



Using Investment Portfolio Concepts to Find Value and Limit Risks

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Service Beyond Comparison

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Feeling Uneasy?



" I couldn't help but notice that your condition fluctuates according to the bond market. "

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Volatile Market



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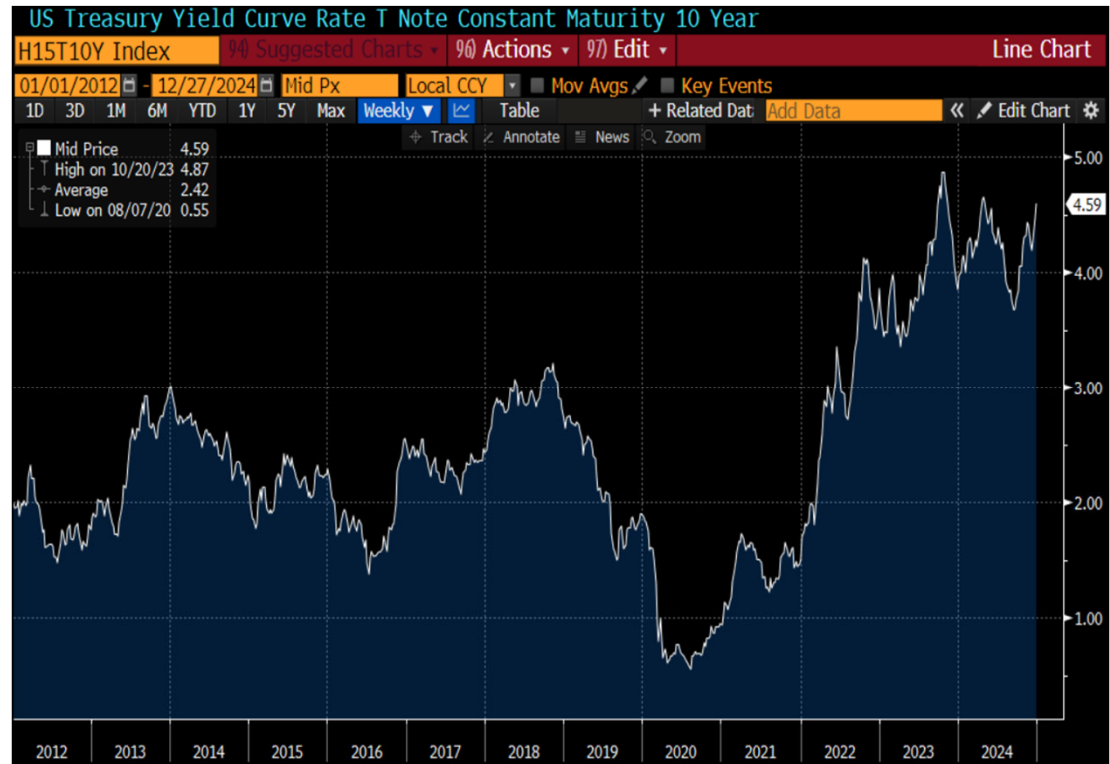
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Volatile Market

Annual High/Low Spread on T10Y

- 2024 - 107bps
- 2023 - 168bps
- 2022 - 262bps
- 2021 - 81bps
- 2020 - 136bps
- 2019 - 132bps
- 2018 - 80bps
- 2017 - 57bps
- 2016 - 123bps
- 2015 - 82bps
- 2014 - 94bps
- 2013 - 136bps
- 2012 - 96bps
- Mean = 120bps
- Median = 107bps

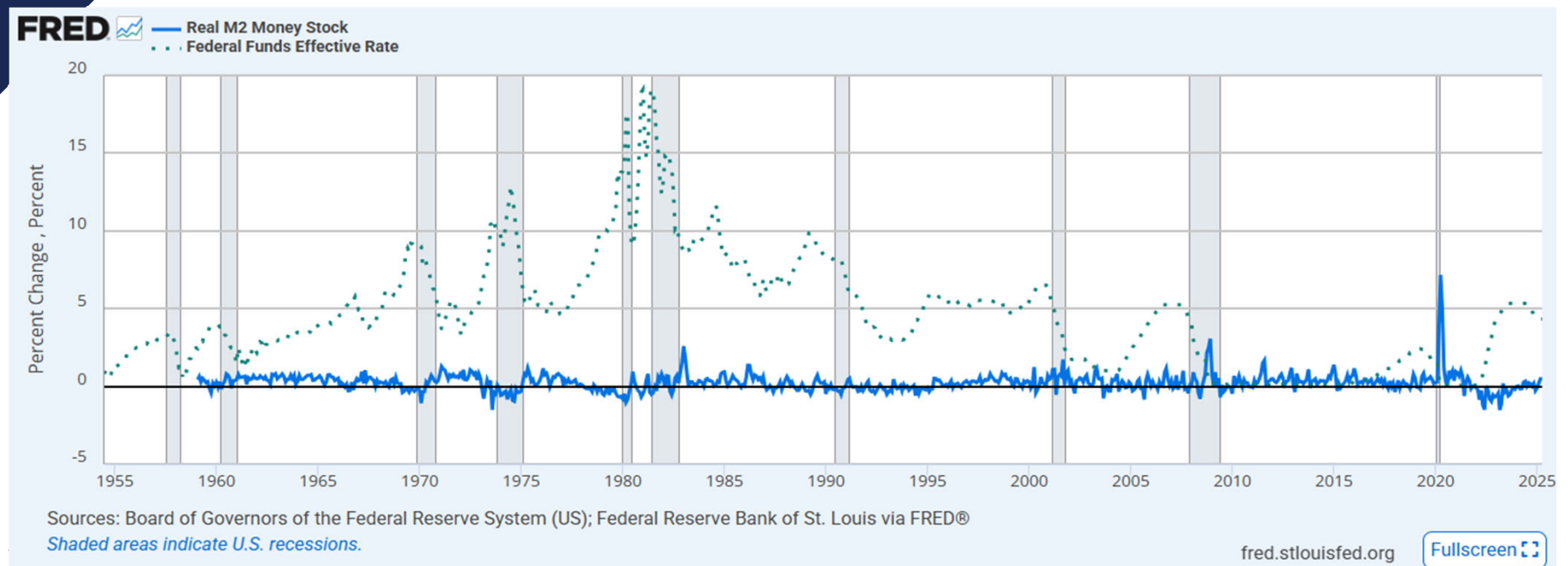
“The only people who get hurt on a roller coaster are the ones who jump off”
Dave Ramsey



2025 T10Y: High = 4.79% Low = 4.01% (78bps)

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Types of Risks

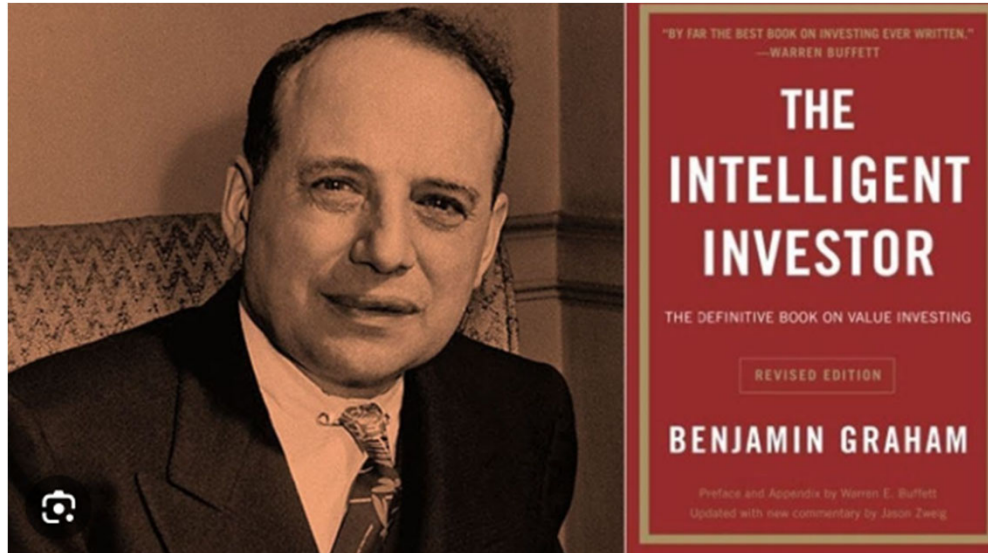


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Its Not You... Its Me

“The investor’s chief problem and even his worst enemy is likely to be himself...”

