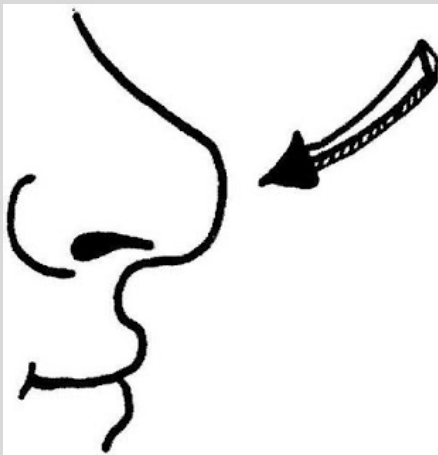# Investing Basics for all

Professor Richard Jakotowicz & Rajeev Vaidya

UD – Osher Lifelong Learning Institute

April, 2025

Disclaimer in plain language

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.

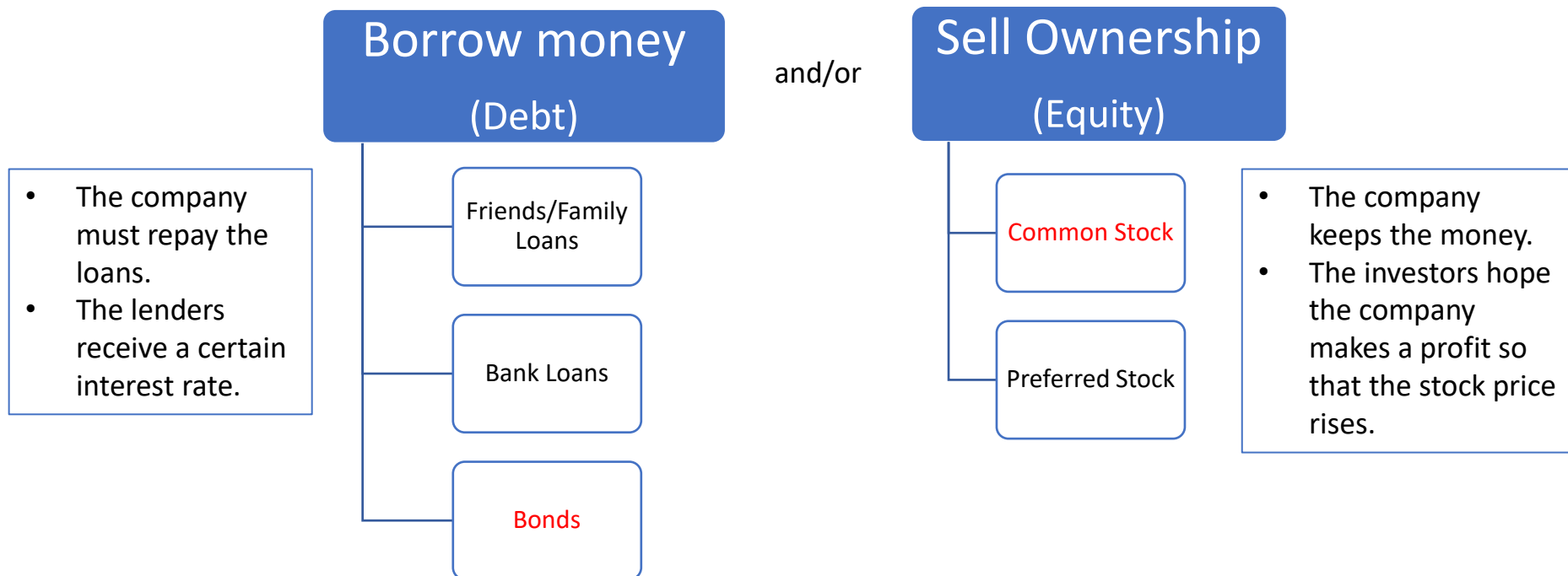This course is for educational purposes only.

Form your own opinion, make your own investment decisions.
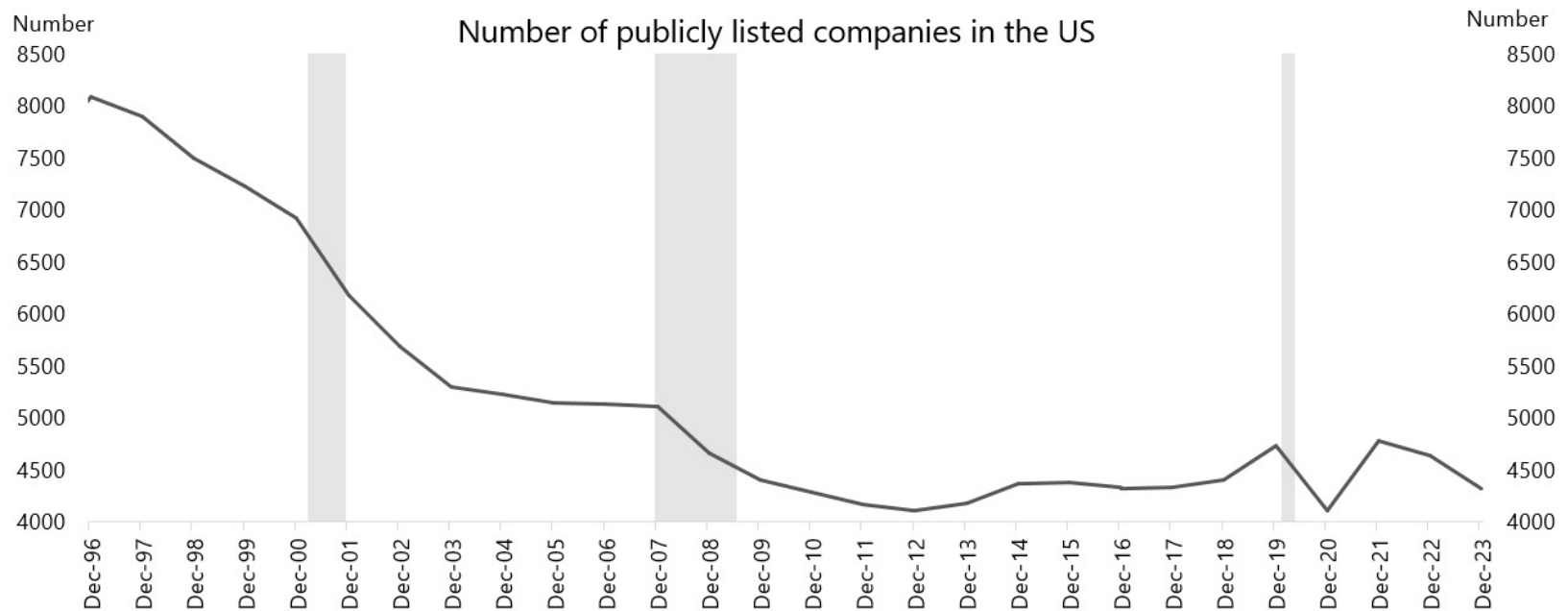
Session 2 – April 9th

• Investing in Stocks

Stocks vs Bonds:
Viewed As The Company

If you start a company, how do you get the financing needed to run it?

