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The “stock market” is a term we use to describe the many institutions and activities involved in helping people and companies buy and sell stock. The stock market is not just one market. Some of its institutions are traditional, floor-based stock exchanges, like the New York Stock Exchange, and some are electronic, computer-based markets like The Nasdaq Stock Market. They are all part of “the stock market.”

In some ways, the stock market is like a shopping mall. At the shopping mall, you find a variety of different stores, some larger, some smaller, and each with its own merchandise. Each stock exchange — like each store in the mall — is an independent business with its own management, its own stock and its own rules. And like the many stores in the mall, the many participants of the stock market also work cooperatively — for example, opening and closing for business at the same time. Additionally the stock market, like the mall, doesn’t buy stocks (merchandise) itself, but rather, operates the venue that enables the participants to sell to the public.

**History of the Stock Market**

After the Revolutionary War, the U.S. government began issuing bonds to finance its war debts. This is generally recognized as the start of the securities markets in our country. (Bonds, like stocks, are types of securities.) As was common in those days, business was conducted outdoors. In this case, it is believed that the bonds were sold from a location in the shade of a buttonwood tree, growing on Wall Street in New York City. Incidentally, the street got its name from a 12-foot high wooden stockade, or wall, built by the Dutch settlers to protect themselves from attacks by the British or the Indians. Wall Street was laid out along that wall in 1685.

In 1790, at about the same time that the government began selling its first war bonds, the Philadelphia Stock Exchange was formed. In those days, Philadelphia was considered to be the “financial center” of our young country, so it makes sense that the first stock exchange in the United States was founded there. Today, we recognize the Philadelphia Stock Exchange as the oldest exchange in the U.S., though not one of the major, national exchanges. You can learn more about the Philadelphia Stock Exchange on its website at www.phlx.com.

The New York Stock Exchange can trace its history back to 1792, when 24 prominent stock brokers and merchants gathered — again, on Wall Street and rumored to have occurred under a buttonwood tree — to sign the Buttonwood Agreement. In this important pact, the signers resolved to charge the same commissions as each other for trading securities. This was the start of organized trading. In that same year, five securities began trading. Three were bonds and two were stocks. In 1817, the same group of brokers adopted a constitution, with rules for conducting business. In this new constitution, this group of brokers named itself the New York Stock and Exchange Board and set up their operation at 40 Wall Street. The name was shortened, in 1863, to the New York Stock Exchange.

Other key dates in the history of the U.S. Stock markets: Edward A. Calahan invents the stock ticker in 1867. Publisher Charles Dow creates the Dow Jones Industrial Average with 12 important stocks in 1896. The stock market crash, known as “Black Tuesday,” occurs on October 29, 1929, which signals the start of the Great Depression. The Securities Act of 1933 and the Securities Exchange Act of 1934 establish important disclosure requirements and regulatory reforms and create the U.S. Securities and Exchange Commission — “the SEC.”

**NEWSPAPER ACTIVITIES**

1. Look through the business pages of your newspaper for how the stock market has done in the past year or two. If there is a chart that compares stock performance with bond investments or money market funds, list the relative performance of each of these types of investments. If you had invested your $1,000 in stocks one year ago, what would it be worth today?

2. The expression “the stock market” can mean several different things. How does your newspaper refer to different types of stocks in discussions about their performance?

3. The business pages of your newspaper will often contain articles written by experts who give general investment advice. Find an article in which the writer gives an opinion on whether this is a good time to invest in stocks. Summarize that article.

The “stock market” is different from a shopping mall in some important ways. Most noticeably, you don’t find all stock exchanges under one roof. In fact, in the United States, there are stock exchanges in many parts of the country and electronic stock markets can operate from almost any remote location. The other important difference is that at the shopping mall, stores sell products to the customers. But in the stock market, investors buy and sell stock, and from each other. That’s a bit complicated, so we’ll examine it more closely, later.

Sometimes we hear the stock market simply called “the market.” That can be a bit confusing, since there are many types of “markets” in the world. But generally, when we hear the term on television or read it in the newspaper in the business and finance section, it’s pretty safe to assume that “the market” is short for “the stock market.” You may have also heard or read about “Wall Street.” This is another nickname for the stock market, which comes from the actual street in New York City where the stock market, in this country, began.
That decision is not entirely up to the company, because it shares of stock on one or more of the markets or exchanges. More about this in the next section — it decides to list its counter. When a company goes public — you will learn about major, national markets. But mostly trade stocks that are also listed on one of the Regional stock exchanges list some of their own local stocks, Chicago and the Pacific Stock Exchange in San Francisco. Regional exchanges still operate in Boston, Philadelphia, some of them merged with other exchanges. Today, some of those regional exchanges still operate in Boston, Philadelphia, Chicago and the Pacific Stock Exchange in San Francisco. Regional stock exchanges list some of their own local stocks, but mostly trade stocks that are also listed on one of the major, national markets. You may also have heard that some stocks trade “over the counter.” When a company goes public — you will learn more about this in the next section — it decides to list its shares of stock on one or more of the markets or exchanges. That decision is not entirely up to the company, because it also has to meet the requirements to list on the exchange. Some companies aren’t big enough or profitable enough to list on a major exchange. If a company doesn’t qualify to “be listed,” or simply doesn’t want to be, it can trade its shares “over the counter” or “OTC.” Years ago, that meant that instead of buying or selling the shares on the floor of the stock exchange, it meant buying or selling them literally over the counter of the local brokerage house. Technically, NASDAQ is an over the counter market because it is decentralized and not a floor-based exchange. In fact, some people mistakenly refer to NASDAQ as “the OTC,” but NASDAQ has listing requirements more like the NYSE and even more stringent than the Amex. If OTC stocks aren’t listed or traded on an exchange, then how do investors know about them? There are two primary sources that quote OTC stocks — they are the OTC Bulletin Board and the Pink Sheets. The OTC Bulletin Board (or OTCBB) is owned and operated by NASDAQ. But don’t confuse OTCBB stocks with NASDAQ-listed stocks, and vice versa. While OTCBB stocks are registered with the Securities and Exchange Commission, they do not meet the same level of requirements as listed stocks. Some companies aren’t even registered with the SEC, but you can still find their stock prices listed on the Pink Sheets. The Pink Sheets got their name from the days when their stock quotes were printed on pink paper and passed around, but today, they appear on a real-time, Internet-based quotation system. Again, OTC stock prices are “quoted” on the OTCBB or Pink Sheets and are traded informally and with limited regulation. Listed stocks are listed and traded on NASDAQ or the other national exchanges and are highly regulated.
How Does the Stock Market Work?

