MODULE 2

Think like an investor...

Saving vs. Investing

Everyone tells you that saving is critical for the future, but is investing better when trying to generate long-term wealth?

This module explains the difference between investing & savings, how banks make money by taking risk, and why you can do the same by evaluating companies for their long-term growth potential in order to make your money work smarter for you than for a banker.

POWERED BY

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Key Takeaways From This Module

Guiding Questions

- What is the difference between saving and investing?
- How do banks make money while paying you?
- What is interest and how does it affect you?
- How do you start saving?
- How do you start investing?
- What is compounding growth?
- How can dollar-cost-averaging help you?
- What is the Rule of 72 and how can it help you estimate how fast an investment will double with a fixed interest rate or rate or return?

Enduring Understandings

- Interest is incredibly important when it comes to saving and in everyday life. Interest can work really well for you or can be your worst enemy so understanding interest is crucial.
- Saving and investing are both important to being financially healthy but they serve different purposes. Building a plan to save and invest is best for your future and can make life easier.
- Investing is best if done for the long-term rather than the short. Time is your best friend when it comes to investing as it can help your money grow exponentially.

Your Order Of Financial Priorities

1. Establish a fund to pay for immediate obligations (e.g. rent,food, minimum debt payment)
2. Create an emergency fund to cover 3-6 months of living expenses
3. Contribute as much as your employer will match to your retirement plan
4. Pay off all high-interest debt (+7%), paying off the highest first
5. Invest the maximum allowed amounts in tax-advantaged accounts (401k or an IRA)
6. Pay off the rest of your debt
7. Invest your money in different accounts even if not tax-advantaged

Recapping The Basics of Banks & Savings

Money is deposited with a bank at a predetermined fee and interest rate

Limits are placed on your ability to withdraw the money without penalty

While your money is in the account, it earns interest from the bank.

Types of Saving Accounts

Traditional

Most common kind of savings account and offers low interest rates

High Yield

Typically found in online banks and offers higher interest

Money Market

Allows for limited withdrawals and interest rates are variable

Specialized

Dedicated to specific purposes such as a house down payment

Recap How Banks Make Money & Pay Interest

Background Knowledge

Interest rates are determined by the supply and demand of money in the market. Demand for money can be thought of as the demand for loans and investment capital.

- Increased demand for money, increases interest for loans, mortgages, and investments.
- Decreased demand for money, lowers interest rates to encourage borrowing.

For Banks, Interest Rates Are Everything

Every bank product falls into 2 categories.

- **Interest-Bearing**: This includes checking & savings accounts, CDs, and other accounts where people deposit their money and the bank pays interest.
- **Interest-Incurring**: This includes car loans, mortgages and more loans which charge an interest rate for the borrower, paid to the lender, the bank.

Here's The Trick...

The banks actually loan your deposits for things like mortgages with interest rates higher than the interest they pay in interest-bearing vehicles. So the difference between interest paid and interest received is the bank's profit!

But Does Your Interest Keep Up With Inflation?

Inflation has a major impact on prices over time, causing goods and services to become more expensive.

In many ways, Inflation acts like a tax on consumers, as it erodes their purchasing power over time.

This means that $1 today will not purchase the same amount as $1 a year from now!

Nominal returns are the rate of return on an investment without taking into account inflation, while real returns take inflation into account.

This means that when nominal returns are calculated, it does not consider the purchasing power of money over time due to inflation.

So if your interest rate on your savings account is lower than the rate of inflation (which it usually is) you're actually losing money unless you improve your saving, spending & investing habits.

Ways To Improve Your Spending Habits

Consumers have several factors to consider when making an informed purchase decision:

- **Cost**: Often the most important factor for consumers. They want to make sure they are getting a good deal and will compare prices before making a purchase.
- **Quality**: An important consideration for consumers as they want products or services that will perform well and last a long time.
- **Convenience**: May play a role in purchase decisions as consumers often prefer products or services that can be easily accessed and used.
- **Brand**: Fashionable designers influence consumer purchase decisions as familiar brands often inspire confidence in buyers and brand-loyalty.

How To Avoid Purchases You Regret?

If you are doing pre-purchase research on everything you buy you are less likely to impulse buy as you realize you don't need what you were buying.

Avoid social media marketing tricks to encourage spending, such as influencer marketing, mobile ads, retargeting ads, and product placements in shows or social media.