-Benjamin Graham



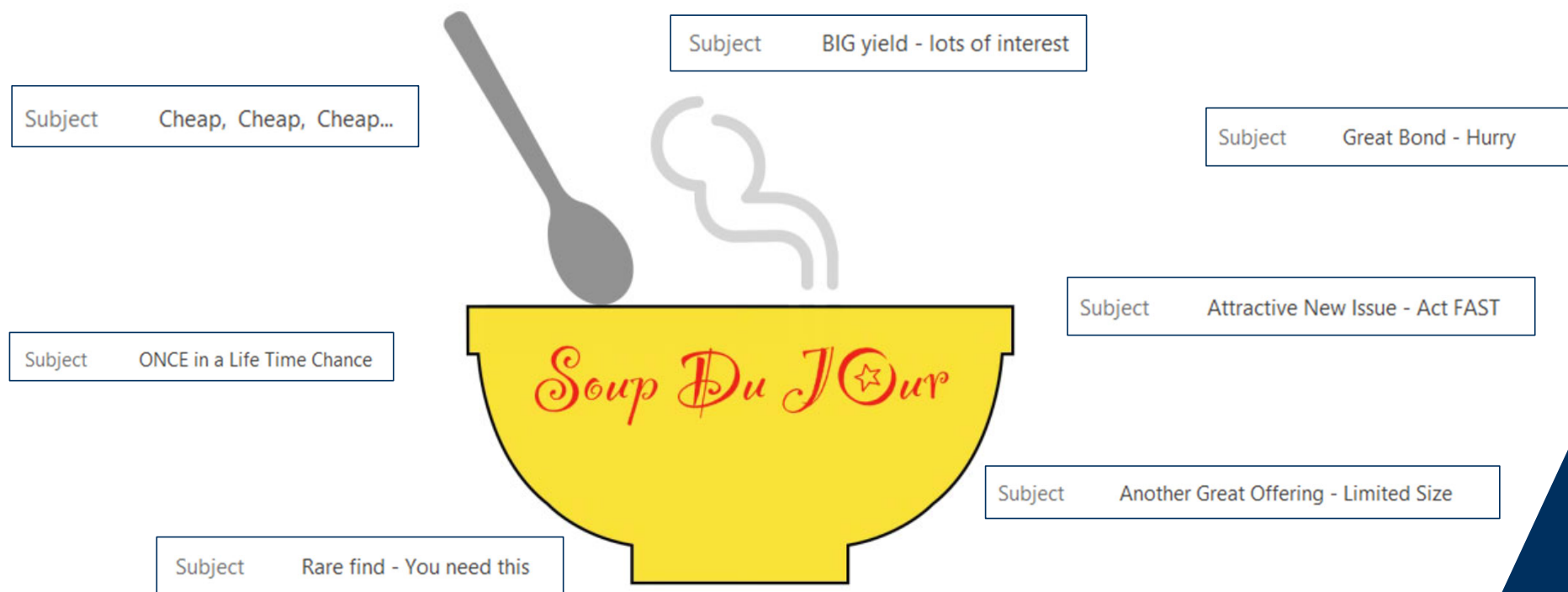
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How to Get the Best Result – Have a Plan!



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The Most Common Strategy...

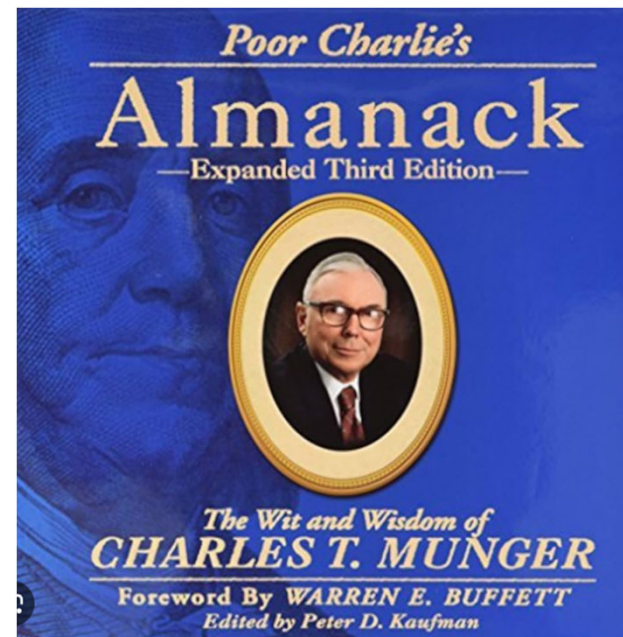


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You Get What You Deserve

“The way to a good result is to deserve a good result...”

-Charlie Munger



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Modern Portfolio Theory

Harry Markowitz, American economist, won the Noble Prize for his development of “MPT”. It is designed to be a practical guide to building an investment portfolio to achieve the maximum level of return when combined with a tolerable level of risk. It steers the focus off any one specific portfolio asset and directs the attention to the overall portfolio’s performance.

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Modern Portfolio Theory (MPT)

Key Concepts:

- Diversification
- Yield Curve
- Credit Risk
- Risk and Return
- Interest Rate Risk
- Active vs Passive Management
- Bond Portfolio Immunization

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Diversification

A concept largely centered around reducing risks. The goal is to own exposure to multiple sectors in order to limit exposure to any single sector.

“Diversification is a protection against ignorance. It makes little sense for those who know what they are doing.”

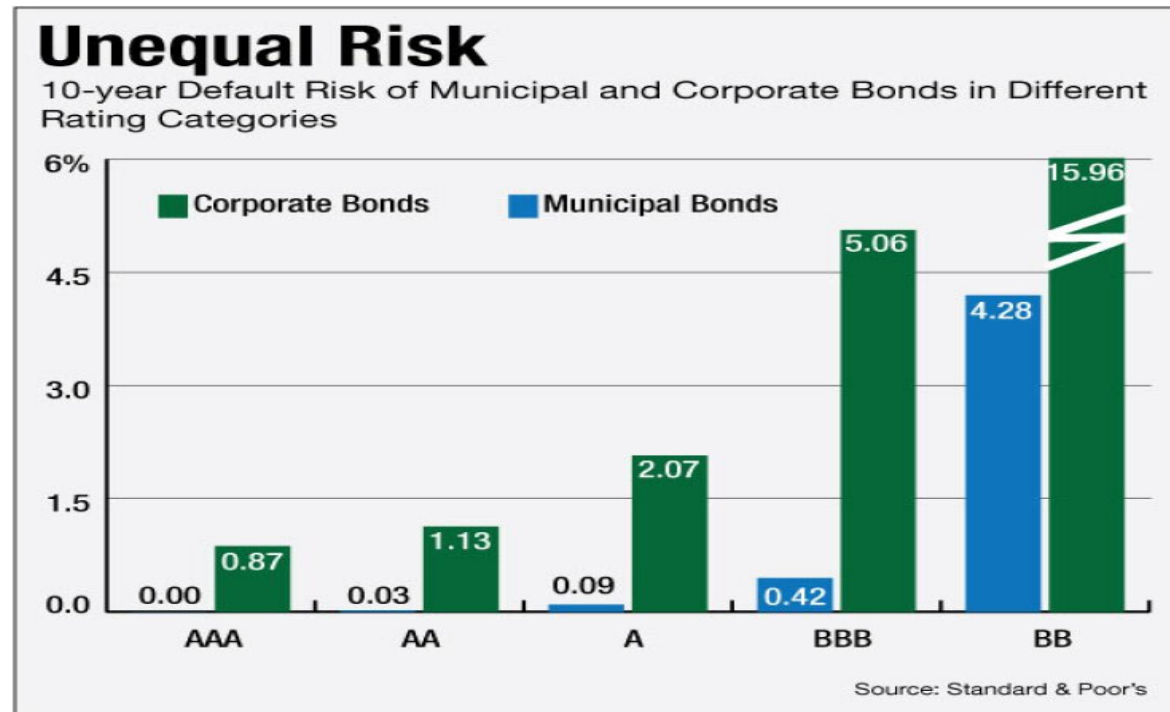
Warren Buffet



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Credit Risks – Save It for the Loan Portfolio

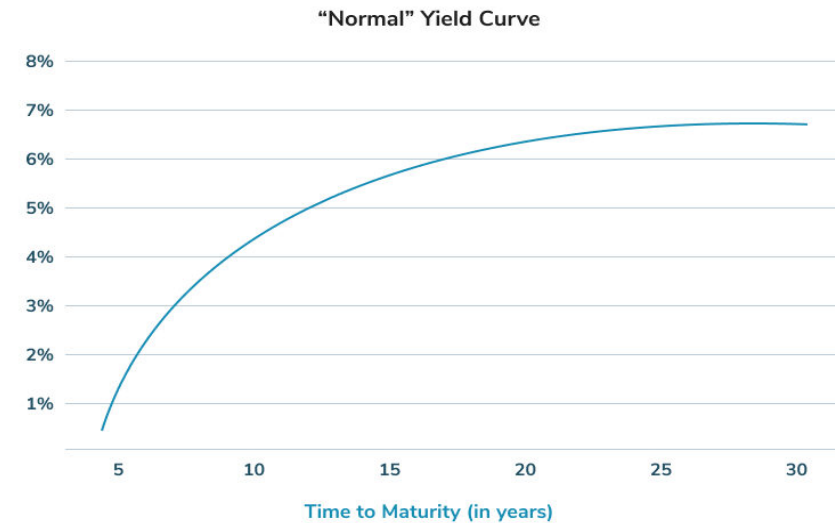
The historical default rate for muni's is significantly lower than corporate debt with an equivalent rating.