The stock market provides an arena for people to buy shares of a stock from others who already own them. Generally, investors don’t buy the shares from the company that issued them. They buy the shares from other investors. Likewise, if you have a stock that you don’t want anymore — usually because you want the cash or you want the funds to buy a different stock — you sell it to another investor through the stock market. In this way, the stock market resembles a swap meet, a flea market, or eBay. The buying and selling of stock among investors is known as “the secondary market.”

The “primary market,” on the other hand, is not really a place or an entity, but rather, an activity. The primary market is created when a company first sells shares of its stock to the public. You may have heard this called an “initial public offering” or “IPO.”

Usually what happens is that a person or a small group of people start a company. If that company is successful, it begins to grow. The company is making enough to pay its owners and employees, but there might not be enough profit to buy new buildings or equipment or experiment on new ideas to make the company grow a lot more. The owner decides to sell shares of his company to anyone who wants them to raise money to invest in the business. Instead of the term “raising money,” you might hear them say “raising capital.” After selling shares of ownership in the company, lots of people own the company and since they can be just about anyone, we call the company a “public” company. That’s why we hear an initial public offering sometimes referred to as “going public.”

The full IPO process is fascinating and quite involved. You can learn more about how a company makes an initial public offering in the book, Going Public. An electronic version of the book can be found at: www.nasdaq.com

Stocks and Shares

The term “stock” actually refers to all the shares, collectively, that a company sells or makes available for sale to the public. So you don’t really “buy the stock,” but rather, you buy shares of the stock. You may have heard stock called “equity”; the money that a company raises by selling shares of its stock is called “equity capital.” Equity, generally, refers to ownership, so stocks, which are bought, are known as equity securities. (Bonds, which are a loan, are called debt securities.) “Stock” is also the instrument that signifies your ownership of a company. When you buy stock, you become a shareholder of that company.

In the stock market, stocks are not called by name, but rather, by symbol. These stock symbols, often called “ticker symbols” are short, unique abbreviations for each security. On the NYSE, stock symbols are one, two or three letters. On the Amex, the symbols are two or three letters (because the NYSE has all the one letter symbols). On NASDAQ, stock symbols have four letters. Certain types of stocks have additional letters added to the end of the symbol. Long ago, when stock orders were written by hand and quotes were transmitted through a “stock ticket” — a machine similar to a telegraph, but specifically created for the stock market — it took too long or too much room to write out company names in full, so this unique form of abbreviations was developed.
**Stock Brokers**

Individual investors don’t go to the floor of the New York Stock Exchange to buy stock. Neither do they log into NASDAQ’s intricate computer-based system. Individual investors buy and sell stock through the services of a stockbroker — an intermediary who is licensed to act on behalf of an investor for a fee, usually a commission.

When we think of a stockbroker, we generally think of a traditional, full-service securities industry professional that manages your account and advises you on your investments. In movies, we see the frantic, rich executive hollering to his secretary, “Get my broker on the phone.” Your broker might be a long-time advisor who knows your whole family by name or might be one of many people who answer the phone to take your order to buy or sell your stock. Or, it might not be a person at all, but simply the company that holds your online investing account.

Generally, a stockbroker is a person. Your broker is qualified and licensed by the National Association of Securities Dealers, Inc. He or she had to pass an exam or series of exams administered by the NASD and must remain qualified through compliance and continuing education. Your broker remains registered with the NASD and we sometimes hear them called “registered representatives.”

A brokerage firm or broker-dealer is the company that employs your stockbroker. The firm is also sometimes called simply “the broker” too. If you deal with one person who knows you well and advises you on your investments, then the firm is known as a “full-service broker.” Some firms have lots of agents who answer calls from various investors and assist the investors in placing orders to buy or sell, without giving specific guidance or advice. Because these agents provide limited services, they can provide them at a lower cost. These firms are known as “discount brokers” and, sometimes, “deep discount brokers.”

Today, most discount brokers offer online accounts and some offer only online accounts. The fees are minimal; often the lowest of all discount broker fees. Instead of dealing with a person, you place your order to buy or sell by logging onto a computer screen. If you are playing the Stock Market Game or another investing simulation, the computer screen that you use to play is very similar to an online brokerage account page.

**Trade Execution**

After you have placed an order with your broker — either online, in person, or on the phone — how does the purchase or sale actually take place? The action, called “trade execution,” differs depending on the type of market.

The New York Stock Exchange and other floor-based markets like it use the auction market model. Let’s say, for this example, you want to buy a stock. Your broker (in this case, we mean the firm) sends that order to a “specialist” — a person, representing his or her firm, which is in charge of that particular company’s stock. The specialist is a member of the exchange and is located on the floor of the exchange. Meanwhile, other brokers are taking orders from their customers to sell stock. Those brokers approach the same specialist, who will then try to match buyers and sellers in order to complete the trade. With the help of the specialist and the brokers on both sides, the seller is “auctoning” shares to buyers willing to pay a certain price.