Borrow money (Debt)

and/or

Sell Ownership (Equity)

- The company must repay the loans.
- The lenders receive a certain interest rate.

Friends/Family Loans

Bank Loans

Bonds

Common Stock

Preferred Stock

- The company keeps the money.
- The investors hope the company makes a profit so that the stock price rises.

How many companies trade on US Stock Exchanges? AKA: Publicly Traded Stocks
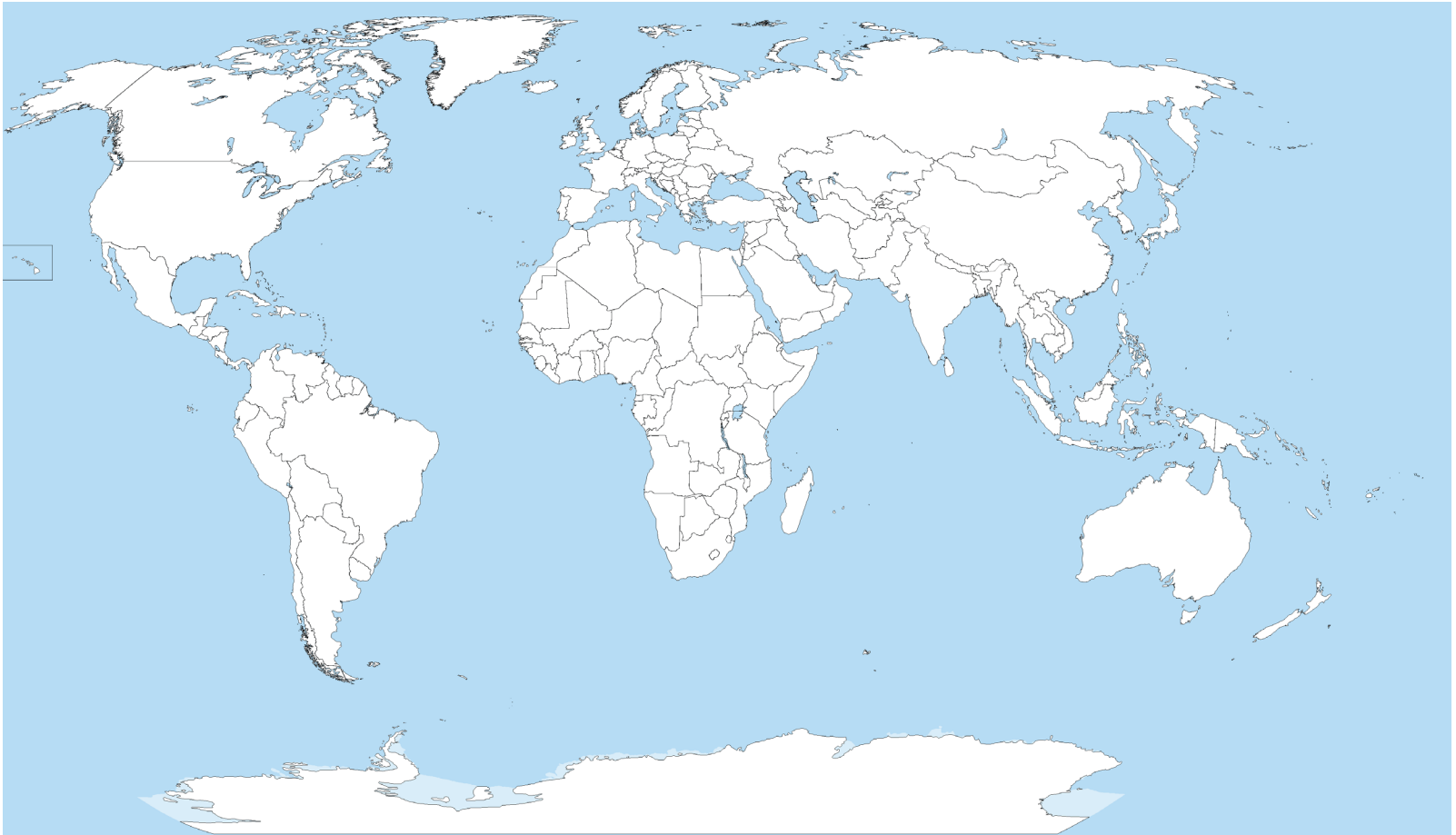

