

# AAII SAN DIEGO CHAPTER

## FUNDAMENTALS OF INVESTING

### MARCH 18, 2023

AAII: AMERICAN ASSOCIATION OF INDIVIDUAL INVESTORS

- <https://www.aaii.com> Trial membership for \$2 for a month
- <https://invest.aaii.com/membership/>

### San Diego Chapter

- Meets at Good Samaritan Episcopal Church in La Jolla
- Meetings are broadcast on Zoom
- Special Interest Groups typically meet on Zoom
  - Risk Management
  - Options Trading
  - Fundamentals of Investing
- <https://aaiisandiego.com/>



## **Thomas Jones**

- Retired Navy/DoD physicist
- Ph.D. in Physics, U.C.L.A.
- Life Member AAI
- Treasurer of San Diego Chapter
- Managing investments for 46 years
- Writing investment software is a hobby

## **Steve Rawlinson**

- Retired computer design engineer
- BS in Mathematics from MIT
- Life Member AAI
- Webmaster of San Diego Chapter
- Has dealt with stock market for over 50 years
- Learned a lot from AAI. Wish I had joined years ago.

# Disclosure

The instructors in these classes are not professional investors nor do they have paid teaching experience. The opinions expressed are their own and are presented in good faith but no representation is made as to accuracy or astuteness. The material presented is for information purposes only. The instructors do not intend to provide any specific financial advice or any basis for making financial decisions.

Any fees that are collected are voluntary contributions and support the chapter. The instructors do not receive financial remuneration for the time and effort spent teaching these classes.

## Flexible Meeting Fees

Please contribute based on the value you receive from today's meeting. We appreciate your support.



[www.aaiisandiego.com](http://www.aaiisandiego.com)

# Upcoming Chapter Events








**April 8, 2023 – “Why Buy Bonds Now?”**, presented by Linda Beck,  
Director of Fixed Income, Bailard, Inc.








**May 13, 2023 – “5 Must-Knows About Retirement Spending”**,  
presented by Christine Benz, Director of Personal Finance,  
Morningstar, Inc

## Investing Ideas



### STOCKS

-  Stock Ideas
-  Custom Stock Screener **PLUS**
-  A+ Stock Grades Screener **PLUS**
-  Top/Bottom Rated Stocks **PLUS**
-  Upgrades & Downgrades **PLUS**

### ETFs

-  ETF Ideas
-  Top/Bottom Performing ETFs
-  Consistent Performers **PLUS**
-  ETF Guide
-  Compare ETFs

### FUNDS

-  Mutual Fund Ideas
-  Top/Bottom Performing Funds
-  Consistent Performers **PLUS**
-  Mutual Fund Guide
-  Compare Mutual Funds

### COMMENTARY



STOCK GRADE FOCUS, COMPANY SPECIFIC • FEBRUARY 27  
[Is Imara Inc \(ELVN\) Stock a Good Investment?](#)  
by Sean Murphy

Enliven Therapeutics, Inc., formerly Imara, Inc., is a clinical-stage biopharmaceutical company focused on the discovery and development of small molecule inhibitors to help patients with cancer. The Company focuses on addressing existing and emerging unmet needs with a precision oncology approach. The Company is advancing two parallel lead product candidates, ELVN-001 and ELVN-002, as well as pursuing several additional research stage opportunities. Its first product candidate, ELVN-001, is a potent, highly selective, small molecule kinase inhibitor designed to specifically target the breakpoint cluster region-Abelson (BCR-ABL) gene fusion, the oncogenic driver for patients with chronic myeloid leukemia (CML). Its second product candidate, ELVN-002, is a potent, selective and irreversible human epidermal growth factor receptor 2 (HER2) inhibitor with activity against various HER2 mutations, including Exon 20 insertion mutations (E20IMs) in non-small cell lung cancer (NSCLC).

### RECENTLY

[Is TechPrecision Corp \(TPCSD\) Stock a Good Investment?](#)  
Sean Murphy • Stock Grade Focus, Company Specific

[Is First Robinson Financial Corp \(ERFC\) Stock a Good Investment?](#)  
Jenna Brashear • Stock Grade Focus, Company Specific

[Is Discovery Energy Corp \(DENR\) Stock a Good Investment?](#)  
Jack Gilleland • Stock Grade Focus, Company Specific

[More Articles](#)



# AAII SAN DIEGO

Information for Investors in San Diego County

## AAII Journal

### 40th Anniversary

AAII celebrated its 40th Anniversary in 2019 by selecting [40 memorable articles](#) from *AAII Journal* and distributing them to their members.

