



# Investing Basics for all

Professor Richard Jakotowicz & Rajeev Vaidya

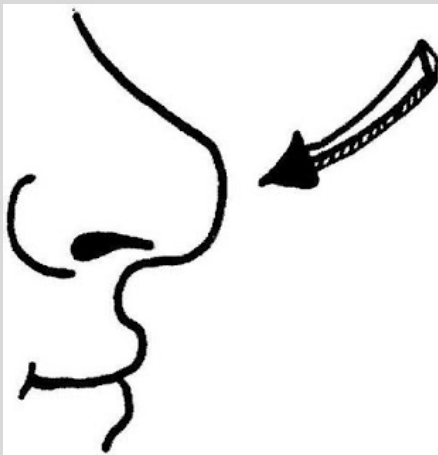
UD – Osher Lifelong Learning Institute

April, 2025

# Disclaimer in plain language

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## Disclaimer – in plain language:



Opinions are like noses, everyone has one !

You are going to see mine in this course !!

I am simply sharing my perspective.

**This is not investment advice or recommendation.**

**Rajeev is not a financial advisor.**

**This course is for educational purposes only.**

**Form your own opinion, make your own investment decisions.**

# Session 1 – April 2<sup>nd</sup>

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- Class Introduction
- You need money to Invest
- Getting into a virtuous financial cycle.

# Class processes - RECORDING

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- UD has a restricted policy on recording and sharing
  - Only if all participants agree
  - Only to be shared with REGISTERED class participants on an exception basis as needed.
  - To request a link to a class recording, send an email to [ron.materniak@verizon.net](mailto:ron.materniak@verizon.net)
  
- WE WILL START RECORDING THIS FIRST CLASS NOW
  - Unless anyone does not agree.
  - Please speak up if you do NOT want to be recorded.

# Class Composition

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- 39 people registered
- More than 80% are currently taking or have previously attended the Wednesday morning class on Investing for Successful Retirement.
- Approx. 20% look to be new students

# Course Content

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- Typical Class – 75 minutes

- Weekly Topic (55-60 min)
  - Either Rich or I will do the talk on the main topic for 45 minutes and then give the other a few minutes to add comments
- Time for Questions / Discussion (15-20 min)

- 5 classes

1. You need money to Invest – Getting into a virtuous financial cycle. - Rajeev
2. Investing in Stocks - Rich
3. Investing in Bonds - Rajeev
4. Mutual Funds and ETFs - Rajeev
5. Asset allocation and location - Rich

Goal – Learnings from the class have a positive impact on your investing.

# Class processes / plans

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- ❑ olli-online mailed a class Zoom link to all registered participants
- ❑ The Link is for a repeating meeting
  - ❑ Same link works for all 5 weeks
- ❑ Password was mailed to you in the welcome note from olli-online
  - ❑ Password does not change .. Same for the whole semester
- ❑ Please put your name (vs “computer”) in Zoom so we know who you are when asking questions.

# Class processes / plans

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- 5 week class.
  - Schedule is posted on the class website.
- **Class website**
  - <http://udel.edu/~diyinvst>
  - Class documents are posted each week before class and stay on the website till the end of the semester. Do not share with people outside the class.
  - Click the class schedule link on the website and then the charts are accessible through the link in the table in the last column to the right.
- Rajeev Vaidya – diyinvst@udel.edu



# Class Emails

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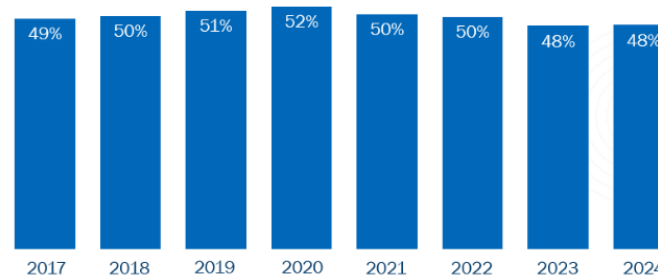
- ❑ Generally, Rajeev will send ONE email per week to class participants.
- ❑ The email will be sent a day or two before class, letting you know that charts have been posted to the website.
- ❑ If you do NOT want to receive these emails, please send an email to [diyinvst@udel.edu](mailto:diyinvst@udel.edu) and we will remove you from the distribution list.

