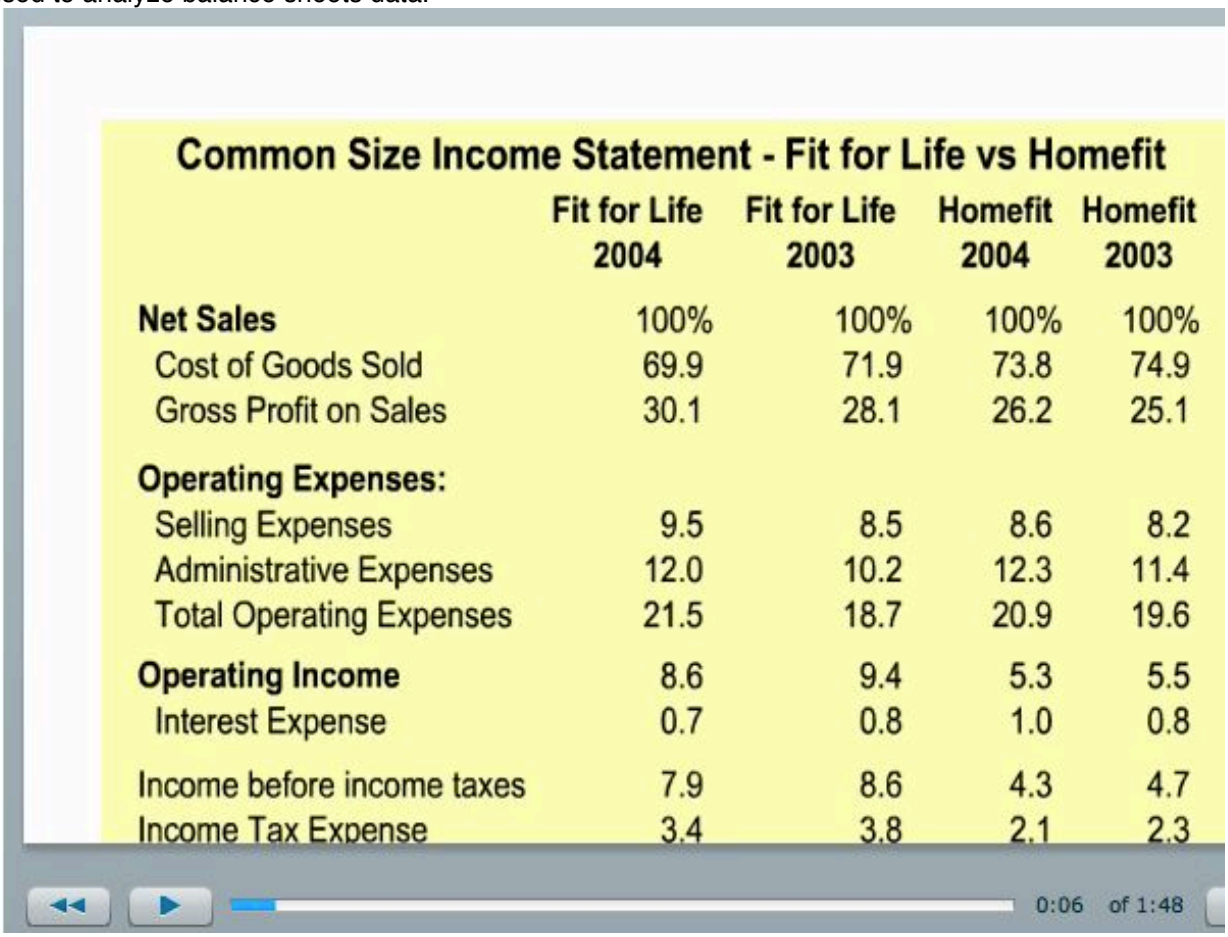
External users use published financial statement information to monitor compliance with legislation and other agreements. for example, tax authority compares the numbers reported to that of given in financial statements. other external users such as investors and creditors use the financial statements in order to predict the future financial performance of the company.
investors and creditors analyze both, quantitative factors which can be expressed in numbers and as well as the qualitative factors those which are expressed in words and **may only be intuitively sensed.** there is vast amount of information to be considered that analysts do not always use exactly the same information nor do they necessarily reach the same conclusions at the end of their analyses. intact, fundamental analyses is so challenging that some investors leave the fundamental analysis to others and make their investment decisions instead based on technical analysis of trends and patterns in stock prices.
Quantitative factors are in interest/consideration of investors and creditors which are expressed numerically. absolute measures of quantitative factors such as profits, sales and assets are not use if not compare with similar amounts of different period or with the other firm in the industry.
Profitably: the ability to generate earnings: the public is more interested on net income and it is arguably the most frequently reported singe statistics published about the firm.
Liquidity: the ability to stay solvent: a company may exist for some years if they are unprofitable but they cannot stay in the industry if they are insolvent due to increase in debt. if so happens, the creditors will have to take the legal actions against the firm and it may have to shutdown or reconstitute it with a new management team or wind up the firm and sell of their assets to recover their loans
Size and industry risk: to exercise the control in their industry
Growth: overall health of the company
stability: ability to realize their own potential within the industry
Qualitative factors:
good governance indicators (how an organizations controls its actions)**:**
majority of the directors independent
CEO and chair of board separate
independent audit, compensation committees and nominations
short term for board members
management competence: its a new way of thinking for the organization to gain high performance within a short span of time.
Auditor independence refers to the independence of the internal auditor or of the external auditor from parties that may have a financial interest in the business being audited. Independence requires integrity and an objective approach to the audit process. The concept requires the auditor to carry out his or her work freely and in an objective manner.
regulated by securities regulators
a responsibility of the board of directors
essential for auditor credibility and investor trust in audit options
Product/industry: if the particular product launched in the market is expected to grow.
social responsibility
Media coverage
Analysts advice
Risk tolerance
other investments factors: tips which acts as **confidential information.**
beware: it is **unethical and illegal to give such information or even act on it. even the name of the company can influence your investment decision.**
technical analysis: 40 week average. some analyst doesn't care about the fundamental analysis and so their decisions are based on observations of patterns and trends of the stock prices of the particular company.