Tips To Improve Your Saving Habits

Use a good system for financial record-keeping to help track income, expenses, and investments in order to make accurate and timely financial decisions.

Introducing FinTech

Digital financial technology (FinTech) platforms provide services to help users manage all of their finances.

- **Mint**: Monitors Your Spending, Income & Credit Cards
- **Venmo**: Allows users to securely send money using a digital device. Money stored on these accounts is usually FDIC insured.
- **Coinbase**: A type of account to hold cryptocurrencies, however, these accounts offer no insurance to holders.
- **Mobile Banking**: Major banks offer apps to monitor your checkings, savings, mortgages and more. These investments, even though they are digital, usually have FDIC insurance.

Key To A Successful Saving Plan

The key to a overcoming these influences is to identify your own priorities and goals.

Make a budget that is realistic for your current income and lifestyle, and set financial milestones to achieve long-term savings.

Remember To Pay Yourself First

- Set aside a fixed percentage of your income each month, before expenses and other bills are paid.
- You can use this money to save for retirement, pay off debt, or build up an emergency fund.

External influences can have a powerful effect on personal savings decisions.

Peers, family, and other social influencers may push us to compare ourselves with others and make choices based on what we see rather than our own financial values.

Why Saving & Investing Are Not The Same

What happens when you put $100 in savings?

$100.00 Placed in a traditional savings account at the start of 2020

↓

$100.70 Is approximately what you'll have at the end of 2023

These returns do not significantly change from year to year and the risk of losing all your money is negligible

What happens when you invest $100?

$100.00 Invested in Amazon stock at the start of 2020

↓

$173.50 Is approximately your portfolio worth at the end of 2023

However, these returns and the company's survival are not guaranteed. In 2014, for example, Amazon stock price fell by 22%

We see that savings and investing are primarily differentiated by the **RISK** and **RETURN** they each offer. There are also more minor differences such as investing having greater transaction costs and requiring a brokerage instead of a bank

Which Is More Important?

Saving and investing are both important parts of personal finance. Savings allow you to build a financial cushion for emergencies and achieve personal goals like saving for a down payment on a house. **Investing, however, is far more important for wealth creation because of a higher rate of return**. Here's how it works:

What happens when you put $100 in savings for 5 years?

Year 0: 100
Year 1: 100.70
Year 2: 101.40
Year 3: 102.11
Year 4: 102.83
Year 5: 103.55

Assuming a traditional savings account with average interest rate 0.7%

What happens when you invest $100 for 5 years?

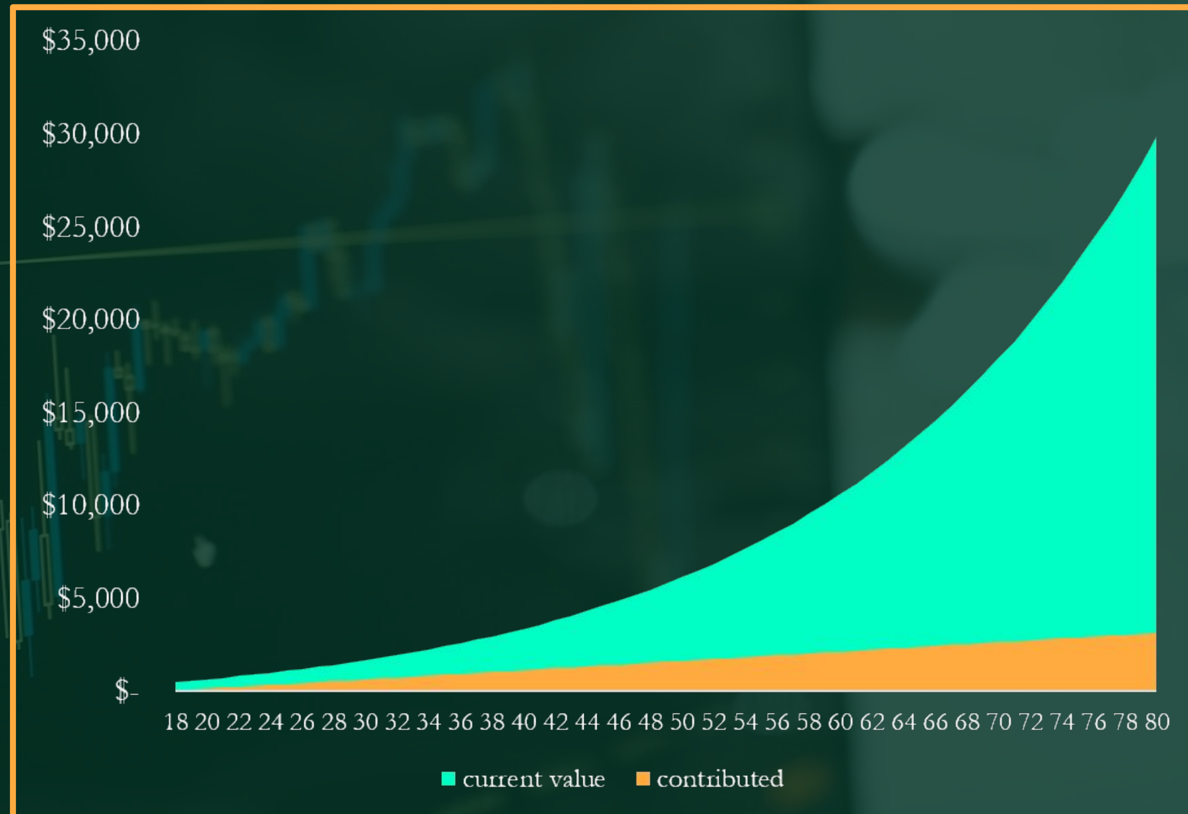
Year 0: 100
Year 1: 165.57
Year 2: 231.27
Year 3: 407.47
Year 4: 482.69
Year 5: 564.13

