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Increasing Your Credit Union's Impact and Legacy

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PERFORMANCE TRUST
CAPITAL PARTNERS

Important Information:

All charts / graphs are shown for illustrative purposes only. Past performance does not guarantee any results or that any trend will continue.

Certain assumptions have been made in connection with analysis presented and changes in market conditions or assumptions may have had a material impact on results. There is no guarantee that any strategy will be successful.

Principles of an Intentional Legacy

Legacy Planning vs. Succession Planning

Legacy planning is a comprehensive approach that focuses on more than just financial assets: encompassing values, principles, beliefs, and the impact one wants to make on future generations.

> A teacher affects eternity: he can never tell where his influence stops.
>
> -Henry Adams

Who is a teacher?

What *are* we teaching?

What *should* we be teaching?

Mission Member Margin

What is your Mission?

Mission Member Margin

What is your Mission?

Member

Service

Educate

Improve Lives

Better rates

Mission Member Margin

What is your Mission?

Community

Service (volunteer)

Financial

Reinvest

To Improve lives

Mission Member Margin

What is your Mission?

Employees

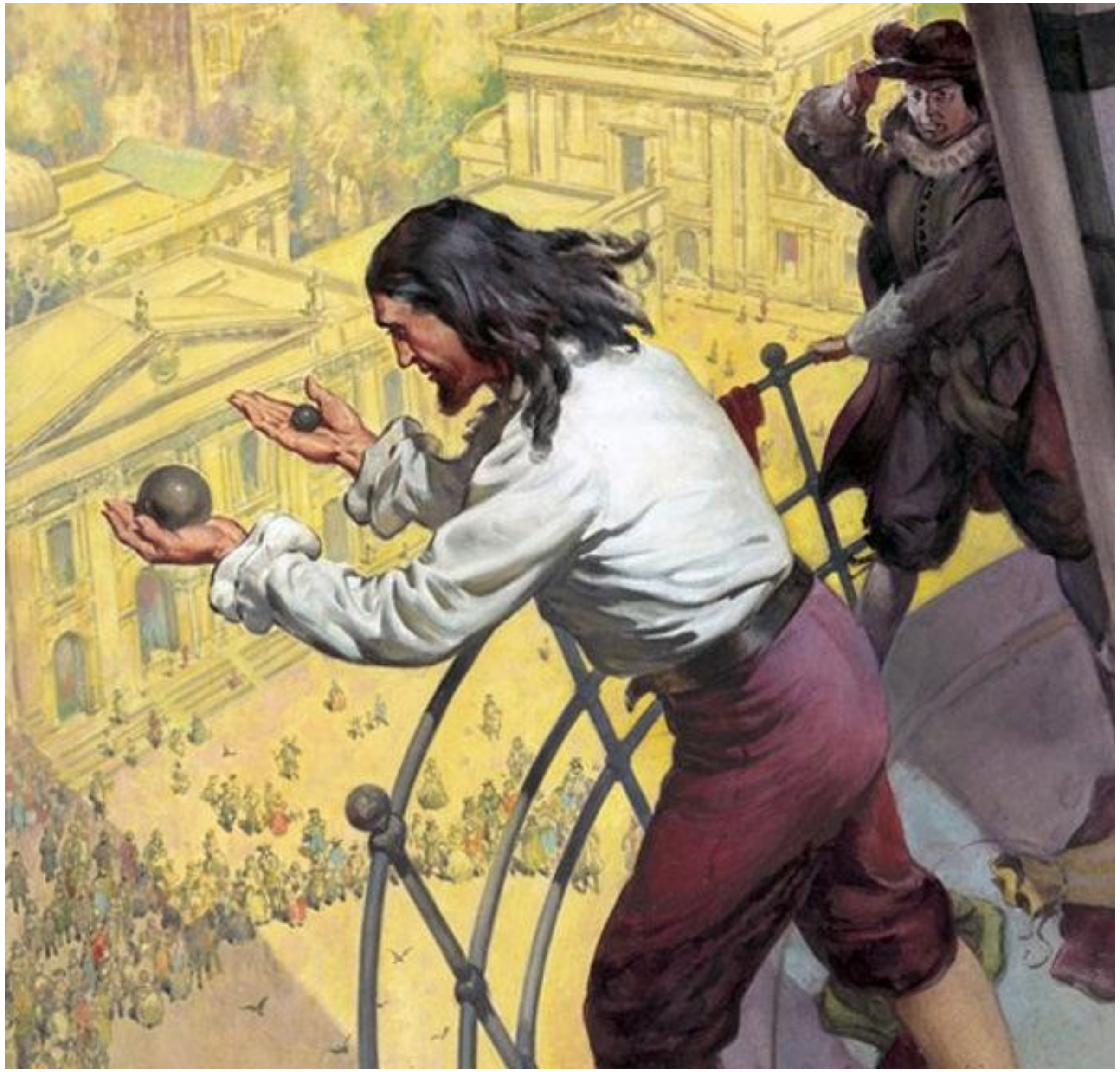
Purpose

Culture

Growth & Advancement

To Improve Lives

This is a Possible Galileo Moment



What is a Member?

Owner

Affinity group

Types of members

- My 2009 experience
  - Core
  - Casual
  - Opportunistic

What Type of Member?

Let's assume that the wholesale borrowing rate for CU is 3.60%

Checking	0.25%
Savings	0.80%
Money Market:	1.75%
Super Money Market:	3.00%
FHLB Advance	3.60%
Super CD Special:	4.30%

What Type of Member?

Let's assume that wholesale low risk investments available for CU is 5.50%

Auto Loan	5.80%
Auto Loan	5.25%
Auto Loan:	4.25%
Adjustable Mortgage Loan:	5.75% (+225)
Adjustable Mortgage Loan:	5.25% (+175)
Adjustable Mortgage Loan:	4.75% (+125)

What is Margin?

ROA

ROE

Mission Margin Member

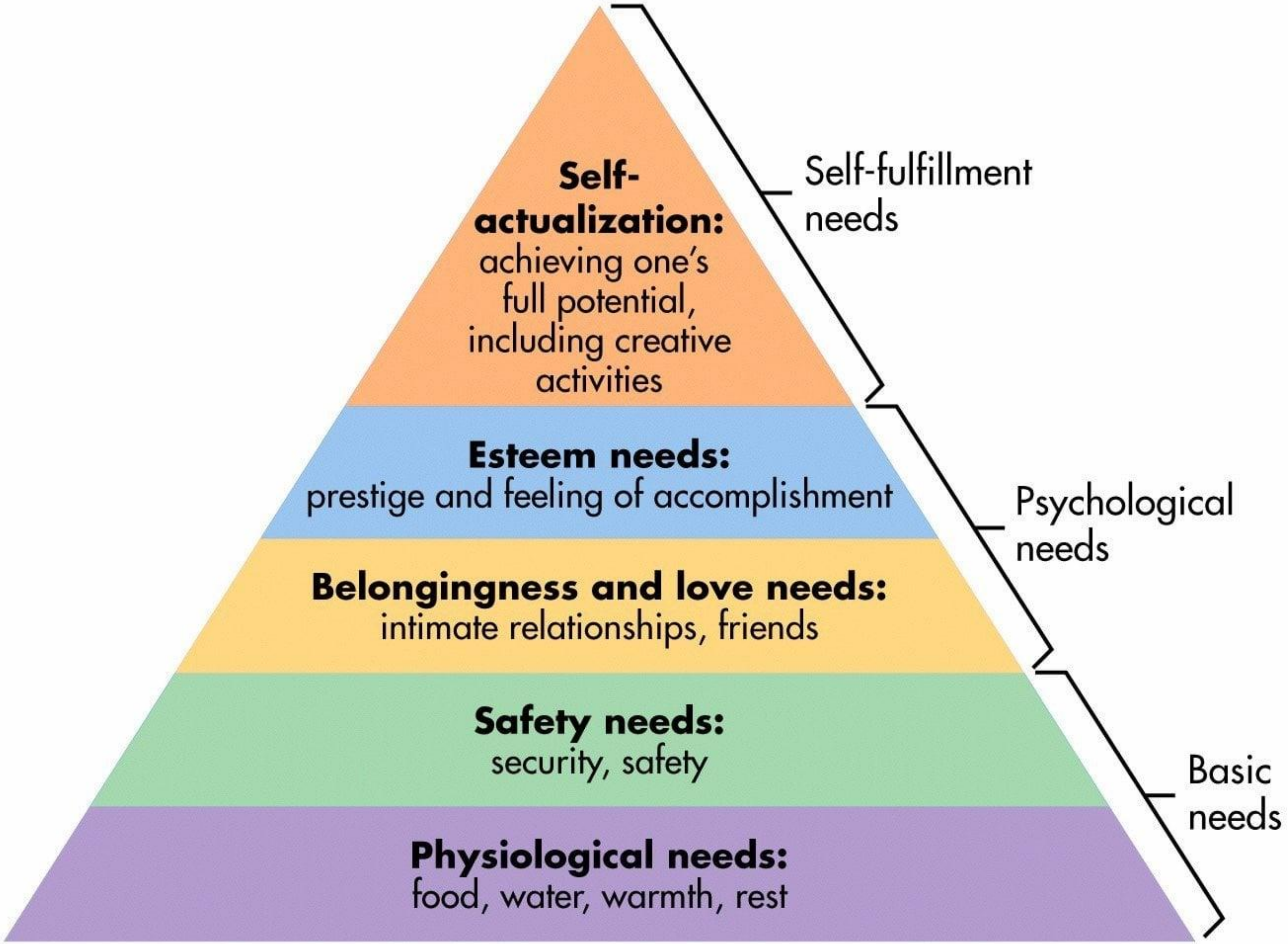
Suppose $10 Billion Credit Union with $900 million (9%) equity

ROA = Net Income/Average Assets

ROE = Net Income/Equity (Net Worth)

Net Income	$60 million	$120 million	$180 million
ROA	0.60	1.20	1.80
ROE	6.67%	13.33%	20.00%

What Should Our Margin Be?



Source: Maslow's Hierarchy of Needs

Maslow for Credit Unions

What Should Margin Be?

Mission

Members

Structural Advantage

- Affinity
- Ownership
- Tax-exempt

Margin

If a bank is expected to earn a 1.20% ROA to cover their cost of capital, what ROA might a credit union expect?