Analysts often use **horizontal analysis** of a firm's financial statements and compute the dollar and percentage changes for important items and classification totals for 2 or more years. Dollar increases or decreases are divided by the earliest year's data to highlight large percentage changes. This type of analysis is useful in detecting improvement or deterioration in a firm's performance and in spotting trends. Similarly, **vertical analysis** in which a percentage is computed by dividing one number by another in a single year's financial statements, can detect unusual relationships of line items. **showing income statement data as a percentage of sales is an example of vertical analysis.**

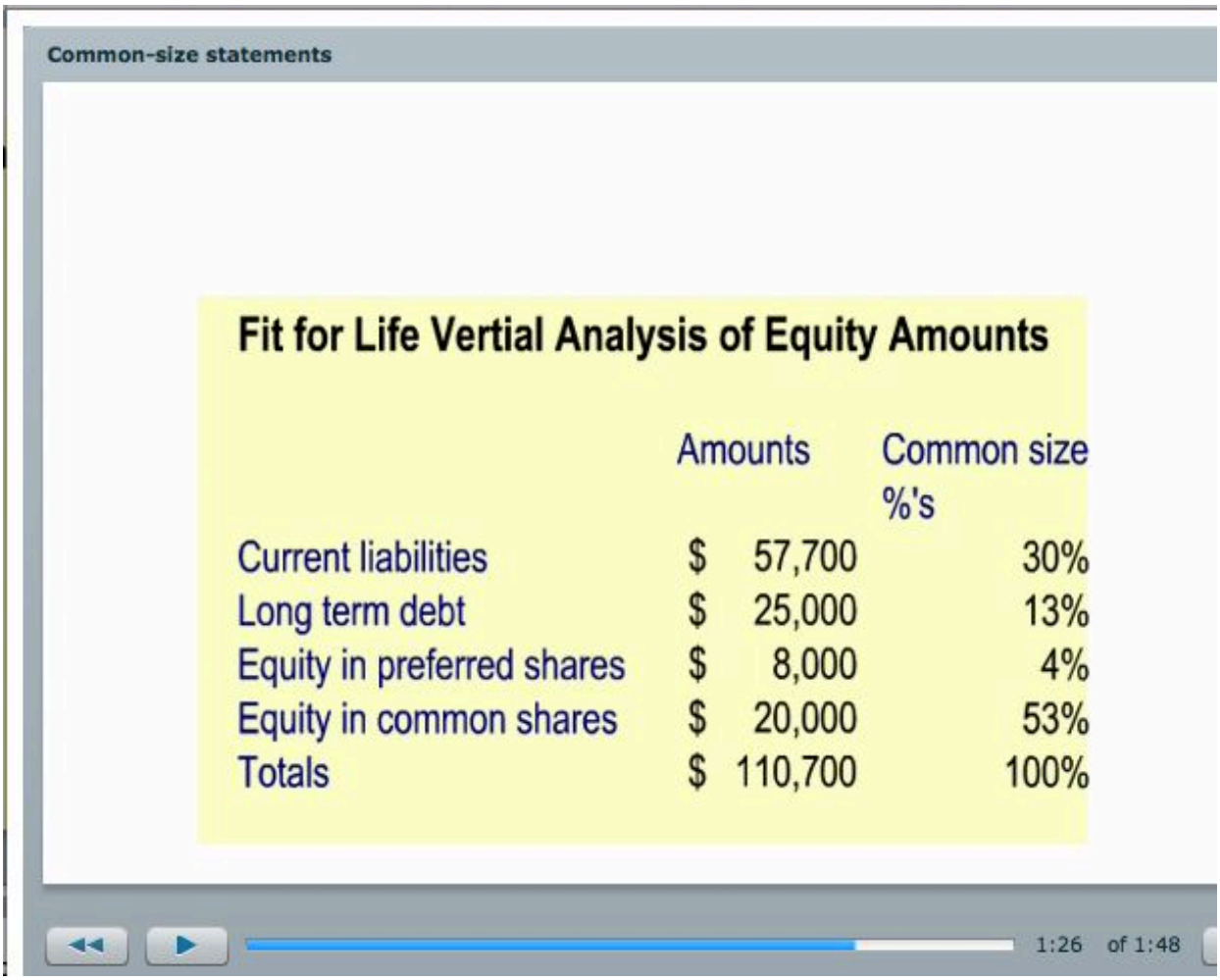
While the **common size** income statements are more frequently used, common-sizing may also be used to analyze balance sheets data.



Common Size Income Statement - Fit for Life vs Homefit

	Fit for Life 2004	Fit for Life 2003	Homefit 2004	Homefit 2003
Net Sales	100%	100%	100%	100%
Cost of Goods Sold	69.9	71.9	73.8	74.9
Gross Profit on Sales	30.1	28.1	26.2	25.1
Operating Expenses:				
Selling Expenses	9.5	8.5	8.6	8.2
Administrative Expenses	12.0	10.2	12.3	11.4
Total Operating Expenses	21.5	18.7	20.9	19.6
Operating Income	8.6	9.4	5.3	5.5
Interest Expense	0.7	0.8	1.0	0.8
Income before income taxes	7.9	8.6	4.3	4.7
Income Tax Expense	3.4	3.8	2.1	2.3

From the common size income statement we can see that home fit has a smaller gross profit margin as compare to fit for life. This can be due to higher cost of production or lower sale prices for home fit. if we state company's current assets and longterm assets in percentage that we can easily conclude that whether the company is less solvent or more solvent.



The best use of **vertical analysis of a common size while analyzing with the balance sheet data** is the sources of assets, liabilities etc computed as the percentage of the totals capitals supplied as shown above in the table. This percentages are useful in apprassing the financial structure of a firm.

Analysis of Operating Performance: Return on Asse

In evaluating the operating performance of a firm, the analyst invariably uses This analysis, which deals with the firm's profitability, relates either the oper income to some base, such as average total assets, average shareholders' eq The resultant percentage can be compared with similar rates for the firm ir firms. The most important relationships are

(1) Return on assets.
(2) Return on common shareholders' equity.
(3) Return on sales.

Return On Assets

The return on the total assets available to a firm is probably one of the most useful measures of the firm's profitability and efficiency. Return on assets, sometimes called the productivity ratio, is calculated by dividing the year's operating income (income before deducting interest expense and income tax expense) by the average total assets employed during the year.

