

## Investment

## Basics

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## What is a stock?

Stock represents an equity ownership in a company.
Instead of loaning a company money, you are buying a little ownership of the company.

If a company has 1,000 shares of common stock outstanding, and you own 10 shares, then you own 1\% of the company.

## Real World Example:

Apple has 5,860,000,000 shares outstanding. So if you owned 10 shares of Apple, you would own $0.00000017 \%$ of the company.


Over the past 200 years, real inflation-adjusted returns from stocks have crushed returns from bonds, which have crushed returns of gold.

IPO-Initial Public Offering

## Investments:

## Stocks:

Owning a portion of the company
Making money if the company does well
Bonds:
Loaning money to a corporation or government
and you earn the interest

## Mutual Funds:

Owning a portion of a collection of stocks, bonds, or other securities

## Many Different Investments:

> Commodities - most risky
> Collectibles
> Stocks
Mutual Funds
Corporate Bonds
Treasury Bonds
Certificates of Deposit
Bank Savings Accounts - least risky

## What is a ticker symbol?

In order to buy a stock, you must know its "ticker symbol."

This is a 1 to 5 digit abbreviation or code that is unique to that stock.

KO=Coca-Cola
AAPL=Apple
WMT=Wal-Mart
NKE=Nike
UA=Under Armour

, |lı, \|/., Cisco CISCO (NASDAQ:CSCO)


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## Generally....

## The HIGHER the Return <br> The RISKIER the Investment

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## How Do Stocks Make Money?

Price appreciation - buy low, sell high
Dividends - the portion of a corporation's profit that is paid to the shareholders. Can be paid in cash or stock.

People who buy stocks are stockholders.

## Common Stocks:

$>$ Pay dividends based on performance of the company
$>$ Have higher risk but may have higher reward

## Preferred Stocks:

$>$ Dividend amount is preset
$\rightarrow$ Dividends are paid on preferred stocks before common stocks
$>$ Have lower risk but may limit reward

## What is the difference between a private and a public company?



- Privately-held companies are owned by the company's founder, management or a group of private investors.

Public companies sold a portion of itself to the public via an IPO (initial public offering) of some it's stock. Shareholders have claim to part of the company's assets and profits.

## Primary and Secondary Markets

Primary Market - When stock is issued to the public for the first time by a corporation, it is called a primary distribution. Brokerage firms arrange to purchase large blocks of a new issue from a corporation at a set price.

Secondary Market - All subsequent sales of the stock take place in the secondary markets, i.e. NYSE. These involve transactions and the exchange of funds between investors and brokers.

## NYSE:

New York Stock Exchange is the largest, bestknown stock exchange with trading floor

NASDAQ: National Association of Securities
Dealers Automated Quotations system - no trading floor, all computers

Large, mid-sized, and small growth companies

## AMEX:

American Stock Exchange Mid-sized growth companies, $2^{\text {nd }}$ largest exchange

## What and where is Wall Street?



A street in lower Manhattan, NYC
The first permanent home of the New York Stock Exchange

## Why is it called Wall Street?

In the $17^{\text {th }}$ Century a wall was built around Fort Amsterdam at the southern end of Manhattan Island.

1792: Business men would gather near the intersection of Broad St and the Wall.

1817: To get out of the rain and cold, they rented a building
 across the street.

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## The New York Stock Exchange



The nations largest security exchange, commonly called a stock exchange. It provides facilities for its members to buy and sell securities. The members of a stock exchange are brokers who buy memberships so that they can use the exchange.

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## The trading floor of the NYSE



## What and Where is NASDAQ?



National Association of Securities Dealers Automated Quotations
Located on Time Square New York City, It is the largest electronic screenbased equity securities trading market in the U.S.

