



وعي مالي شخصي  
Personal Financial Literacy

Lesson 16

# Investing in stocks

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## Investing in stocks

### What Is a Stock?

Technically, a share of stock is a form of ownership or equity in a publicly traded company. A publicly traded company is a large corporation that has elected to raise investment capital by selling a portion of its ownership to the public via a stock exchange. This initial public offering (IPO) is called a primary transaction, or “going public”. Once the company has completed its IPO, individuals or institutional investors can buy or sell these shares in what are called secondary market transactions.

When you buy a share of stock you are a part owner in the company with a claim (however small it may be) on every asset and every penny in earnings the company may have.

Because the relatively small number of shares that may be owned by any individual, stock buyers rarely think like owners, and although owning shares of stock allow one to vote for certain corporate matters, it's not as if they actually have much of a say in how things are done.

Nevertheless, it's that ownership structure that gives a stock its value. If stockowners didn't have a claim on earnings, then stock certificates would be worth no more than the paper they're printed on. As a company's earnings improve, investors are willing to pay more for the stock.

Over long periods of time, stocks in general have been solid investments. That is, as the economy has grown, so too have corporate earnings, and so have stock prices.

Since 1926 in the United States, the average large stock has returned close to 10% a year. If you're saving for retirement, that's a pretty good deal – much better than U.S. savings bonds or stashing cash under your mattress.

Of course, “over time” is a relative term. As any stock investor knows, prolonged downturns or “bear” markets can decimate a portfolio.

Since the 1940's, the US markets often called Wall Street, have endured several bear markets – defined as a sustained decline of more than 20% in the value of the Dow Jones Industrial Average (DJIA). The DJIA is an index that averages 30 of the largest US corporations' stock values. One can see the trends in the DJIA Index (and many other indices) at the Yahoo Finance website: [www.yahoo.com](http://www.yahoo.com).

“Bull” markets, or upturns in the value of stocks, eventually follow these downturns, but again, the term “eventually” offers small sustenance in the midst of the downdraft.

The point to consider, then, is that investing must be considered a long-term endeavor if it is to be successful. In order to endure the pain of a bear market, you need to have a stake in the game when the tables turn positive. Most investors believe that investing in stocks over the long term provides the best opportunity to achieve returns that exceed inflation.

### What Are the Different Types of Stocks?

There are thousands of stocks listed on the many worldwide exchanges to choose from, so how do investors classify stocks they may be considering as possible investments? There are at least three common ways to organize stocks:



## 1. By Size

A company's size refers to its market capitalization, which is the current share price times the total number of shares outstanding. Theoretically this is the total value placed upon a company by the market. For example, XYZ Corp., may have 2 billion shares outstanding, and a stock price of \$10 per share. Therefore the company's total market capitalization would be \$20 billion. So, one could buy each of the 2 billion shares of stock at \$10 per share, and own the whole company.

But is \$20 billion a bargain? There are no official rules that allow us to say officially. There are some distinctions that investors commonly use to further classify stocks:

Classification	Market Cap
Micro-cap	Less than \$500 million
Small-cap	\$500 million to \$2 billion
Mid-cap	\$2 billion to \$10 billion
Large-cap	\$10 billion to \$100 billion
Mega-cap	\$100 billion or more

You don't have to multiple every time you'd like to know which category a stock might fall into. You can easily find the market capitalization by using Yahoo Finance, and then search for the stock in question.

Large-cap companies tend to be established and stable, but because of their size, they have lower growth potential than small caps. An example of a large cap stocks include General Electric Company.

Over the long run, small-cap stocks have tended to rise at a faster pace. It's much easier to expand revenues and earnings quickly when you start. From example it's easier to grow from \$10 million in profits to \$20 million than it would be to grow from \$10 billion to \$20 billion, even though both growth rates are 100%. When profitability rises, stock prices follow.

There is a trade-off, though. With less developed management structures, small caps are more likely to run into troubles as they grow – expanding into new areas and beefing up staff are examples of potential pitfalls. Of course, even corporate giants get can into financial trouble.

## 2. By Style

Typically, investors also classify stocks as to the behavior or performance of their stock price; Growth, Value, or Cyclical.

A "growth" company is one that is expanding at an above-average rate, much as technology companies did in the 1990s.

Investing in a successful growth stock early on can provide spectacular profits. But remember one of the basic concepts of finance, the greater the potential return, the larger the risk. Growth stocks race higher when times are good, but as soon as growth slows, those stocks often decline in value.

The opposite of growth is “value”. There is no one definition of a value stock, but in general, it trades at a lower-than-average earnings multiple than the overall market. Maybe the company has messed up, causing the stock to plummet – a value investor might think the underlying business is still sound and its true worth not reflected in the depressed stock price.

A “cyclical” company makes something that isn’t in constant demand throughout the business cycle. For example, steel makers see sales rise when the economy heats up, spurring builders to put up new skyscrapers and consumers to buy new cars.