### Everybody Should Read ...

[Avoiding the Mistakes Made by Ineffective Investors](#) by Spencer Jakab

### Shared Articles

Sometimes AAII shares an article from AAII Journal with the chapters. We have links to these shared articles on this page.

	Article Title
2023 January 10	<a href="#">Best of the Web: Seven Key Sites for Investors</a>
2022 August 24	<a href="#">Financial Planning Tips for Empty Nesters</a>
2022 June 16	<a href="#">11 Key Retirement Dates You Should Pay Attention To</a>



Your financial support for the AAII San Diego Chapter is always welcome and gratefully appreciated. We are a 501(c)(3) organization and therefore your contributions may be tax deductible.

[Contribute Today](#)

## Upcoming Events

February 18, 2023, 9:00 AM PST  
Options Trading SIG Meeting

March 1, 2023, 5:00 PM PST  
Risk Management SIG Meeting

April 8, 2023, 9:00 AM PDT  
Chapter Event

# Difference between Investing and Trading

- Investors are patient and disciplined people who follow a strategy. Traders may be disciplined and they may follow a strategy, but they are not patient.
- Investors don't trade very often. Traders trade all the time.
- Investors who get emotional make bad trades. They also increase the number of trades they make.
- Traders are competing against powerful computers.
- Are you an investor? If you say “yes”, Fred Richards does not believe you. (4/9/2016, “Looking for Elephants”)



## **Don't Overtrade**

- Trades used to cost money, but now commissions are \$0 at many brokers. But that does not mean that you should trade more often.
- Trades still have bid/ask spread issues and transaction taxes that the seller pays.
- You incur tax liability if you trade frequently in a taxable account. You have a better chance of realizing long-term gains if you don't trade often.
- Overtrading is a symptom that you are not following a sensible investment strategy in a disciplined way.
- You will need to trade occasionally to rebalance or for other reasons consistent with your investing strategy.

## Don't Be Too Conservative

- We feel pain more strongly than joy
- This problem goes back to our cave-dwelling ancestors who had to win every day. One loss meant death. Our genes have not changed much since then.
- Golfers focus more on avoiding bogeys than on chasing birdies, but studies suggest that scores would improve if the golfers played more aggressively.\*
- NFL coaches punt on 4th down far more frequently than statistics say they should. They worry about having to explain the failure to convert.\*

\* Wall Street Journal, January 6, 2020, Page A15. Book Review by David A. Shaywitz.

To understand the cost of conservatism, we run Monte Carlo simulations on 5 different types of portfolios over a 40-year period:

- 100% Bonds (ultra-conservative)
- 65% Bonds, 35% Stocks (mildly conservative)
- 50% Bonds, 50% Stocks (mid-range)
- 35% Bonds, 65% Stocks (mildly aggressive)
- 100% Stocks (ultra-aggressive)

Simulations run on

<https://www.portfoliovisualizer.com/>

- Monte Carlo simulations select from collected data using random numbers to generate outcomes that have varying probabilities. The collected data used by Portfolio Visualizer is stock and bond market data dating back probably to 1926. Portfolio Visualizer runs 10000 simulations for each portfolio being simulated.
- Monte Carlo simulations were developed by Stanislaw Ulam and John Von Neumann. They were trying to figure out how much damage would be created by a hydrogen bomb that was being developed after WWII.
- The name “Monte Carlo” was initially a code name because this was a secret project at the time. Ulam’s uncle lived in Monte Carlo and had a gambling addiction.

We run a set of simulations on each of the 5 portfolios:

	Total US Bond Market	Global Bonds	US Stock Market	Global ex-US Stock Market
Ultra Conservative	70%	30%	0%	0%
Mildly Conservative	45%	20%	25%	10%
Mid-Range	35%	15%	35%	15%
Mildly Aggressive	25%	10%	45%	20%
Ultra Aggressive	0%	0%	70%	30%

Here are the results:

	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
<b>Ultra Conservative</b>	\$5,247,098	\$6,279,886	\$7,643,855	\$9,391,135	\$11,192,701
<b>Mildly Conservative</b>	\$7,817,204	\$10,237,082	\$13,728,560	\$18,297,765	\$23,923,849
<b>Mid-Range</b>	\$8,014,473	\$11,417,138	\$16,938,125	\$24,738,914	\$34,134,996
<b>Mildly Aggressive</b>	\$7,577,841	\$12,008,270	\$19,837,574	\$31,939,398	\$48,604,344
<b>Ultra Aggressive</b>	\$10,353,323	\$20,271,162	\$41,312,945	\$82,912,453	\$152,074,034



## Saving & Investing for Specific Life Goals

- This class assumes your financial success depends on saving & investing from your income, not on a financial windfall.
- Learn how to accumulate investing capital by . . . .
  - Living beneath your means (spending less than you make).
  - Paying Yourself First.
  - Eschewing the accumulation high-interest debt.
- Learn how to make your money grow by . . . .
  - **Learning to navigate the financial markets (this course).**
- Case Study # 1: Saving & Investing for your child's or grandchild's college.
- Case Study # 2: Saving & Investing for Retirement.

## Simple Interest vs. Compound Interest

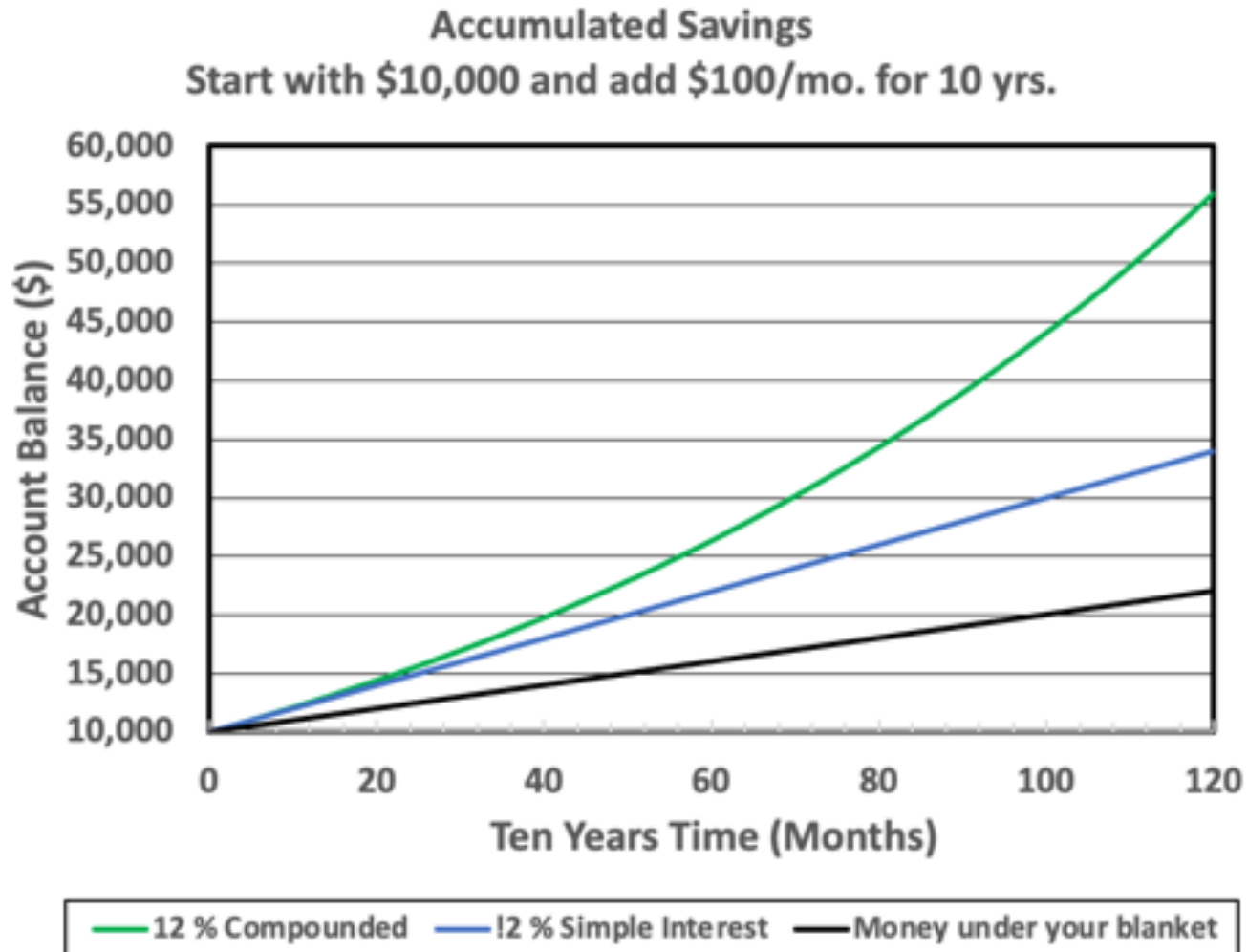
- Interest payments work in both directions.
  - ✓ Investing and Earning Interest – work for you.
  - ✓ Borrowing and Paying Interest – work against you.
- Simple Interest – the interest is computed on the starting principle forever (Principal stays constant).
- Compound Interest – the interest is added to the original Principal after each period so the Principal increases (compounds).