Number of publicly listed companies in the US

Source: Apollo

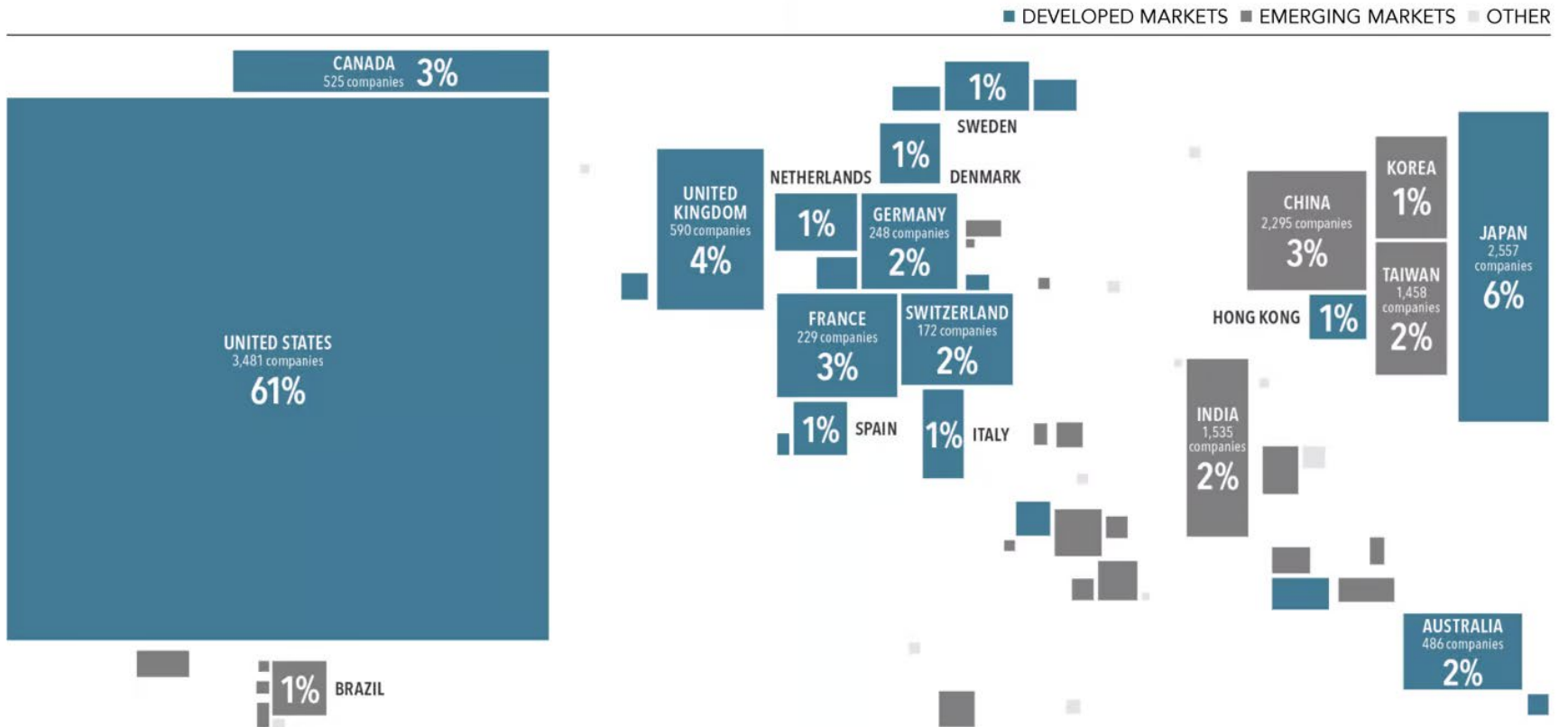# Publicly Traded Stocks vs Private Stocks
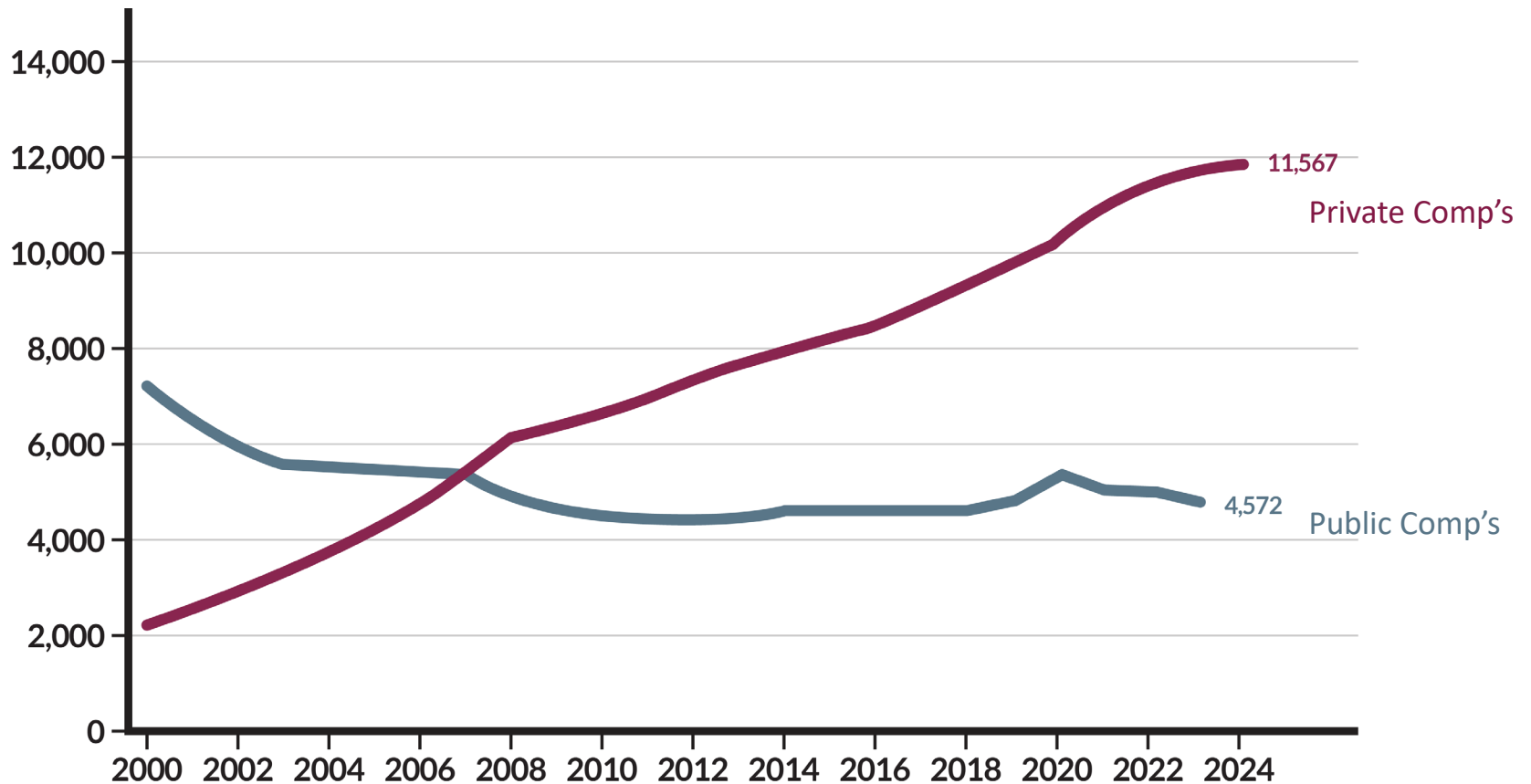
Source: World Bank, Statista, Siblis Research

We Can Buy Stocks From All Over The World

Global Stock Market Exposure

Source: Dimensional Fund advisors 12/31/2024

Types of Risk

- Systematic Risk – macroeconomic and other "systemic" events that influence the value of financial assets in general.
  - Recessions, inflation, interest rates, etc.
  - GeoPolitics
  - As a stock investor, you can't "hide" from systematic risk

- Unsystematic Risk
  - Risk specific to an industry or individual company
  - Risks to specific sectors / industries within the stock market.
    - How the industry will perform in the current economy
    - Measured by volatility in a specific sector
  - Risk in a specific company within the sector/industry
    - How the company performs in the sector/industry
    - What happens to that company – financial performance
    - Measured by Beta for that company within the market.

Why are you taking risk?

Disciplined buying

Investment thesis:

This is a good investment because …….

Valuation Entry Point:

This is a good price / entry point to buy because …….

Position Size:

I can buy XXX shares for my portfolio

If I am right, I will make gains by selling the stock @ …….

Exit Rules:

If I am wrong, I will limit losses by exiting the position @….