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## NASDAQ

> World's first electronic exchange
$>$ Second Largest Stock and Securities Exchange in the world, only behind the NYSE
> Approximately 3,700 Companies worth \$19 Trillion
> Lists more companies and trades more shares per day than any other U.S. market

## Dow Jones Industrial Average

Thirty of the largest and most widely held U.S. public companies


Companies in the Dow Jones Industrial Average

| Company | Price | Change | \% Change | Volume | YTD <br> change |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| MMM 3M | 166.76 | -0.31 | $-0.19 \%$ | $3,712,913$ | $-12.48 \%$ |
| AXP American Express | 116.80 | -0.99 | $-0.84 \%$ | $5,342,370$ | $+22.53 \%$ |
| AAPL Apple | 217.73 | -3.23 | $-1.46 \%$ | $57,977,094$ | $+38.03 \%$ |
| BA Boeing | 379.39 | -5.05 | $-1.31 \%$ | $6,853,019$ | $+17.64 \%$ |
| CAT Caterpillar | 128.16 | -1.96 | $-1.51 \%$ | $6,438,036$ | $+0.86 \%$ |

Full list of current companies: http://money.cnn.com/data/dow30/

## Dow Jones Industrial Average or Dow Jones Index

The industrial average was first calculated on May 26, 1896 by Charles Dow and one of his business associates, statistician Edward Jones with 12 stocks and the DJIA on its first day was at 62.76.

Dow Jones Industrial Average


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## Balance Sheet and other Financial Statements

## Example of Apple Balance Sheets and Income Statements. They help you understand the size of these companies.



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## Stock Splits:

> Shares are created at a lower price per share
> If you had owned just a single share of CocaCola a century ago, you'd have $\mathbf{9 , 2 1 6}$ shares today -- and even at a modest price of just $\$ 60$ per share, your holdings would be worth roughly $\$ \mathbf{5 5 0 , 0 0 0}$.
> https://www.stocksplithistory.com

## Terminology:

$>$ Bull Market - rising market
> Bear Market - falling market
$>$ Blue Chips - the largest and most profitable stocks

## Large and Small Companies:

## Large:

> Often have high prices
> Low risk of failure
> Usually pay regular dividends

## Small:

$>$ Potential for growth is greater than for larger companies
> Generally prices are lower

## Long Term Investing



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## Researching General Electric

52 Week High/Low:
Highest and lowest price for a share of the stock in the past 52 weeks. GE's high was 28.09 \& Low of 23.69

Ticker symbols: Typically from 1 to 5 letters

| Markets | Quote | Trades |  | ons | Charts | News | Company | Financials | Filings | Analyst | Historical |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Symbol: |  | Detailed Quote v |  |  |  | Symbol Lookup \| Recent Quotes |  |  |  | powered by quotemedia.com |  |
| Detailed Quote for General Electric Co. (GE) |  |  |  |  |  |  |  |  |  |  |  |
| \$ 27/.0 |  | $\Delta 0.40$ ( $+1.50 \%)$ |  |  |  | Volume: 36.78 m |  |  | 4:20 PM EST Nov 18, 2014 |  |  |
| Afte Ho | $\$ 27$ |  | 0.00 (0.00\%) |  |  | Volume: 315.17 k |  |  | 6:18 PM EST Nov 18, 2014 |  |  |
|  |  |  |  |  | Last Price |  | Change \$ |  | Change \% | Tick |  |
| - |  |  |  |  | 27.01 |  | $\triangle 0.40$ |  | $\triangle 1.50 \%$ | N/A |  |
|  |  |  |  |  | Bid |  | Bid Size |  | Ask | Ask Size |  |
|  |  |  |  | 26.90 | 90 $\quad 26.92$ |  | 500 |  | 26.97 | 500 |  |
|  |  |  |  | 26.80 | . Open |  | High |  | Low | Prev Close |  |
|  |  |  |  | 26.80 | 26.70 |  | 27.05 |  | 26.69 | 26.61 |  |
|  |  |  |  | 26.70 | Last Trade |  | Volume |  | 52 Wk Hi | 52 Wk Low |  |
|  |  | 26.60 |  |  | - 11/18/14 |  | 36.78 m |  | 28.09 | 23.69 |  |
|  |  |  |  |  | Market Cap |  | Ex-Div Date |  | Div Rate | $\begin{gathered} \text { Yield } \\ 3.2581 \end{gathered}$ |  |
|  |  | $\begin{array}{cc} 2 \mathrm{pm} & 3 \mathrm{pm} \\ \text { ©(C) quotemedia.com } \end{array}$ |  |  | 271.24b |  | 09/18/14 |  | 0.88 |  |  |
| November | $18,2014$ |  |  |  | Shares$10,042,192,011$ |  | EPS (TTM) |  | PE Ratio20.60 | Exchange |  |
| Today | 5d | 3m | 1y | more |  |  | NYE |  |  |  |