NASDAQ, on the other hand, is an electronic market in which dealers, known as market makers, compete against each other to buy and sell shares of stock. Here’s how it works. Let’s say you have shares of a stock you want to sell. You tell your broker — again, in person, on the phone, or online — you want to sell 100 shares of Apple Computer (symbol: AAPL). Your broker sends your order, electronically, through the NASDAQ system to find the market maker willing to meet your price or offer you the best price. The market maker, which is a large securities firm, uses its firm’s own money to buy your shares and hold it in inventory. Since NASDAQ is a competitive dealer market, there will be many market makers who have inventories of Apple stock. When another investor comes along who wants to buy AAPL, that investor will buy it from whichever market maker offers it at the best price. Just like K-Mart, Wal-Mart and Target stores compete with each other for customers, so do market makers — and competition helps keep prices low for investors.

**The Trading Day**

In the United States, the stock market is open from 9:30 a.m. to 4:00 p.m., Eastern Time. For the stock market, everyone follows Eastern Time. If you live in California, which is on Pacific Time, the stock market is open from 6:30 a.m. to 1:00 p.m. in your local time zone. The stock market is closed on weekends and for major holidays. The participants believe that it is in the best interest of the market and all investors to maintain a common operating schedule. In fact, when the stock market closed unexpectedly following the attacks on September 11, 2001, the NYSE, NASDAQ, and Amex agreed to stay closed until all three were ready to open again. Four days later, when the markets were ready to reopen, the chairmen of all three markets met at the NYSE to ring the opening bell together. Later that day, all three chairmen met again, this time at NASDAQ MarketSite, to close the day’s trading.

The opening bell signals the start of trading on the floors of the NYSE and Amex. At NASDAQ, which is computerized, few people are there to hear a bell, so trading is started with the push of a button. All three markets usually hold ceremonies, each morning, to start the day’s trading. The honor of opening the market is usually given to executives of listed companies, celebrities, elected leaders and other dignitaries. The term “at the bell” usually means “at the start of the trading day.”
Trading Settlement

Placing your order to buy or sell stock is not the end of the transaction. An important process, called trade settlement occurs at the end of every stock transaction. Think of buying or selling a used car. Once you find a car you want to buy and you and the seller agree on a price, you still don’t officially own that car. First you exchange money and the title (ownership certificate), and then you register the car in your own name. Likewise in settling a stock trade. Years ago, when you sold shares of stock, you would turn in your paper certificate, which was reissued in the name of the person or people who bought the shares. Today, very few investors actually keep paper certificates and, instead, hold the stock in their brokerage account, letting the broker keep track of it. This is what’s called holding your shares “in street name.”

Trade settlement is handled by the Depository Trust and Clearing Corporation (DTCC), which through its subsidiaries, provides clearance, settlement and information services for stocks and other securities. The DTCC also operates a vault underneath the streets of Manhattan, which is where most of the physical stocks and bonds in the United States are stored. If you hold your shares in street name, the transfer of shares when you buy or sell is done within the computer system of the DTCC. You can learn more about the DTCC at www.dtcc.com. NASDAQ reports its trades directly to the DTCC. But if you are trading shares of NYSE or Amex stock, the Securities Industry Automation Corporation or “SIAC” — often pronounced “SY-ack” — handles trade settlement on behalf of the DTCC. SIAC, found on the Internet at www.siac.com, is a joint subsidiary of the New York Stock Exchange and the American Stock Exchange. Settlement for all stock transactions usually takes place on the third business day following the trade date. In the securities industry, this is called “T+3.”

Newspaper Activities

1. Look at the stock market listings in the business pages of your newspaper to find the volume of shares traded for IBM stock. Multiply the number by 100 to find the number of shares traded at IBM’s trading post. How many shares were traded?
2. Your newspaper’s business pages will also list the total volume of shares traded on the NYSE. How many shares were traded on the NYSE yesterday (or the last business day)?
3. Daily events in the news (either negative such as war, a plane crash, or positive such as a war ends, home sales increase) may affect the overall stock market or individual stocks. Find stories in the newspaper that you think will have such an impact. Write a brief explanation of your opinion.

How Do I Choose a Stock?
Different Types of Stocks

The New York Stock Exchange lists the stocks of about 2,800 companies. Approximately 3,300 companies list on NASDAQ. The Amex has about 700. That’s a lot of stocks from which to choose, not to mention investment products like mutual funds and exchange-traded funds (ETFs). Before you invest, it is important to become familiar with different types of stocks.

For investors, the most common type of stock is “common stock.” When you buy common stock, you become a shareholder in that company, with the right to vote on company matters, such as the election of company leaders. Typically, you have one vote per share, although some companies offer different classes of the same stock (Class A, Class B, etc.), in which one class may have more votes per share than others, and which is indicated by an extra letter or letters on the ticker symbol. Common stock shareholders may be entitled to receive dividends, if the company pays them.

Owners of “preferred stock” are also shareholders, but they usually don’t have voting rights. Their dividend payments, however, are generally guaranteed; ahead of common stock owners and even if common stock owners don’t get dividends at all. “Convertible stock” is simply preferred stock that can be converted to common stock. Some companies offer both common and preferred shares, but it is up to the company to decide.