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Yield Curve

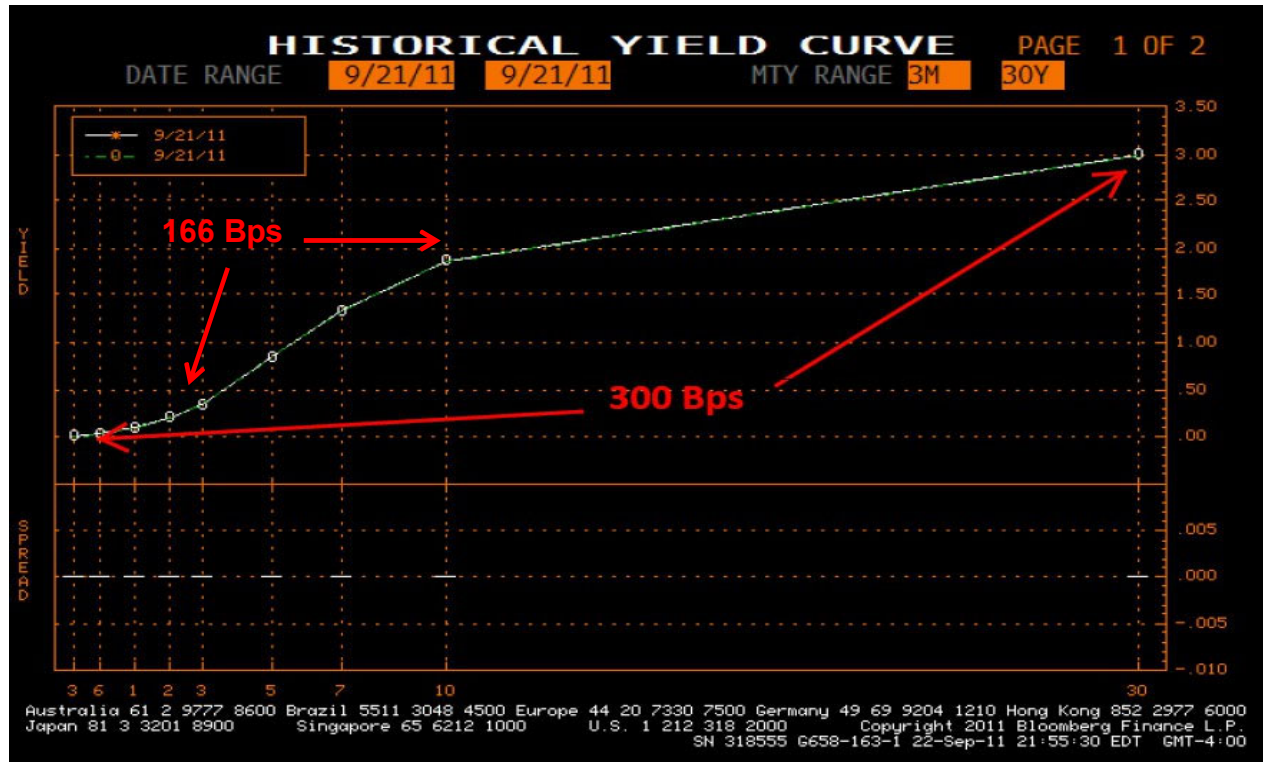
A line that plots a group of varying term maturities against their yield assuming the credit quality is identical.



InvestingAnswers.com

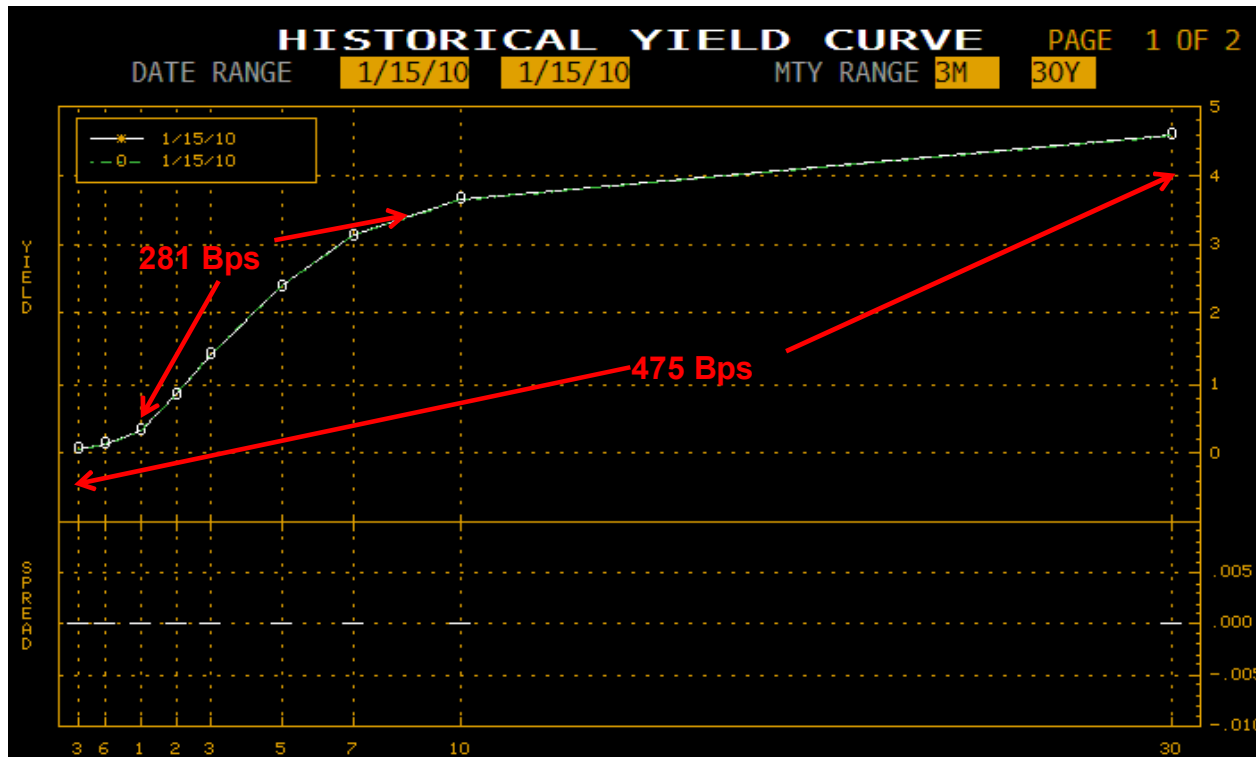
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Yield Curve – Normal



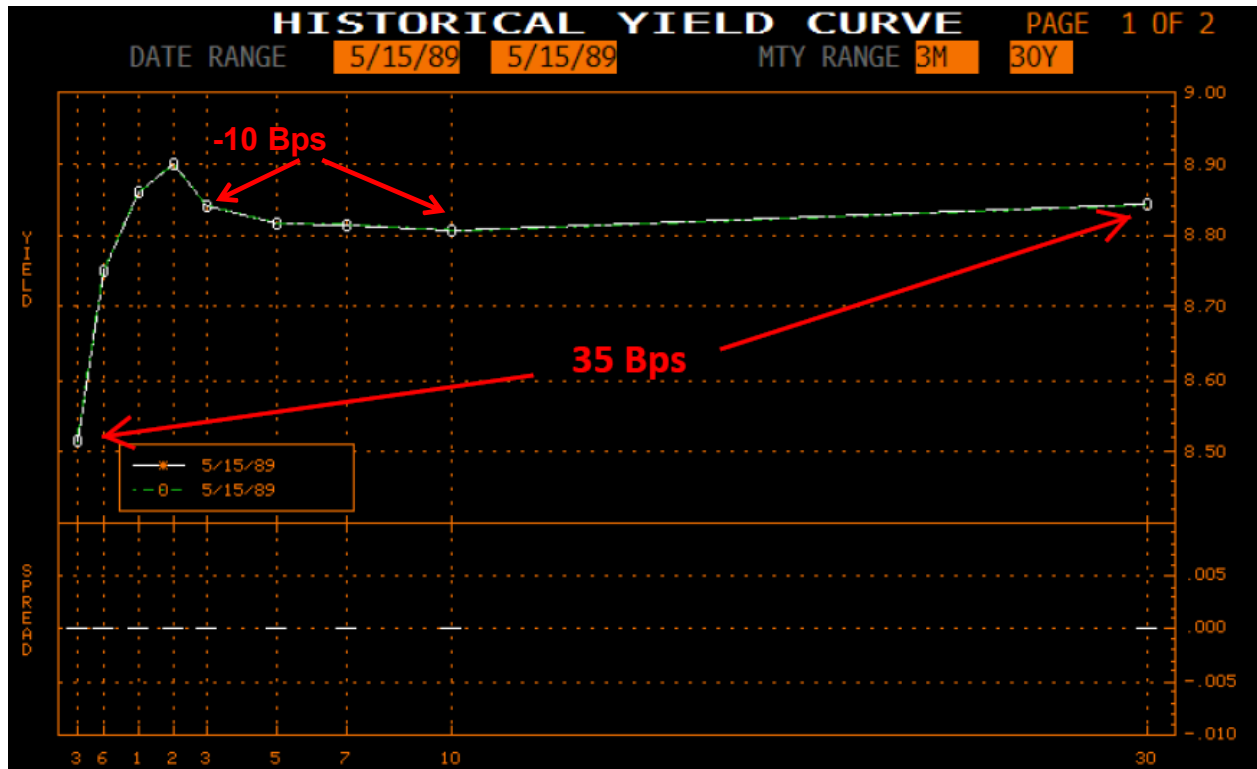
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Yield Curve – Steep