C Corp (21% + 5%) = 1.62 ROA

S Corp (37% + 5%) = 2.06 ROA

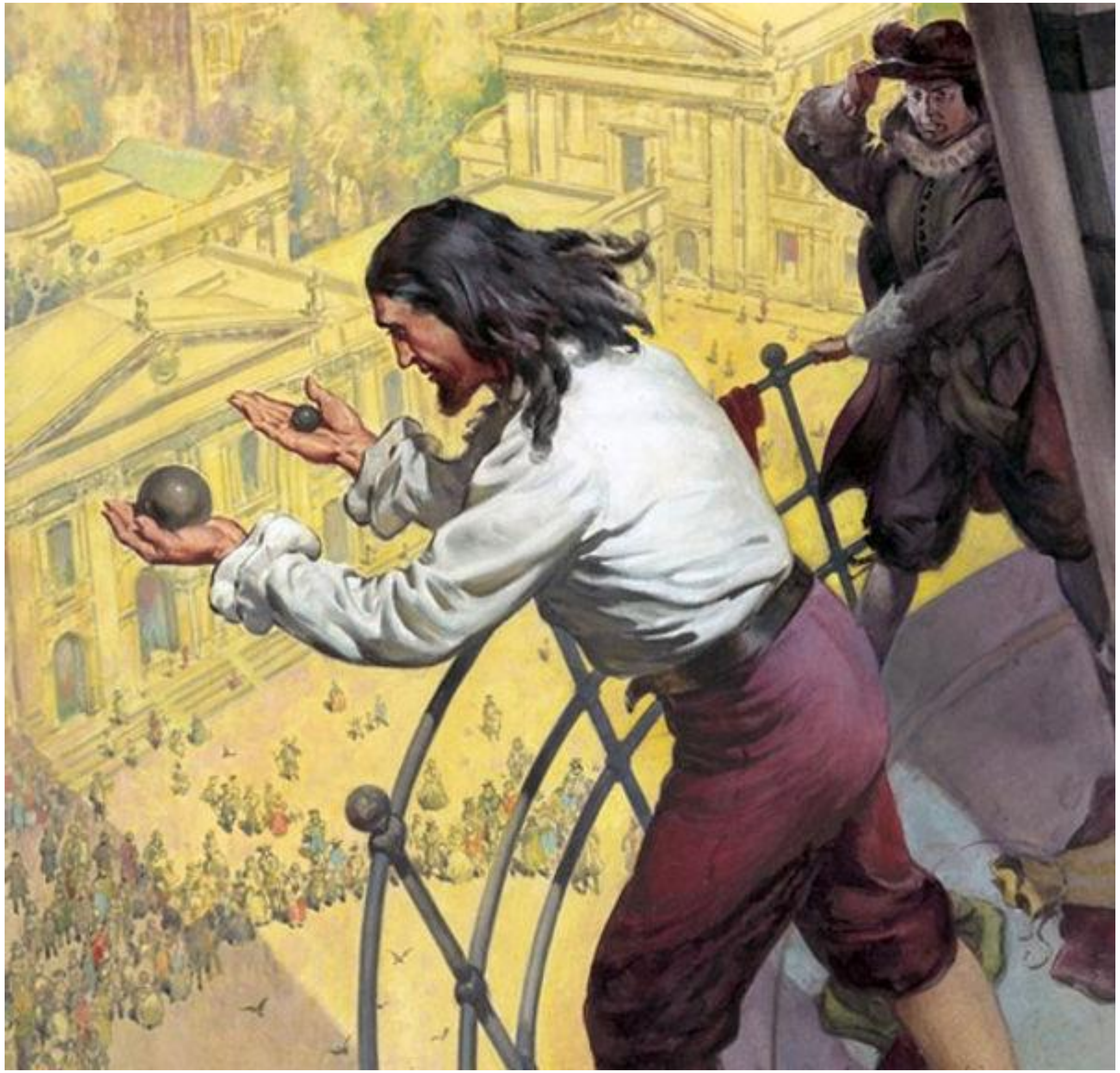
Mission Member Margin

Let's Quantify Our Costs

Let's assume that the wholesale borrowing rate for CU is 3.60%

30% Checking	0.25%
5% Savings	0.80%
20% Money Market:	1.75%
20% Super Money Market:	3.00%
15% FHLB Advance	3.60%
10% Super CD Special:	4.30%
Cost Of Funds:	**2.08%**

This is a Possible Galileo Moment



	Bank	CU	CU
Cost of Funds	2.49%	2.08%	2.08%
Net Overhead	2.00%	2.20%	2.20%
Cost of Operation	4.49%	4.28%	4.28%
Desired ROA	1.62%	0.60%	1.00%
Net Asset Yield Needed	**6.11%**	**4.88%**	**5.28%**
Member Allocated Benefit	0.00%	1.23%	0.83%
Member Allocated Benefit	$0	$123 million	$83 million
Member Retained Earnings	$120 million	$60 million	$100 million

Illustrative example based on assumptions; not indicative of actual or future results.

	Bank	CU	CU
Desired Gross ROA	**1.62%**	**0.60%**	**1.00%**
Net Asset Yield Needed	6.11%	4.88%	5.28%
Member Allocated Benefit	$0	$123 million	$83 million
Member Gross Earnings	$120 million	$60 million	$100 million
Community Investment		**$2 million**	**$42 million**
Net Member Retained Earnings	$120 million	$58 million	$ 58 million
Net ROA	**1.20**	**0.58**	**0.58**

Illustrative example based on assumptions; not indicative of actual or future results.

	CU	CU	CU
Desired Gross ROA	**0.60%**	**1.00%**	**1.20**
Net Asset Yield Needed	4.88%	5.28%	5.48%
Member Allocated Benefit	$123 million	$83 million	63 million
Member Gross Earnings	$60 million	$100 million	$120 million
Community Investment	**$2 million**	**$42 million**	**$62 million**
Net Member Retained Earnings	$58 million	$ 58 million	$58 million
Net ROA	**0.58%**	**0.58%**	**0.58%**

Illustrative example based on assumptions; not indicative of actual or future results.

Impact & Legacy?

Margin Feeds the Mission

Members

Community

Employees

Stewardship

The responsible management and care of something
that has been entrusted to

you

- Protecting
- Improving
- Using resources wisely for the benefit of others and the future

Stewardship

Mission

Member

Margin

Stewardship

- What kind of Member?
- What should be our *gross* margin?
  - *Excellence*
  - *Member Allocated Benefit*
- What should be our *net* margin?
  - *How do we invest for growth?*
  - *How much we “distribute”?*
- How can we protect while improving?

Stewardship: Protect While Improving

Principles of Finance of Banking and Principles of Performance

- *Comparing Unlike Cash flows*
- *Durable earnings across multiple interest rate and credit scenarios*
- *Appropriate risk pricing*
- *Enterprise risk*
- *Supplementing core with wholesale*

Your $10 billion Credit Union has surging deposits in 2020

Strategy A

Agency MBS 1.52% yield

4.30 modified duration

+ 122 to 5-year treasury (0.30%)

$1.0 billion invested

Strategy B

AA 10 yr Taxable Muni 1.77% yield

8.85 modified duration

+97 to 10-year treasury (0.80%)

$1.0 billion invested

3 years later in 2023 rates have risen tremendously

Strategy A

Agency MBS 1.52% yield

4.30 modified duration

+ 122 to 5-year treasury (0.30%)

$1.0 billion invested

$53,700,000 Earnings (1.79%)

$186 million unrealized loss

Strategy B

AA 10 yr Taxable Muni 1.77% yield

8.85 modified duration

+97 to 10-year treasury (0.80%)

$1.0 billion invested

$53,400,000 Earnings (1.78%)

$161 million unrealized loss

Was this knowable in advance?

We Wrote an Article

ABA Banking Journal

June 1994

THE INVESTMENT PORTFOLIO

In the bond world, yield is not what you actually get

By Nicholas W. Betzold and Richard S. Berg

How can this be?

Instrument	Quoted Yield	Actually Received
Five-year Treasury	5.27%	5.03%
Fifteen-year Mortgage-backed security	6.31%	5.13%

As you may recall from our March column, we discussed the concept of yield on mortgage-backed securities versus the actual dollars earned. And, perhaps for some readers, it was an eye-opening experience.

Since we wrote that column there has been quite a bit of discussion around our office and with bankers regarding the words "yield" and "market value" as they relate to bonds. Perhaps the discussion was prompted by the spring's precipitous drop in prices on the bond market—or the rise in yields, depending on your viewpoint. Or perhaps the discussion stems from many people's simple association of the word "yield" with "harvest."

Perhaps this article should have preceded the earlier one, because it will focus on a word we all have grown up with and internalized from our very first investment experience. The word is "yield."

4.07%. That means on an initial $1,000 investment you would have $1,040.70 at the end of a year. However, the same $1,000 placed in a two-year CD at 4% compounded monthly for a 4.07% yield would not merely be $1,081.40 (twice the one-year total) but rather $1,083.14. That's the art of compounding!

. . .and bond-equivalent yield

What's the point? Many people naturally assume that "yield" means the same thing in the realm of bank investing, that is, how many dollars we will have at the end of our initial investment. This is so intuitive that it seems it must be right.

But it's not. There is a key distinction between the yield quoted on bank products and the yield quoted on bond investments. Yield on bank products represents the end product, whereas yield on bonds represents only the beginning. Yield in the bond world is analogous not to yield in the bank lobby, but rather to "rate." However, while the frequency of compounding to compute the yield (ending dollars) is known in the case of the bank CD, in the case of a bond we don't know at what rate the interest will be compounding (reinvested).

The typical bond (we will use 30/360 for our examples) has a defined cashflow determined by the coupon and the maturity. Therefore, a $1,000, 6%, three-year bond would exhibit the following cashflows:

We Wrote an Article

ABA Banking Journal

September 1993

"Defensive" investments— mark-to-market error

Buying adjustable-rate securities as "insurance" can be expensive over time—and not very good protection either

By Nicholas W. Betzold, Jr., and Richard S. Berg

Ask any knowledgeable regulator or accountant why the Financial Accounting Standards Board enacted its new mark-to-market rule and they will give you the two most powerful reasons:

(1) To discourage gains trading; and

(2) To "tell the truth" to shareholders about the real value of the portfolio (in other words, to shine a light on portfolio volatility).

A flurry of advice has been given about the new FASB standard 115 ("Accounting for certain investments in debt and equity securities"). Besides the accounting mechanics, many bankers are being offered the following two strategies:

(1) Take securities with big gains—the "winners"—and put them into the available-for-sale category, which will

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FDIC Improvement Act to use accounting standards that are as least as stringent as generally accepted accounting principles) will not recog-

the risk/reward in our existing portfolio?"

The essential skills necessary for this new environment are the same skills the best bank investors have been using for years, namely, "total return investing." What follows is a review of one common "defensive" investment strategy, and a view of that strategy through the eyes of total return analysis.

Investment parable

Your secretary announces a caller who represents the Government National Mortgage Association.

"I have been sent here by GNMA to make a special investment offer. It is a 30-year mortgage-backed security with a price of 102 and 13/32, which would yield 7.74% to a 10.76-year average life. As you know, our general market offerings for 30-year securities are yielding 6.56% to a 10.5-year average life.

"In other words, I've come here today to make you a once-in-a-lifetime offer, yielding 118 basis points over the general market.

"There is one catch," he continues, clearing his throat. "In order to get this high yield, you will be giving up liquidity—this pool has a special number that designates it as virtually untradeable. How many million would you like?"

How many of these securities would you buy? After calling ten community bankers and trying out this story, we couldn't find one taker.

Stewardship: Principles of Finance of Banking and Performance

- Comparing Unlike Cash Flows
  - 4 Principles
    - *Must determine an appropriate time horizon*
    - *Multiple Scenarios are required*
    - *Count all cash flows*
      - Reinvested before horizon
      - Economic value after horizon
    - *Compared to what?*

- Certified Credit Union Investment Professional (CCUIP)

Your $10 billion Credit Union has surging deposits in 2020

Strategy A

Agency MBS 1.52% yield

4.30 modified duration

+ 122 to 5-year treasury (0.30%)

$1.0 billion invested

Pre-purchase Analysis?

Strategy B

AA 10 yr Taxable Muni 1.77% yield

8.85 modified duration

+97 to 10-year treasury (0.80%)

$1.0 billion invested

Pre-purchase Analysis?