$$A_S = P + rP + rP + \dots = P(1 + rN)$$

$$A_C = P(1 + r)(1 + r) \dots = P(1 + r)^N$$

where P is the Principal (starting amount), r is the decimal Interest Rate per Period ( $r = 0.05$  for 5 %), and N is the Number of Periods,  $A_S$  is the Amount accumulated with Simple Interest, and  $A_C$  is the Amount accumulated with Compound Interest.





## Compound Interest Example Credit Card Loan

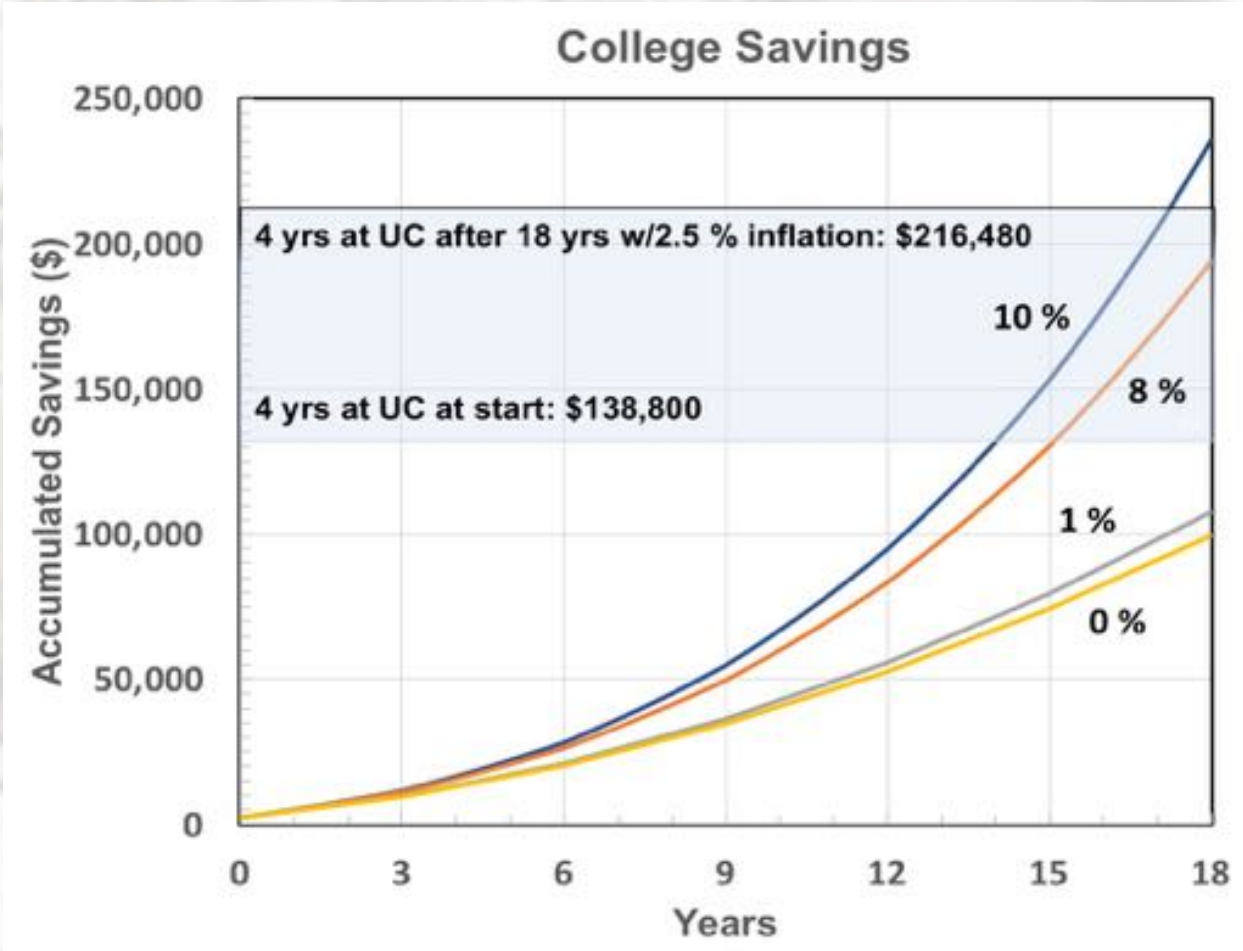
- The average credit card interest rate today is **24 % per year** compounded monthly (Mar 2023).
- The **periodic (monthly) rate** is  $24/12 = 2.0\%$  per month.
- Each \$1000 of unpaid balance grows to  
 $A = \$1,000 (1 + 0.02)^{12} = \$1268.24$   
in one year, and doubles in less than 3 yrs (35 months).
- Thus, the **Effective Annual Rate** is 26.82 % due to compounding compared with the **nominal stated rate** of 24.00 %.