# Financial Literacy

- Financial literacy in the US – GFLEC (Stanford – GWU)
- Surveys since 2017 using a standard scale

**Financial (il)literacy is holding steady: 2017-2024**

% of P-Fin Index questions answered correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2017-2024).

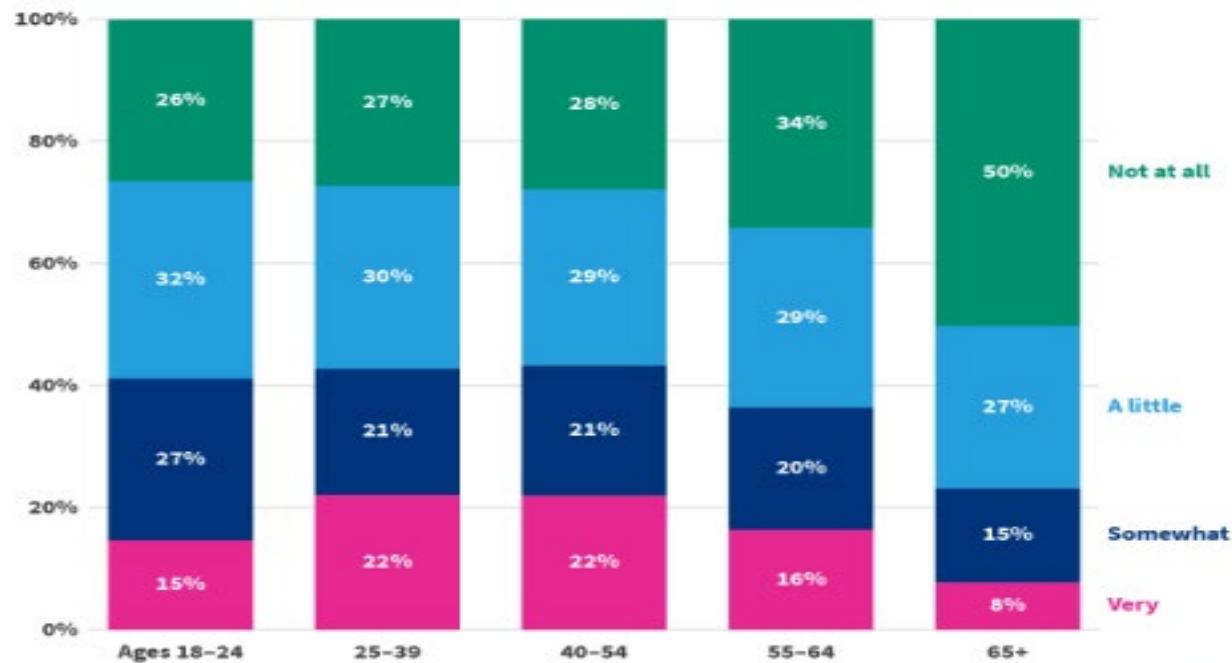
The number of people in the US who understand basic financial principles has not significantly changed for eight consecutive years. Image: 2024 TIAA Institute-GFLEC Personal Finance Index

- 2024 data
  - Average score was 48. Women typically scored 10 points lower. Gen Z responded correctly to only 37% of the test.
  - Only 16% of Americans scored above 75%.
  - Those with limited financial literacy were more exposed to financial vulnerability, inadequate emergency funds and insufficient retirement preparation.

