



Investing 101

Foundational Terms and Lessons
Basics with Investing

\$\$\$ Basic Terms to Get You Started\$\$\$

- **Public Company:** any company that has issued stock to be traded (bought and sold); anyone with a brokerage account can buy shares; most companies in the world are not public companies and are privately owned
- **Stock Share:** a unit of ownership in a company entitling the holder to distribution of profits in the form of dividends i.e. “I bought and own 20 shares of Best Buy (BBY) at \$22/share one year ago, now they are trading at \$30 per share.” The price of one share of stock for a company changes by the second
- **Mutual Fund Share:** a share of stock containing many companies within one share, instant diversification!!, a mutual fund share could be made up of many companies from one sector, This is the way to go for the everyday investor, prices (quotes) are day ending only compared to individual cos.
- **Ticker symbol:** the 1-5 letter abbreviation used to buy, sell, and track a stock or mutual fund; example: TGT (Target) GOOG (Google) F (Ford) MSFT (Microsoft) SWPPX (mutual fund tracking the S&P 500)
- **DJIA:** Dow Jones Industrial Average, 30 of the biggest companies in the U.S., the DJIA is the daily indicator used to track the overall performance of the stock market, “when they’re up they’re up, when they’re down, they’re down. This is the most common benchmark to track performance.

Key terms

- **S & P 500**: 500 of the largest companies traded on the NYSE; another benchmark to track the performance of the entire stock market
- **Stock Price/Quote**: the current price to purchase one share of that company or mutual fund, it changes by the second for companies ex. look up a company on finance.yahoo.com; “What is Google trading for today??”
- **Annual Rate of Return**: the percentage increase or decrease over the past year for that stock $(\text{new-old})/\text{old}$ (i.e. I bought shares last year of Ford \$8.50, today they are trading at \$11. Therefore, my investment in Ford is up 29.4% since I bought it.
- **NYSE**: New York Stock Exchange, located on Wall Street in NY, over 2000 companies are traded on this exchange, mostly larger, well-known companies
- **NASDAQ**: an exchange with over 4000 companies that are usually smaller, growth companies or technology companies
- **AMEX**: American Stock Exchange, small and medium sized companies that are not very well known



\$\$\$ Basic Terms to Get You Started\$\$\$

Diversification: minimizing risk by owning a wide variety of investments in your overall portfolio (don't put all of your eggs in one basket) i.e. if you have \$5,000 to invest don't put all of that money into shares of one company!! But, it is not recommended to own too many either.

- **Sector**: a grouping of businesses that share the same products or services, i.e. retailers, banks, insurance companies, oil companies, airlines, energy companies, etc.
- **Investment Horizon**: the total length of time that an investor expects to hold a particular stock after they buy it; the longer your time frame, the more risk you can take, how else can something make a comeback after a terrible year? They say that if you need the money within 2-3 years, you should not invest in the stock market! I agree. It is a good rule of thumb. You might have to sell at a big loss if you need the money back!!
- **Portfolio**: how you have invested your money?, your current holdings?, “where is your money invested??” example: pie chart

Terms..

- **Note**: this is a computer driven industry, no paperwork ever changes hands once you open an on-line brokerage account!! Login/password, go! Must be 18. Send a check. Go.
- **Next**: Take a look at finance.yahoo.com, learn how to read some screens, find a company in a sector, what's hot, what's not etc.
- **Next**: look at completed stock market game spreadsheet; Cool
- **Next**: download and save 2 files from schoolfusion

Research sources-next steps

- Finance.yahoo.com (best)
- <http://biz.yahoo.com/ic/index.html> (sectors)
- Joesdata.com (sectors)
- Morningstar.com (historical data)
- Download the MS Excel Template and also the S & P 500 Companies file from Schoolfusion
- Familiarize yourself with screens, looking up stock prices by ticker symbols, researching companies using the above sites

Topic: 401K Plans

- Most companies offer 401k plans to their employees as a benefit and incentive to save money by taking a small percentage out (1-15%) of each paycheck and investing it in the stock market (\$17500 max)
- Many of these companies also are willing to match the amount of your percentage dollar for dollar up to 1-5%.
- This is a tremendous benefit!!! It's like getting money for free from your company.
- In addition, most companies will not let you start participating in their 401K plan until you have worked there for 1-3 years.

Topic: 401K Plans continued...

- Another key factor is that the money is tax-deferred. In other words, you are not taxed on the 401k deduction until you take the money out of the fund when you retire at a later age. Therefore, your current income is taxed less. Tax-deferral is one of the main reasons for having a 401k. If you choose to participate in non-tax deferral, you can take the money out at any time.
- Money put into a 401k plan is cannot be withdrawn without penalty (10%) until the age of 59 1/2 or if you leave the company. This is a painless, easy way to grow money tax-free for retirement
- Main Goal: Save for retirement!!