Picking Stocks To Buy

Qualitative Research

- Management Team
- Industry Market Share
- Geographic and Segment Position
- Conference Call Review, MD&A

Subjective!

Answers the question:
Is it a good company?

Valuation Techniques

Intrinsic Value
- Value is based on future assumptions of sales, earnings, & growth
  - Discount Cash Flow Model or Dividend Discount

Relative Value
- Value is based on the value of peers.
- Compare various ratios of the firm to the average ratio of it's peers

Answers the question:
Is it trading at a good price?

Relative Value of a Stock
Using Price Multiples

Name	Price To Earnings Ratio
McCormick	26.11x
JM Smucker Co	21.01x
Lamb Weston Holdings	21.89x
Post	23.29x
Flowers Foods	23.67x
Hain Celestial Group	52.88x
Snyder's-Lance	49.93x
Hershey	31.10x
Fresh Del Monte Produce	17.18x
Phibro Animal Health A	22.43x
Hostess Brands A	10.80x
Average	27.84x

If McCormick stock is trading at **$104**
And, its earnings per share are $4 per share

Using the average PE Ratio for the industry, the stock should trade at 27.84 times earnings

Relative Value = 27.84 x $4 = **$111.36**

That's 7% higher than its current price...Buy

Relative Value of a Stock
Using Price Multiples

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Average	27.84x

If Hershey is currently trading at **$93 per share**
And, its earnings per share are $3 per share

Use the average PE ratio to determine its value…

Relative Value = 27.84 x $3 = **$83.52**

That's 10% lower than its current price…Sell

Intrinsic Value of a Stock

Interest Rates and Stock Prices

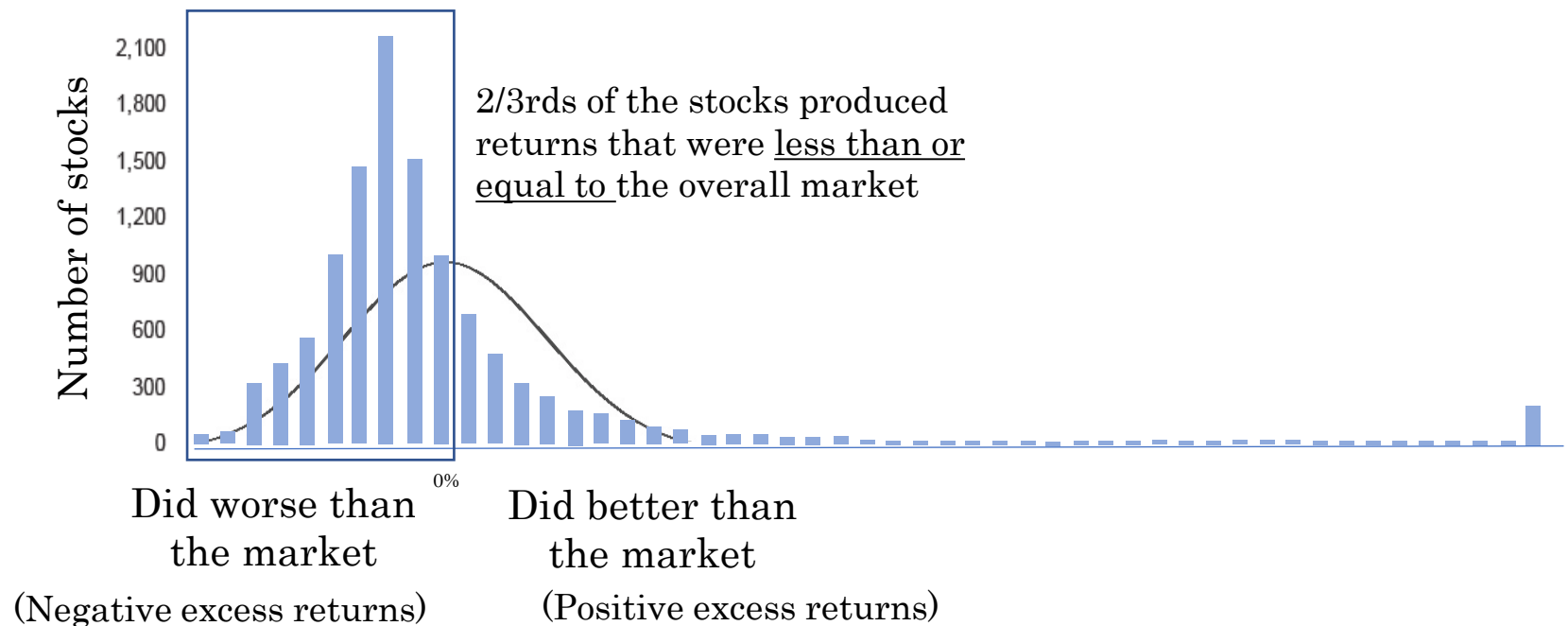|	
What is the value of a $100 dividend payable next year? If rates are 10% $100 / (1.10)^1 = \underline{\$90.91}$	What is the value of a $100 dividend payable next year? If rates drop to 7% $100 / (1.07)^1 = \underline{\$93.46}$

