

What Causes Stock Prices to Change?

Suggested Grade & Mastery Level

High School - all levels

Suggested Time

50 minutes

Teacher Background

A stock's price is an indication of what investors believe a company is worth. The price of a stock not only reflects a company's current value - it also reflects the investor's expectations of future growth and earnings.

This lesson discusses events and situations that influence stock prices. A number of factors contribute to the minute-to-minute changes in a stock's price. For example, market forces such as supply and demand impact share prices. If more people want to buy a stock (demand) than sell it (supply), then the price goes up. Conversely, if more people wanted to sell a stock than buy it, supply exceeds demand and the price falls.

News events working in conjunction with public opinion also play a role in creating rises and dips in stock prices. Reports on internal corporate activity, industry trends, and national/international events (e.g. political, social and scientific news) are interpreted as either "good" or "bad" news by the public, who in turn determine whether a company is a good investment or not.

Fundamental data such as P/E ratios and projected earnings help investors place a value on a stock. Public companies must report their earnings four times a year (once each quarter). "Wall Street" carefully watches earnings results. Analysts base their opinions about future value of a company on its earnings projections. If a company's results are better than analysts expected, the stock price rises. If a company's results are worse than expected the stock price falls.

Investors have developed literally hundreds of variables, ratios and indicators to predict stock price changes. The main forms of stock analysis are: fundamental, technical and quantitative. Each approach involves following various market indicators to decide whether to buy, sell, or hold.

This lesson will touch on the analysis of outside influences (i.e., current events). It is a broader and more basic approach to understanding influences on the market.

Vocabulary:

Earnings: Whatever profits or net income remains after subtracting the company's expenses from its revenue (also called a company's profit).

Fundamental Analysis: A primary method for analyzing a stock's potential return. It involves assessing a corporation's financial history and current standing, including earnings, sales, and management, as well as the strength of the corporation's products or services in the marketplace.

Inflation: An increase in the general level of prices of goods and services.

Market Capitalization: A measure of the value of a company, calculated by multiplying the number of outstanding shares by the current price per share. For example, a company with 100 million shares of stock outstanding and a current market value of \$25 a share has a market capitalization of \$2.5 billion.

P/E Ratio: A company's closing price divided by its latest annual earnings per share. The Price / Earnings is the relationship between a company's earnings and its share price. It is calculated by dividing the current price per share by the earnings per share.

Quantitative Analysis: Analysis focused on a corporation's financial data including looking at profit-and-loss statements, sales and earnings histories and the statistical state of the economy.

Technical Analysis: Tracking price movements and trading volumes in various securities to identify patterns in the price behavior of particular stocks, mutual funds, commodities, or options in specific market sectors or in the overall financial markets.

Performance Objectives

Students will be able to:

- Analyze and interpret market indices, which influence changes of the overall stock market.
- Discuss the various ways stock prices are influenced
- Evaluate the ways investors can be affected by the change in market prices when choosing to buy, sell or hold.
- To interpret charts and graphs to better understand the growth and change in stock prices.

Subject Area

Economics, Mathematics, English Language Arts, Technology/Research

Materials

- Multiple copies of the day's newspaper.
- In preparation for this lesson, students should bring the following research to class:
Novice and Apprentice students should select two stocks from their current Stock Market Game team's portfolio and write a brief, one page, report to present to their teammates on whether the team should sell these stocks, hold their current investment in the companies or buy more of the stock based upon their findings.
Master and Grand Master students should select two stocks that they would like to see their team invest in and be prepared with their reasons for recommending the purchases; including research on the companies' earnings, share price over the past year, dividends, recent events related to the company, etc.
- Poster Board, glue and markers.
- **Fact Sheet 1: Online Newshour Transcript: Stock Market High, Dropping Gas Prices Signal Possible Economic Boom**
- **Activity Sheet 1: The Ripple Effect**
- **Activity Sheet 2: Influences on the Market**

Springboard Activity

Display the title of the Online Newshour Transcript:

Stock Market High, Dropping Gas Prices Signal Possible Economic Boom

Ask your students to react to the statement.

ASK

- Does this news affect the portfolio your team is managing in The Stock Market Game? Why?
- What changes based on this news, if any, would you recommend your team make to the investments you have chosen? Why?
- Does this news make you want to investigate industries or companies you hadn't considered investing in before? Why?

Distribute **Fact Sheet 1: Online Newshour Transcript: Stock Market High, Dropping Gas Prices Signal Possible Economic Boom**. You may have the students read it to themselves individually or you may choose to select three students to read aloud the statements of Gwen Ifill, Mark Zandi, and John Kilduff.