Other categories of stock are generally descriptive terms used by the industry to help investors understand what they’re buying. “Small-cap,” “mid-cap,” and “large-cap” simply refer to the size or “capitalization” of the company that stock represents. “Blue chip stocks” are large, well-established companies with solid track records, like those included in the Dow Jones Industrial Average (though a company doesn’t have to be part of the Dow to be a blue chip). The term is borrowed from poker chips, where the blue ones are the most valuable.

“Penny stocks” usually cost more than a penny — but are the very least expensive, which makes them attractive to some buyers. But, they are often the riskiest investments, quoted on the OTCBB or Pink Sheets. “Income stocks” are those that consistently pay higher than average dividends, which are favored by investors like retirees who rely on this source of income. The term “growth stock” has some variations in meaning, but generally, it refers to companies that are growing faster than the industry average or the potential for a company’s earnings to grow faster than average.

Using the Media, Especially Newspapers!

Most individual investors get information about stocks and the stock market from the print and electronic media. One of the best sources of information is your daily newspaper, which prints news about individual stocks as well as the market in general. Financial magazines offer more in-depth information, though they are not as timely as the newspaper. Books — from the bookstore or library — are a good source of general information. Some broker firms and other organizations offer pamphlets and other material to help educate investors, but be careful, as they may also promote the products offered by that company. Before you invest in a particular company, you might want to read the company’s annual report. You can request a copy from the company for free and, today, many companies post an electronic version on their websites.

Electronic media, such as television and radio, offer brief, but up-to-the-minute reports on stocks and the stock market. Most local and network news shows will at least report whether NASDAQ and the Dow (more on them later) were up or down. In recent years, the Internet has become a primary source of information about stocks and the stock market, but be sure to get your information from reputable websites, and never rely solely on what you read on bulletin boards and chat rooms.

Newspaper Activities

1. Look through your newspaper’s stock listings for the names of two companies that make each of the following products: cars cereal fast food health care your choice

2. Look through the business pages of your newspaper to determine if the industries or stocks above offer good or poor potential growth over the next few years. Why and how did you reach your conclusion?

3. Look in your newspaper to find the names and stock ticker symbols of companies that fit each of the following categories: DJIA S&P 500 NASDAQ 100 Foreign

4. Find the names and stock ticker symbols of two companies that make clothing a teenager might buy. Would you be interested in purchasing these stocks? Why?
Reading Stock Tables

Newspapers provide lots of information about stocks every day. Some newspapers provide different information each day so that they can increase the amount of information you get in the course of a week. Most major daily newspapers print a daily stock table. The stock table in your newspaper will look something like the chart, right, although the columns may appear in a different order. The stock table provides data from the previous business day (table from April 2003).

The following explains what each of these columns mean:
1. “Stock” refers to the name of the company or an abbreviation of the name.
2. The stock’s ticker “symbol,” as discussed earlier. Again, note that NASDAQ uses four letters and the NYSE and Amex use three or fewer.
3. “Volume” is the number of shares of that stock traded that day in hundreds of shares. (The number of shares of Dell traded that day was 151397 X 100 = 15,139,700. Boeing traded 41451 X 100 = 4,145,100).
4. The price of the stock at the time the market closed is called the “close.” Notice that stocks now trade in dollars and cents. They used to trade in fractions.
5. “Change” is the amount the stock price changed from the previously reported trading day’s closing price to the last day's closing price. For example, if it is Wednesday, the stock chart is reporting Tuesday’s figures and the “change” is the difference in closing price from Monday to Tuesday. Dell fell (-) 77¢ while Boeing rose (+) 3¢ on those particular days.
6. The “52-week high” is the highest price at which the stock traded during the past 52 weeks. At some point during the past year, Dell traded at $35.04 and Boeing at $48.98.
7. Likewise, the “52-week low” is the lowest price at which the stock traded during the past 52 weeks. At some point during the past year, Dell traded at $22.59 and Boeing at $24.74.
8. Some companies share their profits with their shareholders by paying dividends. This column tells you how much per share Boeing is paying in dividends over the course of a year. The company bases the amount on the last quarterly or semiannual declaration. Companies can change their dividend payments each time one is paid.
9. “PE” is the abbreviation for price-to-earnings ratio. This is calculated by dividing the price of the stock by the earnings per share over the past 12 months.
10. The “12-month return” tells you what percentage your investment would have lost or gained if you had purchased the stock one year ago. If you bought Dell one year ago, you would have gained 29.6%. With Boeing, you would have lost 43.9% of your investment.

Selecting Stocks to Purchase

There are many factors you have to analyze when selecting stocks to invest in. These factors generally fall into two main categories: the strength of the company and the condition of the market and/or economy as a whole. Let’s look first at the market and the economy. Is the economy strong or weak, improving or getting worse? What phase of the business cycle are we in? Is it a “bear market” or a “bull market”? You’ve all heard these terms, but you might not be sure about what they mean. The term “bull market” describes the condition of the stock market, overall, as going up in value and going up quite rapidly. That’s because of the way a bull charges and tosses things up with his horns. If the market is sluggish or declining, it’s called a “bear market” because of the way a bear lumbers and is known to tear things, like fruit or honey, down with its paws.

Neither a bear market nor a bull market is necessarily good or bad. Many investors who bought stocks in the bull market of the late 90s, lost money when those stocks declined in value a few years later. However, we often think of the bull market as a growing, and therefore more favorable market. If an analyst or financial reporter says he or she is “bullish” on the market or on a particular stock, he or she is viewing it favorably. You don’t hear the term “bearish” as much, but it is generally a cautious or pessimistic view. The stock market generally follows the economy. If the economy is doing really well, this will be reflected in the stock prices.