Based on Amazon's stock price growth from January, 2015 - January, 2020

Starting Early Is Crucial

The chart shows the accumulation of compound interest **using a contribution of $50 a year with a 5% interest rate.**

After about 62 years, **you will have deposited $3,150 but it will be worth $29,891!**



The Strength of Compounding

There is an exponential relationship between the rate of return on an investment and the added benefits that you can receive as an investor through compound interest.

This concept works because it allows your profits to make more profits. In other words, imagine you're earning 15% by investing in an index-tracking ETF. After making 15% in the first year, you have 115% of your original investment.

The next year, you'll earn 15% on your original investment, as well as the 15% profit you made the previous year, which actually results in you having 132.25% of your investment by the end of year 2.

WELCOME TO...

THE Rule OF 72

HOW FAST CAN WE DOUBLE OUR INVESTMENT?

We have already seen that compound interest can be incredibly powerful. Even Albert Einstein who studied black holes and relativity described it as the strongest force in nature.

If you earn 12% per year on an investment and reinvest your profits, you will double your investment in only 6 years!

How did we calculate that? It all comes down to 72 and a nifty trick that will let you calculate longer-term returns with a little mental math.

So What's The Trick?

In order to determine how long it will take for an investment to double in value, divide the number 72 by the expected rate of return, as a percentage, multiplied by 100.

$$\frac{\textbf{72}}{\textbf{RATE OF RETURN}} = \textbf{TIME FOR AN INVESTMENT TO DOUBLE}$$

More Evidence With Different Rates of Return

Below are a few examples of different types of investments (or debts) to show how quickly you can earn money on investments if you rely upon compounding interest, and how compounding interest can ruin you financially if you let high-interest debt continue to build.

$10,000

		30 Years
1% High-Yield Savings	Does Not Double - 2^0	**$13,478**
5% Mortgage	Doubles Twice - 2^2	**$43,219**
12% Avg S&P Return	Doubles Five Times - 2^5	**$299,599**
25% Credit Card Debt	Doubles Ten Times - 2^{10}	**$8,077,935**

You Gotta Risk It For The Biscuit

The saying goes, the greater the risk, the greater the reward. The same can be said for investing and that's why saving just doesn't cut it when trying to build wealth.

When you place money into a savings account at a reputable bank, your money might not earn a lot of interest, but it is protected, even if the bank goes bankrupt. This is because the government insures deposits up to $250,000 per account. The flip side, is that because there's no risk, your money won't earn more than 1%.

So if you want your money to grow & to leverage compound growth, that's where investing comes in. **For investing, you don't get government insurance against losses, so you need to become comfortable with risk**.

The Odds Are Stacked In Your Favor

Every year, the global population increases and those people are contributing to the global economy.

