Let’s Talk Stocks
Advanced Level
Why Learn About the Stock Market?

1. It is an integral part of American society
2. It is considered a core element of America’s economic system
3. Stocks & Bonds are financial products that are traded & represent companies that affect our daily lives

**Stock Market** - A general term used to describe the place where all transactions involving the buying and selling of stock shares issued by a company take place.
Some Basic Stock Market Terms

**Stocks** - a share of ownership in the assets and earnings of a company

**Stock certificate** - Typically now a digital certificate provided to a shareholder representing their ownership shares of a stock(s)

**Bond** - type of debt that a company issues to investors for a specified amount of time; may offer a fixed rate of interest
Why Do Companies Issue Stocks?

When a company would like to grow or expand, it can choose to sell stocks to raise funds to pay for ongoing business activities. It is popular because:

- *The company does not have to repay the money*
- *Allows for owners to make further investments using stock-frees up cash*
- *Paying dividends is optional*
  - What’s a Dividend?
    - distributions of earnings paid to stockholders
Initial Public Offering (IPO) - the first time the stock of a private company is offered to the public to be traded on a stock exchange.
Risk vs. Return

- Risk is defined as uncertainty about an outcome
- Stocks tend to offer a higher Rate of Return (increase or decrease in the original purchase price of an investment, and most often expressed as a percentage) than more liquid investment products like savings

If an **investor** seeks a higher rate of return for their investment, they must be willing to accept greater risk with their money

To reduce exposure to risk, investors should create a **Diversified Portfolio** in which their money is invested in a variety of investment tools such as stocks and bonds
Two Basic Types of Stocks
Common Stock

- **Common Stock** – shares or units of ownership in a public corporation
- Most basic form of ownership
- One vote per share owned to determine company’s board of directors
Preferred Stock - Shares which pay fixed dividends and have priority over common stock

*Less risky than common stock
*No voting rights
*Fixed value stated on the stock certificate

Stock Certificate - Usually provided as a digital certificate, shareholder receives it to represent their ownership of a stock

Dividends are stated as a percentage known as the par value or market value
Ways Stock Values May Change

1. The **price per share** or the dollar value of the stock increases or decreases

2. **Stock Split** occurs – shares owned by existing stockholders are divided into a larger number of shares

3. A **Merger** of two companies

4. **Dividends** are paid
Vocabulary Terms to Know

**Market Price** - amount a willing buyer would pay a willing seller for the stock; known as the price per stock. Based on the interest rates of the economy.

**Par Value** is the fixed value stated on a preferred stock certificate which indicates the dividends which will be paid to the shareholder.

*Example: if the Par Value is 7%, and the stock is worth $100.00, the dollar amount would be $7.00 per dividend period for each stock owned.*
### Comparing Stocks

#### Common vs. Preferred Stock

<table>
<thead>
<tr>
<th>Common Stock</th>
<th>Preferred Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Voting Rights</strong></td>
<td><strong>No voting Rights</strong></td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>One vote per share owned to determine company’s board of directors</td>
<td>No representation</td>
</tr>
<tr>
<td><strong>Dividends Guaranteed</strong></td>
<td><strong>Sometimes</strong></td>
</tr>
<tr>
<td>No dividends guaranteed. Paid only when the company has excess profits. Never paid before Preferred Dividends</td>
<td>Sometimes represented, but seldom in control</td>
</tr>
<tr>
<td><strong>Representation on Board</strong></td>
<td><strong>Less</strong></td>
</tr>
<tr>
<td>No representation and in control</td>
<td>Acts like a corporate bond, less risk than common stock</td>
</tr>
<tr>
<td><strong>Risk Level</strong></td>
<td><strong>Higher</strong></td>
</tr>
<tr>
<td>Upside and Downside Risk is higher than preferred stock.</td>
<td>Higher than preferred stock</td>
</tr>
</tbody>
</table>