# It is tough out there !!

## Percent of age groups reporting difficulty paying for household expenses

August 20 to September 16, 2024



Source: Census Bureau

USA FACTS

# Our Goals in this five-session class

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- Everyone is unique
  - Financial situation and goals
  - Time / interest in engaging in the management of a financial portfolio

## Objectives

- Understand the jargon and basic concepts
- Enable better conversations with your advisors as you independently make your own financial decisions

Goal – Learnings from the class have a positive impact on your investing.

# Financial situation – measurement?

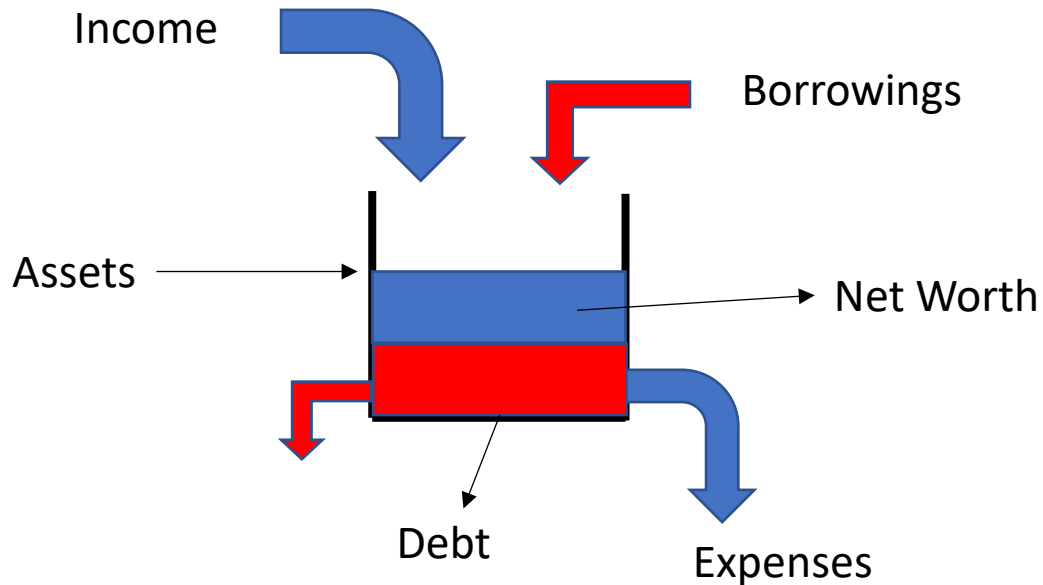
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- How do you measure wealth?
- Net worth
  - Assets – Value of everything you own
  - Liabilities – Value of everything you owe

$$\text{Net worth} = \text{Assets} - \text{Liabilities}$$

# Growing your Net Worth

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- Grow your income
- Spend less than you earn
- Invest your savings to grow
- Reduce Debt

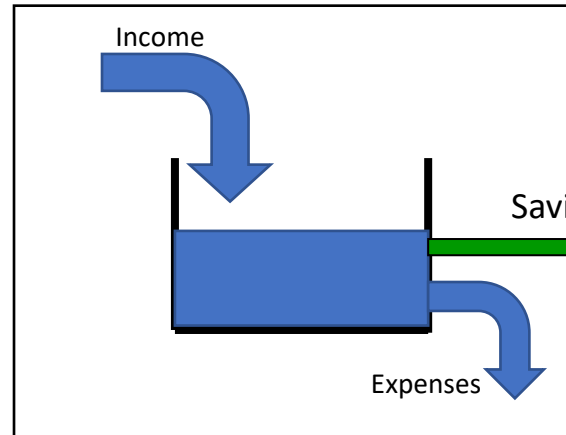
# Growing Your Income

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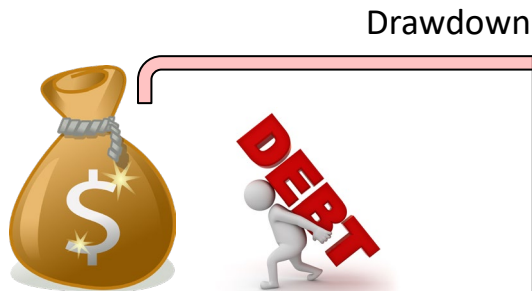
- Choose a career/job/business that energizes you and pays a living wage
- Excel at the job
- Advance in the enterprise
- Advance your career/business to earn more
- Side jobs etc. to add to income