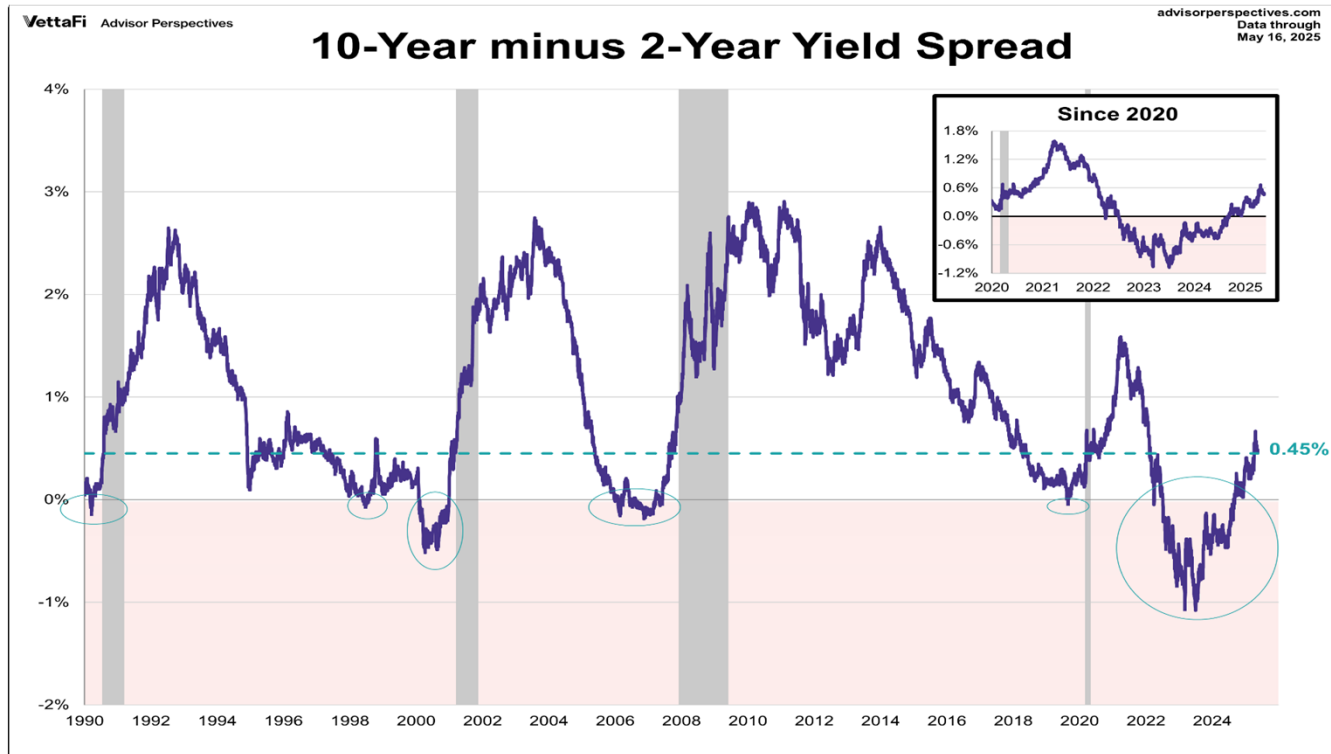
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Yield Curve – Flat



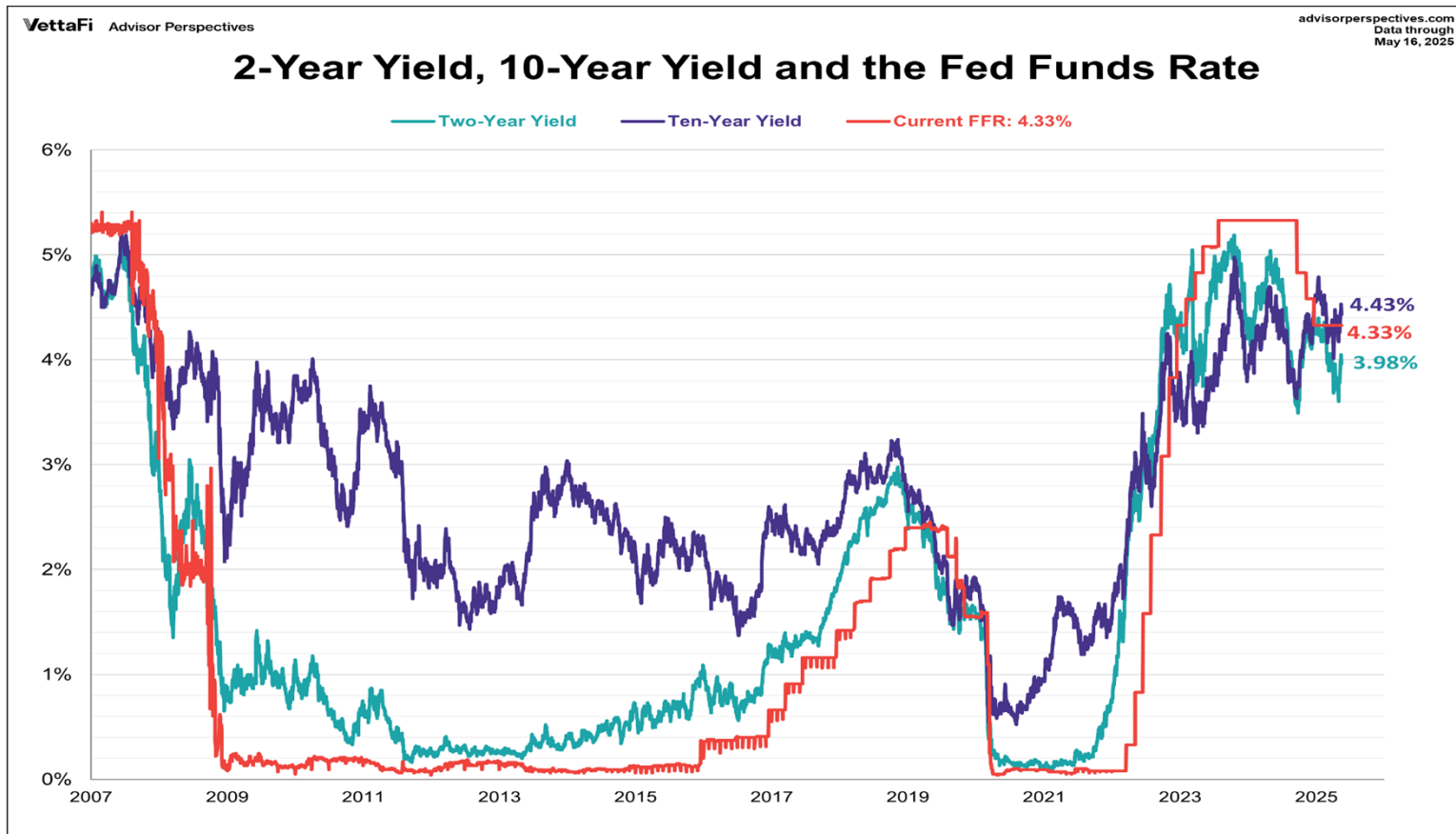
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Yield Curve – Inverted



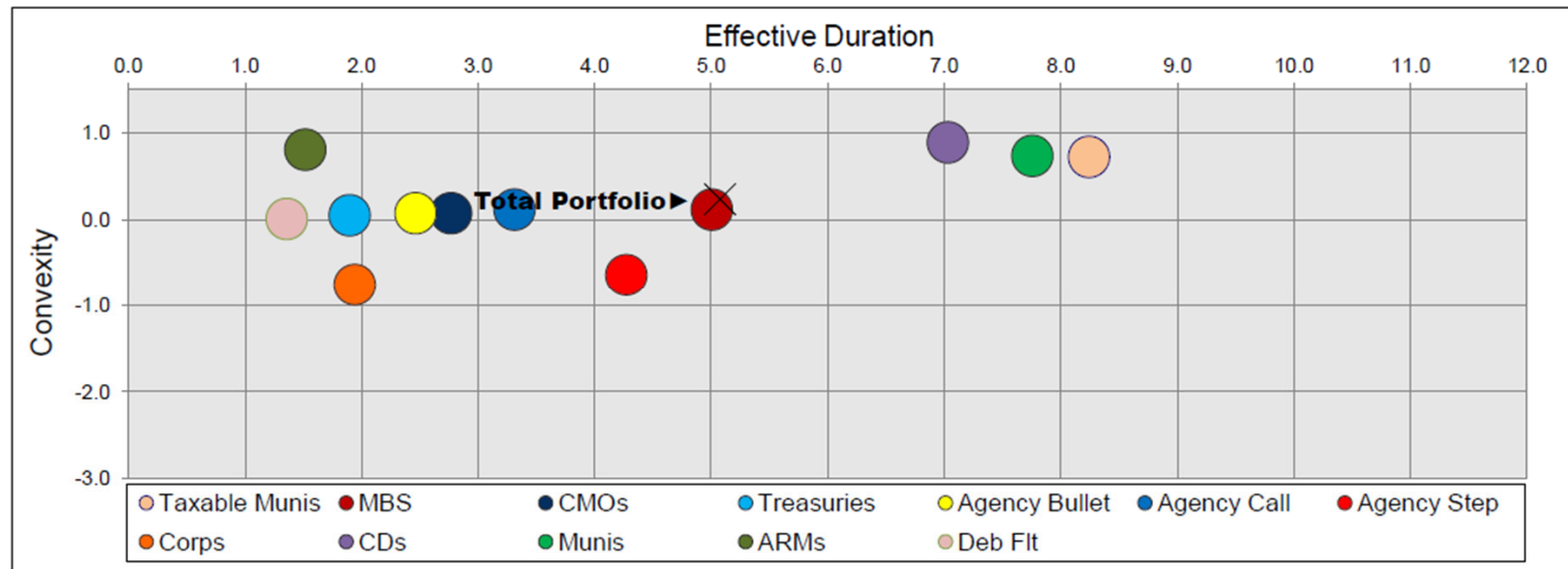
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Yield Curve



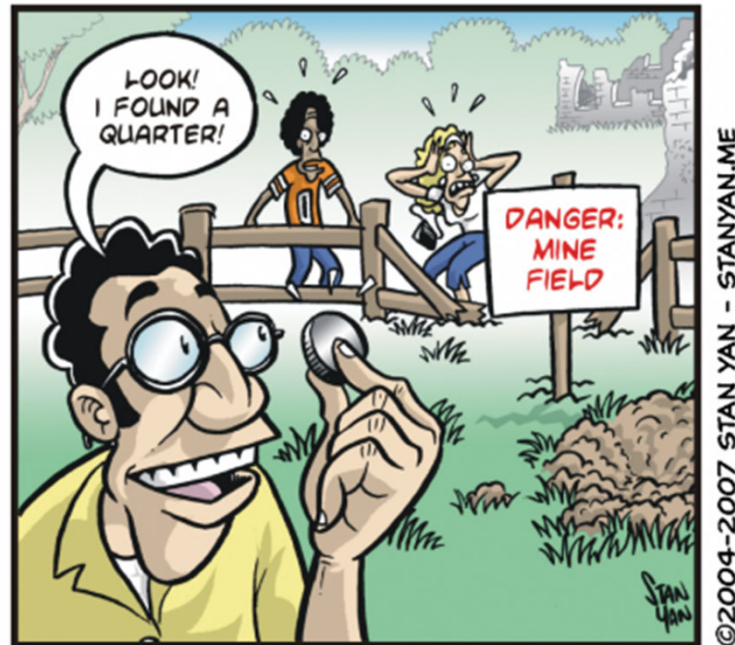
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You Need Exposure to Various Curve Points



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Risk vs Reward



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FRED'S NOT GOOD AT ASSESSING RISK VS. REWARD.