News and Media for General Electric Co. (GE)

News for General Electric Co. (GE)
Wed, Nov 19, 2014
6:25 AM GE: The Sum Of All Of The Parts - SeekingAlpha
4:46 AM Siemens - GE With European Discount - SeekingAlpha

## Researching General Electric

> DIV:
Annual Dividend per Share of Stock

Based on the rate of the Last Quarterly Payout
Annualized Data
Example GE: $\$ .88$ per share


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## Researching General Electric

> Yield \%: Known as Dividend Yield, a measure of the income produced by the stock
> Calculation: the DIV or Annual Dividend by the Day's Closing Price: GE .88/27.01 = . 0325 or $3.25 \%$


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## PE Ratio: What stocks should I buy?

What Does Price-Earnings Ratio - P/E Ratio Mean?

A valuation ratio of a company's current share price compared to its per-share earnings.

Calculated as:
Market Value per Share
Earnings per Share (EPS)
More earnings per share given stock price results in a lower PE ratio and a better buy.

## PE Ratio: What stocks should I buy?

More earnings per share given stock price results in a lower PE ratio and a better buy.
Sometimes known as "price multiple" or "earnings multiple.
Compare the $\mathrm{P} / \mathrm{E}$ ratios of one company to other companies in the same industry. http://www.investopedia.com/terms/p/priceearningsratio.asp

## PE Ratio: What stocks should I buy?

The P/E is sometimes referred to as the
"multiple", because it shows how much investors are willing to pay per dollar of earnings.

If a company were currently trading at a multiple (P/E) of 20, the interpretation is that an investor is willing to pay $\$ 20$ for $\$ 1$ of current earnings.

## Researching General Electric

> Example:

## GE at 20.60 P/E Ratio indicating that GE is selling for 20.6 times the company's earnings



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## Look Back: Was Mattel or Apple the better buy?

| MATTEL INC (NYSE:MAT) Delayed quote data |  |  |  | Edit |
| :---: | :---: | :---: | :---: | :---: |
| Last Trade: | 18.65 | Day's Range: | 18.51-18.93 | MAT 25-Jan 10:06am (C) Yahoo! <br> 19.0 |
| Trade Time: | 10:06AM ET | 52wk Range: | 15.94-19.79 |  |
| Change: | + 0.14 (0.76\%) | Volume: | 207,500 | + |
| Prev Close: | 18.51 | Avg Vol (3m): | 1,683,181 |  |
| Open: | 18.72 | Market Cap: | 7.74 B | 10am $\frac{1}{12 \mathrm{pm}}$ 2 ${ }^{\text {cma }}$ |
| Bid: | N/A | P/E (ttm): | 15.81 | 1d 5d 3m 6m 1y 2y 5y max |
| Ask: | N/A | EPS (ttm): | 1.18 | Special Edition: How to Fix |
| 1y Target Est: | 19.33 | Div \& Yield: | 0.45 (2.39\%) | Social Security |

APPLE COMPUTER (NasdaqNM:AAPL) Delayed quote data

| Last Trade: | 71.48 | Day's Range: | 70.94-71.52 |  <br> 1d $5 \mathrm{~d} ~ 3 \mathrm{~m} 6 \mathrm{~m}$ 1y $2 y$ 5y max <br> Annual Report for AAPL |
| :---: | :---: | :---: | :---: | :---: |
| Trade Time: | 10:12AM ET | 52wk Range: | 21.70-74.42 |  |
| Change: | + 0.72 (1.02\%) | Volume: | 3,009,843 |  |
| Prev Close: | 70.76 | Avg Vol (3m): | 16,687,909 |  |
| Open: | 71.41 | Market Cap: | 28.92B |  |
| Bid: | $71.48 \times 1000$ | P/E (ttm): | 57.46 |  |
| Ask: | $71.49 \times 500$ | EPS (ttm): | 1.244 |  |
| 1y Target Est | 81.29 | Div \& Yield: | N/A (N/A) |  |

Another way to look at EPS: firm profit divided by number of shares.
More earnings per share given stock price results in a lower P/E \& a better buy.
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## PE Ratio: What stocks should I buy?