Topic: 401K Plans continued...

- Target matches up to 5% of your 401k deduction dollar for dollar.
- Stefano has chosen to contribute 10% of his income to the Target 401k plan each year.
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- Year 1 Salary: \$30,000
- Year 1 Stefano 401k deduction: \$3,000 (this means only \$27,000 is taxed as income that year)
- Year 1 company match: \$1500 (5% of his salary)
- Total Account Value: \$4,500 (plus any investment income)
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- Year 2 Salary: \$40,000
- Year 2 starting balance: \$4,500
- Year 2 Stefano 401k deduction: \$4,000
- Year 2 company match: \$2,000
- Year 2 Total deductions: \$6,000
- **End of year 2 401k balance: \$10,500 (plus/minus increases or decreases from investment performance)**
- **Bottom Line with 401k plans: Just do it! Always deduct at least the amount the company is willing to match .**

Topic: Diversification

- I keep hearing that it is important to have my portfolio diversified. All the financial gurus use the term a lot and I am not sure if my current portfolio is diversified. Can you please explain this concept to me?
- Diversification in its most simple definition simply means to make sure your portfolio of investments is spread across several different business sectors and risk levels to help eliminate huge losses when one sector or company goes down fast

Topic: Diversification

- For example, if I have \$10,000 to invest and I get a “hot tip” from a friend to invest all of it into a hot stock such as Krispy Kreme donuts at \$10 a share, I am banking all of my money on that company’s stock price going up so I can sell and make a profit during my projected investment horizon or time frame. What happens if it goes down to \$5 in one month. I have already lost \$5,000 with no quick recovery in sight!!

Topic: Diversification

- On the other hand, if I do my research and decide to take the \$10,000 and allocate it across a couple of blue chip (large companies with a strong track record), a couple of hot sector companies such as two bank stocks, one mutual fund, and one small, high growth (and risk) company I am reducing my risk because if the bank stocks go down the small growth company may go up the same amount to make up for it!

Topic: Diversification

- The general rule is you're not going to hit a homerun by having a widely diversified portfolio but you are going to protect yourself against huge losses and give yourself a better chance of making 10-20% return on your investment (which is the goal of most investors).

Topic: Mutual Funds

- 80 million Americans have invested some money into the stock market and the majority of those people have that money invested in something called mutual funds.
- The experts say that mutual funds are the best long term investment product available to the average investor who doesn't want to have to look at the newspaper or go on line every day to see how their stocks are doing.”

Topic: Mutual Funds

- **What's a mutual fund?**
- When you buy a mutual fund share, you are buying a stock or fund that may be investing in 10-100 stocks or individual companies, bonds (promises to pay), money markets (safe, low risk), or a combination of the three.
- For the individual investor, the greatest benefit of mutual funds is that the fund manager is in charge of managing the fund (choosing the companies in the fund to buy or sell for the life of the mutual fund). Essentially, they are your “diversification” manager within a fund that was created based on certain goals.

Topic: Mutual Funds

- **Main Advantages:** professionally managed, already highly diversified, no cost, easy to find one to match your investment goals/risks, don't have to worry about buying and selling and watching the price on a daily or weekly basis
- **Main Disadvantages:** hard to get a “homerun” return; can't effect what stocks are held in the fund due to professional management of fund

Topic: Mutual Funds

- **Bottom Line With Mutual Funds:**
- They are the best place to invest money if you don't want to lose sleep because generally speaking mutual funds never go up really fast nor do they go down really fast like individual companies can
- Find 3-5 funds that match your investment goals and put the money you have set aside for the long run (3 years or more) into those funds
- You can buy sectors if you want to take more risk
- I suggest investing 50% of your \$\$\$ into a mutual fund that tracks the S&P 500 (index funds); i.e. swppx
- All mutual fund ticker symbols end with an "x"
- Day end pricing for quotes; i.e. share prices do not change during trading hours
- You must have 1-2 mutual funds in your portfolio for this class of the 20 investments in your portfolio
- Let's look at how to research MF using yahoo finance...

Topic: Dollar Cost Averaging

- **Topic: Dollar Cost Averaging**
- Mr. T, a couple of small questions about this investing “stuff” have been keeping me up at night and I need you to help me out. First of all, I realize that the best time to buy is when a stock or mutual fund is at its lowest price and the best time to sell is when it is at its highest price. Obviously, if anyone could predict those points, they’d be millionaires. So, what can I do to “find the best time” to put money into a stock or mutual fund so that I’m not buying at the all time high?
- Excellent question....Assuming that you have done some research and know what you want to invest some money in, the next step is easy. The answer lies in a simple concept in the investing world known as **dollar cost averaging**. It means that you **put the same amount of money into your given investment every month at the same time**. This way, you will be putting some money in when the stock is low, some money in while it increases, and some money in while it is in a “holding pattern”. In the end, you haven’t bought at the high or low but most likely your investment will be somewhere in the middle. Let’s look at a brief example to show you the power of dollar cost averaging.