Strategy A MBS 1.52% (4.30 modified duration) $1 Billion

	Down 300	Down 150	UNCH	Up 150	Up 300
Y1	$9.80M	$14.40M	$15.20M	$15.50M	$15.90M
Y2	$4.30M	$10.10M	$15.20M	$17.10M	$18.30M
Y3	$4.00M	$9.40M	$15.20M	$17.40M	$19.60M

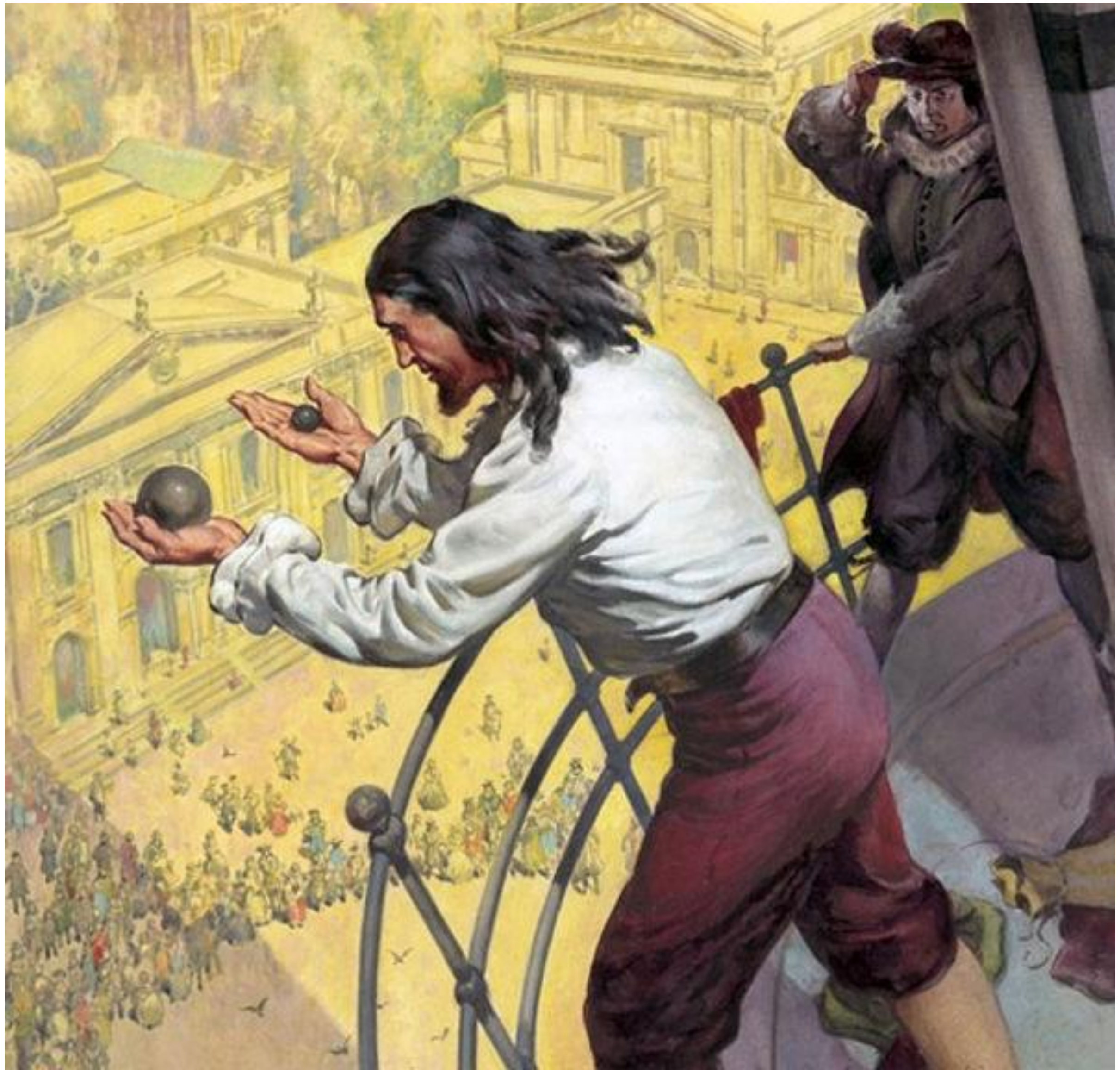
Strategy B Taxable Muni 1.77% (8.85 modified duration) $1 Billion

	Down 300	Down 150	UNCH	Up 150	Up 300
Y1	$17.67M	$17.69M	$17.70M	$17.70M	$17.70M
Y2	$17.48M	$17.64M	$17.70M	$17.75M	$17.76M
Y3	$17.45M	$17.61M	$17.70M	$17.79M	$17.89M

3-yr Hz: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

	Down 300	Down 150	UNCH	Up 150	Up 300
MBS	$18.10M	$33.90M	$45.60M	$50.00M	$53.80M
Muni	$52.60M	$52.94M	$53.10M	$53.24M	$53.35M

This is a Possible Galileo Moment



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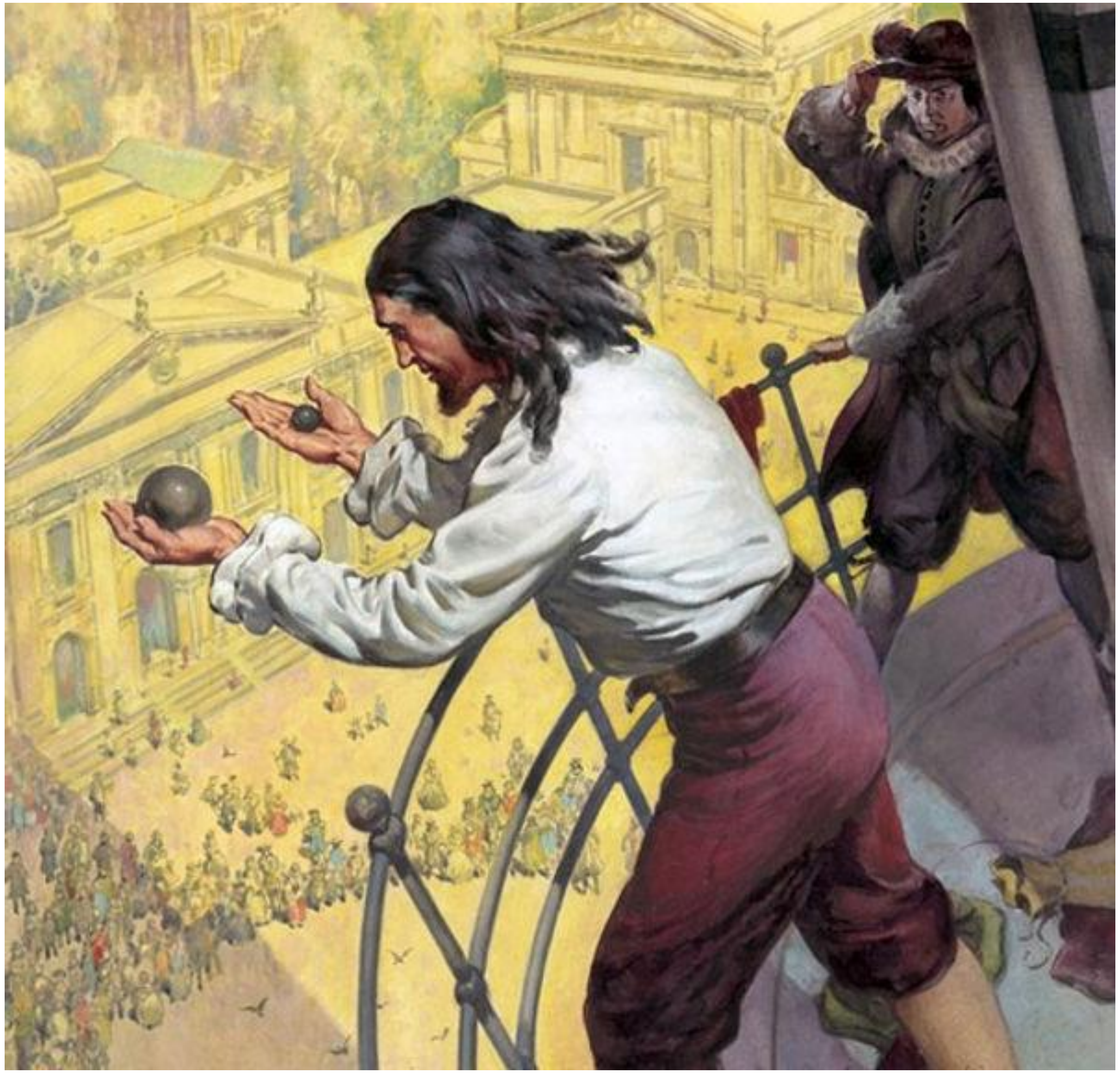
MBS	$18.10M	$33.90M	$45.60M	$50.00M	$53.80M
(1.52%)	**0.60%**	**1.13%**	**1.52%**	**1.67%**	**1.79%**
Muni	$52.60M	$52.94M	$53.10M	$53.24M	$53.35M
(1.77%)	**1.75%**	**1.76%**	**1.77%**	**1.77%**	**1.78%**

Yield is NOT what you get!

This is a Possible Galileo Moment



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(1.52%)	**0.60%**	**1.13%**	**1.52%**	**1.67%**	**1.79%**
G/L	**$9.85M**	**$8.53M**	**$873K**	**($91M)**	**($186M)**
Muni	$52.60M	$52.94M	$53.10M	$53.24M	$53.35M
(1.77%)	**1.75%**	**1.76%**	**1.77%**	**1.77%**	**1.78%**
G/L	**$112M**	**$104M**	**$19.8M**	**($75M)**	**($161M)**

Duration is NOT ALWAYS what you get!

3-yr Hz: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

	Down 300	Down 150	UNCH	Up 150	Up 300
MBS	$18.10M	$33.90M	$45.60M	$50.00M	$53.80M
(1.52%)	**0.60%**	**1.13%**	**1.52%**	**1.67%**	**1.79%**
G/L	**$9.85M**	**$8.53M**	**$873K**	**($91M)**	**($186M)**
NET	**$27.95M**	**$42.43M**	**$46.47M**	**($41M)**	**($132M)**
Muni	$52.60M	$52.94M	$53.10M	$53.24M	$53.35M
(1.77%)	**1.75%**	**1.76%**	**1.77%**	**1.77%**	**1.78%**
G/L	**$112M**	**$104M**	**$19.8M**	**($75M)**	**($161M)**
NET	**$164.6M**	**$156.94M**	**$72.9M**	**($21.76M)**	**($107M)**

3-yr Hz: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

	Down 300	Down 150	UNCH	Up 150	Up 300
MBS	$18.10M	$33.90M	$45.60M	$50.00M	$53.80M
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G/L	$9.85M	$8.53M	$873K	($91M)	($186M)
NET	$27.95M	$42.43M	$46.47M	($41M)	($132M)
TR	**0.64%**	**1.40%**	**1.52%**	**(1.41%)**	**(4.70%)**
Muni	$52.60M	$52.94M	$53.10M	$53.24M	$53.35M
(1.77%)	**1.75%**	**1.76%**	**1.77%**	**1.77%**	**1.78%**
G/L	$112M	$104M	$19.8M	($75M)	($161M)
NET	$164.6M	$156.9M	$72.9M	($21.8M)	($107M)
TR	**5.30%**	**5.25%**	**1.84%**	**(0.74%)**	**(3.80%)**