Higher systemic risk leads to higher discount rates.
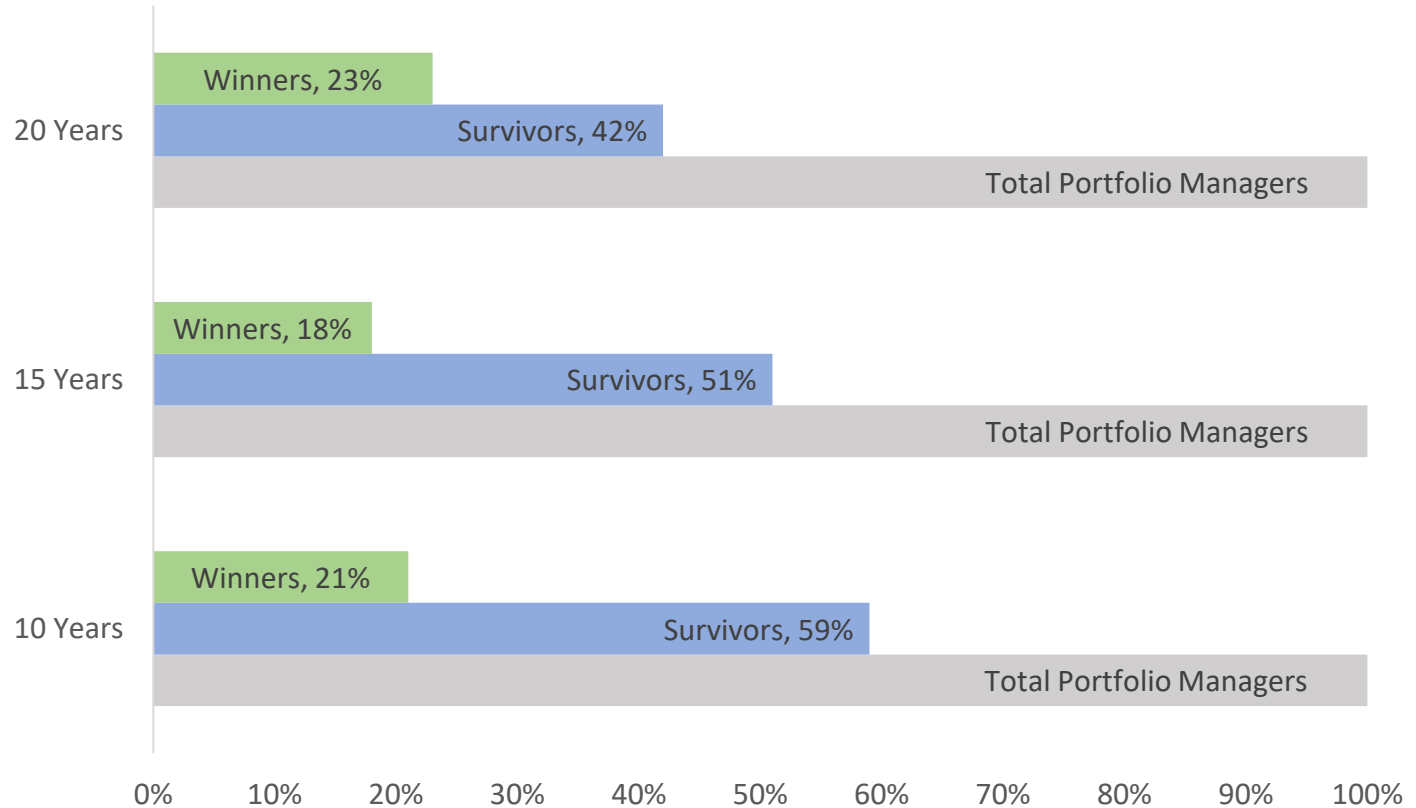
Higher rates = lower values

The Difficulty In Picking A Winning Stock

Excess Return = Did the stock do better or worse than the overall market
Lifetime excess returns 1980-2014

2/3rds of the stocks produced returns that were <u>less than or equal to </u>the overall market

Number of stocks (y-axis): 0, 300, 600, 900, 1,200, 1,500, 1,800, 2,100

0%

Did worse than the market
(Negative excess returns)

Did better than the market
(Positive excess returns)

Prof. Rich Jakotowicz – Univ. of Delaware

Professionals Don't Do Well

Source: DFA

Over 100 Behavioral Biases When Investing
## 100 Ways That Your Behavior Can Become Your Biggest Obstacle!

- Anchoring Bias
- Choice-Supportive Bias
- Availability Bias
- Clustering Bias
- Ostrich Effect
- Information Bias
- Placebo Effect
- Pro-Innovation Bias
- Confirmation Bias
- Outcome Bias
- Recency Bias
- Survivorship Bias
- Blind Spot Bias
- Conservatism Bias
- Overconfidence Bias
- Salience Bias
- Zero Risk Bias
- Disposition Effect
- Framing Effects
- Loss Aversion
- Selective Attention
- Herding Bias
- Gambler's Fallacy
- Illusion of Control
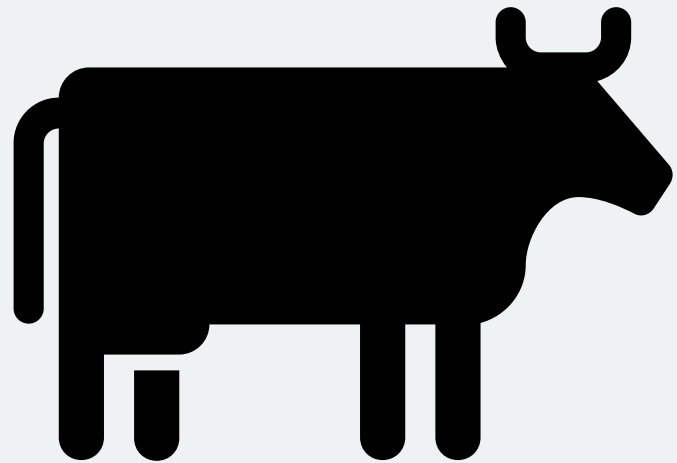
Which Animal is More Deadly?
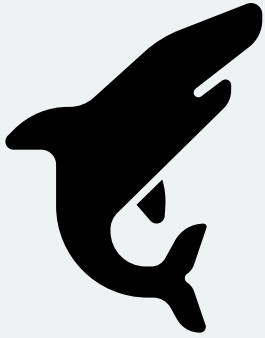
1

2
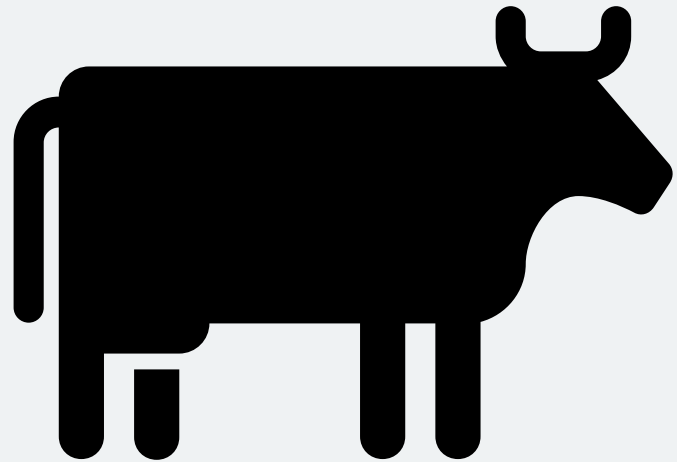
Which Animal is More Deadly?

1

2 ✓

While sharks may seem to be the clear choice, sharks kill on average just one American each year, whereas an average of 20 Americans are killed by cows annually.

Source: Rawley Z. Heimer, Kristian Ove R. Myrseth and Raphael S. Schoenle, "YOLO: Mortality Beliefs and Household Finance Puzzles,"
The Journal of Finance 74, no.6 (December 2019): 2957-2996. https://doi.org/10.1111/jofi.12828.