---

**Note:**
- Common stock is the most typical type of stock, refers to shares or units of ownership in a public corporation.
- Preferred stock refers to shares of stock which pay fixed dividends and have precedence over common stock.
<table>
<thead>
<tr>
<th><strong>Income</strong></th>
<th><strong>Blue Chip</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>These pay high dividends because the company chooses to retain only a small portion of its profits. These stocks are from companies who have a steady stream of income. Utility companies fit this profile.</td>
<td>From nationally recognized companies which dominate their respective industry and often have revenue of $1 billion or more. They have consistent records of profit, dividend payments, and a good reputation for company management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Growth</strong></th>
<th><strong>Emerging Growth</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A company who has a consistent record of relatively rapid growth and earnings in all economic conditions. Generally growth stocks are associated with new companies who pay no dividends to their investors.</td>
<td>A young firm in an emerging industry, consisting of a few companies and is often centered around a new technology. It is high risk, with great prospect for growth.</td>
</tr>
</tbody>
</table>
Based on the characteristics associated with

**Cyclical**
These stocks are greatly influenced by changes in the economic business cycle. They are associated with companies who operate in major consumer dependent industries such as automobiles and airlines.

**Countercyclical**
Also called “defensive,” these stocks are associated with companies that have consistent returns even when the economy is suffering due to the fact that their products are in high demand. Grocery stores and utility companies are examples.

**Speculative**
These companies have a spotty earning pattern, but have potential for substantial earnings in the future, pharmaceutical companies are represented by this type of stock. They are very high risk stocks.
For an investor to have a diversified stock portfolio, they must have a variety of stocks which fall into different categories and based on . . .

- Characteristics associated with the underlying company
- Characteristics associated with the industry
- Based on the **Market Capitalization** (Size) of Company
  - Measures the size of the company
  - Calculated by multiplying:
    
    \[
    \text{number of outstanding shares} \times \text{current stock price}
    \]
  - If a company has 1.5 million shares outstanding at a share price of $25, its market cap is $37.5 million \((1.5 \text{ million} \times \$25)\)
Based on the Market Capitalization (Size) of the Company

- **Mega-cap**
  - Over $200 billion
  - Example: WELLS FARGO

- **Large-cap**
  - Over $10 billion
  - Example: Microsoft

- **Mid-cap**
  - $2 billion-$10 billion
  - Example: Gulfport Energy

- **Small-cap**
  - $250 million-$2 billion
  - Example: NAUTILUS

- **Micro-cap**
  - Below $250 million
  - Example: FULL HOUSE RESORTS

- **Nano-cap**
  - Below $50 million
  - Example: GREEN BRICK PARTNERS
Two Ways to Analyze Stocks

1. Technical Analysis of Stock Trends
   - Studies the historical chart patterns and trends of publicly traded stocks
2. Fundamental Analysis of Stocks

- Focuses on the financial statements of a company
- Determines potential for future growth by analyzing:
  - Revenue
  - Earnings
  - Return on equity
  - Profit margins

\[
\beta = \frac{5}{6} = 0.833
\]

- \(\beta < 1\): the stock is less volatile than the market as a whole
- \(\beta > 1\): the stock is more volatile than the market as a whole
- \(\beta < 0\): the stock is losing money while the market as a whole is gaining
Researching a Stock

There are four numerical measures an investor may use to determine how well a company's stock is doing:

1. Book Value
2. Earnings per Share (EPS)
3. Price/earnings ratio (P/E ratio)
4. Beta
Book Value

- Helps determine the net worth of a company
- Calculated by subtracting a company’s liabilities from its assets, both of which can be found in the company’s annual report
- The Book Value Answer indicates what would happen if a company’s assets were sold, debts paid off, and all proceeds were distributed to those who own shares of common stock

Formula

Assets - Liabilities = Book Value
Earnings per share (EPS)

- Indicates how much income a company has available to pay in dividends or to reinvest as retained earnings on a per share basis.
- Highly regarded as an important statistic to consider when evaluating a stock.
- Determined by dividing the corporation’s after tax annual earnings (before common stock is paid but after dividends are paid to preferred stockholders) by the total number of shares of common stock.