Return called th calculat operatin deducti income average during t

Return on Assets = Operating Income / Average Total Assets

Because the return for a year is earned on assets employed throughout the year and assets may vary during that time, we compute the return on the average amount of assets. We obtain the a summing the beginning and ending asset totals and dividing by two. If the pe of productivity and accomplishment, it should not be influenced by the manne is financed. Therefore, we use income before interest charges as a measure c numerator. As a result, we may compare the return for a company having a r of debt with that of a company using mostly owners' equity to finance its asset

Compute ▸ Fit for Life's Return on Assets and click here to check your answer.

Debt Financing and Operating Performance

Imagine that Company A and Company B each have $500,000 in average tota
has income of $70,000 before interest expense and taxes. Suppose that Comp
bearing debt but Company B has $200,000 of 10% bonds payable outstanding.
the income statements of these two companies (rearranged to highlight the effec
are shown (for simplicity, we assume a 40% effective income tax rate).

	Company A	Company B
Operating income before interest expense	$70,000	$70,000
Interest expense ((10% of $200,000)	$0	$20,000
Income tax expense (40%)	$28,000	$20,000
Net Income	$42,000	$30,000

$500,000 average total assets). Company B, however, is financed partially by b
expense of $20,000 less a 40% tax benefit of $8,000 makes its final net income
of Company A. This difference is due solely to the manner in which the two c
and is unrelated to their operational accomplishment. For this reason, the retur
measured before interest and income taxes. We demonstrate later that juc
financing may benefit the owners of a business.

The return on assets is useful for comparing similar companies operating in the
aids management in gauging the effectiveness of its asset utilization. When
along with such relationships as return on shareholders' equity and return o
insight about a firm's operating performance.

Analysis of Operating Performance: Return On Common Shareholders' Equity

The return on assets is useful for comparing similar companies operating in th aids management in gauging the effectiveness of its asset utilization. Wher along with such relationships as return on shareholders' equity and return insight about a firm's operating performance.

The rate of return to common shareholders is calculated using net incon dividend requirements. This return on common shareholders' equity ratio profitability of the investment to the common shareholders. Although the rati taxes, it is commonly done after taxes as follows:

$$\text{Return on Common Shareholders' Equity} = \frac{\text{(Net Income - Preferred Div}}{\text{Average Common Shareholders}}$$

The return is earned on the shareholders' equity invested throughout the yea varies during the year, we commonly approximate the average investment by and ending balances and dividing by two.

Compute ▸ Fit for Life's Return on Common Shareholders' Equity for 2004 to check your answer.

Analysis of Operating Performance: Return On Sale

Another important measure of operating performance is the rate of return on return on sales. The most commonly used version of this ratio is net income sales equals the net income percentage, calculated as follows:

$$\text{Return on Sales} = \frac{\text{Net Income}}{\text{Net Sales}}$$

The calculations for Fit For Life Corporation are given below:

	2004	2003
Net income	$18,760	$15,400
Net sales	$415,000	$320,000
Return on sales	4.50%	4.80%

studying similar companies in the same industry or when comparing differe company. The rate of return on sales varies widely from industry to industry.

Some industries are characterized by low profit margins and high turnover ratio of net sales to average total assets is called asset turnover.) For ex companies and supermarkets seldom have a net income to net sales ratio e huge sales volumes, however, and turn over their assets (especially inv contrast, a company manufacturing and selling fine grand pianos might hav income to net sales ratio. Because high volume production capabilities for m unfeasible, turnover of assets is low. As a general rule, firms that deal i involving fairly long production periods require higher profit margins for a resp assets and on the owners' investments.

Introduction to Financial Accounting in the 21st Century © Gaber, Hayes & Porporato

Net income analysis:

when analyzing the net income figure, analysts usually use their own evaluation as they are interested in predicting the future income of the company. They also analyze the factors influencing the net income figure. To answer these question, analysts are interested in analyzing the financial statements. and using these statement they can know how representative the net income figure is and also whether it was determine by conservative accounting principles.
Any unusual item is eliminated from the income statement while analyzing it such items include gains and losses of the company on sales of plant assets or securities for analytical purposes.
The other main factors which analysts may have interest is determining the depreciation method and inventory valuation techniques to determine their effects on net income.

Earnings Per Share

Because stock market prices are quoted on a per-share basis, it is useful to ca earnings on the same basis. Earnings per share for common shares are usually pron because both analysts and investors consider the relationship of prices and earni important.