# Saving & Investing for College

- The goal is to send a student to the University of California.
  - The current annual estimated cost is \$34,700 for a California resident living on campus.\*
  - Four years of college would cost about \$138,800.
  - The rate of inflation is assumed to be 2.5 % for college expenses.
  - The time period to save is 18 years
  - The effect of inflation will be to raise the estimated total cost to about \$216,480 in 18 years.

\*<http://admission.universityofcalifornia.edu/paying-for-uc/tuition-and-cost/index.html>



### Savings Rate

Monthly	Years
\$200	1 - 3
\$300	4 - 6
\$400	7 - 9
\$500	10 - 12
\$600	13 - 15
\$700	16 - 18

### Results

Return	Total
10 %	\$235,610
8	\$194,172
1	\$107,374
0	\$99,300

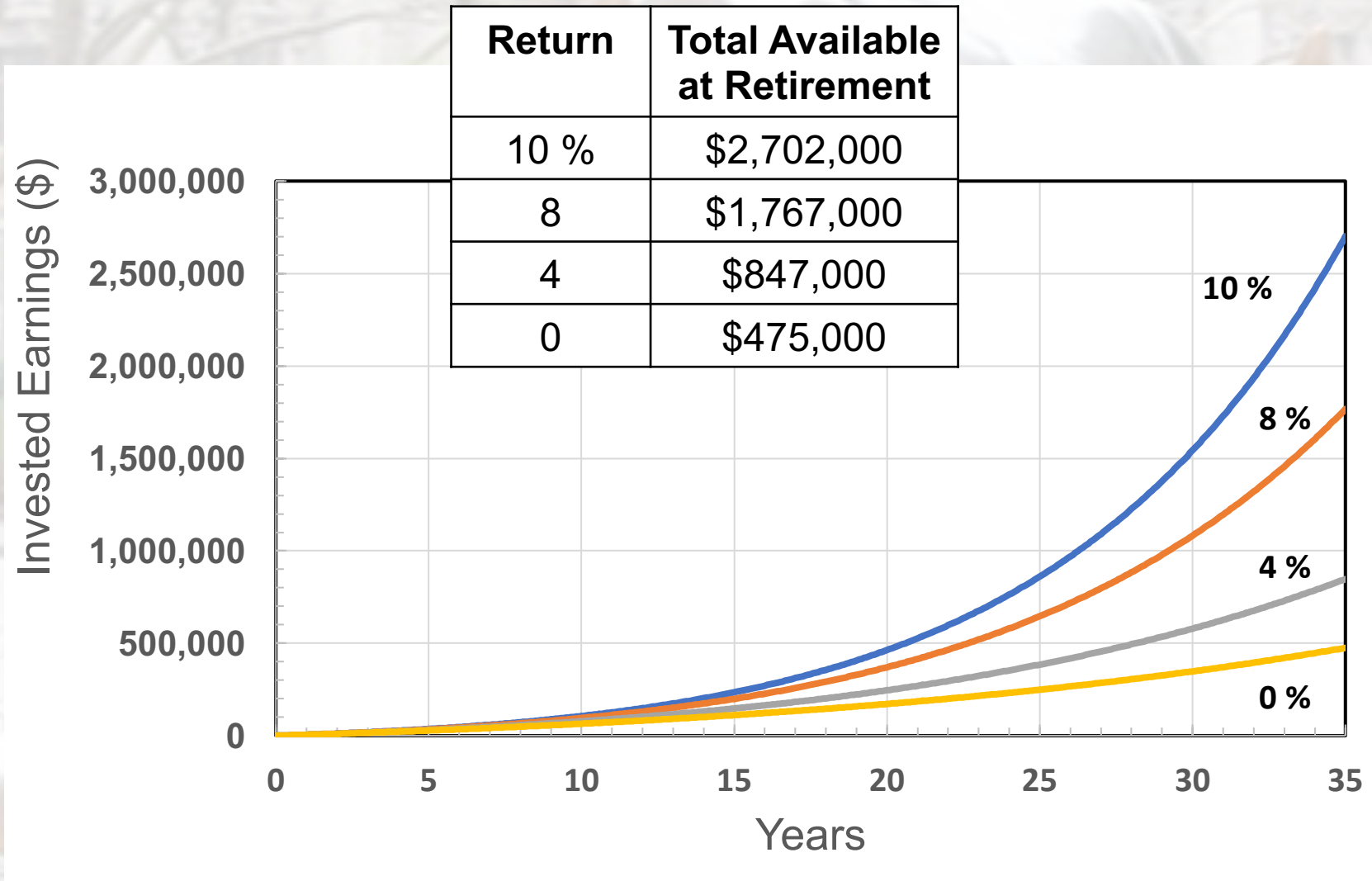
Approximate Costs around the year 2020.