Another important indicator of how the economy and the stock market are doing is the stock indexes. If you’ve ever watched a television news program — and who hasn’t — you’ve certainly heard the reporter say that NASDAQ or “the Dow” were up or down, gained or lost. It’s not hard to figure out that a gain or “up” is good, but what is this based on and what does it mean?

Market Indexes

The Dow Jones Industrial Average — sometimes called simply “the Dow” or printed in the newspaper as “the DJIA” — was the first stock market index or indicator used in this country and it is still the most widely used and recognized. Originally, the Dow was based on 12 stocks, but today, includes 30 stocks. Those 30 stocks are among the largest and best known companies in the United States, sometimes called the blue chip stocks. The Dow Jones Industrial Average is simply the average price of its 30 stocks. If the Dow goes up, it doesn’t necessarily mean that each stock in your portfolio will go up, but it is a good indicator of how the market, as a whole, performed that day. Occasionally, Dow Jones & Company (which publishes the Wall Street Journal, among other things) changes the companies included in the Dow — but it doesn’t happen very often. Twenty-eight of the Dow companies are listed on the NYSE. Two are listed on NASDAQ.

The other index commonly reported is the NASDAQ Composite Index or sometimes, simply, “the NASDAQ.” The NASDAQ Composite Index is made up of every foreign and domestic common stock listed on NASDAQ; today that is more...
than 3,000 stocks from all business industries. Some people confuse the NASDAQ Composite with the NASDAQ-100, which consists of 100 of the largest non-financial companies listed on NASDAQ. It is the NASDAQ Composite, the larger one, that you hear mentioned briefly on television news reports along with the Dow. Both the NASDAQ Composite and the NASDAQ 100 are “weighted indexes,” that is, the index figure is not a simple average of all the component stock prices. Instead, a calculation is used so that each stock affects the index value in proportion to its size.

These are not the only market indicators. Three of the other most important indexes (or “indices”) are the S&P 500, the Russell 2000 and the Wilshire 5000. The S&P 500, published by Standard & Poor’s, covers 500 of the largest U.S. stocks that are “widely held,” in other words, owned by many people. The Russell 2000, published by the Frank Russell Company, represents the stocks of 2,000 smaller U.S. companies. The Wilshire 5000, published by Wilshire Associates, covers virtually all U.S.-based common stocks. It was named for the original 5,000 stocks in the index, but now tracks many more. There are many, many other indexes that track market performance broken down by market, industry sector, and type of security.

### Analyzing the Company Before You Buy

When you buy a product, for instance, a shirt, you would prefer to choose something that is of good quality and reasonably priced. It’s the same way with stocks. In picking a stock, you should look for one that is appropriately priced (either at the price you think it is worth or less) and that you think is of good quality. For stocks, this means one that represents ownership in a company that you think will perform well in the years to come.

In order to assess how a company is doing or will do, you might conduct a “qualitative analysis” and a “quantitative analysis.” Qualitative analysis is more subjective and it looks at the “qualities” of the company; the elements that make up the company. Qualitative analysis would involve looking at news and reports about that company. For example, is the company expanding and acquiring other companies (which would be good)? Or is it closing down stores or plants (which might be an indication of something bad)? You should also look at the company’s management, which is basically the company’s leadership. For example, Howard Schultz, the Chairman of Starbucks, is widely considered to be an effective leader and thus led the success of his company. You might look at the reputation of the company and how it compares to its competitors in the industry.

The more objective analysis is the “quantitative analysis” — or, analysis of the numbers. You can look at a company’s financial statements, including the company’s balance sheet, income statement and cash flow statement. Additionally, you might find or calculate and analyze the company’s earnings-per-share, P/E ratio, debt-to-asset ratio, and working capital ratio. The “earnings-per-share” ratio is the company’s net income (after dividends are paid to shareholders) divided by the price per share. Earnings-per-share don’t tell us much, alone, but you can compare the current figure to previous years and compare it to the figure for competitor companies, to see how the company is doing.

### Earnings per share

- Net income – dividends paid out
- Average number of outstanding shares

The price-to-earnings or “P/E ratio” measures the price of a stock in relation to its earnings. You really can’t say with absolute certainty whether a P/E ratio is good or bad. A low P/E ratio could mean that the share is undervalued (costs less than people think it should), which could give you real value for your money or indicate that investors are getting rid of the stock. A high P/E ratio could mean that the share is overvalued (perceived to be too expensive), meaning either that earnings do not live up to the share price or that investors are optimistic that future earnings will go up.

### Debt-Asset ratio

- Total Assets
- Total Liabilities

The “debt-to-asset (debt-asset) ratio” looks at the company’s ability to repay its debts. Calculated as the total value of the company’s liabilities divided by the total value of its assets, a ratio of less than one means that the company is funded more by equity than debt and thus has enough assets to sell should they need to repay the debt immediately. A ratio of more than one means that the company is funded more by debt than equity, which is not such a good thing. Sometimes, it’s also important to see how fast a company can repay its debts. To do this, we can look at “liquidity ratios,” such as the “working capital ratio,” which is current assets divided by current liabilities. The interpretation of this ratio is more complicated that the debt-asset ratio. A low ratio shows that the company has more current assets than current debt and can easily repay the debt. There are many other ratios that you can use in your quantitative analysis; these are just some examples of the ones more commonly used. The key in using ratios is not to simply look at the number you calculated, but to compare that to ratios for earlier years, as well as to other companies in the industry.