But when the economy slows, their sales lag too. Cyclical stocks bounce around a lot as investors try to guess when the next upturn and downturn will come.

### 3. By sector

Standard & Poor’s (S&P), a research organization, breaks stocks into 10 sectors and dozens of industries. Generally speaking, different sectors are affected by different things. So at any given time, some are doing well while others are not. As of November 2010 you can see the 10 S&P sectors and their various returns:

Index	1 Month	3 Months	1 Year	3 Years	5 Years	10 Years
Energy	2.50%	7.62%	-7.09%	2.73%	52.69%	381.74%
Material	7.17%	9.78%	12.94%	-13.31%	59.14%	380.58%
Industrials	7.46%	17.83%	-0.72%	-39.68%	-12.13%	62.65%
Consumer Discretionary	4.74%	7.93%	-2.21%	-36.80%	-17.69%	-37.50%
Consumer Staples	3.51%	11.96%	13.14%	11.09%	66.15%	253.71%
Health Care	1.98%	3.29%	-2.86%	-6.08%	53.19%	135.85%
Financials	4.10%	7.29%	-5.66%	-27.12%	7.33%	108.10%
Information Technology	3.41%	-4.22%	-6.01%	19.43%	58.80%	-56.22%
Telecommunication Services	-4.45%	-13.54%	-12.55%	-25.69%	-8.47%	-19.46%
Utilities	7.18%	12.03%	14.17%	-24.22%	13.93%	120.29%

In most cases, finance, health care and technology tend to be the fastest growing sectors, while consumer staples and utilities offer stability with moderate growth. The other sectors tend to be cyclical, expanding quickly in good times and contracting during recessions. Note that the one and three year returns shown above have been impacted significantly by recent the financial and economic crisis.

## How Can We Establish a Value for a Stock?

In good times, investors are often exuberant or overly optimistic, and they are willing to pay exorbitant amounts for stocks.

The reverse is also true, when times are bad, they assume the world is ending and refuse to pay much of anything. In assessing how much a stock is worth, investors talk about “valuation”, the stock price relative to any number of criteria.



## Price/Earnings (P/E) Ratio

Everybody uses it, but not everybody understands it. The actual P/E calculation is easy: Just divide the current price per share by earnings per share.

But what number should you use for earnings per share; the sum of the past four quarters (we call this trailing twelve months or TTM), or estimates for next year (this is called next twelve months or NTM)?

It depends so both can be the right answer. The P/E based on the past four quarters provides the most accurate reflection of the current valuation, because those earnings have already occurred. But investors are always looking ahead, so most also pay attention to estimates, which also are widely available at financial various financial web sites such as Yahoo Finance.

Wall Street analysts generally compute earnings-per-share estimates for the current fiscal year and the next fiscal year and use those estimates to assign a P/E, though there is no guarantee that the company will meet those estimates.

The P/E can't tell you whether to buy or sell. It is merely a gauge to tell you whether a stock is overvalued or undervalued. P/E can also allow you to compare two stock investment alternatives. Assuming they have the same total shares outstanding, is a \$100 stock more expensive than a \$50 stock? Not exactly, where valuation is concerned, price is dictated by expectations of future earnings performance. If the earnings of the higher-priced company are growing considerably faster than the other, the higher price may be justified.

What's an appropriate P/E? Different types of stocks win different valuations. Generally, the market assigns higher values for growth or enormous profitability. Consider a slow-growing industrial conglomerate and a tech company with fat profit margins and enormous growth potential. The market will typically reward the second company with a higher P/E.

To quickly compare P/Es and growth rates, use the Price Earning Growth (PEG) ratio – the P/E (based on estimates for the current year) divided by the estimated long-term growth rate. A company with a P/E of 36 and a growth rate of 20% has a PEG of 1.8 (36/20).

In general, most investors want a stock with a PEG that's close to 1.0 (or lower), which means it is trading in line with its growth rate. But for a quality company, you can sometimes pay more.

Also, don't get excited by rock-bottom P/Es – some poor performing companies are doomed to low valuations. One category the market tends to penalize is cyclical stocks, companies whose performance rises and falls with the economy.

## Price/Sales Ratio

Just as investors like to know how much they're paying for earnings, it's also useful to know how much they're paying for revenue (the terms "sales" and "revenue" are used interchangeably).

To calculate the Price/Sales ratio, divide the stock price by the total sales per share for the past 12 months. You could also use revenue estimates for the next fiscal year, which are being published more frequently on financial Web sites.

Like P/Es, Price/Sales ratios vary greatly, with fast-growers tending to get the highest valuations.

## Price/Book Value Ratio

Defined simply, book value equals a company's total assets minus its total liabilities and intangible assets. In other words, if you liquidated a firm, this is what the leftover assets would be worth after paying off all your creditors.