# Saving & Investing for Retirement

- The goal is to retire after a reasonable professional career. Here's a reasonable scenario:
  - Consider a 35-year working career, commencing at early-to-mid adulthood.
  - Assume one starts at a \$50K annual salary.
  - Assume general inflation runs at 2.0 %.
  - Assume salary will increase at 5.0 % - consists of inflation plus career advancement.
  - Saved and invested 10 % of gross salary.

# Retirement Savings





## The Secure Act 2.0 of 2022 (How to Prod People to Save More for Retirement)

### Highlights

- New Law passed by Congress and signed by the president in 2022.
- Takes effect in 2025.
- Makes behavioral economics the default framework for retirement.
- Sets the automatic retirement contribution for new employees to 3 % of salary unless they opt out.
- But a generally recommended starting percentage is at least 7 % of income.
- Suggests automatic increases of 1 % of pay per year.
- Savings deducted from salary for retirement can be used temporarily for high-priority payments like high-interest credit cards and school loans without losing the employer match.
- Increases age when retirees must start RMDs (Required Minimum Distributions) from IRAs to 75.

Reference: [\*The Wall Street Journal\*, March 6, 2023, p. R1.](#)

## Lessons Learned from these Two Examples

- Focus on living beneath your means so you can . . .
- Save money and invest it relentlessly over time using . . .
- A working knowledge of the financial markets to . . .
- Help achieve your long-term financial goals.



## Preview of Retirement Savings, Investments, and Withdrawals (Probably in Class 4)

- Plan for Retirement.
- Social Security
- Saving & Investing for Retirement
- Can I Retire Now? What's My Number?
- The 4 % Rule
- How Long will my Money Last in Retirement? Please don't ask.
- How to ensure you never run out of money in retirement.
- RMDs and Automatic Retirement Withdrawals
- Unplanned Retirements
- What I Did.
- Tax Considerations in Retirement.
- Investing in Retirement.
- Longevity considerations