### Investing — Making Your Money Grow

At this point in your life, you are most likely already familiar with saving money. You may already have your own account at a bank or a credit union. Maybe you don’t have a savings account, but you have probably stashed away money — in a piggy bank or maybe just a shoebox — someplace at home, to accumulate and use later. Forming the habit of saving while you are young can help you to afford the things you really want or need, now and when you are older. Saving is a habit, and once you get used to saving part of your income, it becomes automatic. When you think of making a choice between spending and saving, perhaps saving sounds boring. Maybe thinking of saving as deferred spending will help to make it sound more interesting. You are going to spend the money, but you are going to defer (delay) the spending in order to get something you really need or truly want.

Now that you have become a saver, it is time to think about making your money grow. That’s “investing.” Suppose you have saved $1,000. A year from now, if you neither spend it nor add to it, how much money will you have? That depends on how you invest it, and there are many investment choices.

### Newspaper Activities

1. Find an ad for a CD or other interest bearing account. Compare this return with the Dow Jones Industrial Average and with several individual stocks over the past year. Which was a better investment?

The prices-to-earnings or “P/E ratio” measures the price of a stock in relation to its earnings. You really can’t say with absolute certainty whether a P/E ratio is good or bad. A low P/E ratio could mean that the share is undervalued (costs less than people think it should), which could give you real value for your money or indicate that investors are getting rid of the stock. A high P/E ratio could mean that the share is overvalued (perceived to be too expensive), meaning either that earnings do not live up to the share price or that investors are optimistic that future earnings will go up.

The debt to asset ratio is: 

\[
\text{Debt-Asset ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}
\]

Finally, it is important to remember that you should never invest in a stock simply by looking at the pattern of prices. We all learned this all too well in recent years. Just because a stock has shown a steady and consistent increase in stock prices doesn’t tell you enough about the company and whether those increases are likely to continue. Looking at the company’s finances and using the ratios described above will give you a much better picture of how that company will likely perform in the months and years to come.
If you have decided that you want to purchase shares of stock immediately, at whatever price it is now trading, you will place a “market order.” The broker will place your order (or if you are using an online account, the firm places the order electronically) and you will buy the stock at the best price that stock is going for at that moment. Usually your broker or the online firm website can tell you the current market price of the stock. But that can change. If the stock is very volatile, you may not know the price you paid until after your order is placed.

If you want to buy a stock, but only if it is available at a certain price, you can place a “limit order.” That is, you limit the price you will pay. If you are buying stock, it is the highest price you are willing to pay. (If you are selling stock, it is the lowest price you are willing to let it go for.) Your broker will hold that order and fill it only if your price is met. The risk you take is that the price might never fall that low, and you will never purchase it.

**Buying Stocks on Margin**

If you are willing to take even more risk in order to have an even greater reward, you can use your stock to borrow money from your broker to buy more stock. For example, you have purchased 100 shares of DELL from your broker. Those shares are worth $3,390. Your broker is willing to lend you money because he has those shares as collateral. The amount of money your broker will lend you might vary, depending on the type of stocks you have in your account, but let’s assume that the firm is willing to lend you an amount equal to the value of your account. The firm will lend you $3,390. The firm will charge you interest on the money you borrow. (Brokers are charging about 5-7% on margin accounts today, but that interest rate can change.) You decide to purchase another 100 shares of DELL. You now own 200 shares of Dell Computer, Inc. But, you owe the broker $3,390 plus interest, which will be charged to your account each month. If DELL does well and the stock price rises, you will make twice as much profit as you would have if you owned only 100 shares. What is the risk? If the value of DELL goes down, you will lose twice as much money as you would have if you only owned 100 shares. If the value of your stock goes down to a certain point, your broker will give you a certain amount of time (usually 3 days) to deposit more money or your stock may be sold without asking you. The broker has that right. Buying on margin can increase your reward, but it also increases your risk.

**Diversification — Reducing the Risks**

The stock market has great potential for returns, however, at the same time, you will also face potential risk, because the price of stocks can fluctuate greatly. Therefore, investors shouldn’t put all their eggs in one basket — that is, shouldn’t invest all their money in only one stock or one type of stock. Investors “diversify” their “portfolio” (their collection of investments) to reduce the risk by buying a number of securities, which are not affected by the same variables. Your portfolio may include stocks from different-sized companies, from companies based in different countries, or from different industries. You might also diversify your portfolio by investing in securities other than stocks — bonds, for example. If you build a portfolio that includes securities from a number of sectors, chances are that one or more would always be doing better than average. The trick is to find securities that don’t have tendencies to increase or decrease in price at the same time.

Setting up your own diversified portfolio can be quite complicated, as you will have to keep track of your many stocks at the same time, depending on how many stocks you buy. One simpler means of diversification is to buy a “ready-made portfolio” by investing in a mutual fund. A mutual fund is a portfolio of stocks and sometimes other securities that is managed by an investment company. In return for a nominal fee, the company will help you to keep track of the stocks. You can purchase shares of the mutual fund through your broker, or in many cases, directly from the mutual fund, thus eliminating the broker commission. The firm that runs the mutual fund has many clients, like you, which enables them to pool all the clients’ money together to buy the shares.

Besides diversification of risk, mutual funds enable you to take advantage of professional management of securities, simplicity, economies of scale and liquidity. However, there can also be disadvantages to investing in mutual funds. For some funds, fees to manage your money, and at times a broker fee, can eat up money that could be invested. In addition, the professional management of the company does not guarantee a good return on your investment. Therefore, you should always use your own judgment and research in selecting both stocks and mutual funds.

There are many types of mutual funds, including money market funds, which invest in treasury bills, and bond funds, which invest in bonds. Equity funds invest in stocks, and there are also many types of equity funds, such as sector funds, which invest in stocks from a particular industry; international funds, which invest in foreign-based stocks; growth funds, which invest in companies expected to appreciate quickly; and the like. Index funds are mutual funds that track the performance of an entire index.