3-yr Hz: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

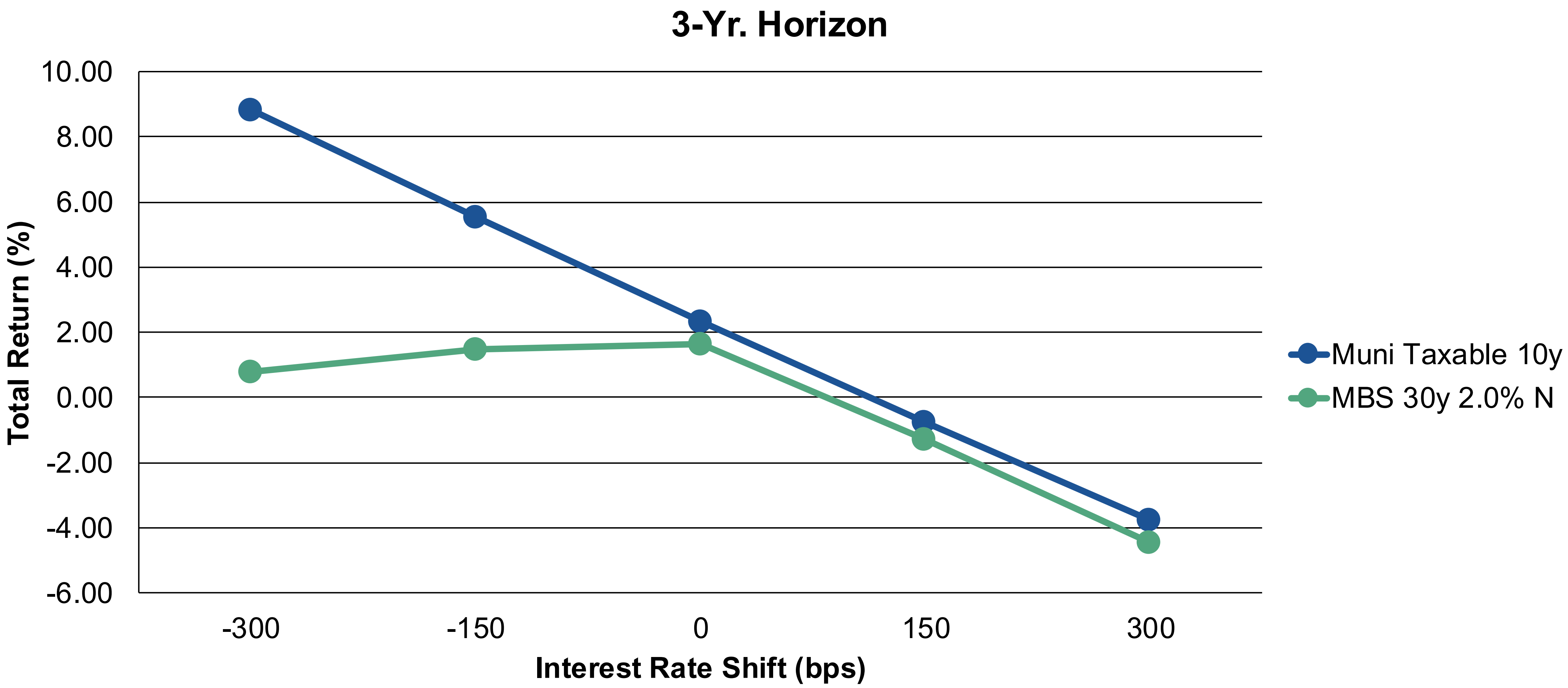
	Down 300	Down 150	UNCH	Up 150	Up 300
MBS					
Yield	0.60%	1.13%	1.52%	1.67%	1.79%
G/L	.985%	.853%	.087%	(9.1%)	(18.6%)
TR	**0.64%**	**1.40%**	**1.52%**	**(1.41%)**	**(4.70%)**
Muni					
Yield	1.75%	1.76%	1.77%	1.77%	1.78%
G/L	11.2%	10.4%	1.98%	(7.5%)	(16.1%)
TR	**5.30%**	**5.25%**	**1.84%**	**(0.74%)**	**(3.80%)**

3-yr Hz: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

	Down 300	Down 150	UNCH	Up 150	Up 300
MBS	0.64%	1.40%	1.52%	(1.41%)	(4.70%)
Muni	5.30%	5.25%	1.84%	(0.74%)	(3.80%)

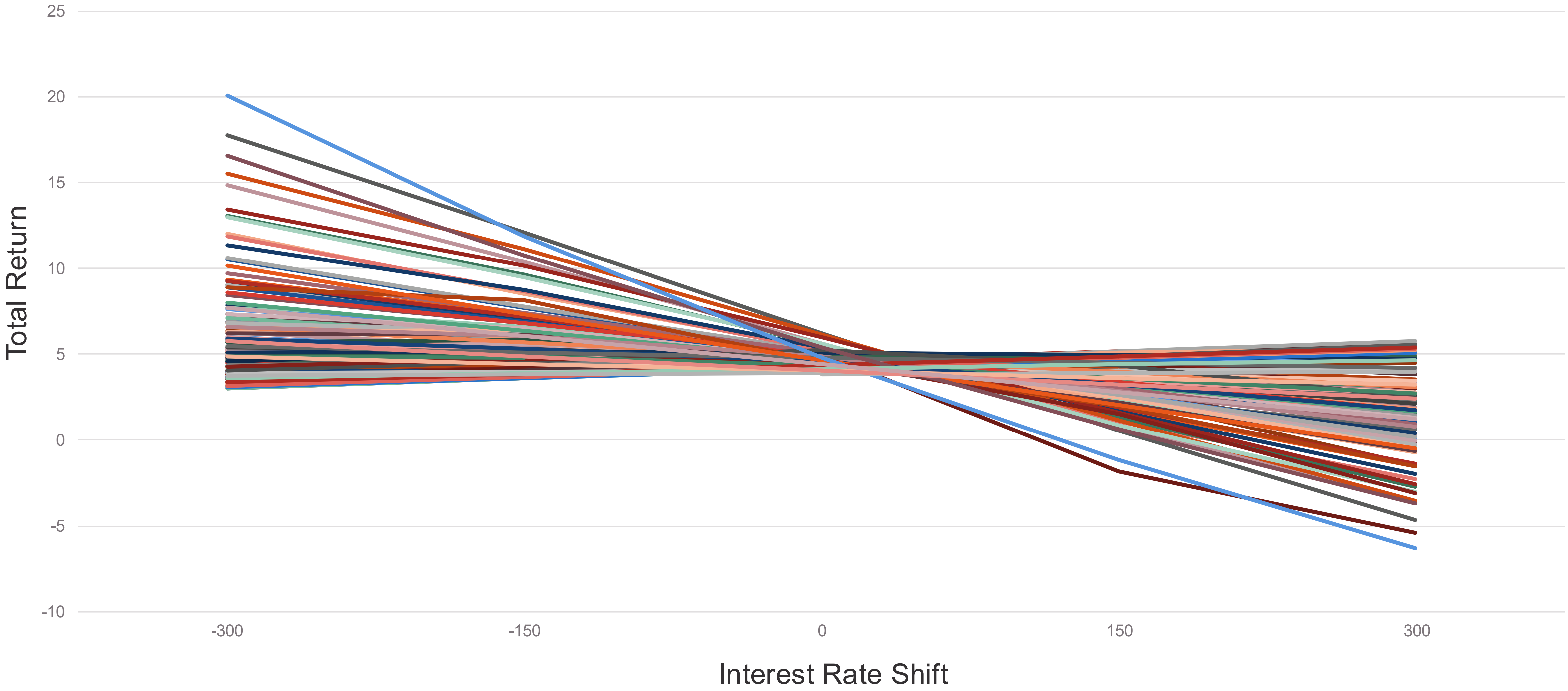
Convert to a SHAPE
Apply the Laws of Math

SHAPE: MBS 1.52% (4.30 mod) vs Muni 1.77% (8.85 mod)