> Trailing P/E: is what is reported in the financial section
$>$ Forward P/E: based on forecasting net years future expected earnings

## Researching General Electric

## Earnings Per Share:

GE \$1.31
Many investors carefully watch this number In general, higher earnings per share means better dividend and overall stock performance.


## News and Media for General Electric Co. (GE) <br> Sector News I Topic News

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## Researching General Electric

| Earnings Per |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Share: | Detailed Quote for General Electric Co. (GE) |  |  |  |  |  |
| GE \$1.31 |  |  |  |  |  |  |
|  | Afer Hours 5827.01 | 000(000\%) |  | 315.77 k | 18 P | 14 |
| Calculated by |  |  | Lastrice |  | Chang |  |
| dividing the |  |  | ${ }^{\text {Bid }}$ |  |  | Ask Size |
| closing price on |  |  |  |  |  |  |
|  |  |  | ${ }_{\substack{\text { Onen } \\ 20.7}}^{\text {ond }}$ | ${ }_{\text {cter }}^{\substack{\text { Higa } \\ \hline}}$ | ${ }_{26.9}{ }^{\text {Lew }}$ |  |
| consider by the |  |  |  | $\substack{\text { Volume } \\ 3678 \mathrm{~m}}$ | $\frac{52020}{20.09}$ | $\frac{5246.10 w}{23.69}$ |
| consider by the |  |  | arkec ap |  | Divate |  |
| P/E ratio. |  | \% ${ }^{\text {mimm }}$ |  |  |  |  |
|  |  |  | 42,192 |  |  |  |
| Closing: \$27.01 | News and Media | O General Elect | ctric Co. |  | Sector Nea | 1 Tooceners |
| P/E Ratio: 20.60 | Neevs for General Electic | Co. (6E) |  |  |  |  |
| 27.01/20.60 = | Weo, Now 19,2014 | Alothe |  |  |  |  |
| EPS: \$1.31 | ${ }_{4}^{6,46 \mathrm{Am}}$ S Simens | Whit Euroean Discold | Sunt-seeking |  |  |  |

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## Beta

$>$ Beta of 1 means that the stock and market change by the same percentage
$>$ Larger beta means a larger change than the market on any given day
> Calculation:
\% change in stock return
\%
change in market return

## Market Capitalization or MCAP

$>$ Represents the aggregate value of a company or stock.
$>$ Obtained by multiplying the number of shares outstanding by their current price per share.

Example: If a company has $15,000,000$ shares outstanding and a share price of $\$ 20$ per share $=\$ 300,000,000$.

## US Market Cap Divisions

> Large Cap - usually \$5 billion or more
> Mid Cap - usually \$1 billion to \$5 billion

- Small Cap - usually less than \$1 billion

These are the generally accepted cutoffs between the categories. They are not precise or fixed.

## Exchange Traded Funds

> The first ETF created was the Standard and Poor's Deposit Receipt (SPDR), pronounced "Spider" in 1993.
$>$ SPDRSs gave investors an easy way to track the S\&P 500 without buying an index fund and they soon became quite popular.

## Exchange Traded Funds

## > Funds track an index

> Trades like a stock
> Traded on the exchanges
> Can be bought any time during the day
> Price fluctuates moment to moment
Exchange Traded Funds are a way to invest in a specific commodity, sector or country

## Short Selling

Short selling starts with borrowing a stock from your broker

You sell the borrowed stock hoping to buy it back at a lower price and return (short cover) it to your broker for a profit

## Short Covering

Must have already short sold the stock
May set a maximum price limit

## Example: Short Selling and Covering

$>$ I borrow the stock from the broker ( $\$ 10$ brokerage fee)
$>$ I sell it. Now l've got cash.
$>$ I short cover by buying the stock back in the stock exchange at a lower price

## Example: Short Selling and Covering

> | return the stock to the broker (\$10 brokerage fee).
> I get the difference between the high price and the low price minus the brokerage fees.

## Buying on Margin

## If you borrow funds to buy stock, it's called 'buying on margin'

## Trading Ideas

## Lots of links to give students trading ideas including:

- Percentage gainers
- Most actives
- Analyst upgrades and downgrades
- Earnings calendars



## Quotes and Charts

Complete quotes page that includes

- Market Updates
- Charts
- News
- Companxprofiles
- Financial statements
- SEC filings
- Analyst ratings and forecasts


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