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Risk vs Reward - Measurements

Duration – measure of price volatility per 100bps move in rates

Convexity – measures the rate of change of duration

Yield – the annual return one expects to receive on a bond

Alpha – the excess return you earn over a performance benchmark

Beta – measures the degree of systematic risk I have in my portfolio

Sharpe Ratio – a measure of an investment's risk-adjusted performance which is calculated by comparing its return to the risk-free asset (Investopedia)

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Risk vs Reward - Measurements

Total Return – a measurement of return that factors in the assumed future value (price risk) of the bond

- Measurement is highly dependent upon the estimated future value
- Future values are determined through duration, convexity, product spreads (these often vary), and bid/ask discount
- The bid/ask discount is much more difficult to determine in bonds with high degree of optionality, complexity, credit exposure, and/or thinly traded (obscure) sectors

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Total Return – Assumptions Matter

Scenario:

An account needs funds in the next 12 months, which bond should they buy?

1-year US Treasury @ 4.00%, -2.70% Price Volatility +300 bps

Uncapped SBA Floater @ 5.00% (variable), 0% Price Volatility +300 bps

The investor can buy the US Treasury, earn 4%, and guaranty the funds are available in 12 months.

Or,

The investor can buy the SBA Floater, earn a variable coupon (currently 5%) and sell the position in a year no matter what interest rates do (0% Price Volatility).

Total Return: 5%, currently

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Total Return – Assumptions Matter

Price Volatility Management Example:

An account needs funds in the next 12 months, which bond should they buy?

1-year US Treasury @ 4.00%, -2.70% Price Volatility +300 bps

Uncapped SBA Floater @ 5.00% (variable), 0% Price Volatility +300 bps

The investor can buy the US Treasury, earn 4%, and ensure the funds are available in 12 months.

Or,

The investor can buy the SBA Floater, earn a variable coupon (currently 5%), and sell the position in a year for a 1% loss (0% Price Volatility, 1 point bid/ask spread).

Total Return: 4%, currently

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Total Return – Assumptions Matter

Price Volatility Management Example:

An account needs funds in the next 12 months, which bond should they buy?

1-year US Treasury @ 4.00%, -2.70% Price Volatility +300 bps

Uncapped SBA Floater @ 5.00% (variable), 0% Price Volatility +300 bps

The investor can buy the US Treasury, earn 4%, and ensure the funds are available in 12 months.

Or,

The investor can buy the SBA Floater, earn a variable coupon (currently 5%), and sell the position in a year for a 2+pt loss (0% Price Volatility, 1 point bid/ask spread, 1 point liquidity premium required by buyer).

Total Return: 3%, currently

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Total Return Summary

- Great tool for actively managed bond funds
- Too assumption heavy to be reliable unless using for highly liquid securities with low to no optionality
- Doesn't take into account all factors that determine future price (spread, market appetite, credit tolerance/performance, etc...)
- Banks should already be using duration and convexity as portfolio guidelines
- Your investment portfolio isn't managed in a silo. It is part of a broader balance sheet which should determine its composition

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Aligning Risk and Reward



"There's no such thing as a free lunch."

The bond market is predominately an efficiently priced market. If you are getting more reward, you are assuming some form of additional risk. This traditionally encompasses either complexity, structure, credit, or duration risk. Of these, duration risk is the only one that benefits FI's with the typical industry IRR (asset sensitivity). The others underperform as rates decline resulting in owning a less effective balance sheet hedge.

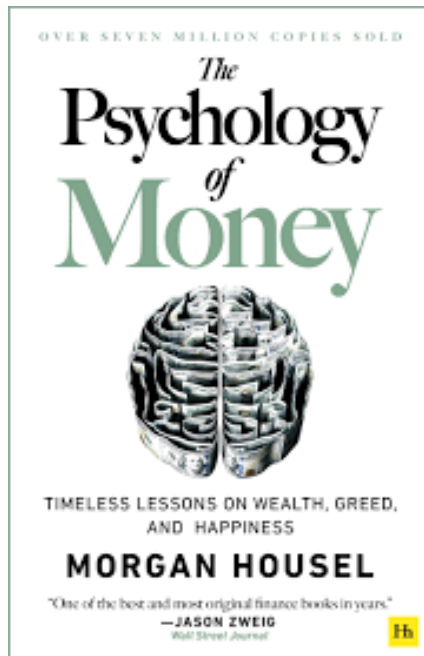
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Aligning Risk and Reward



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Fees vs Fines



The Psychology of Money

Morgan Housel

“Like everything else worthwhile, successful investing demands a price. But its currency is not dollars and cents. It’s volatility, fear, doubt, uncertainty and regret- all of which are easy to overlook until you’re dealing with them in real time. The inability to recognize that investing has a price can tempt us to try to get something for nothing. Which, like shoplifting, rarely ends well.”

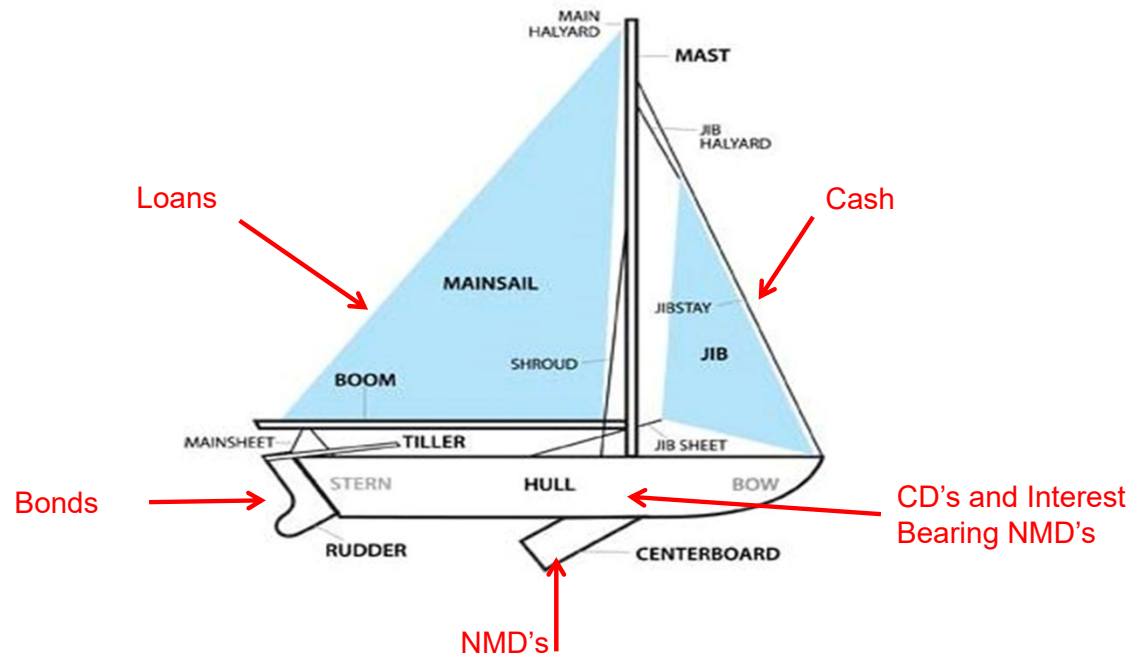
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Interest Rate Risk



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IRR Made Easy



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IRR Profile

- What is my IRR exposure?
 - Net Interest Income Simulation (asset or liability sensitive)
 - Near-term risks
 - Should help define portfolio cashflow and fixed vs floating needs
- Can I balance my IRR exposure?
 - Economic Value of Equity
 - Longer-term risks
 - Should help define portfolio duration and optionality preferences

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Passive vs Active Investing



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What you are not...

Bonds funds are actively managed:

- They actively take losses
 - Too many banks aren't open to this idea
- All cashflow is reinvested back into bonds
 - Banks typically reinvest near all investment cashflow back into loans as rates rise
- Bond funds become flush with cash as rates rise
 - Banks struggle to meet loan demand due to vanishing deposits as rates rise
- Bond funds often aggressively use credit in search of “alpha”
 - Bank regulations limit this option... “credit risk is for the loan portfolio”
- Bond funds are a silo
 - Banks are a balance sheet

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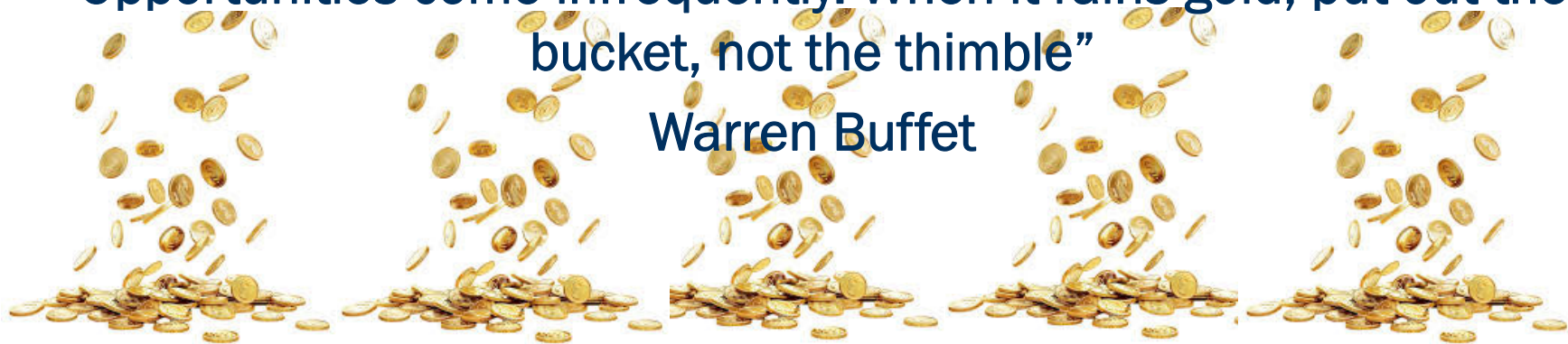
What you should be...