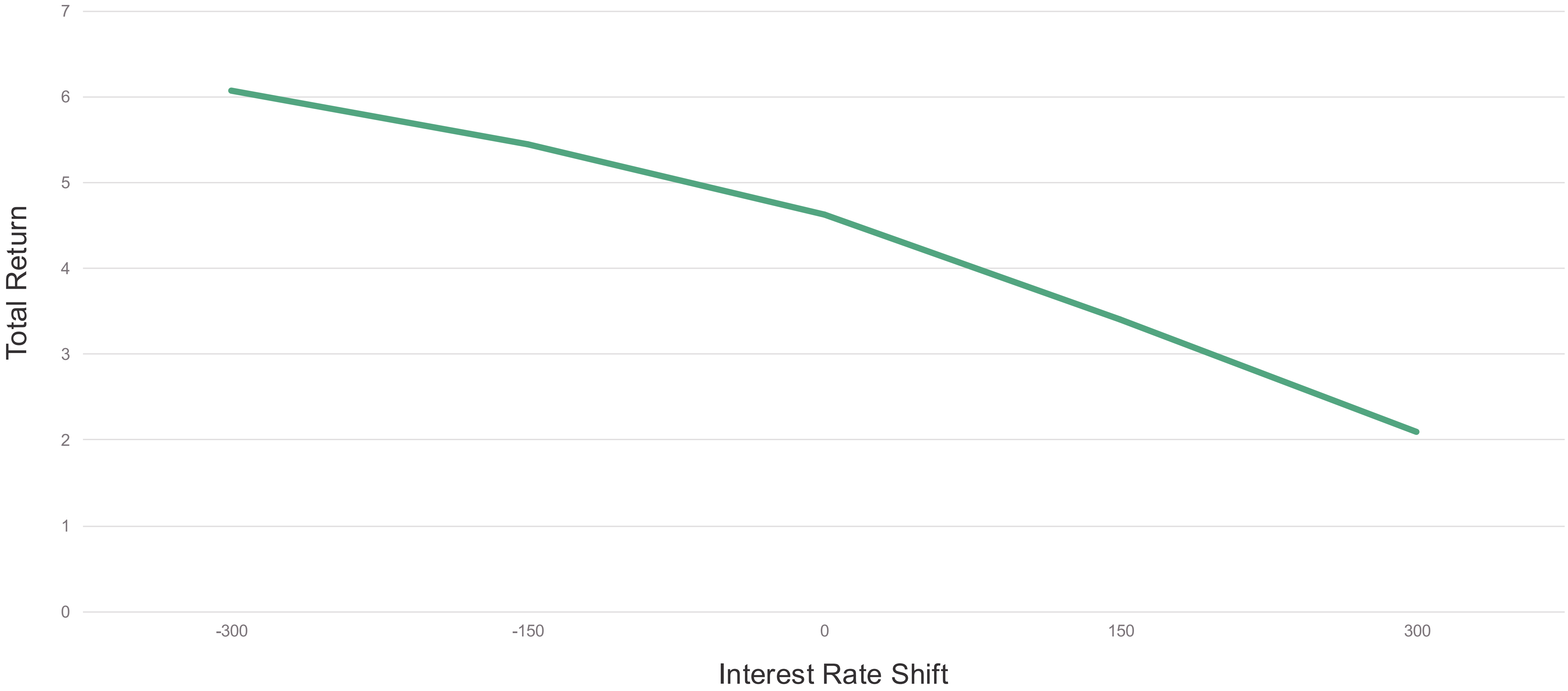


Source: Performance Trust Analytics

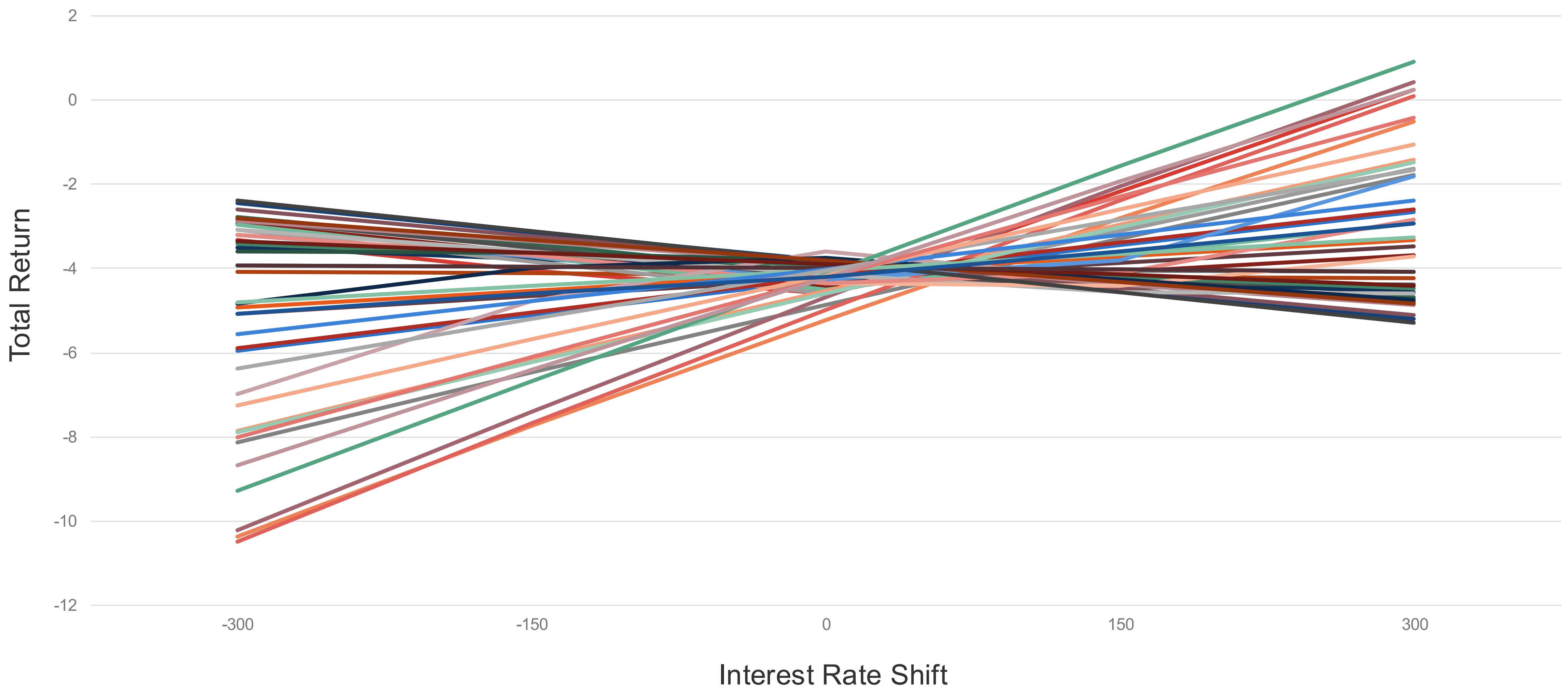
Asset Shapes



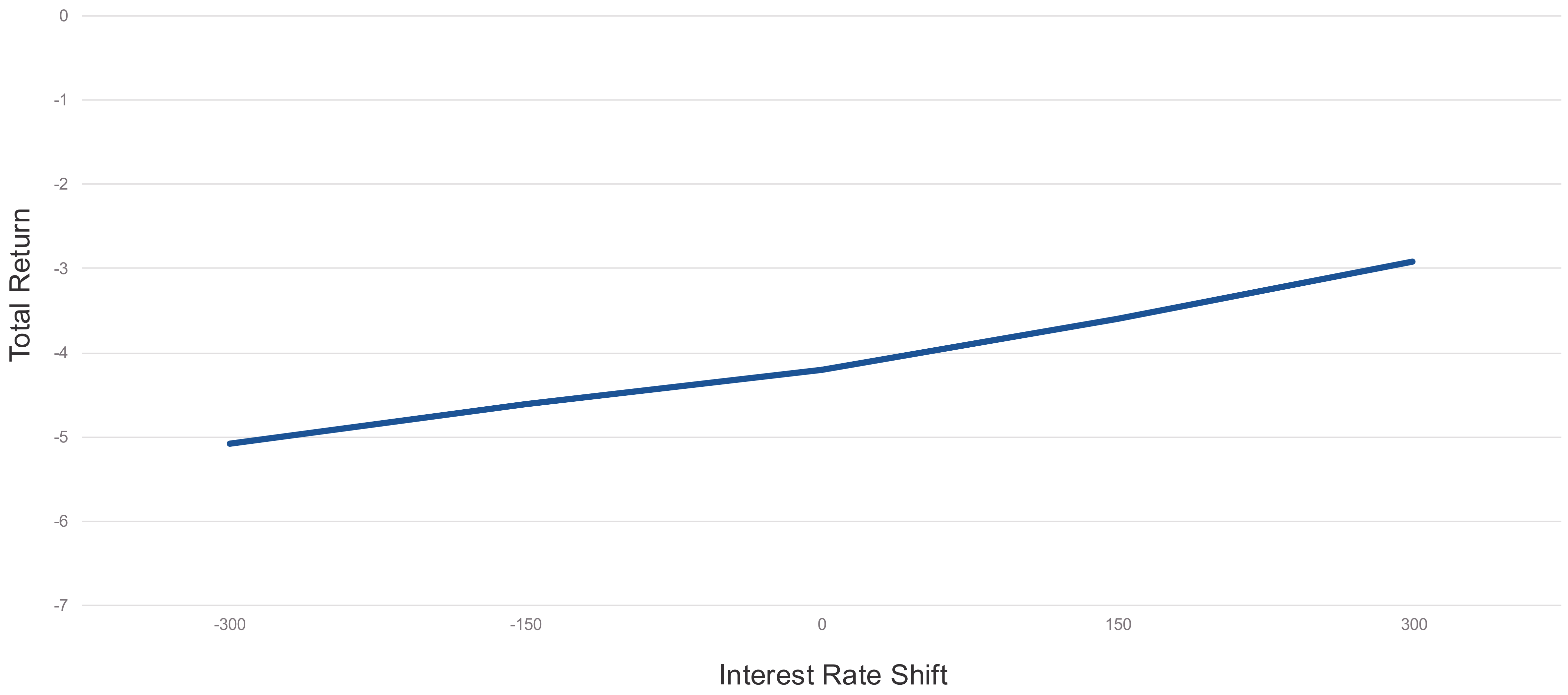
Net Asset Shape



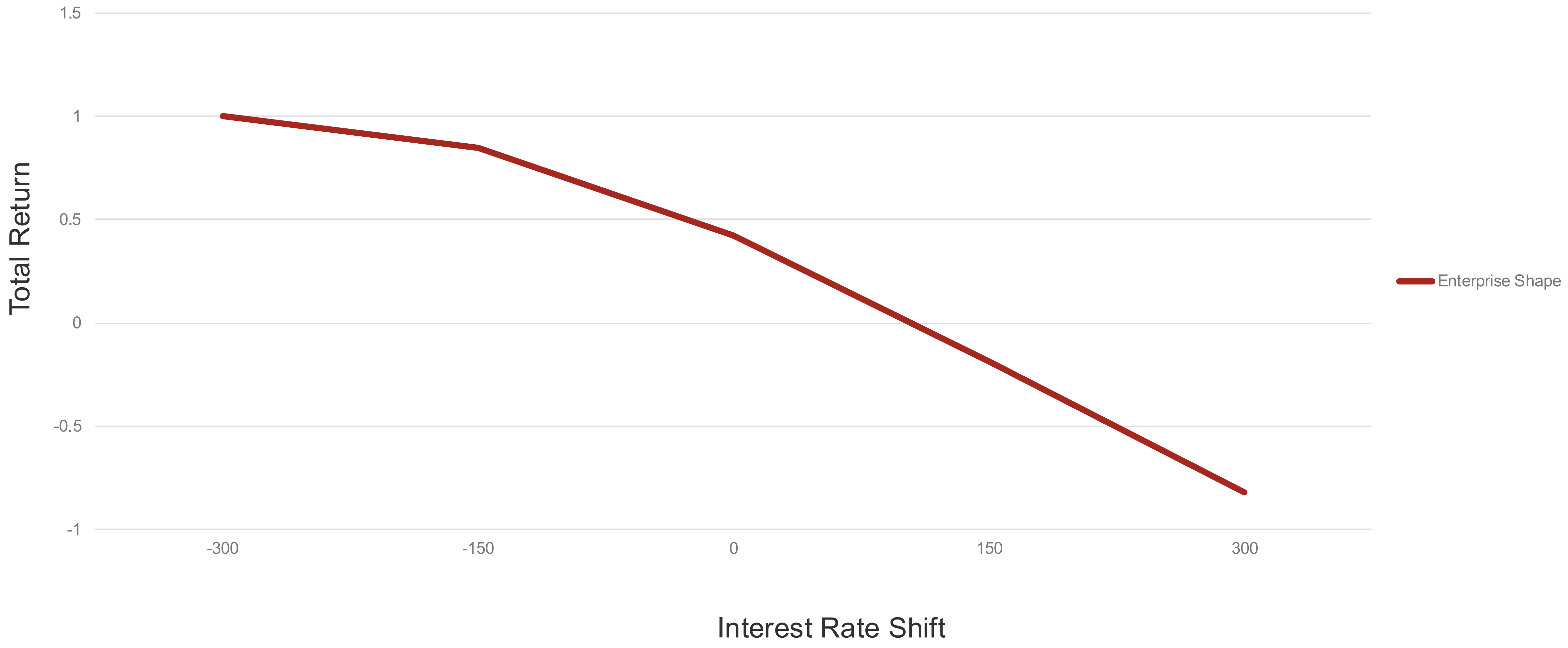
Liability Shapes



Net Liability Shape



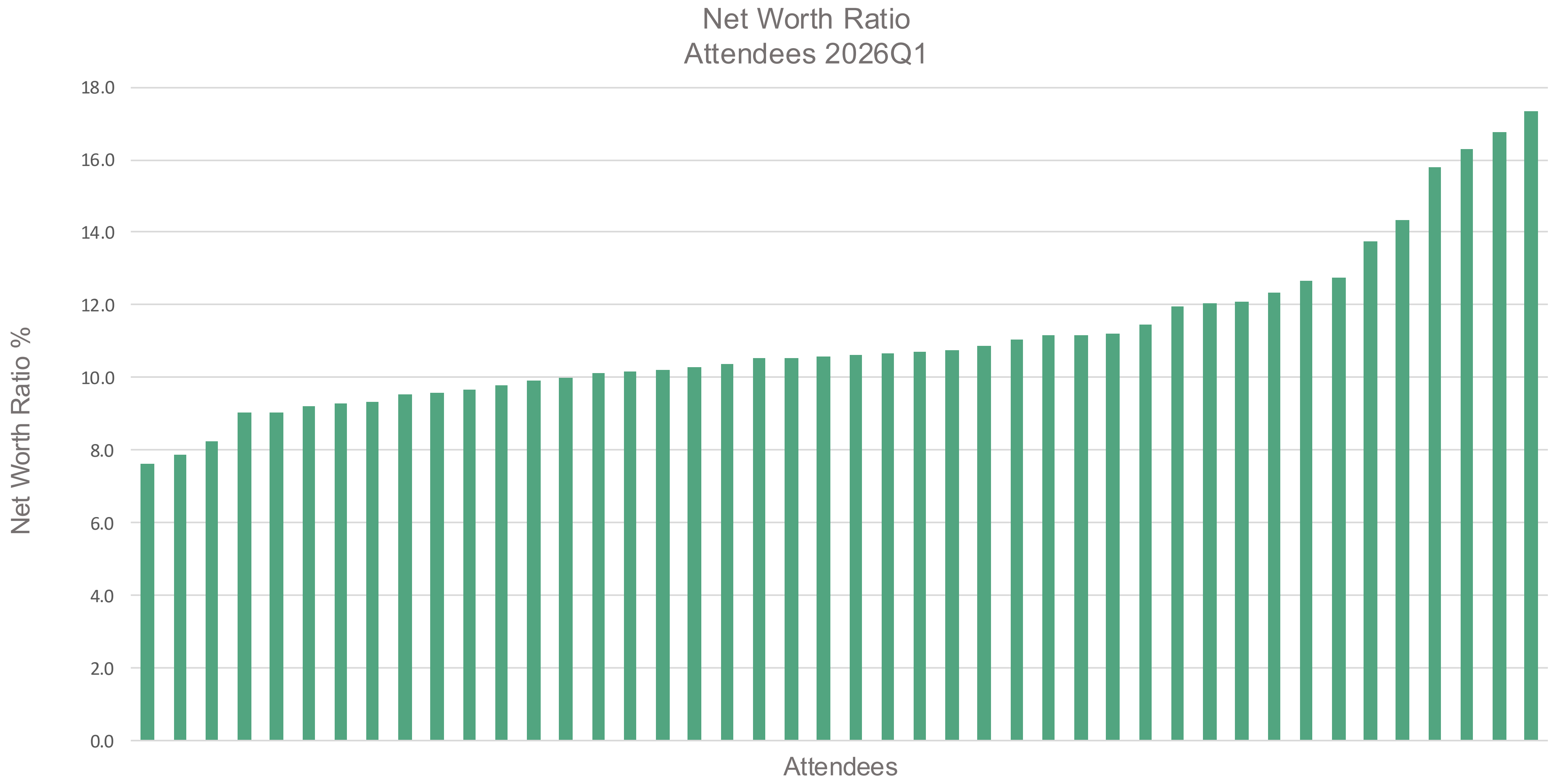
Enterprise Shape



Let’s Evaluate Enterprise Risk

Capital Levels

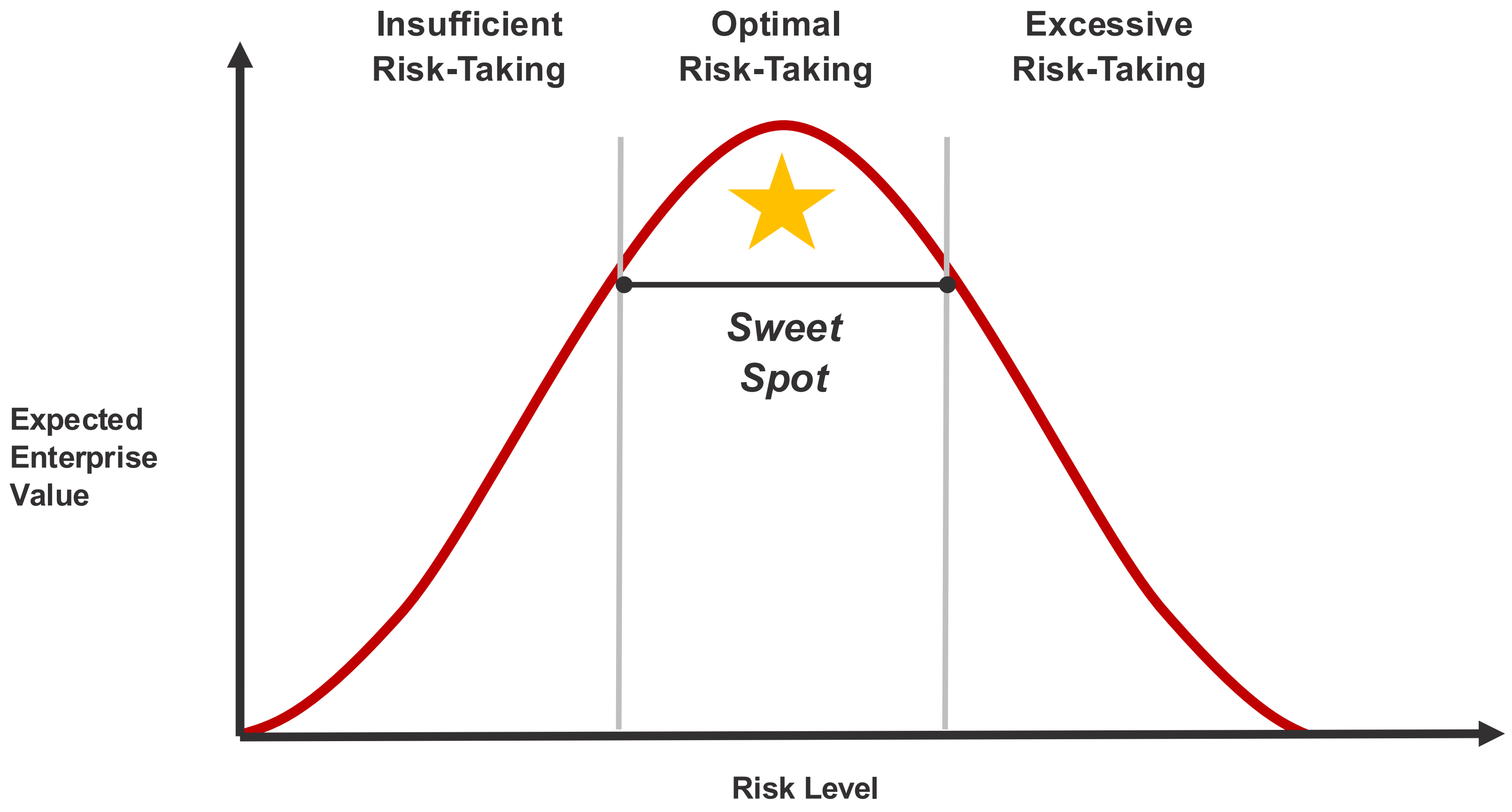
Optimal Use of Capital



Source: PT Score®

Evaluating Risks with PT Score®

COSO Model



Source: Committee of Sponsoring Organizations of the Treadway Commission (COSO)

Evaluating Risks with PT Score®

PT Score is a **Strategic Risk Management System** that helps financial institutions optimize performance through more effective management of risk and regulatory positions. Initially created in a regulatory setting to monitor banking conditions, the PT Score platform has evolved into a comprehensive system that delivers critical insights on the important risk and regulatory issues.