Topic: Dollar Cost Averaging

1-1-01: \$30
2-1-01: \$25
3-1-01: \$33
4-1-01: \$50
5-1-01: \$28



In just five months the stock price has moved between \$25 and \$50! That's a 100% increase if you put all of your money in on 2-1 and sold on 4-1. On the other hand, it could be a big loss if you put all of your money in on 4-1 and a month later it is down to \$28 per share.

But, by putting \$100 in on the first of each month, you have “dollar cost averaged” your share price to be somewhere between the 5 month high and 5 month low. If the stock has been tracking upwards to any extent over those five months, you should see an increase in your overall stock value. That's the biggest benefit to dollar cost averaging. **It protects you from putting a huge some of money into an investment on what could end up being the stock's all time high price!!!!**

Topic: Dollar Cost Averaging

- In today's easy access, information age, on line brokerage companies have made this incredibly easy. You can have your account set up to pull any allocated amount of money from your money fund to your stock or mutual funds on the same day of each month. It involves no work on your part at all!
- This is essentially how 401k investments work because they are deducted out of your paycheck mid and end of month
- So remember, dollar cost average your way into a stock or mutual fund. It'll give you some protection against one of the greatest risks in investing....putting a huge sum of money into something that is close to it's all time high....if you have \$5000 to put into the market you might want to ease your way into it to protect against a big drop right after you buy.

Topic: Rates of Return

- The news and all financial reporting outlets will always give you recaps on stocks based on how much they went down or up for the day so basic math skills come in handy when it comes to knowing if my stocks are up or down for the day, week, year or whatever. What is the formula?

Topic: Rates of Return

- To Calculate your rate of return for any time frame, you only need to know your buy price and the current price:
- Formula $(\text{Current Price}-\text{Buy Price})/\text{Buy Price}$
- Same formula we learned earlier $(\text{New}-\text{Old})/\text{Old}$
- Example: BBY bought at \$10 in 2011 now trading at \$18 in 2014
 - $(18-10)/10 = .80 = 80\%$ increase in that timeframe
- Always remember to calculate **your increase** based on your buy price
- Go to Morningstar.com to learn how to analyze historical ROR data.....

Topic: “Rule of 72”

- Mr. T, I was wondering if there is a quick mathematical formula for me to use to help me determine how quickly my money will double given a certain annual rate of return or interest rate. I keep hearing all of this stuff about compound interest and how quickly money increases in value without even adding a single cent. What formula can I use to quickly give me a rough idea how quickly my money will double??
- Excellent question and yes there is! Several years ago I learned about a investing tool called “the rule of 72”.
- **Here’s what it is:** To determine how quickly your investment will double in years all you need to do is take 72 and divide it by your average or expected annual rate of return for your stock, mutual fund or entire portfolio. That number will then be the amount of time in years before your investment doubles (estimate, not exact) i.e. $72/9\% =$ investment doubles in about 8 years

Topic: “Rule of 72”

- **Let’s look at an example.**
- Mike invests \$10,000 into Best Buy stock and the annual average rate of return for BBY has been 15% over the past five years. If that rate stays consistent, Mike’s \$10,000 will turn into \$20,000 in about 4.8 years because $72 / 15 = 4.8$.
- Pretty amazing that his money doubles in less than 5 years without adding a single cent at what may seem like a low annual average rate of return of only 15%!
- The Rule of 72 is **not a perfect formula but only a quick, ballpark number to use.**
- Oh, by the way, **you can also use the formula to determine what annual average rate of return you need to get for your money to double in the amount of time you are striving for.**

Topic: Rule of 72

- **Let's look at a different example.**
- Mike wants his \$10,000 to double to \$20,000 in 10 years so he can buy a house, what average annual rate of return does he need to achieve his goal?
- The formula is $72/10=$
- Well, in this case it is 7.2 percent. Mike's money will double in about 10 years if he can find in investment option that will give him an average annual rate of return of 7.2%.

Try some examples using the rule of 72.

Portfolio Value= \$50,000

Average annual rate of return= 6%

Value will be \$100,000 in about _____ years.

Portfolio Value=\$100,000

Average annual rate of return=25%

Value will about \$200,000 in about _____ years.

Portfolio Value=\$3,000

Average annual rate of return=10%

Value will be about \$6,000 in about _____ years.

Portfolio Value=\$4,000

Want money to double to \$8,000 in 8 years.

Average annual rate of return needed? _____

Portfolio Value=\$2,500

Want money to double to \$5,000 in 4 years.

Average annual rate of return needed? _____

Who wants to be a MILLIONAIRE??



The Most Realistic and Easiest Way to Become a Millionaire!!