We compute earnings per share by dividing common share earnings (net income les dividend requirements) by the average number of shares outstanding during the year,

$$\text{Earnings per Share} = \frac{\text{Net Income - Preferred Dividend Requirements}}{\text{Average Number of Common Shares Outstanding}}$$

Compute ▸ Fit for Life's Earnings per Share for 2004 and click here to check your ans

Price-Earnings Ratio

The price-earnings ratio is the result of dividing the market price of a share by the ear For many analysts and investors, this ratio is an important tool in assessing the valu example, after evaluating the strong and weak points of several companies in an indu may compare price-earnings ratios to determine the "best buy". When determining th ratio, we customarily use the latest market price and the common share earnings quarters of a company's operations. In our calculation for Fit For Life Corporation, if th share earnings and the market price at year-end, was $37.50:

$$\text{Price-Earnings Ratio} = \frac{\text{Market Price per Common Share}}{\text{Earnings per Common Share}}$$

Compute ▸ Fit for Life's Price Earnings Ratio for 2004

Play ▸ price earnings ratios [viewing time 1:07] to check your answer and hear how Pri Ratio analysis predicted the collapse of Capital Markets early in this century.

Preferred and **common stocks** are different in two key aspects.

First, **preferred stockholders** have a greater claim to a company's **assets** and **earnings**. This is true during the good times when the company has excess cash and decides to distribute money in the form of **dividends** to its investors. In these instances when distributions are made, preferred stockholders must be paid before common stockholders. However, this claim is most important during times of insolvency when common stockholders are last in line for the company's assets. This means that when the company must **liquidate** and pay all **creditors** and bondholders, common stockholders will not receive any money until after the preferred shareholders are paid out.

Second, the dividends of preferred stocks are different from and generally greater than those of common stock. When you buy a preferred stock, you will have an idea of when to expect a dividend because they are paid at regular intervals. This is not necessarily the case for common stock, as the company's **board of directors** will decide whether or not to pay out a dividend. Because of this characteristic, preferred stock typically don't fluctuate as often as a company's common stock and can sometimes be classified as a **fixed-income security**. Adding to this fixed-income personality is the fact that the

dividends are typically guaranteed, meaning that if the company does miss one, it will be required to pay it before any future dividends are paid on either stock. The board of directors is the group of individuals that represents the owners of the corporation and oversees major decisions for the company.

Common Stock

Most shares of stock are called "common shares". If you own a share of common stock, then you are a partial owner of the company. You are also entitled to certain voting rights regarding company matters. Typically, common stock shareholders receive one vote per share to elect the company's board of directors (although the number of votes is not always directly proportional to the number of shares owned). The board of directors is the group of individuals that represents the owners of the corporation and oversees major decisions for the company. Common stock shareholders also receive voting rights regarding other company matters such as stock splits and company objectives. In addition to voting rights, common shareholders sometimes enjoy what are called "preemptive rights." Preemptive rights allow common shareholders to maintain their proportional ownership in the company in the event that the company issues another offering of stock. This means that common shareholders with preemptive rights have the right but not the obligation to purchase as many new shares of the stock as it would take to maintain their proportional ownership in the company. But although common stock entitles its holders to a number of different rights and privileges, it does have one major drawback: common stock shareholders are the last in line to receive the company's assets. This means that common stock shareholders receive dividend payments only after all preferred shareholders have received their dividend payments . It also means that if the company goes bankrupt, the common stock shareholders receive whatever assets are left over only after all creditors, bondholders, and preferred shareholders have been paid in full.

Preferred Stock

The other fundamental category of stock is preferred stock. Like common stock, preferred stock represents partial ownership in a company, although preferred stock shareholders do not enjoy any of the voting rights of common stockholders. Also unlike common stock, preferred stock pays a fixed dividend that does not fluctuate, although the company does not have to pay this dividend if it lacks the financial ability to do so. The main benefit to owning preferred stock is that you have a greater claim on the company's assets than common stockholders. Preferred shareholders always receive their dividends first and, in the event the company goes bankrupt, preferred shareholders are paid off before common stockholders. In general, there are four different types of preferred stock:

- **Cumulative:** These shares give their owners the right to "accumulate" dividend payments that were skipped due to financial problems; if the company later resumes paying dividends, cumulative shareholders receive their missed payments first.
- **non-cummulative:**