An opportunist:

“a person who exploits circumstances to gain immediate advantage rather than being guided by consistent principles or plans” as defined by Oxford Languages

“Opportunities come infrequently. When it rains gold, put out the bucket, not the thimble”

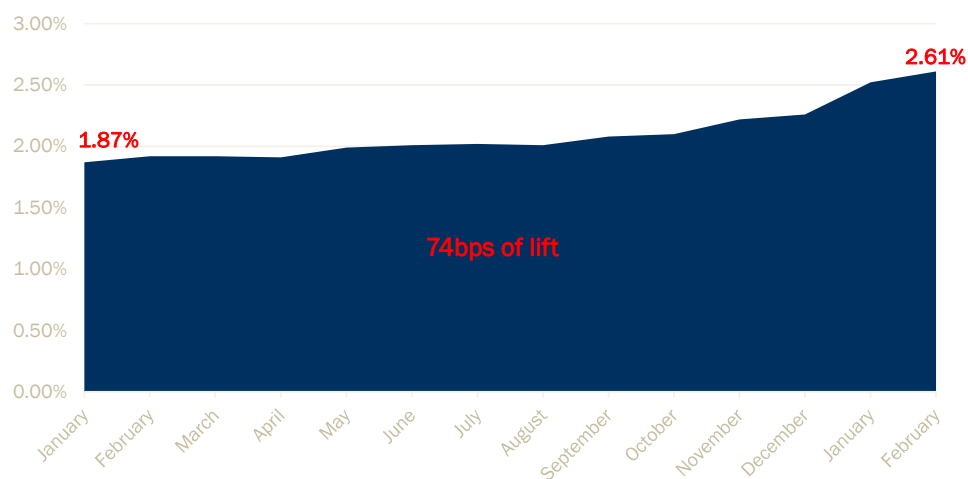
Warren Buffet



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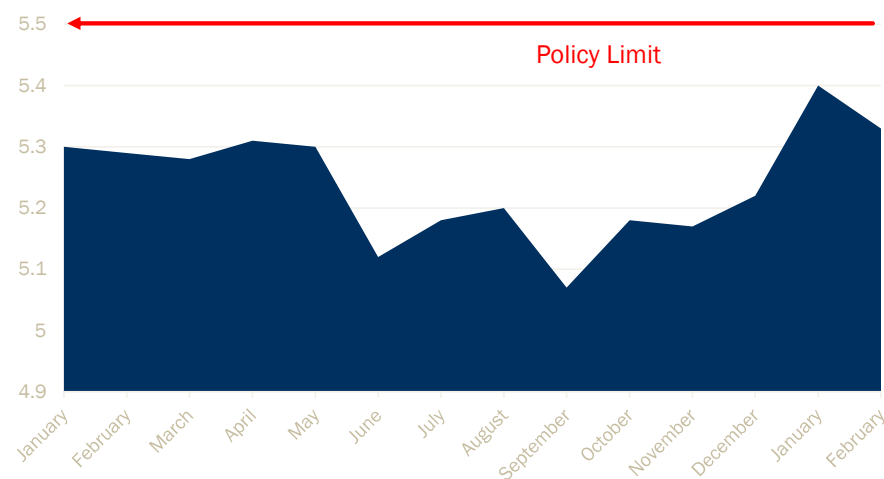
Opportunities Are Out There

Portfolio Yield 2024



Bank improved overall yield by 74bps (from 1.87 to 2.61%) in a year. Portfolio is about \$800mm in size so added almost \$6mm annual earnings boost.

Portfolio Duration 2024



The portfolio risk profile (duration and credit) and size is almost identical. The “cost” was a drop in 3yr expected cash as % of portfolio from 33% to 28%.

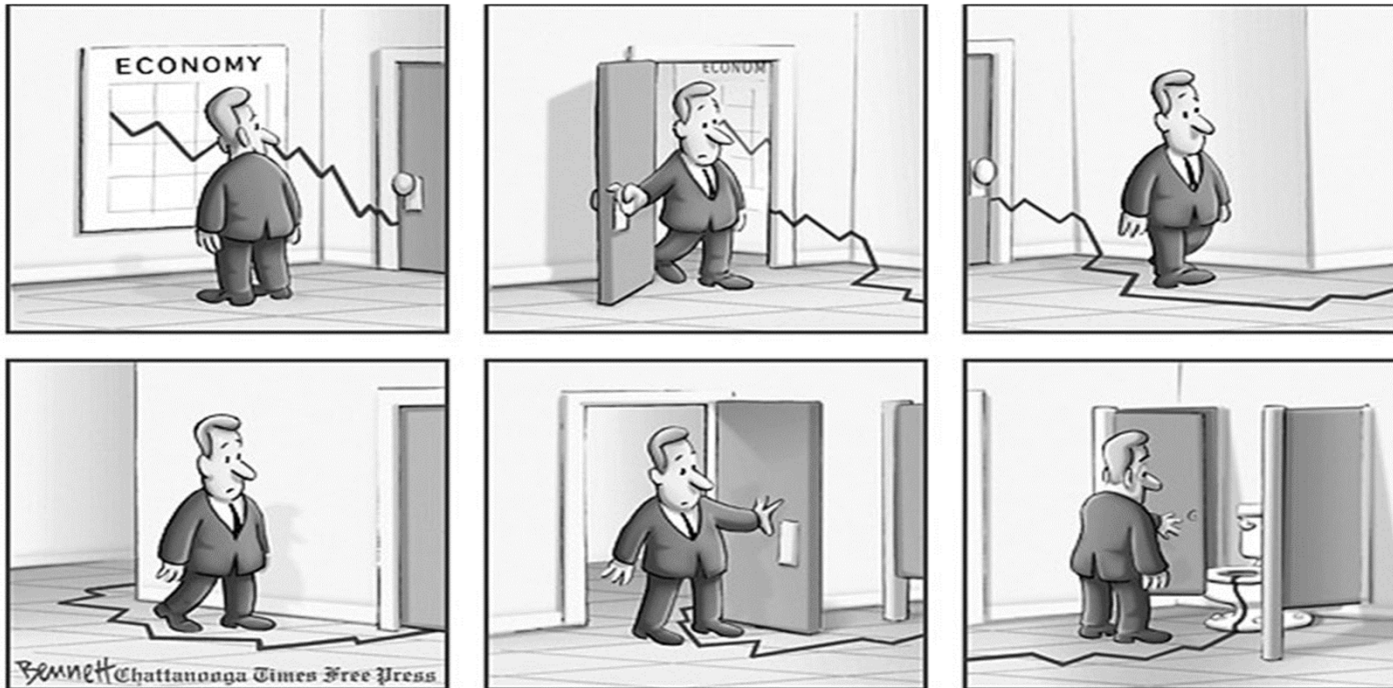
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Portfolio Immunization



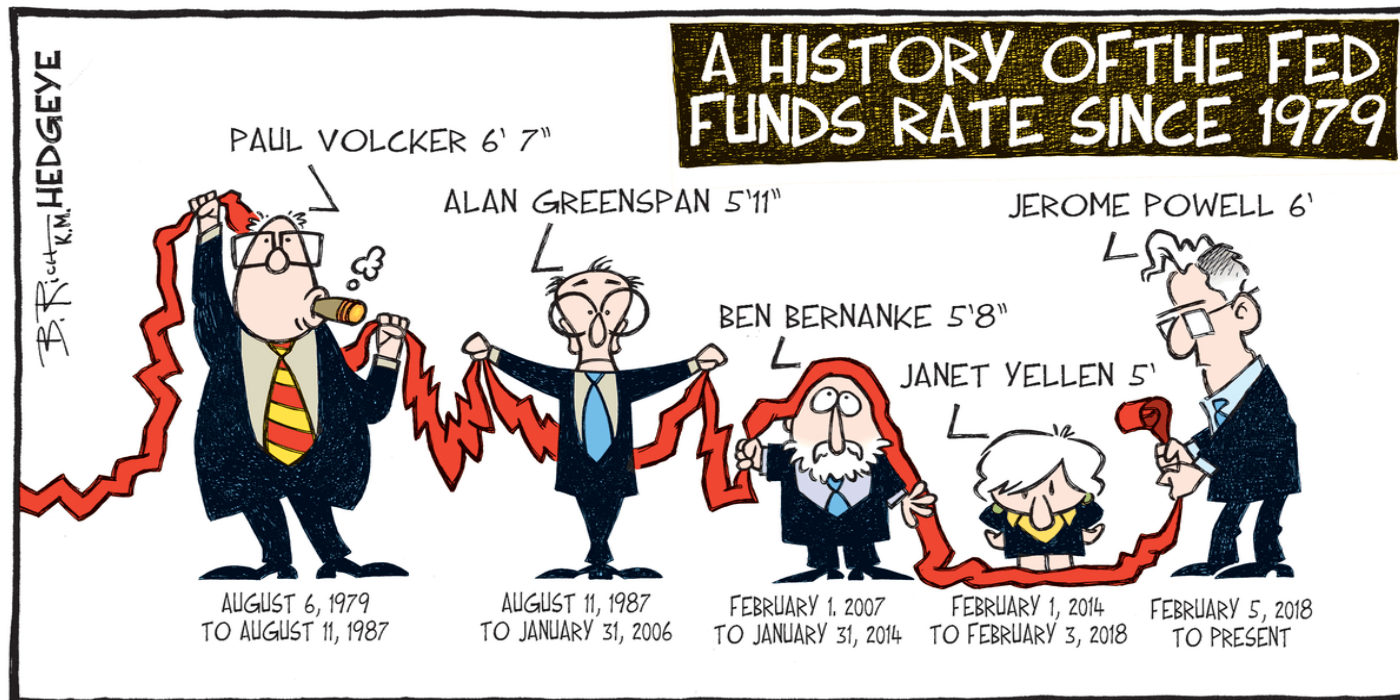
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Top Down Approach - Economy