By Mr. T
(do I get a cut?)



History

- Average annual rate of return of the entire stock market over past 50 years is about 9%
- Using the rule of 72, that means money invested into a mutual fund like (SWPPX) that has a goal of tracking the performance of the market doubles every 8 years!! ($72/9=8$)
- Bottom line.....at your age you can double your initial investment 8 times without adding a single penny if you start soon....

The Magic Steps

- Invest \$2,000 into a mutual fund that tracks the stock market ASAP (I would recommend the S & P 500)
- Starting Age: 20 = \$2,000
- Age: 28 = \$4,000
- Age: 36 = \$8,000
- Age: 44 = \$16,000
- Age: 52 = \$32,000
- Age: 60 = \$64,000
- Age: 68 = \$128,000
- Age: 76 = \$256,000
- Age: 84 = \$512,000
- Age: 92 = \$1,024,000

The Magic Steps

(with a little more \$\$ invested to start)

- Invest \$5,000 into a mutual fund that tracks the stock market ASAP (I would recommend the S & P 500)
- Starting Age: 20 = \$5,000
- Age: 28 = \$10,000
- Age: 36 = \$20,000
- Age: 44 = \$40,000
- Age: 52 = \$80,000
- Age: 60 = \$160,000
- Age: 68 = \$320,000
- Age: 76 = \$640,000
- Age: 84 = \$1,280,000
- Age: 92 = \$2,560,000

Disclaimers / Rules

- Gotta have money to make money (legally)
- Must purchase a fund that tracks the stock market!!
- Never, ever allowed to do anything but watch it grow on paper!!!
- Start young, it buys you more time for “doubles”
- Will the market maintain its historical average of 9% over your lifetime?? That is the only reason that you will make more or less \$\$ than these slides show
- You can do this exercise on your own using any starting age and any amount of money.
- Just Do It!!!
- Now, let's update portfolios.

Safe Investments

- “Mr. T, I must admit I am very excited about the potential that the stock market has to offer but I am a very, very conservative person and would just like to know that my money can only grow. I don’t want to have to worry about any losses. What options do I have if I want to only see increases????
- Outstanding question that many people are asking themselves all of the time. The short answer is that there are only a few options.

Safe Investments

- Option #1: Open up a **savings account** at a bank and get anywhere from 0-1% annual return on your money depending on the current state of interest rates. This is where the average Joe tends to stash too much cash.
- Option #2: Put your money into a **CD (certificate of deposit)** and earn whatever the current market offers (%’s change daily) Usually, CD’s will give you 2-8% annual return on your money. When the stock market is in a downturn, this is where many people invest large sums of money.
- Option #3 Money Market funds: when you open a brokerage account, your money is put into **money market funds** until you buy stocks/mutual funds. The money is liquid at all times (no penalty for withdrawing), and usually returns higher than a bank account but a shade lower than a CD.

Safe Investments

- “Mr. T, I heard that you can’t get at your money until your CD matures. Is that true?”
- Yes, CD’s are usually 3-5-10 year options. If you have a 3 yr CD at 4%, you can’t get your money until three years without a 10-20% penalty. That is why CD’s get you a higher return than a traditional bank account. The longer you have to wait for the CD to mature, the higher the interest rate you will get. The interest rate is constant throughout the term of the CD.

Stock Splits

- Companies often split shares of their stock to try to make them more affordable to individual investors. A **stock split does not increase the overall value of the shares you own**. When a company declares a stock split, its share price will decrease, but a shareholder's total market value will remain the same.
- A stock split is usually done by companies that have seen their share price increase to levels that are either too high or are beyond the price levels of similar companies in their sector. The primary motive is to make shares seem more affordable to small investors even though the underlying value of the company has not changed.
- For example, if you own 100 shares of a company that trades at \$100 per share and the company declares a two for one stock split, you will own a total of 200 shares at \$50 per share immediately after the split. Therefore, your investment is still worth \$10,000.
- It is very important to account for splits in your recordkeeping!!

Dividends

- A distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. The dividend is most often quoted in terms of the dollar amount each share receives (dividends per share). It can also be quoted in terms of a percent of the current market price, referred to as dividend yield.

Also referred to as "Dividend Per Share (DPS)."

- Dividends may be in the form of cash or stock. Most secure and stable companies offer dividends to their stockholders. Their share prices might not move much, but the dividend attempts to make up for this.

High-growth companies rarely offer dividends because all of their profits are reinvested in the company to help sustain higher-than-average growth.

Mutual funds pay out interest and dividend income received from their portfolio holdings as dividends to fund shareholders. In addition, realized capital gains from the portfolio's trading activities are generally paid out (capital gains distribution) as a year-end dividend.

- “older investors” often invest in high dividend paying companies or mutual funds with a goal of getting a big check each time dividends are paid out.