# Adding to or drawing from assets ?

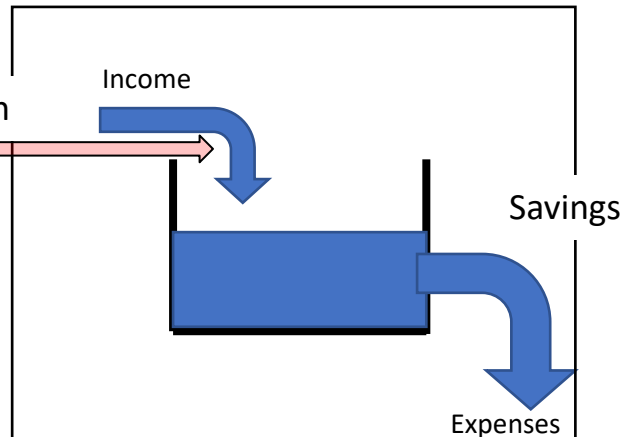
Income exceeds expenses



Expenses exceed income



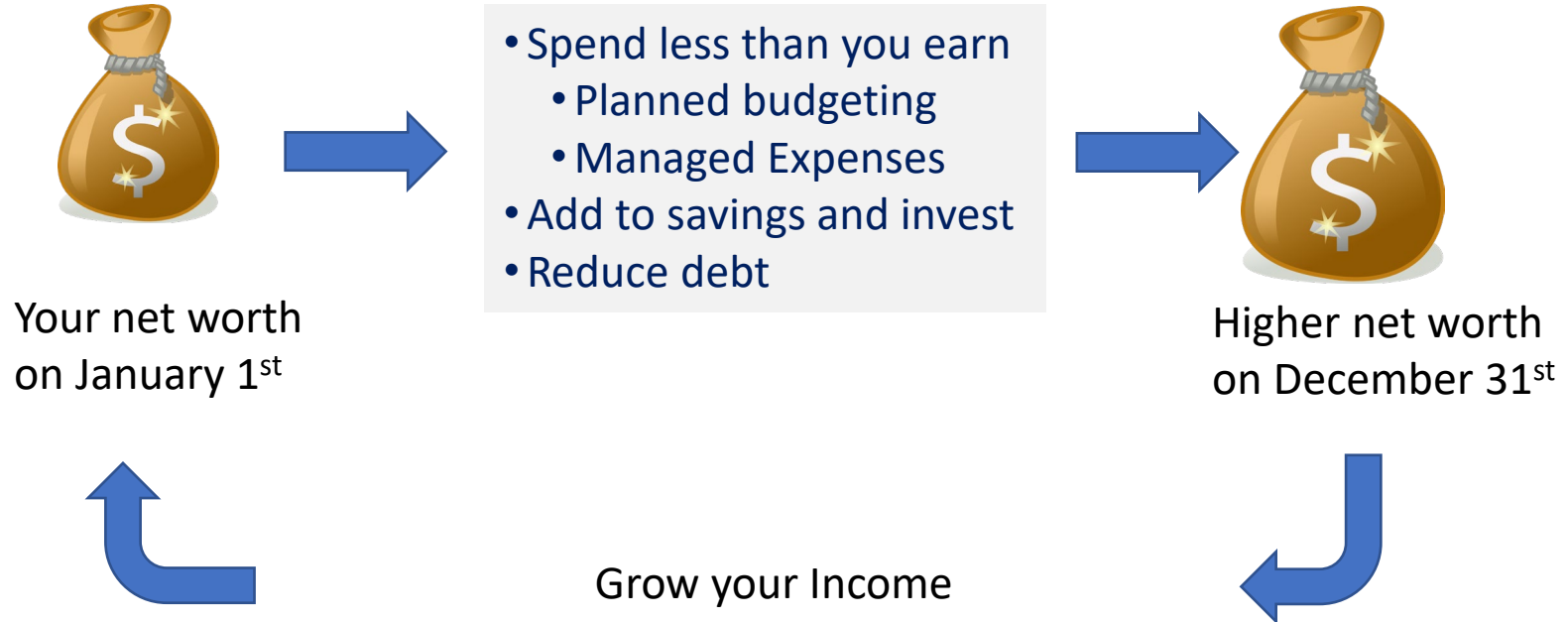
Drawdown





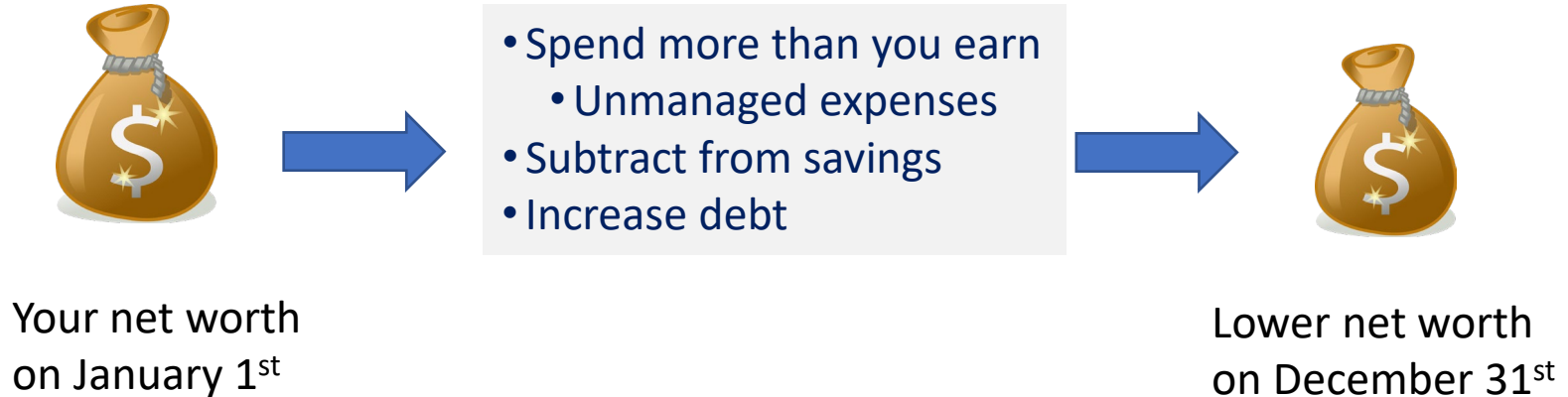
# Virtuous Financial Cycle

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# Don't get into a downward spiral

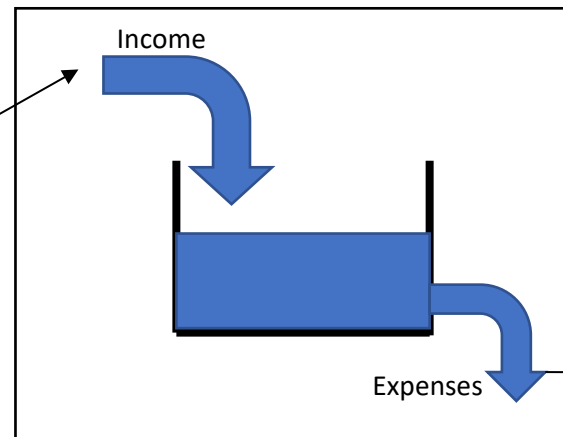
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Between 20 and 37% of American families do not have the capacity to manage an unexpected \$400 expense.