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Top Down Approach – Interest Rate Rates



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Top Down Approach – Your IRR



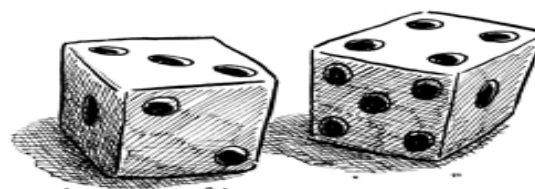
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Top Down Approach – Picking the Right Bond

MODERN RESOURCES FOR *the* WALL STREET TRADER



RESEARCH MATERIAL



NUMBER CRUNCHER



INTERNAL SOURCES



OUTSIDE CONSULTANT

©2008
CAGLE/CARTOONSTOCK
ADAM
ZYGUS
THE BUFFALO NEWS

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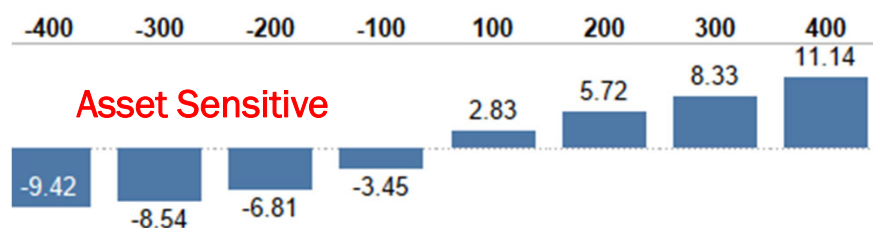
Be A Captain



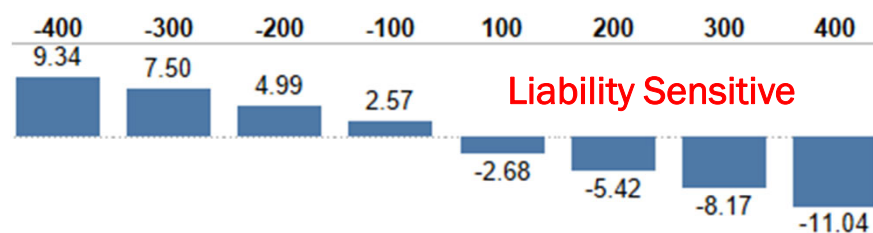
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Your Map

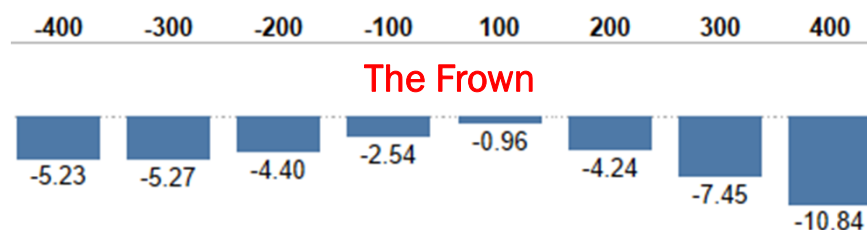
Net Interest Income Variance from Policy - Year 1