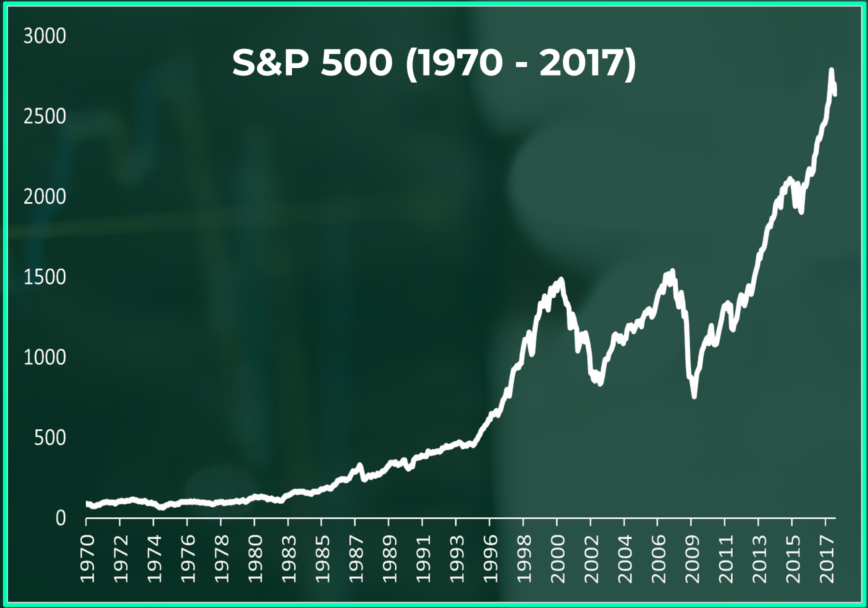
Over the long-term, financial markets grow, because the economy continues to expand as more people get jobs, buy houses, and consume products produced by businesses.

What does that mean?

Well, if you look at the chart, there has never been a 20 year period where the S&P 500 has decreased!

Why does this matter?

This means that investing in a well-diversified basket of stocks that is exposed to the entire financial market, over the long-term, can be one of the most powerful investment strategies on the planet.



Remember the idea of buying the market? Well, there are Exchange Traded Funds which allow you to "buy" the S&P 500 so you can easily capture these returns.

The Value of Dollar Averaging

Dollar cost averaging is an investment strategy that involves committing to investing a fixed amount of money into a stock, regardless of share price, over regular time intervals.

For instance, if you were going to buy the market and had $10,000 to invest, would you do it all at once? Or is it better to invest $1,000 per week or per month until you've invested all of your money. Warren Buffett says dollar-average, so we listen.

Lower Volatility
Regardless of how the market fluctuates, your cost / risk is stagnant

More Flexibility
When stock prices are low, lump sum investing could bring greater returns

Improved Discipline
For beginners, this is a good way to take the emotion out of investing

Closer To The "True" Price
When going through a brokerage, you have to pay a fee for each transaction

Impact of Dollar-Averaging Over The Long-Term

Let's say an investor decides to invest $50 into a company every 6 months.

0 months
Share price: $5
Investor purchases 10 shares

6 months
Share price: $10
Investor purchases 5 shares

12 months
Share price: $50
Investor purchases 1 share

18 months
Share price: $2
Investor purchases 25 shares

24 months
Share price: $5
Investor purchases 10 shares

30 months
Share price: $25
Investor purchases 2 shares

Here, we see that the stock saw significant fluctuations in pricing but the risk undertaken by the investor remained the same.

Although they bought shares as expensive as $50, their **average cost per share is $5.66**

If they had purchased all 53 shares when the share price was $50, the investor would have paid hundreds of dollars more and be down 50%.

Instead, the investor is up over 400% by persevering and buying consistently at regular intervals.

Key Takeaways From This Module

CORE & FUNDAMENTALS

- There are a few different ways to find the true value of a company
- Business cycles and market cycles are different entities, but one is usually an indicator for the other
- During different points in business and market cycles, recessions and bubbles can occur.

APPLIED KNOWLEDGE

- Each valuation strategy is fit for specific scenarios.
- Most of the necessary financial information needed for valuation is in a company's financial statements
- While large stock price drops or swings may occur, the market delivers high returns over time

RELEVANCE FOR YOU

- You can take advantage of the market's natural growth by staying invested, and not trying to buy or sell based on when swings *might* occur
- Pay close attention to the news to track investing "fads".
- History shows us the danger of speculation and investor frenzy. Do close research into new trends before deciding whether or not to claim a stake.