# Budgeting and managed spending

- Salaries
- Income and capital gains from taxable accounts
- Pensions
- Social Sec.



## Essential Fixed Expenses

- Payroll deductions
- Rent / Mortgage
- Medical Insurance
- Debt payments – Auto etc.

## Essential Variable Expenses

- Taxes
- Food
- Transportation
- Out of Pocket Medical Expenses
- Household needs
- Communications – Phone, cable, web

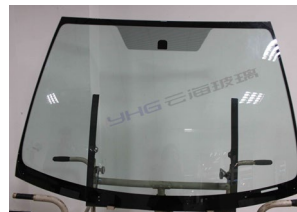
## Discretionary Expenses

- Fun money
  - zero is not real / sustainable

## Savings



Yesterday & Today

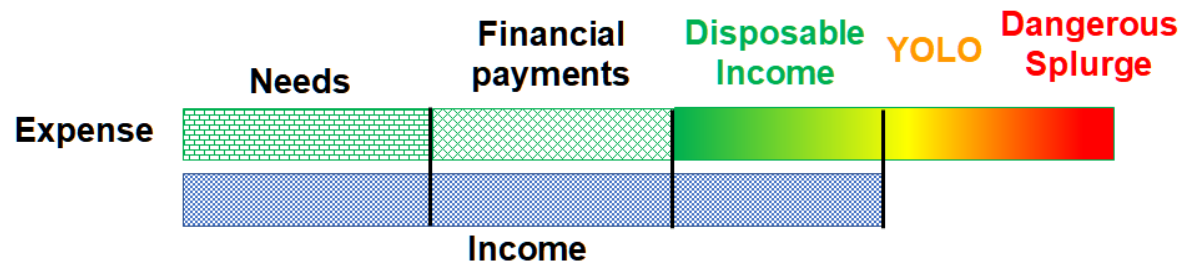


Near Future

# Budgeting

- Forward looking budget

- Expected income
- Needs
  - Expected committed Essential Expenses
  - Planned Essential Variable Expenses
- Financial Payments
- Disposable Income
  - Savings
  - Discretionary Expenses
  - YOLO – Carpe Diem



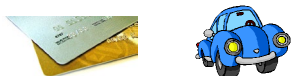
# Credit - Borrowing

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- Measured borrowing for assets that appreciate in value can increase net worth over time



- Borrowing for today's consumables and depreciating assets will reduce net worth



- Total cost of your loan increases with
  - high interest rates
  - high loan fees
  - long payback periods (Lower monthly payments)



Think of debt as  
a burden and  
constraint

# Credit Score and borrowing rates

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Personal FICO score	Average interest rate for new car loans	Average interest rate for used car loans
781 to 850	5.08%	7.41%
661 to 780	6.70%	9.63%
601 to 660	9.73%	14.07%
501 to 600	13.00%	18.95%
300 to 500	15.43%	21.55%

Source: [Experian State of the Automotive Finance Market Q2 2024](#)

# Credit Score

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**Fair Issac Corporation scores 300-850**

## **Factors in your FICO score**

1. Payment history (35%)
  - Pay on time
2. Credit utilization (30%)
  - Don't use all available credit
3. Length of credit history (15%)
  - Use a few accounts for a long time
4. New credit (10%)
  - Don't open too many credit accounts
5. Credit mix (10%)
  - Responsible use of revolving and installment credit

# Paying back your loans

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- Make a list of all your loans
  - Principal amount left
  - Interest rate on the loan
- Pay the highest interest loan off as fast as you can
  - Eliminate credit card debt as soon as practical.
  - Use the convenience of plastic & pay off your balance every month
    - Build a positive credit history
  - Take on credit card debt only as an emergency.
- Pay the low interest loans as much as your budget allows
  - Don't default on your student loan – acceleration, collection
  - Be careful of unpaid interest that is added to principal (capitalized interest)
- Use available resources to learn how to best manage student debt.
  - University resources – financial aid office
  - Web based resources – federal student debt website