“Exchange Traded Funds” (ETFs) are similar to index funds in that they track the performance of an entire index. They differ from index funds in that shares of ETFs trade more like shares of a single stock — they fluctuate and can be bought/sold within the trading day, and investors can short sell them, buy them on margin, and buy as little as one share. The most popular ETFs are: QQQ (sometimes called Qs or “cubes”), which tracks the NASDAQ-100 Index; DIA (called “diamonds”), which tracks the Dow Jones Industrial Average; and SPY (called “SPDRD” or “spiders”), which tracks the S&P 500. All three are traded on the Amex.

No matter what stocks you choose or how you invest, most investment advisors agree that the best strategy is long-term investing. Over a long period of time, stocks have consistently increased in value and stock ownership has produced higher returns than other types of investments. Therefore, investors often adopt a buy-and-hold approach (that is, they buy the stocks at a low price and hold them until they go up). Stocks are often recommended as long-term investment for money that you won’t need for some years. However, investors must always be diligent in understanding what is going on with their stocks and the stock market overall. The volatility of stocks makes it impossible to predict what you can earn on your investment this year or next year. If you need your money before the stock has had a chance to rise, you might have to sell the stocks you bought at a loss.

**Newspaper Activities**

1. Pretend that you have decided to purchase 100 shares of Procter & Gamble. Look at the stock tables in your newspaper, and decide what a reasonable limit price would be to offer. Check the price for a couple of days. Was your limit price met?
2. Suppose you have decided to sell 100 shares of Microsoft. Set a limit price. Check the price for a couple of days. Was your limit price met?
3. You probably decided to purchase that stock because you believed that the stock price would rise over time. But what could you do if you believed the company would not do well over the next year or so? Is there a way to make money if the stock price goes down? Yes, it’s called “short selling.” When you short sell, you sell stock that you do not own by borrowing the shares from the broker. For example, you might borrow 100 shares of DELL from the broker and short sell it. Someone buys the shares at $33.90 a share and you receive $3,390. But you still owe the broker whatever it costs to replace the 100 shares of DELL. If the price falls to $33 a share, you will make a profit of 90¢ a share or $90. However, if the price rises to $34 a share, you will lose 10¢ a share or $10. Now $10 may not break you, but short selling can be very dangerous because there is no limit to the amount of money you can lose. If the stock price rises to $44 a share, how much would you lose?
Who Protects Investors?

By now, you can probably tell that the stock market is a complex, yet exciting place. Due to the complexities of the stock market and the large amounts of money involved, there is some danger of fraud and market misconduct. While the vast majority of market participants are honest and trustworthy, a few bad apples can spoil the system for all of us, so regulation is needed to make sure that all the people and organizations involved in the process abide by the rules and that the mechanism of the stock market runs smoothly.

If you have been reading the newspaper over the past few years, you have probably already heard of companies like Enron, people like Martha Stewart and phenomena like the bursting of the tech bubble. You are probably already aware of people losing money in the stock market. As we know, investing involves some risk; so sometimes losing money is part of the game and is no one’s fault. But participants in the stock market — whether the securities firms, industry professionals, the companies that issue stock and others — need to be regulated for the protection of everyone involved, especially the investors.

The public companies that issue stock need to be regulated to ensure that they provide truthful and complete information so that the investor can make informed decisions. Securities firms and intermediaries, such as brokers or financial advisors, need to be regulated to ensure that they are qualified to serve the needs of investors and serve them appropriately. All market participants need to be protected from “insider trading” (that is, when someone tries to benefit by trading with information that they shouldn’t have or that isn’t available to the public), from “conflicts of interest” (which includes many things, such as when a broker or a company official is in the position to benefit himself and his actions or potential actions might not be in the best interest of others) and finally “fraud” (which is simply cheating or a deceitful action).

Today, the stock market is a highly regulated business. Private and government organizations are responsible for watching over the activities of the stock market to be sure that it operates fairly for all the companies and individuals involved.

SEC

The U.S. Securities and Exchange Commission is an agency of the federal government that was created by Congress to protect investors and maintain the integrity of the securities markets. It is often called, simply, “the SEC” or sometimes, “the Commission.” At the heart of the SEC’s work is the belief that all investors have a right to have basic information about a stock before they purchase it. Therefore, the companies that list their stock on the stock market are required by the SEC to disclose certain information to the public. In addition to public companies, the SEC oversees stock exchanges, broker/dealer firms, investment advisors and other market participants. The SEC was formed in 1934.

Five commissioners who are appointed by the President of the United States govern the SEC. Each commissioner serves a five-year term and the terms end at different times. Did you know that Joseph P. Kennedy, the father of President John F. Kennedy, was the first chairman of the SEC? The SEC is headquartered in Washington, DC, and employs more than 3,000 people. You can learn more about the SEC at: www.sec.gov

State Regulators

State governments have been regulating securities offerings and financial professionals since the first state securities laws were passed in Kansas in 1911. These regulations play an important role in protecting investors from fraud and abuse. Like the SEC, state regulators protect investors, but it is the states’ regulation of small, local, firms and brokers that has led many to refer to them as the “local cops on the securities beat,” helping to ensure that individual investors are not cheated by bad brokers or sold bad products.

Each state has its own laws. State securities regulators enforce their state’s laws to protect small investors. They license financial professionals and screen them for fitness. They register small stock offerings to ensure adequate disclosures — they make sure that advertisements for investments are fair and truthful. State regulators also coordinate local educational events for investors of all ages, so that people can learn to better protect themselves from fraud and plan for their financial futures.

The North American Securities Administrators Association (NASAA) is an organization of all the state regulators. You can visit the NASAA website at www.nasaa.org to find out which agency regulates stocks in your state.