Net Interest Income Variance from Policy - Year 1



Net Interest Income Variance from Policy - Year 1



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Buy Strategically

New Issue 30yr 5.50% pool

FR SD8533 Mtge

FFIEC High Risk Security Test

100% FNCL 5.5 N

6.503(358)1

CUSIP 3132DWPS6

Pool Level

Factor Date 05/2025

FR SD8533 Mtge

Assumptions/Source

Test Info

Settle Date12-Jun-2025

Bid/Ask99-0899-08

Pricing Source

Prepay SourceB. Median

Market Date02-Jun-2025

Rate EnvironmentReal Time

Class Description

Test TypeFFIEC

DetailYes

FFIEC Detailed

FAIL

Test Not Required

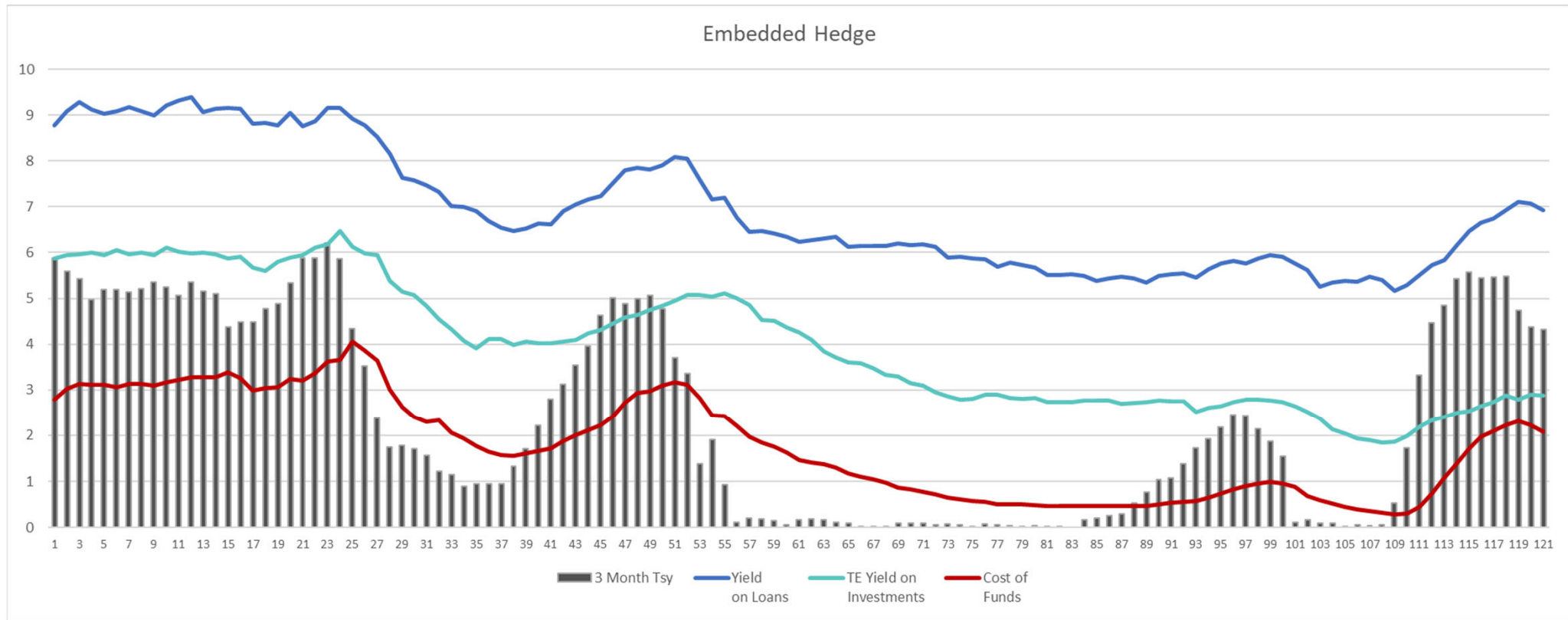
Test #1

Test #2

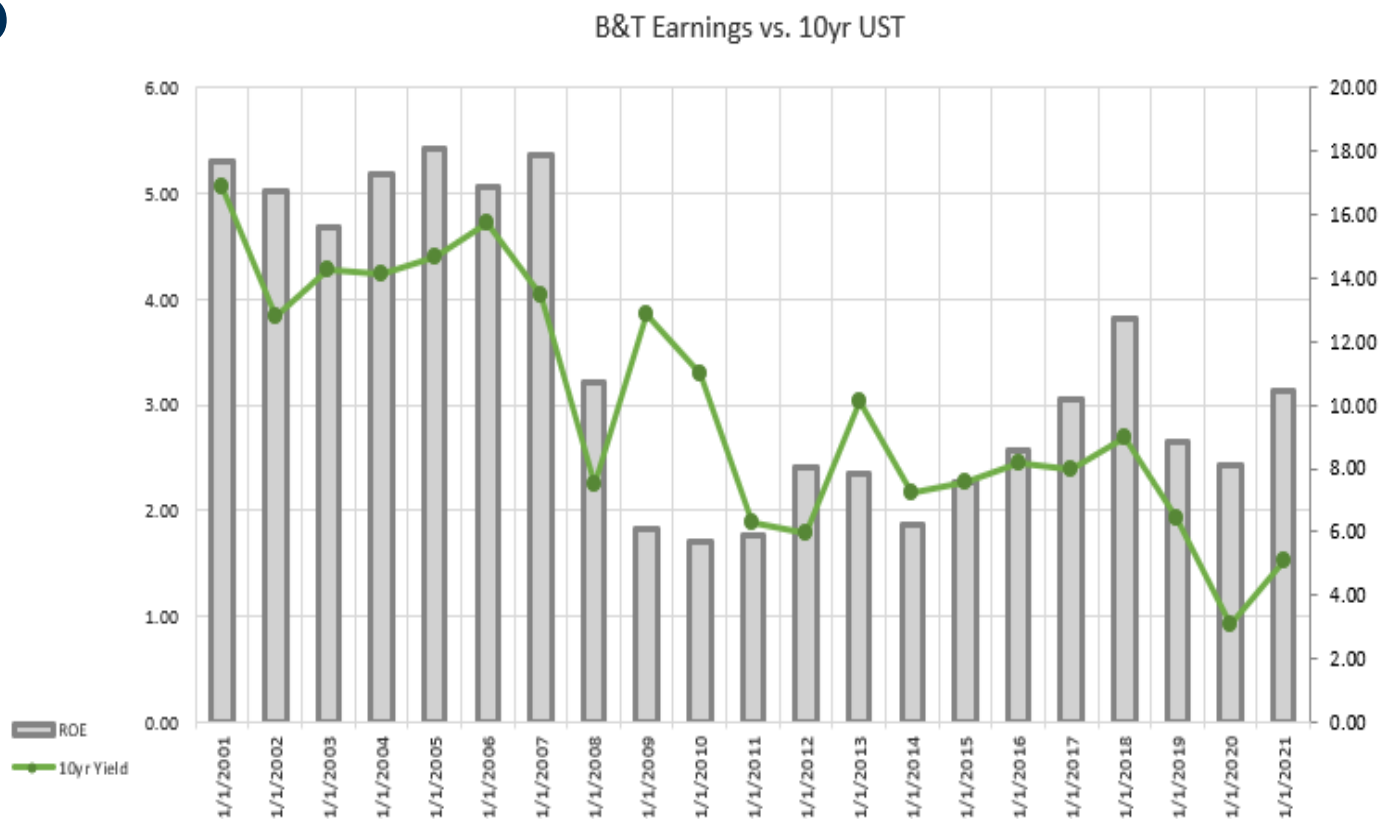
Test #3

Tsy BP	Security	Max	Bmrk Sprd	I Spread	Security	WAL Change	Prc Change
Shift	PSA	WAL	BP	Yield	Price	Actual	Max
-300	1,545	1.56	129	2.307	104-16 ⁵ / ₈	-6.80	-6.0
-200	1,316	1.76	129	3.270	103-14 ³ / ₄	-6.59	-6.0
-100	598	3.26	129	4.214	103-17 ³ / ₈	-5.10	-6.0
0	174	8.36	10	5.629	99-08	--	--
+100	135	9.75	129	6.737	92-11 ¹ / ₄	1.39	+4.0
+200	108	10.96	129	7.808	85-14 ¹ / ₈	2.60	+4.0
+300	91	11.86	129	8.856	79-00 ¹ / ₈	3.50	+4.0

The Actual Experience

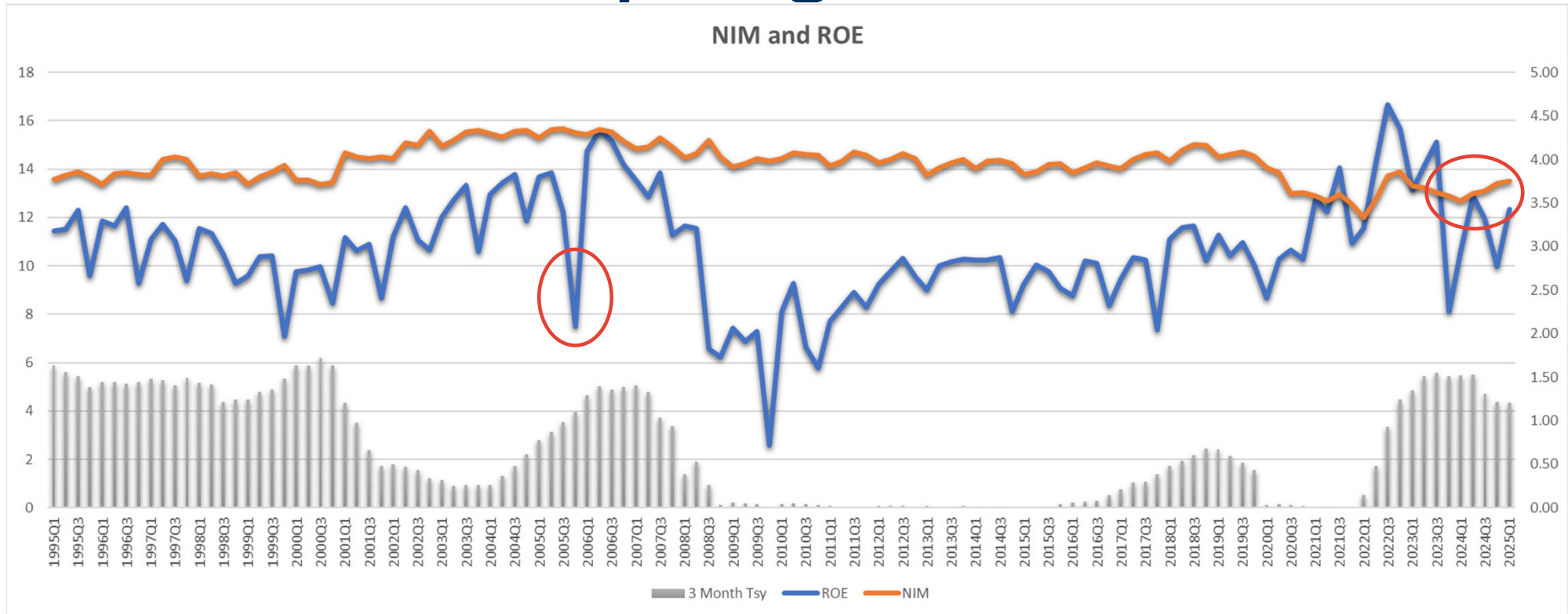


Time to Shine



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Attendee Peer Group – Avg size \$799mm

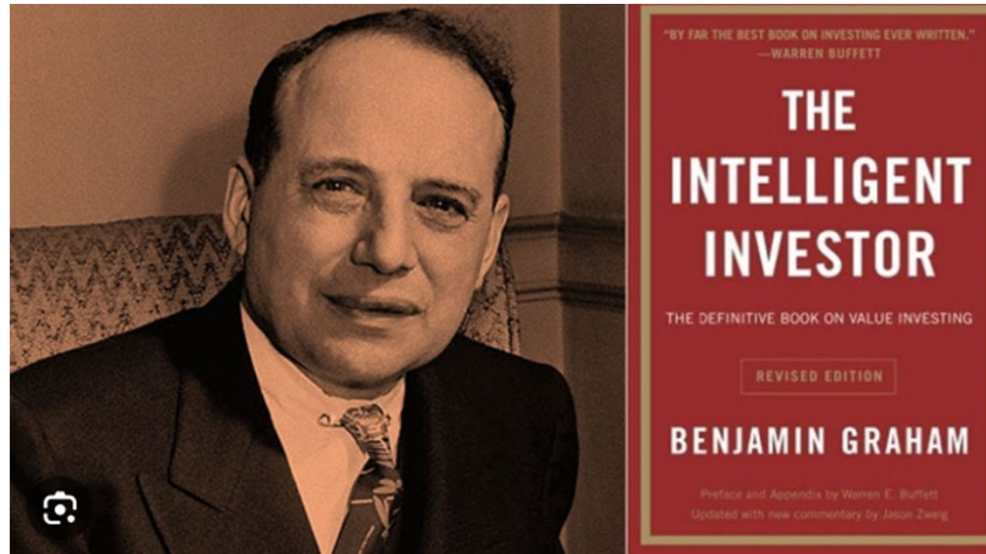


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Have a Plan

“The investor’s chief problem and even his worst enemy is likely to be himself...

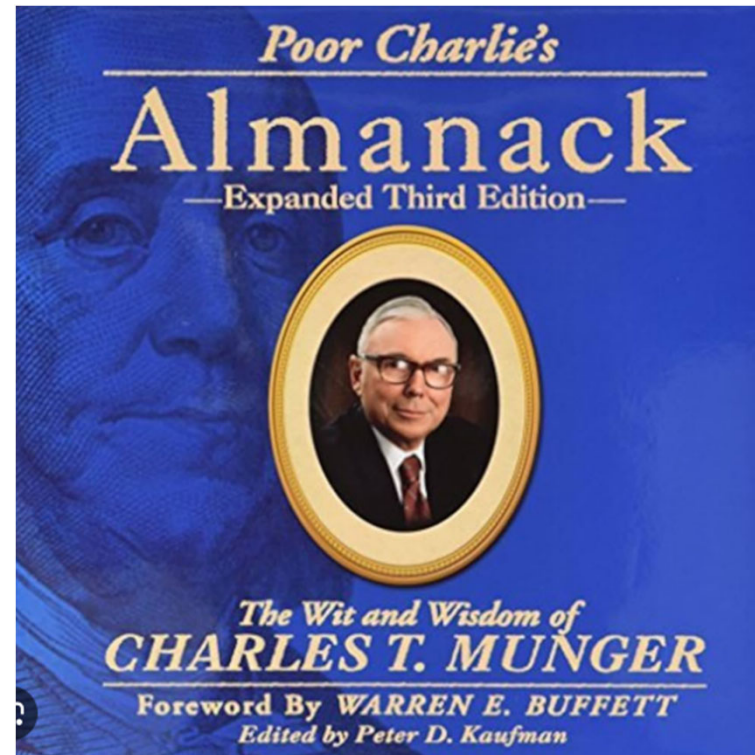
A sound process, adhered to consistently, helps mitigate the emotional pitfalls that derail success”



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Be Worthy

“The way to a good result is to deserve a good result...
And you don’t deserve a good result unless you have a good process”



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Any Questions??

I JUST WANTED TO SAY...



Thank
you...

Thank
you very
much!

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