Formula

\[
\frac{\text{After tax earnings}}{\text{Total number of shares of common stock}} = \text{Earnings per share}
\]
Price/earnings ratio (P/E ratio)

- The relationship between the price per share of one stock and the annual earnings of the company. It represents how much investors are willing to pay for each dollar of a company’s earnings.
- Most companies’ P/E Ratio is 5 to 25
  - Financially successful companies have a ratio of 7-10
  - Rapidly growing companies are between 15-25
  - Speculative companies are 40-50

Formula:

\[
\text{Price per share} \div \text{Earnings of the stock} = \text{P/E ratio}
\]
Stocks with low P/E ratios pay higher dividends, have less risk, lower prices, and slow growth.

High P/E ratios indicate investors believe a firm is expected to have significant future growth.
Beta

- Measures a stock’s **volatility** compared to changes in the overall stock market.
- **Stocks have an average beta between +0.5 - +2.0.**
- A negative beta indicates a **countercyclical stock** because the price changes are opposite the movements in the business cycle.
- **Conservative investors want a stock with a beta of +1.0 or less meaning the stock is less sensitive to changes in the market.**
- A **beta** of +1.1 - +2.0 indicates the stock is **more sensitive** to changes in the market because it moves at a greater percentage.
- **A higher beta indicates a greater risk, but also the possibility of a greater reward.**
### Reading a Stock Quote

<table>
<thead>
<tr>
<th>Stock</th>
<th>YTD%</th>
<th>52-Week High Low</th>
<th>DIV</th>
<th>YLD%</th>
<th>P/E</th>
<th>VOL 100’s</th>
<th>High Low</th>
<th>Close</th>
<th>Net Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAR</td>
<td>-16.3</td>
<td>43</td>
<td>36</td>
<td>.33</td>
<td>2.5%</td>
<td>22</td>
<td>1479</td>
<td>40</td>
<td>37</td>
</tr>
</tbody>
</table>

**Company's stock trading symbol name**

**Year-To-Date percent change. Change in price since 1/1**

**Highest and lowest prices the stock sold per share during last year.**
## Reading a Stock Quote

<table>
<thead>
<tr>
<th>Stock</th>
<th>YTD%</th>
<th>52-Week High Low</th>
<th>DIV</th>
<th>YLD%</th>
<th>P/E</th>
<th>VOL 100’s</th>
<th>High Low</th>
<th>Close</th>
<th>Net Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAR</td>
<td>-16.3</td>
<td>43 36</td>
<td>.33</td>
<td>2.5%</td>
<td>22</td>
<td>1479</td>
<td>40 37</td>
<td>42</td>
<td>.027</td>
</tr>
</tbody>
</table>

### Dividends
Total cash paid to stockholders per share. It is based upon annual payments.

### YLD%
Dividend yield percentage is the dividend expressed as a percentage of price per share.

### P/E Ratio
Price/Earnings ratio is the closing price of the share compared to the annual earnings per share.
### Reading a Stock Quote

<table>
<thead>
<tr>
<th>Stock</th>
<th>YTD%</th>
<th>52-Week High Low</th>
<th>DIV</th>
<th>YLD%</th>
<th>P/E</th>
<th>VOL 100’s</th>
<th>High Low</th>
<th>Close</th>
<th>Net Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAR</td>
<td>-16.3</td>
<td>43 36</td>
<td>.33</td>
<td>2.5%</td>
<td>22</td>
<td>1479</td>
<td>40 37</td>
<td>42</td>
<td>.027</td>
</tr>
</tbody>
</table>

- **Vol 100’s**: The number of transactions to the share that day, represented in hundreds.
- **High Low**: The high and low selling prices of the stock for the day.
- **Close**: The price of the last sold share of the day.
- **Net Chg**: The difference between the closing price of the share from prior day and the current day.
The Health of the Stock Market

There are three basic indexes which track stocks and give individuals a sense of the general health of the economy. These indexes vary daily because of the variety of stocks they measure.