ASK

- Has the article changed their earlier responses to the questions asked? Why?
- What has changed regarding oil, the Middle East, and the housing market since the Gwen, Mark, and John spoke?
- What has the impact on the stock market been?

Explain that stocks are influenced by many current events and today we will discuss the impact of outside events on an investment portfolio.

The original transcript is available here through the Online Newshour:

http://www.pbs.org/newshour/bb/business/july-dec06/economy_09-27.html

Procedure

In 2006, after producing almost 200,000,000 Walkman over almost twenty years, Sony decided to stop producing the product mostly due to the overwhelming success of Apple's iPod. How do you think this situation has impacted both companies and prices of the shares of stock in their companies? Why?

Share prices fluctuate for many different reasons. In addition to what we have just illustrated, what are some other reasons that you can think of for demand for a company's stock to rise or fall? Elicit various reasons including current events and list those reasons on the board.

Put students into their SMG groups. Distribute copies of the day's newspaper and have the students select three articles from national news or the business section of the paper and paste them on the chart paper. (Teachers can model an example of an event before the students begin their task or guide students to specific headlines.) After reading the articles, the teams should determine which publicly traded stock companies will be affected by this event and how and why they will be affected.

Distribute **Activity Sheet 1: The Ripple Effect** and have students' answer the questions using the articles selected. All answers should be placed under the article.

Each group will present their headlines and determination of the events' impact on stock price.

You may wish to ask follow up questions such as the following:

- Why is it important for us to follow the news and world events when deciding on buying or selling stock? Why is it important in determining how these influences will affect the companies in our portfolio and the shares of stock of these companies? Besides what was mentioned, what else influences stock pricing?

Ask students to make a list of factors that influences stock prices and create board notes expressing the determining factors of price change:

- At the most basic level, supply and demand in the market determine stock price.
- Earnings affect investors' evaluation of a company, but there are other indicators that investors use to predict stock price: investors' sentiments, attitudes, and expectations ultimately affect stock prices.
- There are many theories that try to explain the way stock prices move the way that they do. There is no one theory that can explain everything.

Assessment

Distribute **Activity Sheet 2: Influences on the Market**. Have students get into their Stock Market Game teams. Explain that students will be responsible for answering questions for all four scenarios on the worksheet; however, each group will now serve as the experts for one of the scenarios and help out the rest of their classmates. Give groups approximately five minutes to read and discuss the answers



to their scenario and then have groups report back to the entire class. Students should take notes to help complete all questions.

Novice and **Apprentice** Levels:

Stocks are easily influenced by world events. Select a stock in your portfolio that is most likely to be influenced by the news. Explain how current events may increase or decrease the value of that stock.

Master and **Grand Master** Levels:

Download a recent quarterly report from the most successful stock in your portfolio. Use the report together with current events to create a presentation that convinces your team members to either sell or purchase more of the stock.

Application

Students should be given time to work in their Stock Market Game teams to review their portfolios in light of the day's lesson. Students should be able to evaluate what two factors have most influenced the movement of each of their portfolio holdings and determine whether there should be a shift in team investments.

Novice and **Apprentice** Levels:

Students should review their portfolio holdings in their SMG groups and each student should choose one company for follow-up research and track the possible influences on the price changes within the last two weeks. Students should write a one-page report or PowerPoint presentation with their assessment of the investment and recommendations as to whether the investment should be changed for any reason.

Master and **Grand Master** Levels:

Students can download a quarterly report for one of the companies in their portfolio, (<http://www.tva.gov/finance/reports/pdf/3rdq05.pdf>) and create a Power Point presentation reviewing the reasons the company's shares were up or down. Students can then write a prediction as to the possible future of the company. Presentations can be made in class and discussed.

Track a specific stock company that is related to a national event and create a presentation graphing the changes in stock prices that occur. Conclude with an analysis of causes for this change according to the event and discuss how the stock of other companies within the same industry and the economy as a whole could have been affected by the event.

Select a recent historical event (within last 2 years) what industry sector did it effect. Choose a stock within that sector and chart the changes in the stocks sale price and how it correlates to the event.

Enrichment Activities

Create a quarterly report on a stock that the SMG group has chosen and present it to the class. They may use a downloaded version of a quarterly report as a model for their own report. (<http://www.tva.gov/finance/reports/pdf/3rdq05.pdf>). The students can present their reports as a power point presentation or with charts and graphs. The students make the document come alive and be graded on their creativity in dispersing the information. This report can be presented as part of the After the Closing Bell project presentation.