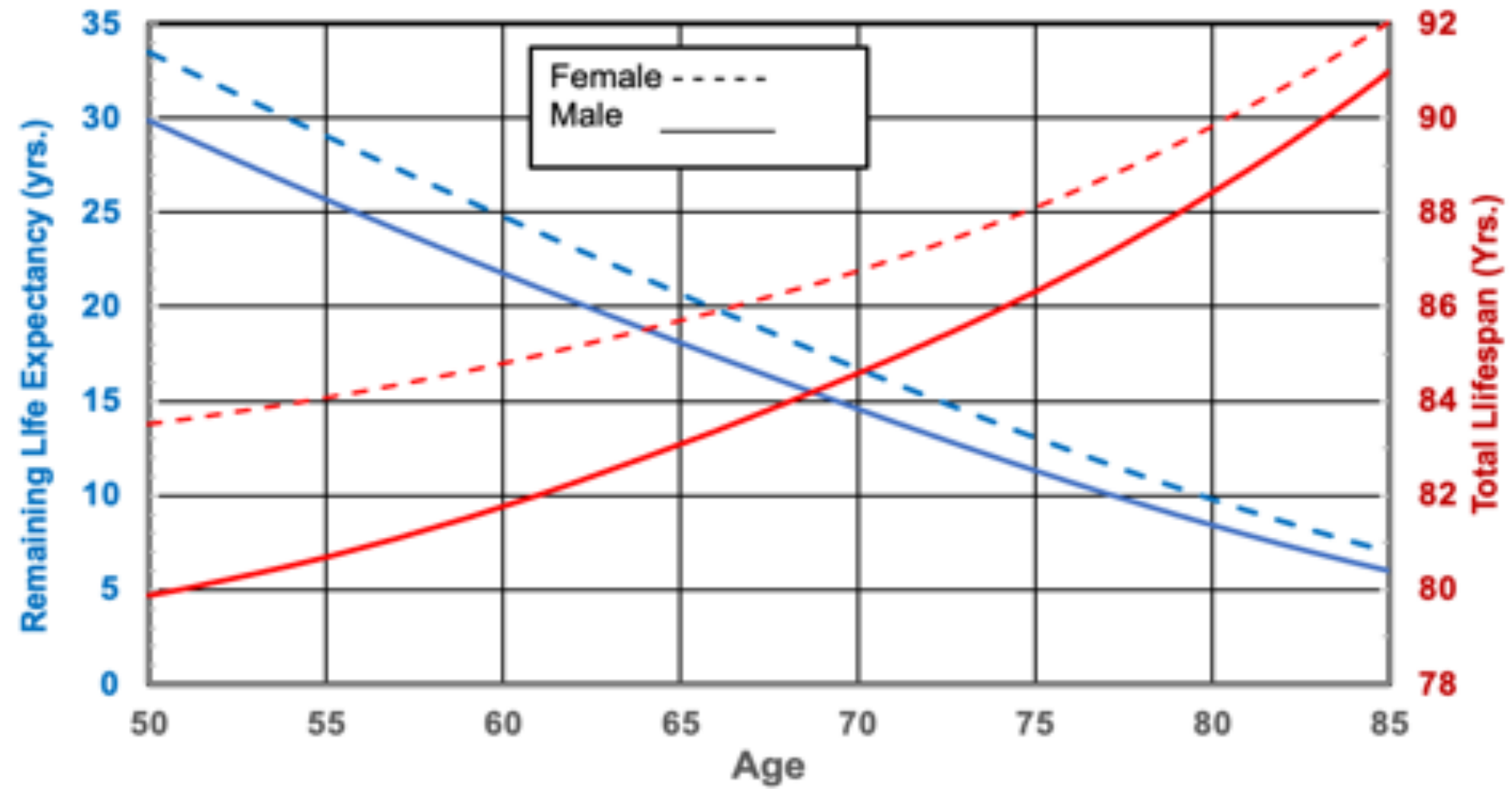
## Interesting Actuarial Facts about Longevity in the U.S. in 2020

- A man reaching age 65 today can expect to live, on average, until age 83.
- A woman turning age 65 today can expect to live, on average, until age 86.
- About 1-in-3 65-year-olds will live past 90.
- About 1-in-7 65-year-olds will live past 95.

Reference: <https://www.ssa.gov/planners/lifeexpectancy.html>



### Longevity in Retirement



Periodic Life Table 2019, as used in 2022 Social Security report.  
 Reference: <https://www.ssa.gov/planners/lifeexpectancy.html>

# UPCOMING CLASSES

**April 15**

- **Investable Assets**
- **Beware of Hedge Funds**
- **Beware of Annuities**
- **Buy when there is blood on the streets, sell when things are great**
- **Common Mistakes**
- **You Can Do This**
- **Don't Underestimate Women**
- **Getting an Advisor**
- **Dollar Cost Averaging**
- **Diversification**
- **Mutual Fund and ETF Selection**
- **Investment Allocations**
- **Taxes**

## **UPCOMING CLASSES (continued)**

**May 20**

- **Factor Investing**
- **Momentum Investing**

**June 17**

- **Managing Investment in Retirement**
- **Bucket Investing**

**July 15**

- **Stock Selection**