Nationwide, financial institutions, regulators, institutional investors, trade associations, and banking professionals rely on PT Score analytics to assess risk conditions across the industry.

600+
Institutions subscribe to PT Score

$917 B
Total Assets of all PT Score Institutions

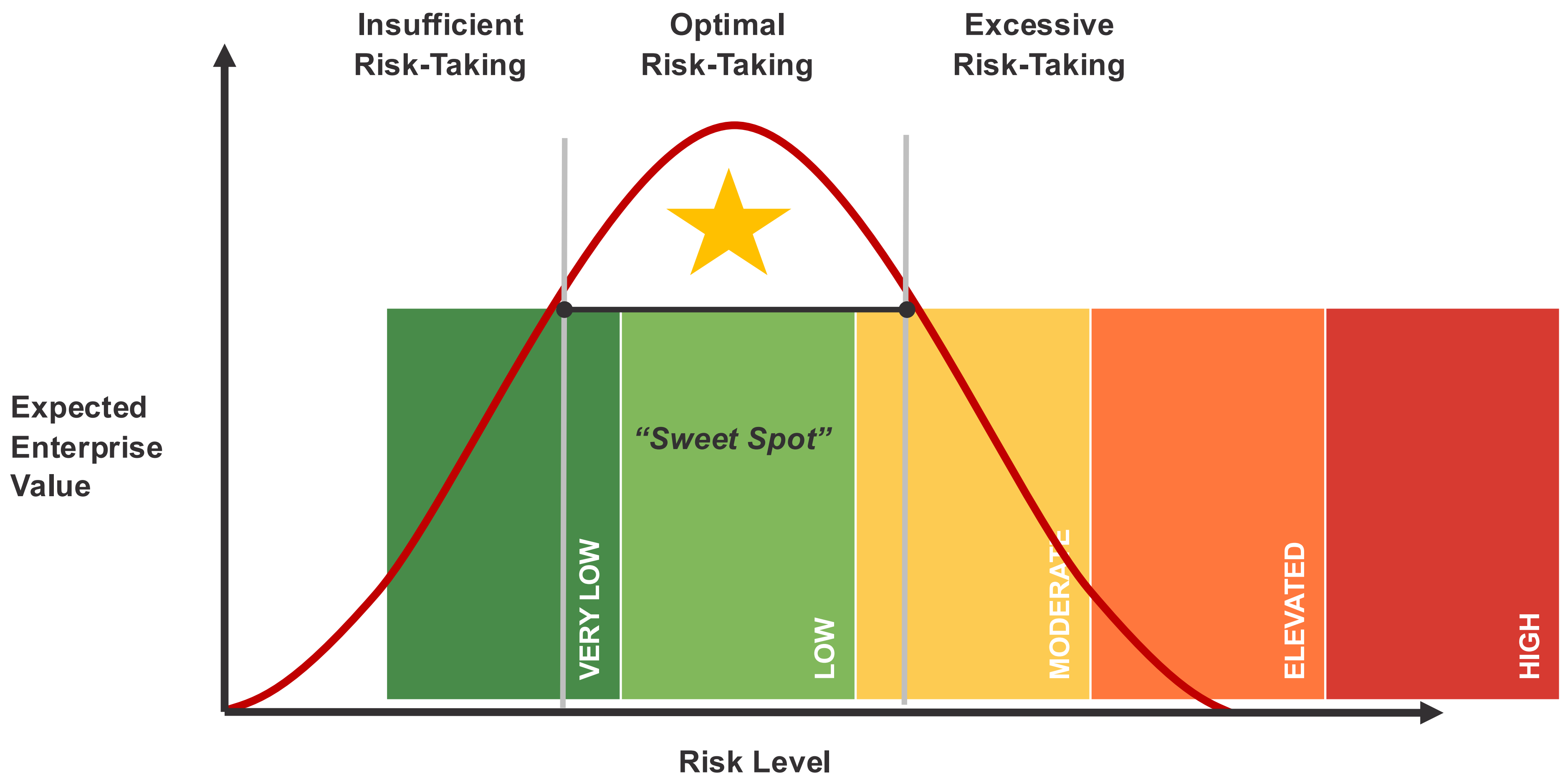
1600+
Individual users, including FHLB Banks, State Regulators, Investors, etc.

20
Institution Members of Bank and CU Advisory Committees

Data as of 2025Q4
For illustrative purposes and intended to represent concepts/strategy only
Source: PT Score®

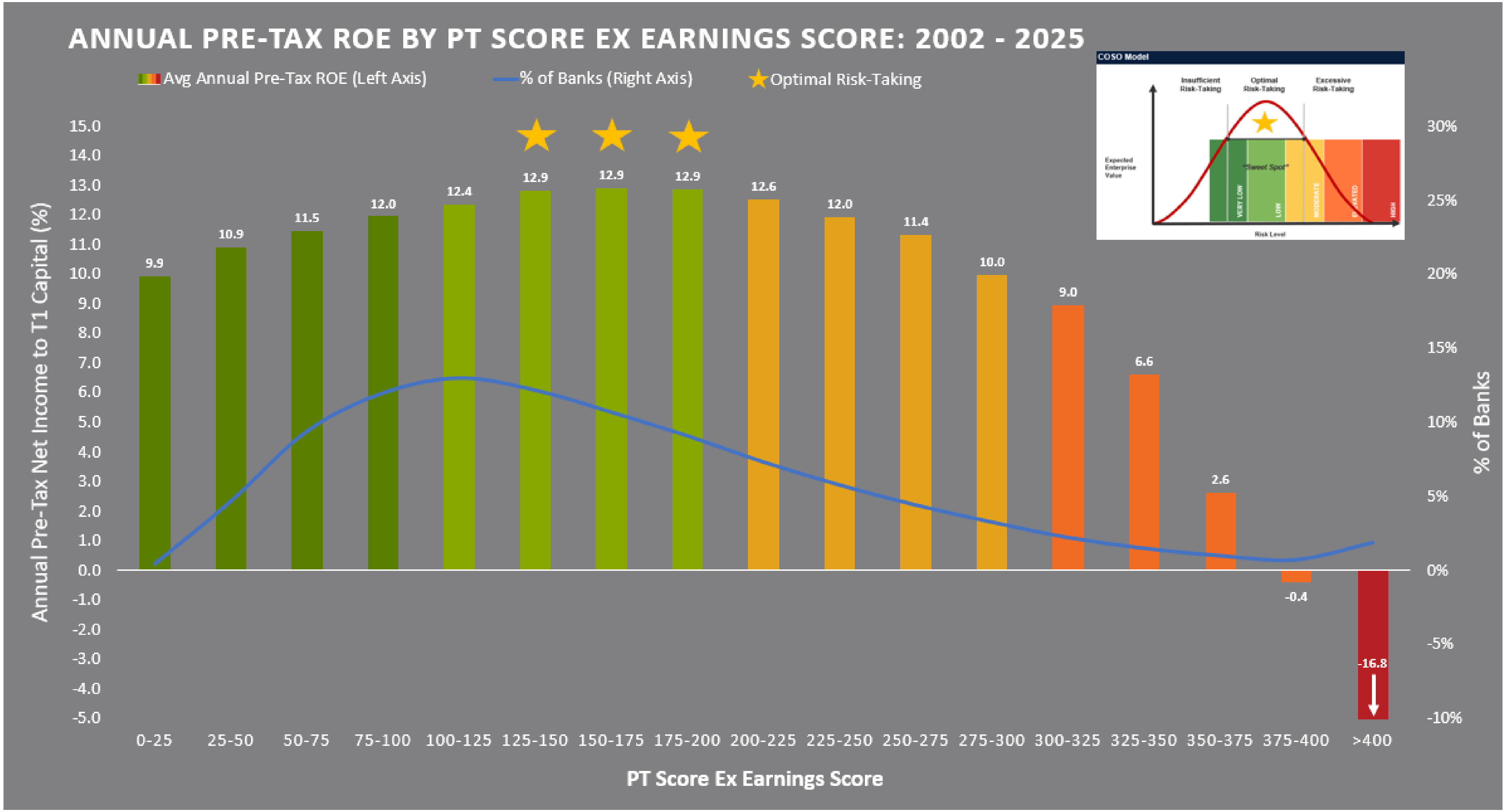
Evaluating Risks with PT Score®

COSO Model



Source: PT Score®, Committee of Sponsoring Organizations of the Treadway Commission (COSO)