- The Dow Jones Industrial Average (DJIA)
- The Standard & Poor’s 500 Composite Index
- The NASDAQ 100 (National Association of Security Dealers Automated Quotations)
• The **Dow Jones Industrial Average** originated in 1884
• The oldest indicator of the ups and downs of the **stock market**.
• Named after co-founders, Charles H. Dow & Edward Jones; nicknamed **the Dow**.
• DJIA is the list of **30** leading industrial blue chip stocks on the **NYSE**
  
  [www.djindexes.com](http://www.djindexes.com)
The Standard & Poor’s 500 (SP 500) Composite Index covers market activity for 500 stocks.

It is more accurate than the Dow because it evaluates a greater variety of stocks.

www.standardandpoors.com
● The NASDAQ (National Association of Security Dealers Automated Quotations) monitors fast moving technology and financial services stocks.

● It covers market activity for all stocks traded on the NASDAQ.

● NASDAQ monitors smaller companies with more speculative stock, & generally has more dramatic ups & downs.

www.nasdaq.com
The term **bull market** describes a state of the economy when prices have **risen 20% or more** over time.

The market’s upward trend is the result of investors who are **optimistic** about the economy and purchasing stocks.

A **bear market** describes a scenario when the market is doing **poorly** and investors are **not confident** in the economy; there are more sellers than buyers; investors hold back from purchasing stocks & selling those already owned. A bear market is characterized by a **20% decline in prices** over time.
Organized Exchanges

- Each exchange has minimum requirements for a stock to ensure only reputable companies are used. They evaluate:
  - annual earnings before taxes
  - net assets
  - market value
  - number of common shares offered to the public
  - number of stockholders owning 100 or more shares

- Each exchange has a limited number of seats available which brokerage firms purchase to give them the legal right to buy and sell stocks on the exchange.
New York Stock Exchange

- Began in 1792 and is the largest stock exchange by market capitalization
- NYSE has the strictest company standards in order to be “listed”
- There are over 2,800 companies who offer stocks on the NYSE, whose market capitalization was over $12 Billion as of 2017.
- www.nyse.com
NASDAQA National Assoc. of Securities Dealers Automated Quotations

- Is an over-the-counter electronic stock exchange
- The NASDAQ has more than 3,300 small American and foreign companies listed
- The company requirements to become “listed” are not as strict as NYSE
- The market capitalization for 2017 was over $21 trillion

www.nasdaq.com
Regional Stock Exchanges

- Place to trade stocks to investors living in a specific geographical area
- Can be found in major urban cities like Boston, Cincinnati, Philadelphia, Spokane, and also Intermountain, Midwest
International Stock Exchanges

- CAC = France
- DAX = Germany
- FTSE = United Kingdom
- Hang Seng = Hong Kong
- Nikkei = Japan
Markets are Auctions

- **Buyers and sellers** meet to compete for best price
- Based upon the **laws of supply and demand**

- **Supply** is the relationship of prices to the quantities of a good or service sellers are **willing to offer for sale** at any given point in time
- **Demand** is the relationship between prices and the corresponding quantities of a good or service buyers are **willing to purchase** at any given point in time

A trade occurs when the best bid meets the lowest offer to sell.
Buying & Selling

- Investors buy and trade stock through brokers.
- An investor will establish an account by depositing cash or stocks in a **brokerage account**.
- Stocks can be bought and sold through a full service broker OR a discount brokerage, often through an online website.
Executing Stock Transactions

- A **broker** will execute a trade for you after telling broker how many and what types of stocks you’d like to purchase.
- In turn, they earn a **commission**.
- After selecting the stocks you want to purchase, you can either make a **“market order”** or a **“limit order.”**
  - A **market order** is one in which you buy stock at prevailing market price.
  - A **limit order** is when you request to buy a stock at a limited (specific) price.