On the balance sheet, book value is represented as "shareholders' equity." (Dividing this aggregate total by the number of shares outstanding will give you a per-share book value.)

This is a more conservative measure, which embraces a "bird-in-hand" philosophy of valuation. Investors use it to spot cases in which the market is over- or undervaluing a company's true strength.

For example, a retailer that owns the buildings its stores are housed in might be sitting on unrealized real estate gains.

## Establishing Your Portfolio

A portfolio is simply the collection of all the securities you may hold at one point in time. This can include other investment instruments such as bonds or mutual funds. We will discuss these later, for now we will focus on only stocks.

There are more than 6,000 publicly traded companies on US stock exchanges, more when we include international exchanges, so where do we begin. Most experts suggest an intelligent investor should begin with a core that consists of financially strong companies with above-average earnings growth.

Surprisingly, less than 3% of stocks fit that description. A well-balanced stock portfolio should consist of at least 15 to 20 stocks, across seven or more different industries – but you don't have to buy them all at once.

You should seek to hold your stocks for a long time, and not constantly try to "time the market" by repeatedly buying and selling. Remember, historically the market average return is about 10% so you seek to accumulate a portfolio that has a return of more than 10%. You can estimate the likely return by adding the dividend yield (if any, some stocks do not pay dividends) to the projected earnings growth rate – a stock with 11% earnings growth and a 2% yield could provide a 13% annual total return.

As a general rule, stocks with moderately above-average growth rates and reasonable valuations are the best buys. Statistically, high-growth stocks are usually overpriced and have a harder time meeting inflated investor expectations.

The first thing to look at is the stock's price/earnings ratio compared with its projected total return. Ideally, the P/E should be less than double the projected return (a P/E of no more than 30 for a stock with 15% total return potential).

A well-balanced portfolio might include a couple of industrials with 9% growth rates and 3% yields, selling at 17 P/Es, as well as consumer growth stocks with 13% growth rates and 1% yields, at 23 P/Es. Add a couple of tech stocks with 25% growth rates and high P/Es (these are risky so minimize the percentage held in this sector, especially if you are older).

If you can average a 14% return over the next 10 to 20 years, you'll reach your financial goals – and probably outperform most pros as well.



## How Do We Buy Stocks?

To purchase stocks you will need a stock broker, someone who is licensed to buy and sell stocks. When you're looking for a broker, you have three distinct choices. From the most to the least expensive, they are: full-service brokers, discount brokers and online brokers. What differentiates them is the service and advice they provide, and the cost.

Full-service brokers will call with stock ideas and back this advice with reports from their firm's research department. They'll keep an eye on your picks and let you know when they think changes are necessary.

Discounters do less of this. While there's typically plenty of research available on the best online brokerage sites, it's up to you to find it.

You may want to choose different kinds of brokers for different purposes. I believe that full-service brokers should get paid for their stock ideas. That seems only fair. But if you've done your research yourself, I don't see any reason to pay a hefty commission – discounter on-line brokers probably are fine.

The nice thing about the way the brokerage world is shaping up is that you may be able to have both of those things in one account at one firm.

Most full-service brokers have come around to the fact that they need an online component – and need to charge you lower commissions when you use it. Discounters like Schwab and Fidelity, and even E\*Trade have both started offering a fuller range of services in recent years, while retaining their low-cost structure.

If you decide to sign on with a full-service broker, you should make sure that person has nothing to hide. To get a report on any United States broker, call the National Association of Securities Dealers at 011 800-289-9999, or visit the broker's Web site.

In the UAE, visit The Securities and Commodities Authority at [www.sca.ae](http://www.sca.ae) for information, or contact your commercial banker.

### Full-Service Brokers

**Cost:** Commissions are typically based on a percentage of your purchase (or sale) price.

### Discount Brokers

**Cost:** Between \$10 and \$20 for a trade of 1,000 shares or less, and on average, discounters charge one-third the price of full-service brokers.

### Online Brokers

**Cost:** At \$9 to \$15 a trade, it doesn't get any cheaper than this.

When trying to place a buy or sell order, you'll be faced with all sorts of questions: Market or limit order? "Day only" or "Good until cancelled." Here's the vocabulary you need to know to place a trade.

If you place a market order with your broker, then you are saying that you're willing to buy at whatever happens to be the prevailing price for the stock.

If you have a specific price in mind, you can set a limit order specifying the price you're willing to pay. If the stock happens to decline to that level, your order will be automatically filled. Limit

orders can be left open for a single day (a day order) or indefinitely (good until canceled).

After you've bought a stock, you can instruct your broker to sell it if the price drops to a level you specify (a stop loss order). That's a kind of insurance; it means that no matter what happens to a stock's price you'll never lose more than a specified amount.

In a volatile market, however, setting a stop-loss order at 10% or 20% below the purchase price will sometimes cause you to cash out of the stock on a momentary dip – thus locking in a loss even though the shares may immediately head back upward.