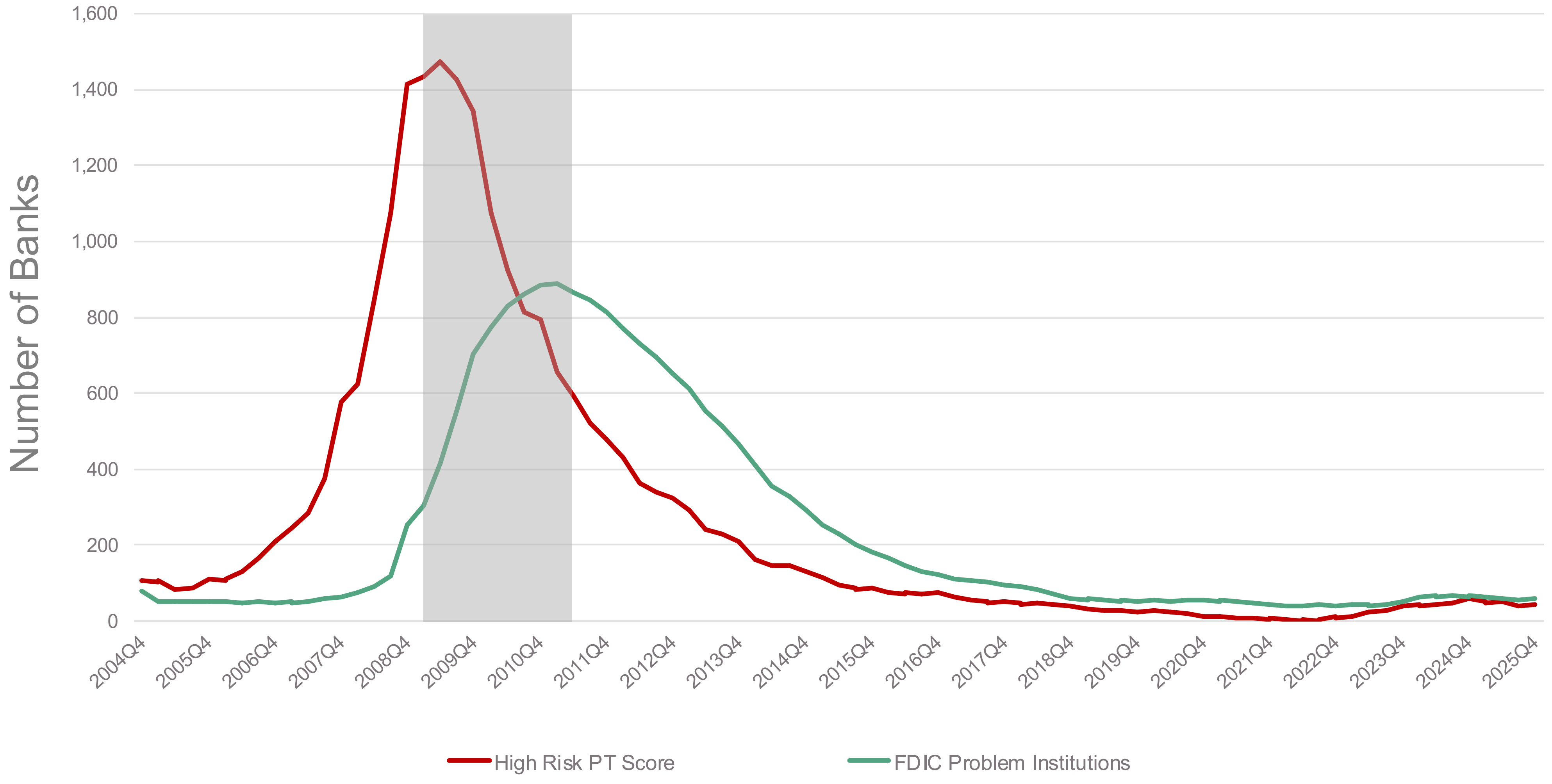
Evaluating Risks with PT Score®



Source: PT Score®, Committee of Sponsoring Organizations of the Treadway Commission (COSO)

Evaluating Risks with PT Score®

Problem Banks and High-Risk PT Score Banks

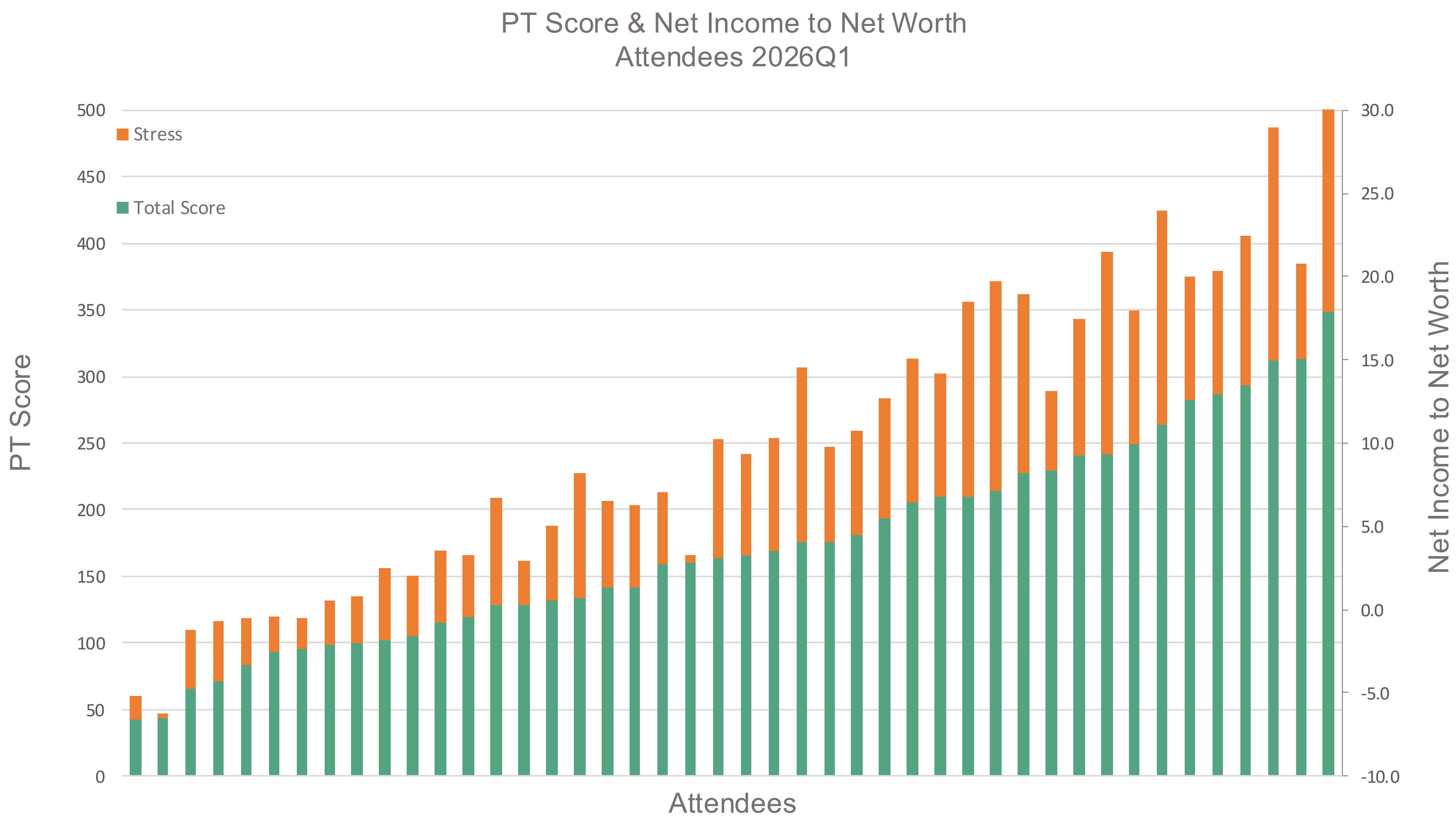


Source: PT Score®, FDIC

Taking the Right Kinds of Risk with PT Score®

Source: PT Score®

Evaluating Risks with PT Score®



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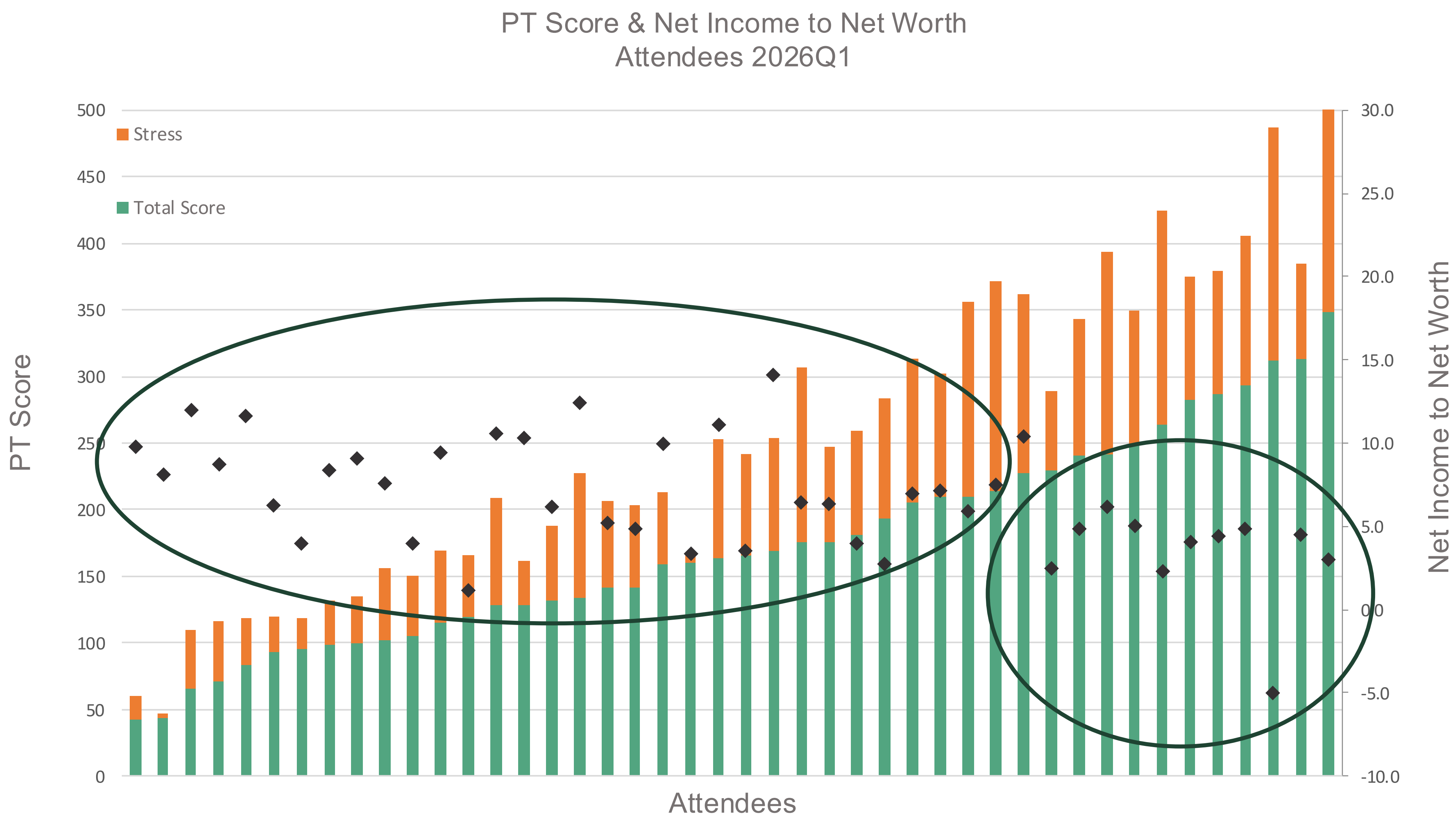
Evaluating Risks with PT Score®