Avantis Investors®
By American Century Investments®

The Availability Bias

- Sharks *seem* deadly (think about the soundtrack from JAWS)

- Shark attacks – and even sightings – receive widespread media attention

- The Discovery® Channel dedicates an entire week of programming to them every year
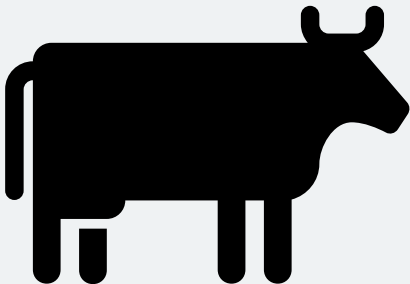
- Cows are docile and don't seem to present a threat

- When is the last time you heard about someone having been killed by a cow?

"When it comes to thinking about what's likely to occur in the future, we think about what was likely to occur in the past and project that ahead in time. We draw on whatever is easiest to conjure." – Hal Hershfield, Professor at UCLA Anderson
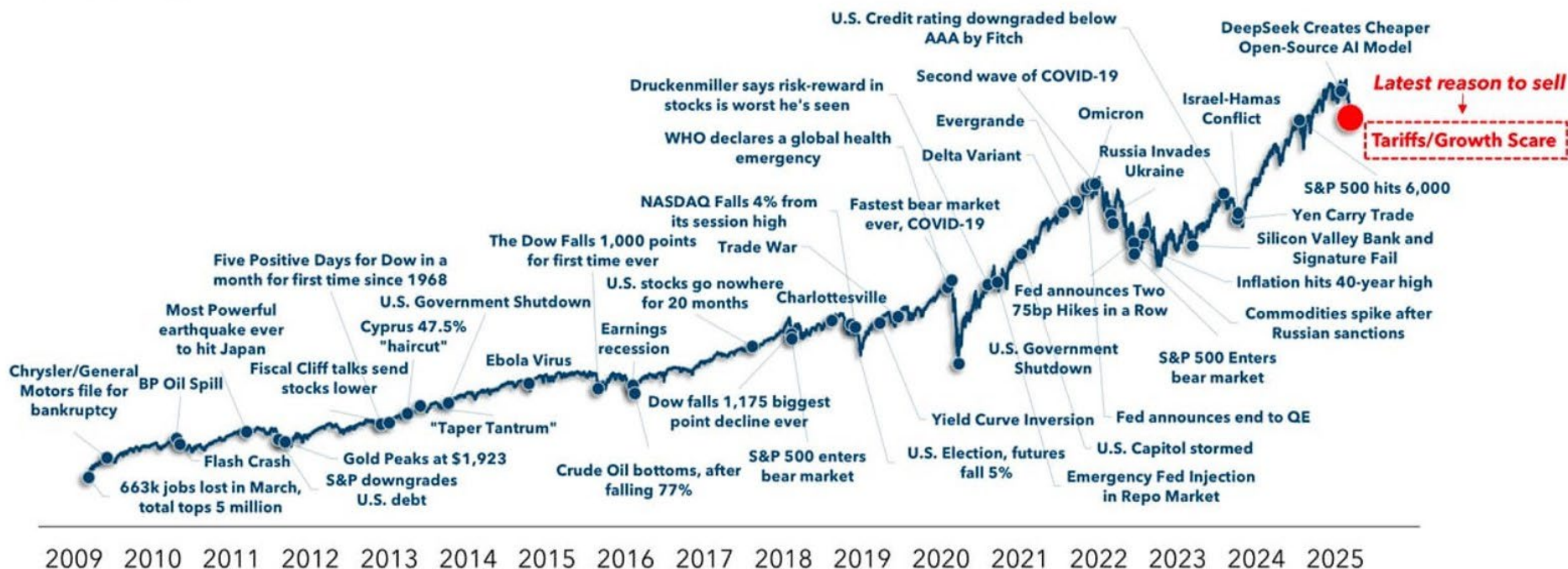
The world Is scary!
It's easy to find a reason to sell
It's hard to ignore the reasons and remain invested
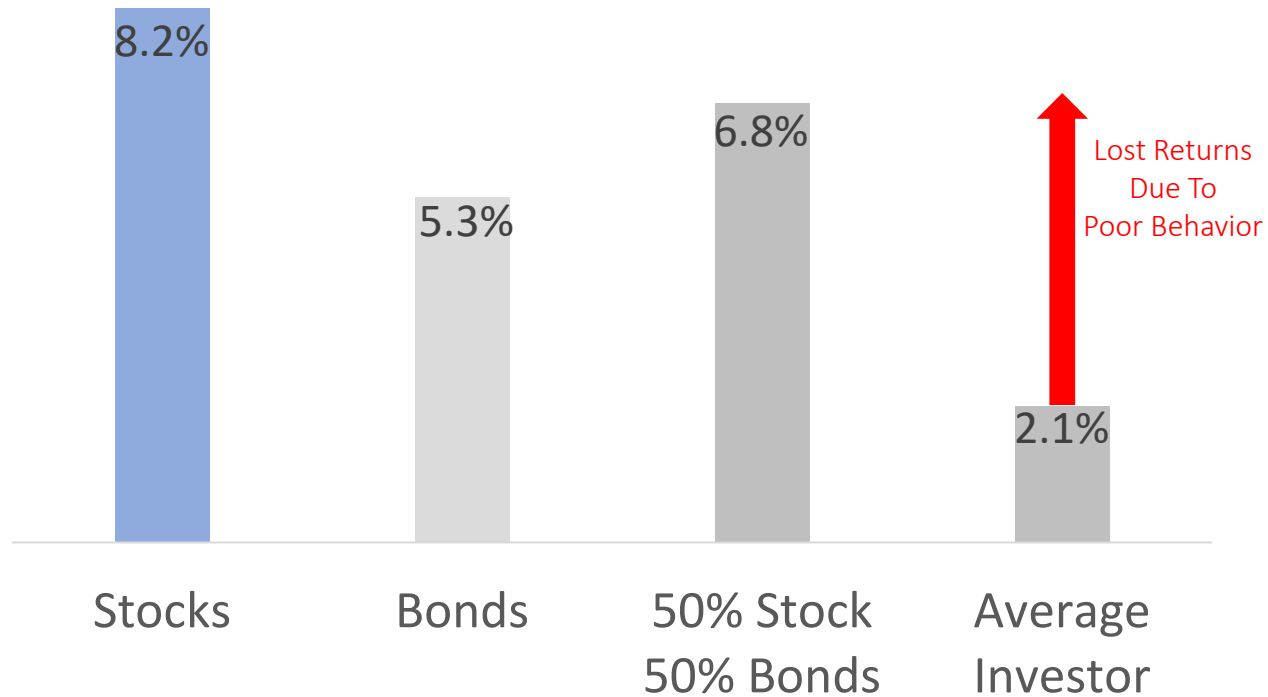

Reasons to Sell and S&P 500 Price — Since 2009.

