

Market Value Ratios



Market Value Ratios

The “market” for a company’s stock (ownership) consists of existing shareholders and potential investors.

The market assesses the value of a company by its stock price.

Several ratios connect the stock price to the financial figures.

- ✓ Earnings per Share
- ✓ Price to Earnings Ratio
- ✓ Dividend Yield
- ✓ Market to Book Value Ratio



Earnings per Share (EPS)...

Recall, net income is often referred to as a company's "earnings".

Earnings per share is just the net income expressed on a per share of stock basis.

$$\text{Earnings per Share, EPS} = \frac{\text{Earnings}}{\text{\# of Shares Outstanding}}$$

Where:

\# Shares Outstanding = the \# of shares trading on the exchanges

The EPS is very closely watched by professional stock analysts. There are expectations on what companies "should" earn, and if the EPS is better than expected, stock prices go up. If not...

Earnings per Share (EPS)...

For example, in 2021, Apple had:

- a net income (earnings) of \$94.68B
- 16.7 Billion shares of common stock outstanding.

$$\text{Earnings per Share, EPS} = \frac{\$94.68\text{B}}{16.7\text{B}}$$

Apple's EPS in 2021 was \$5.67/sh

Apple's EPS and Stock Price (End of Year):

2021:	\$5.67	\$176/sh
2020:	\$3.31	\$132/sh
2019:	\$2.99	\$ 75/sh

Apple's EPS showed impressive gains year-over-year, resulting in an increasing stock price.

Earnings per Share (EPS)...

Recall there are two EPS figures: "Basic" EPS and "Diluted" EPS

"Basic" is based on # of shares trading in the markets

"Diluted" is based on # of shares trading in the markets + all other committed shares not traded on the market (employee stock options).

In Apple's Case...

Shares Used in Computing EPS

- Basic: 16,701 million shares
- Diluted: 16,865 million shares

Net Income: \$94,680M

Earnings Per Share

- Basic \$ 5.67
- Diluted \$ 5.61

Earnings per Share (EPS)...

Where do we find this information?

Apple Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except number of shares which are reflected in thousands and per share amounts)

	Years ended		
	September 25, 2021	September 26, 2020	September 28, 2019
Earnings per share:			
Basic	\$ 5.67	\$ 3.31	\$ 2.99
Diluted	\$ 5.61	\$ 3.28	\$ 2.97
Shares used in computing earnings per share:			
Basic	16,701,272	17,352,119	18,471,336
Diluted	16,864,919	17,528,214	18,595,651

At the bottom of the Income Statement...

Price to Earnings Ratio (P/E Ratio)...

The P/E ratio relates the stock price (\$/sh) to earnings in a simple way:

$$\text{P/E Ratio} = \frac{\text{Price per Share}}{\text{Earnings per Share}}$$

The P/E Ratio indicates how the market (investors) values the company; what they are willing to spend per dollar of earnings. The higher the ratio, more the market favors the company.

While the company's decisions can affect the EPS, the stock price is driven by investor *expectations*, often of what the growth in EPS will be in the future.

Price to Earnings Ratio (P/E Ratio)...

For example, if Apple had a 2021 EPS = \$5.67/sh, and its stock price trades at about \$172/sh (as of 2/4/2022):

$$\text{P/E Ratio} = \frac{\$172/\text{sh}}{\$5.67/\text{sh}}$$

Apple's P/E Ratio is 30.3

By itself, this # doesn't tell us much.

It is more important to:

- ✓ compare it with prior timeframes (is it increasing/decreasing?)
- ✓ compare it to Apple's competition (the higher, the better)

Dividend Yield...

Dividend Yield is a stockholders return (in %) coming from the company's dividends.

$$\text{Dividend Yield} = \frac{\text{Dividend per Share}}{\text{Market Price per Share}} \times 100$$

where:

- Dividends are found on the Financial Statements
- Market Price is the current price per share of stock.

In 2021, Apple paid \$14.5 billion in dividends to its shareholders.

It had 16.7 billion shares of stock outstanding.

Apple's stock trades at \$172/share.

$$\text{Dividend per Share} = \frac{\$14.5\text{B}}{16.7\text{B}} = \$0.89/\text{share}$$

$$\text{Dividend Yield} = \frac{\$0.89}{\$172} \times 100 = 0.52\%$$

Book Value per Share...

This indicates the amount available to shareholders after all the assets have been liquidated and all the creditors have been paid.

More simply, it is the company's net worth per share of stock.

$$\text{Book Value} = \frac{\text{Shareholder Equity}}{\text{\# of Shares Outstanding}}$$

A stock price (the “market” price) that exceeds the book value is a good indication the company is regarded favorably by investors.

Book Value per Share...

For example, in 2021, Apple had:

- Shareholder Equity = \$63.1B
- 16.7 billion shares of stock outstanding (the “basic” value).

$$\text{Book Value} = \frac{\$63.1\text{B}}{16.7\text{B shares}}$$

Apple's Book Value = \$3.78/sh

As the stock price is about \$172 (as of 2/4/22),
investors view Apple as quite a good investment!

Market to Book Ratio...

Derived by simply dividing the current stock price per share (“market price”) by the Book Value per Share.

$$\text{Market to Book Ratio} = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$$

Higher M/B ratios reflect investor confidence.

If Apple's Book Value is \$3.78/sh and its Market Price is \$172/sh, the Market to Book Ratio is:

$$\text{Market to Book Ratio} = \frac{\$172 \text{ per Share}}{\$3.78 \text{ per Share}}$$

$$\text{Apple's Market to Book Ratio} = 45.5$$

Main Takeaways...

Market value ratios are used to relate the company's financial results to their stock price.

The Earnings per Share, EPS, reflects the net income on a per share basis; an increasing EPS often drives an increasing stock price.

The Price to Earnings ratio, P/E, relates the stock price to the company's earnings per share, and shows what investors are willing to pay for those earnings.

The Dividend Yield is a measure of an investors return coming from dividends paid to shareholders, relative to the company's stock price.

The Market to Book ratio is a measure of investor confidence in the company's ability to keep the stock price increasing in the future.

Next Time...

Ratio Analysis Wrap-up!



Credits & References

Slide 1: PE Ratio Price to Earnings Stock Ticker Buildings 3d Illustration by iQoncept, Adobe Stock (253725986.jpeg).

Slide 2: Dollar increase icon. Money symbol with arrow stretching rising up. Business cost sale icon. vector illustration by 200degrees, Adobe Stock (207485006.jpeg).

Slide 14: Ratio Analysis – Statistics/Business. Laptop in the office with term on the Screen by MQ-Illustrations, Adobe Stock (331061495.jpeg).