Self-Regulatory Organizations

In addition to regulation by the state and federal government, the stock market is also subject to “self-regulation.” The idea behind this is that those in the business should know best how to regulate their industry and that it would be more effective for them, rather than the government, to set rules of conduct and enforce these rules.

This regulatory authority was given to national securities associations under the Maloney Act of 1938. The primary self-regulatory organization — or “SRO” — is the National Association of Securities Dealers (NASD). Under federal law, every securities firm that does business with the public in the U.S. is a member of the NASD and must follow its rules and regulations. While the NASD created NASDAQ and still owns the Amex, its regulatory authority stretches to all securities firms in the country, doing business in any of the securities markets. You can learn more about the NASD at www.nasd.com

Furthermore, the NYSE, Amex and NASDAQ are all self-regulatory organizations. They are responsible for making rules, which their members must follow, monitoring member firms and disciplining violations of the trading rules. The SEC must approve all new rules set by the SROs. One of the ways that SROs protect investors is by imposing strict listing standards on the companies that list their stocks on these markets. By requiring that public companies maintain a minimum share price or a certain amount of capital, the markets help to ensure that investors are offered healthy companies in which to invest.

Securities Investor Protection Corporation

The Securities Investor Protection Corporation (SIPC) was created by Congress in 1970 to protect investors against losses that occur when a securities firm “goes under.” SIPC — often pronounced “SIH-pik” — is not a government agency. It is a non-profit organization that is funded by the securities firms, which are its members. What is most important to remember is that SIPC does not protect investors against losses due to natural risks and does not protect investors against fraud. Rather, if a securities firm goes out of business due to bankruptcy or other financial troubles, SIPC helps investors who have accounts with that firm get their money back. Although SIPC’s coverage is narrow and very specific, investors are advised to do business with firms that are SIPC members. For a better understanding of what SIPC insures, visit the website at: www.sipc.org

WEB SITES TO VISIT

www.investopedia.com
www.morningstar.com
www.morningstar.com
www.nasdaq.com
www.nyse.com — The New York Stock Exchange
www.nyse.com — The New York Stock Exchange
www.smgww.org — The Stock Market Game
www.thewealthsite.com
www.youngmoney.com
www.vocabulary.com/SWGame.html — for vocabulary words, definitions, crossword puzzles and other fun ways to learn about the stock market.
TEACHING THE ESSENTIALS

The program teaches and reinforces these essential skills and concepts:

- Math, language arts and social studies
- Critical thinking
- Decision-making
- Cooperation and communication
- Independent research
- Saving, investing and economics

Students use Internet research and news updates, making the simulation an even better mirror of the marketplace. While the competitive game-play creates student excitement, the educational experience delivers the greatest impact.

A KEY TO INNOVATIVE LEARNING

Students who participate in The Stock Market Game Program learn more than investing. As they progress, they learn core academic concepts and skills that can help them succeed in the classroom — and in life.

Starting with a virtual cash account of $100,000, students strive to create the best-performing portfolio using a live trading simulation. They work together in teams, developing leadership, organization, negotiation and cooperation skills as they compete for the top spot.

The setup is engaging, and learning is a natural part of the experience.

In building a portfolio, students research and evaluate stocks, and make decisions based on what they’ve learned. To determine why certain stocks perform the way they do, or why the broader market has moved up or down, they need to understand how the economy works. And to calculate their returns, they need to do the math.

Teachers have discovered that The Stock Market Game Program actually boosts attendance and reduces dropout rates. Students who participate in the program gain confidence and build self-esteem. They have fun — and learn more effectively as they see how their classroom lessons apply to the real world.

What students gain from The Stock Market Game Program is a remarkable experience — and even more important, an education for life.

GET WITH THE PROGRAM!

“Students see that the concepts we’re practicing in math have real-life applications. Making those connections gets them more eager to learn.”
—LaMar Broughton, Math Teacher, Simon Guggenheim Elementary School, Illinois

“It puts you in a real-life situation. It really gets you thinking and turns on that light bulb in your head.”
—Jessica, Student, Montwood Middle School, Texas

How to Get Started

Here are a few ways you can participate:

- Adopt the program in your district, school, or classroom
- Support the program in your community or nationwide
- Learn how the program helps schools meet national education standards
- Join the effort to expand the program’s reach

To find out more, please visit our website: www.stockmarketgame.org

Or contact:
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New York, NY 10271-0080
Phone: 212-720-0608
Fax: 212-968-0901
Email: elesher@sia.com

A PROVEN TOOL FOR SCHOOLS

Since 1977, the program has given educators a way to improve the learning experience in thousands of classrooms. Teachers have successfully used The Stock Market Game Program to enliven core academic subjects — including math, social studies and language arts — and research has shown there’s no better way to teach the importance of saving and investing.

The Stock Market Game Program offers a vast library of learning materials correlated to national educational standards in math, business education and economics. This resource has inspired many teachers to incorporate the program into classes in creative ways — at all levels, from fourth grade to college, all across the curriculum.
Enhancing The Stock Market Game™ Program through writing.

The perfect companion to The Stock Market Game™ Program, our teacher-designed writing component and competition, builds a bridge between classroom learning and the real world. InvestWrite complements The Stock Market Game™ Program learning experience and easily integrates across subjects throughout your curriculum.

Pre-register online starting September 15th.*

www.investwrite.info

InvestWrite, an innovative national writing competition, adds a critical thinking component to help reinforce the concepts learned in the classroom.

* Must be a registered participant of The Stock Market Game™ Program to enroll.

A new addition to The Stock Market Game™ Program. Brought to you by the Foundation for Investor Education.