"History Doesn't Repeat Itself But It Often Rhymes"
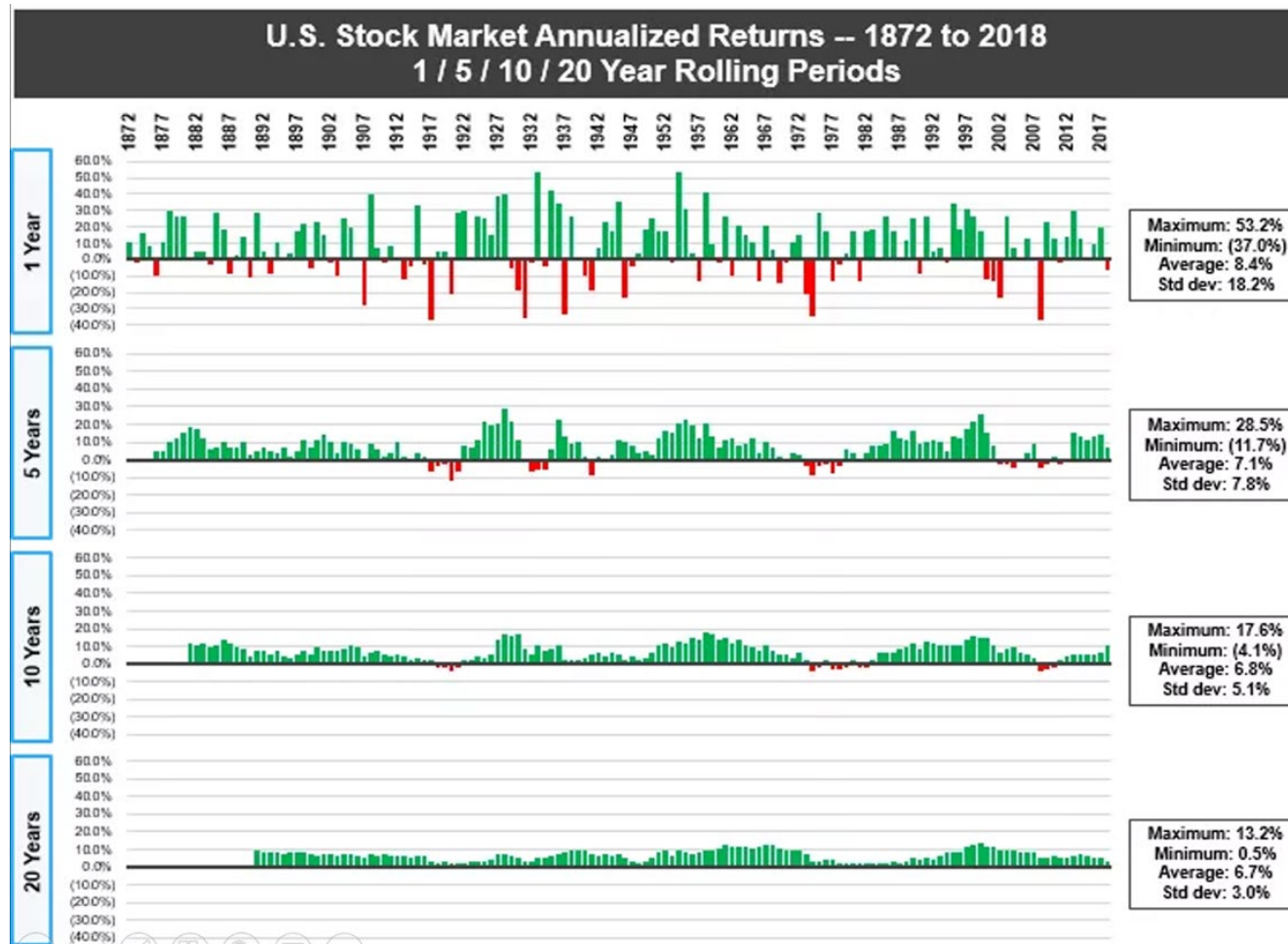
-Mark Twain

Ignore The Media !!!

Annual Returns From 1996 - 2015

Stocks — 8.2%
Bonds — 5.3%
50% Stock 50% Bonds — 6.8%
Average Investor — 2.1%

Lost Returns Due To Poor Behavior

Source: DALBAR

Length of investment time horizon reduces risk

Additional Risk reduction
Dollar cost averaging from monthly contributions over a long period of time

Diversification and Time

Range of stock, bond and blended total returns
Annual total returns, 1950–2024

|	Annual avg. total return	Growth of $100,000 over 20 years
Stocks	11.6%	$895,754
Bonds	5.2%	$276,382
60/40 portfolio	9.4%	$600,708
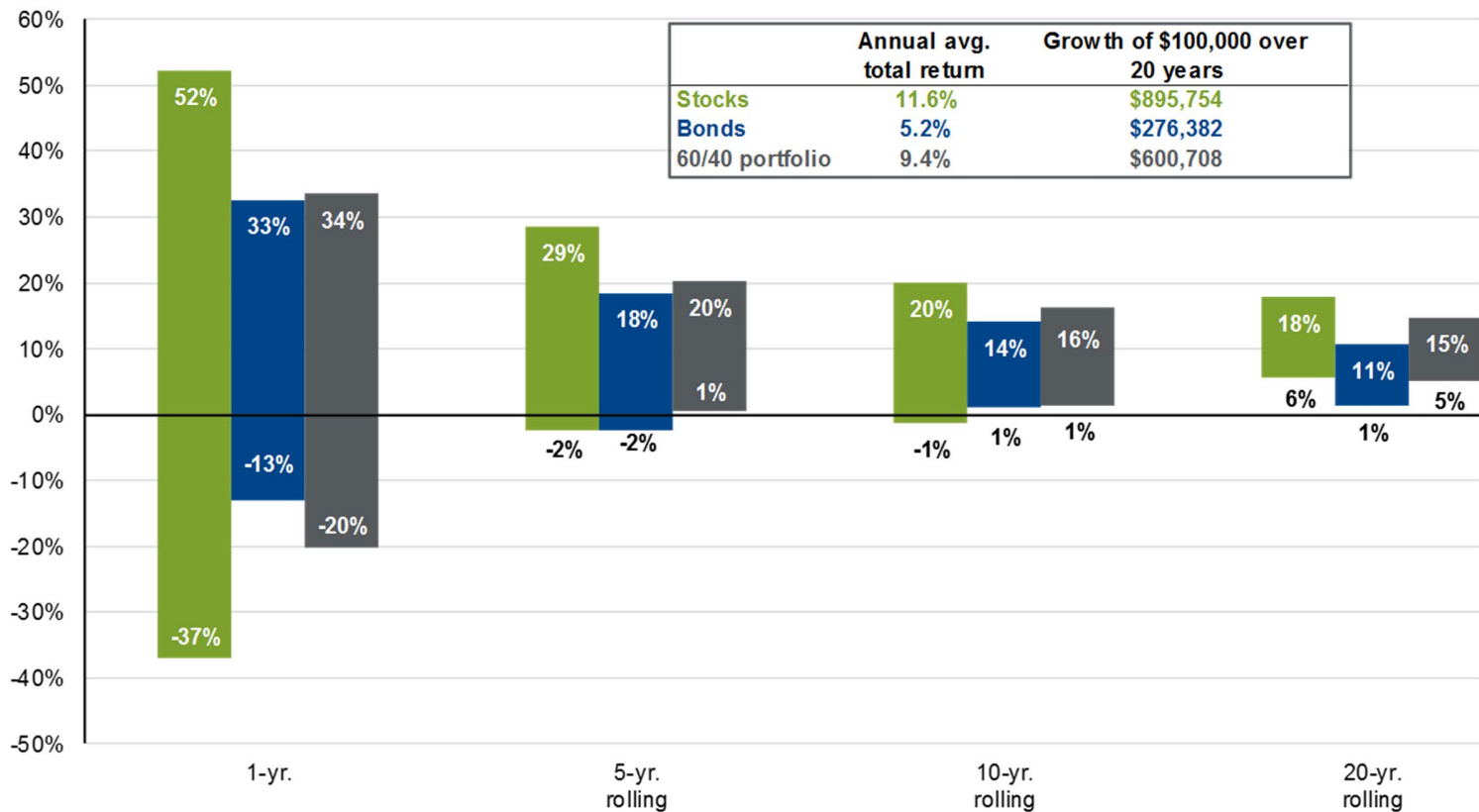
Key messages on selling ….