# The worst kind of borrowing

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- Payday loans
- Car title loans
- Pawnshop loans
  
- These loans have APRs between 250% and 400%
- Younger and lower income families use these more than others – about 6%
- Most common reasons
  - Emergency expenses
  - Regular living expenses exceed income

# Savings

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- 1<sup>st</sup> priority is to build an emergency fund
  - Emergency medical expenses, car / home repairs
  - Ideally 3 to 6 months of expenditures
- 2<sup>nd</sup> is long term savings
  - Retirement savings
  - Savings for down payment on a primary residence.
  - Savings for children's education.
- It is never too early to start
  - Make the power of compounding work for you.
  - Longer time horizons enable you to take more risk with your savings

# What are you investing for?

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- What are your investment goals?
  - Investing for college
  - Investing for a home down-payment
  - Investing for retirement
- Having a plan that meets your goals is important to maximize your chances of achieving them.

# Investment Plans

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- Timeline – Available investment period
  - Liquidity
  - Minimum return needed to achieve the goal
  - Risk you are willing to take
  - Based on the above
    - Asset allocation
    - Asset location
  - Periodic Maintenance
- } Generate the highest after tax - return

# When are you investing vs. your life?

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- Prior to retirement – Accumulation phase
- After retirement
  - Protect and grow the investment portfolio
  - Use the portfolio to produce income for current expenses
  - Draw down the principal as needed and in a way that does not exhaust it prematurely.
- 3 unknowns
  - How long will we live?
  - How much will we need to spend?
  - What return will your portfolio earn at the risk you are willing to take?

*Producing income from portfolio is relevant*  
*Sequence of return risk is relevant*



**What is the average annual return delivered by the stock market in the last 50 years?**

① Start presenting to display the poll results on this slide.



**What does a 6% return  
over 30 years deliver on  
your investment?**

① Start presenting to display the poll results on this slide.

# The Power of compounding

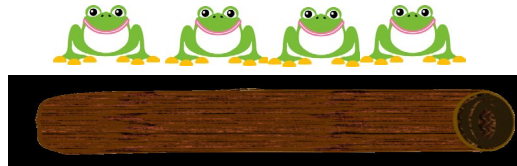
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- A person aged 30 earning \$100,000 per year with an investment plan that earns 6% per year and saving \$10,000 each year would accumulate over a million dollars in their tax-free retirement account by age 63.
- If the person started saving at age 40, they would need to put in **\$20,000** per year to see their tax-free retirement savings grow to \$1 million by age 63. **By saving only \$10,000 per year the tax-free retirement account would grow only to half a million dollars by age 63.**
- If the person started saving at age 50, they would need to put in **\$50,000** per year to see their tax-free retirement account reach a million dollars by age 63 and **saving only \$10,000 per year would have their account grow to only a quarter of a million dollars by age 65.**
- **Start saving and investing today, tomorrow is a day too late!!**



# A riddle

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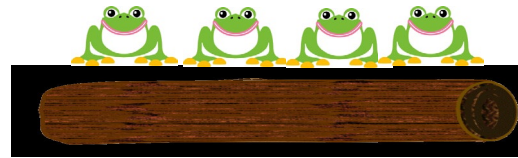
- There are 4 frogs on a log
- Two of them decide to jump
- How many are left ??

# Having a plan is not enough

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## A riddle

- There are 4 frogs on a log
- Two of them decide to jump
- How many are left ??



## Deciding to jump and jumping are not the same thing

- Time is your most valued asset – Start Now
- Have a budget & an investment plan
- Execute the plan
- Measure your success
- Adjust the plan as needed

***“Don’t make the  
perfect the enemy  
of the good”***  
*Winston Churchill*

# Investing Basics for All

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**Thank You !!**