- Selling is OK!

- Only things certain is death and taxes. Being tax smart is OK!

- Three rules.

  1. **Be impatient with your losers.**
  2. **Protect your profits**
  3. **Thinking of selling and selling are not the same**

Intra-year declines vs Year End Returns

S&P intra-year declines vs. calendar year returns
Despite average intra-year drops of 14.1%, annual returns were positive in 34 of 45 years
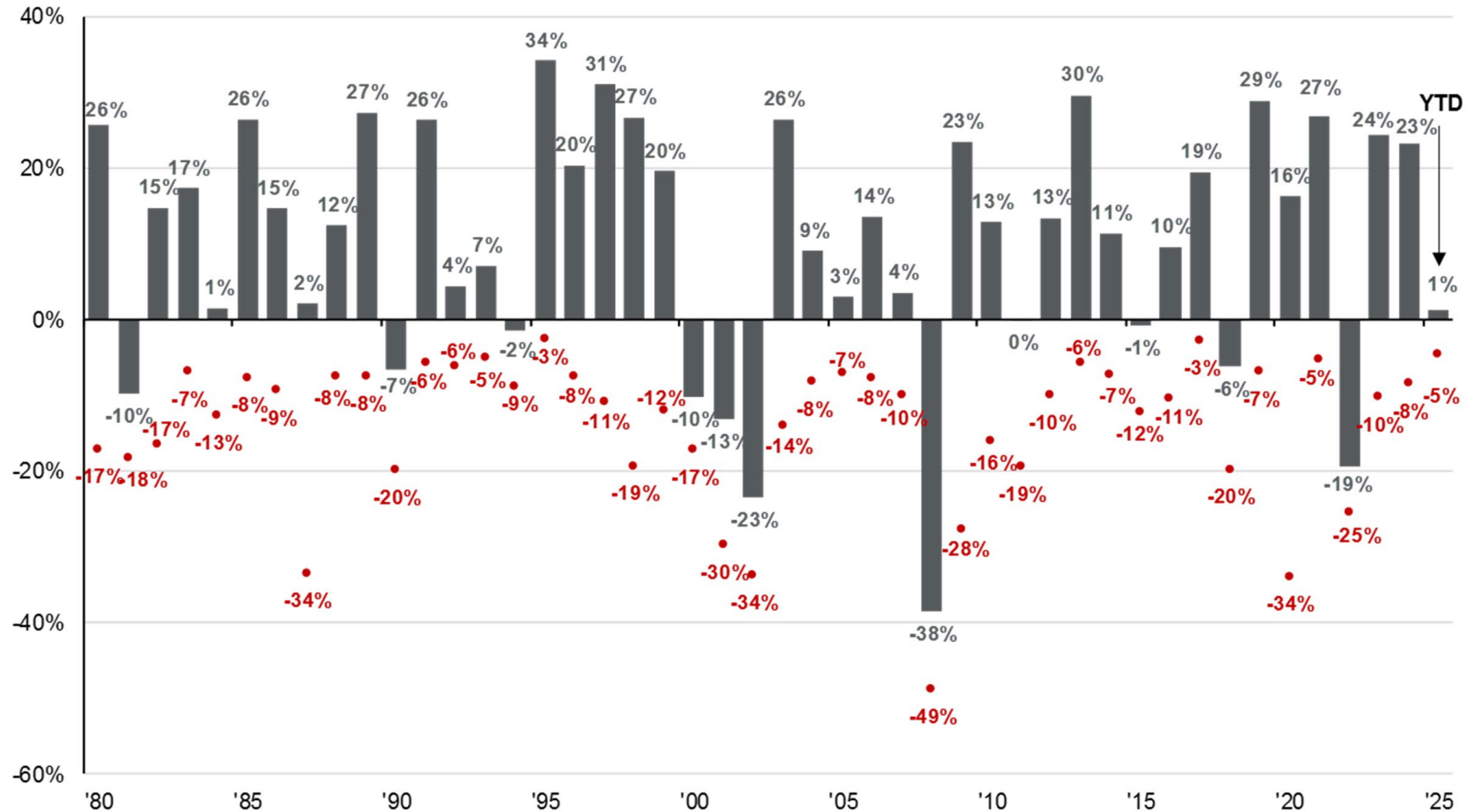
Stock indices

- Stocks are often grouped
  - Dow Jones Index – 30 stocks
  - S&P 500 – 503 stocks (market cap weighted – top 10 account for 37% of index value)
  - NASDAQ – >2500 Stocks but top tech stocks are here
  - Russell 2000 – 2000 Stocks

- You can invest broadly in these groups rather than individual stocks … We will talk more when we come to Mutual Funds and ETFs

All Indices are different

Rajeev Vaidya

Stocks or Shares

- Post-reading if you have time
- Investopedia links:

- https://www.investopedia.com/terms/s/shares.asp

- https://www.investopedia.com/terms/s/stock.asp

- https://www.investopedia.com/terms/i/ipo.asp

Investing Basics for All

Thank You !!