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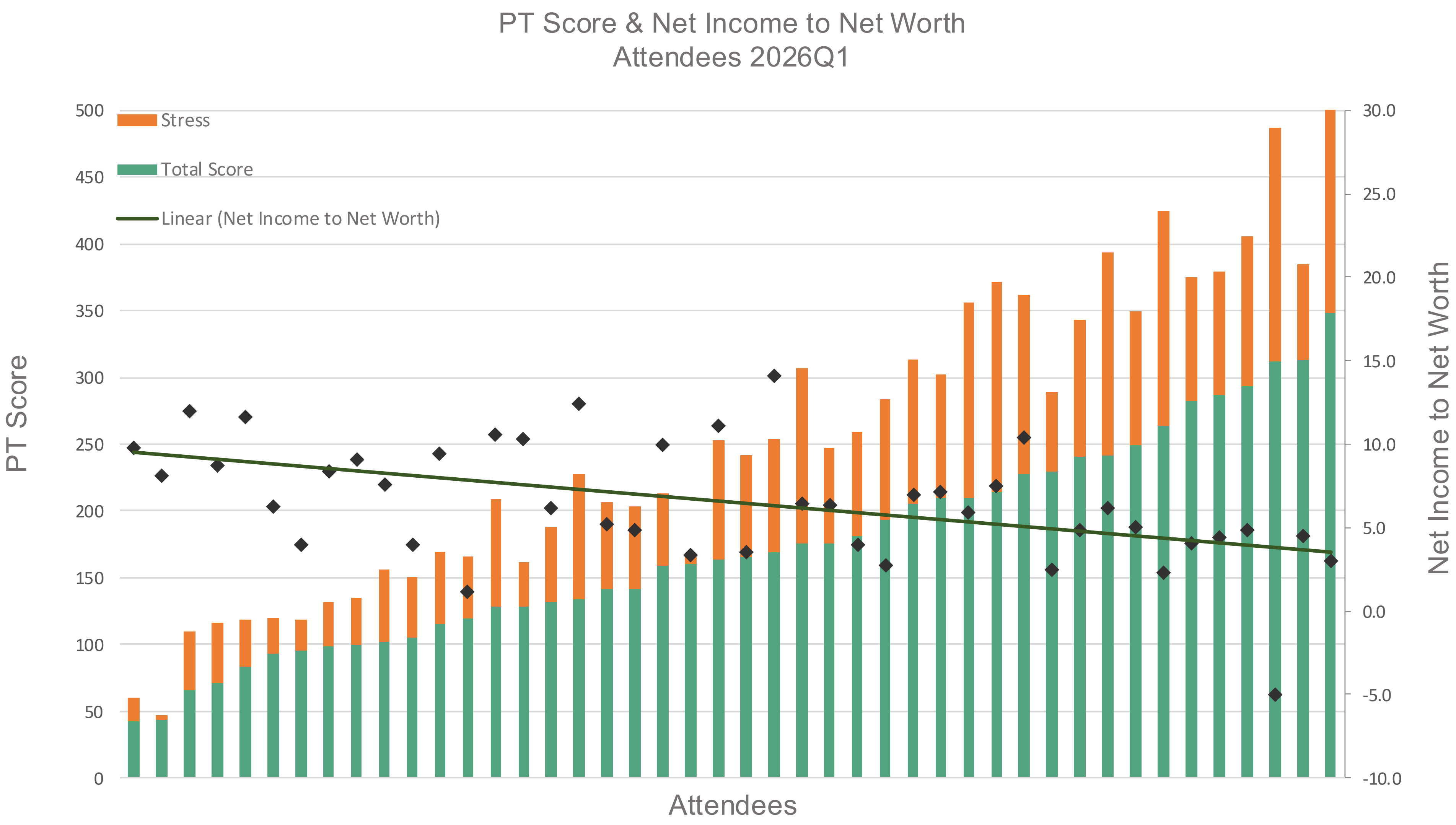

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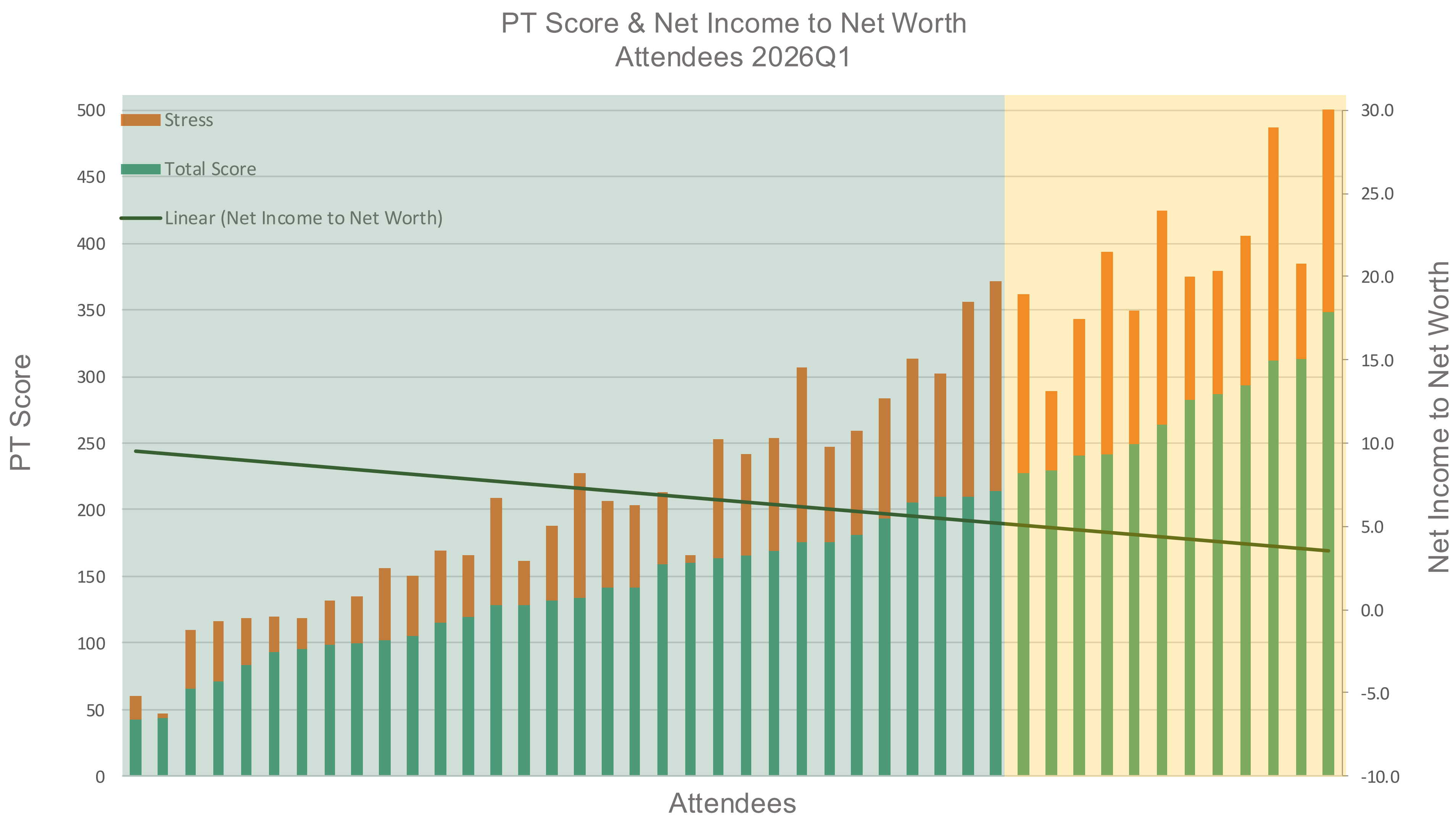
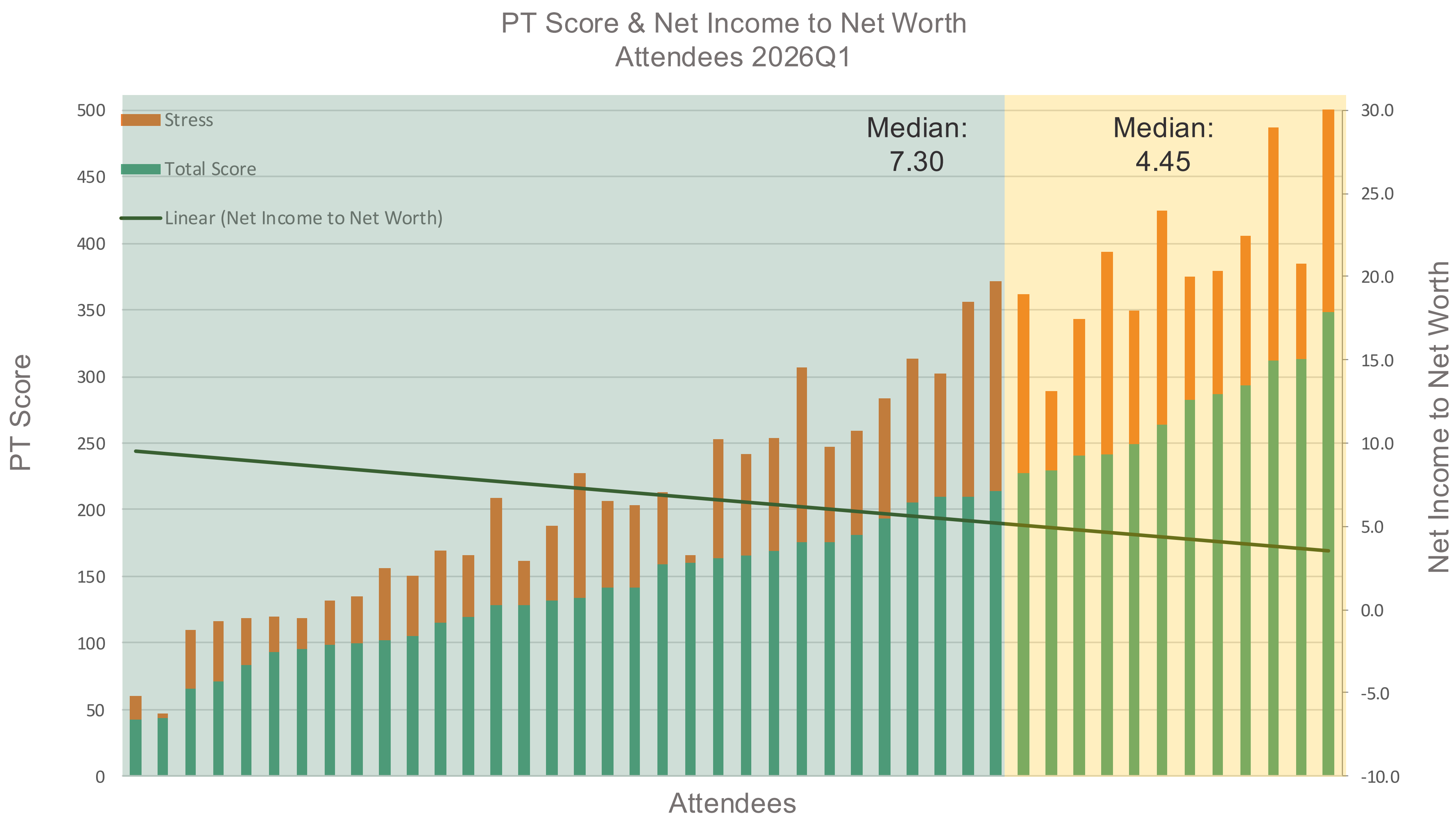


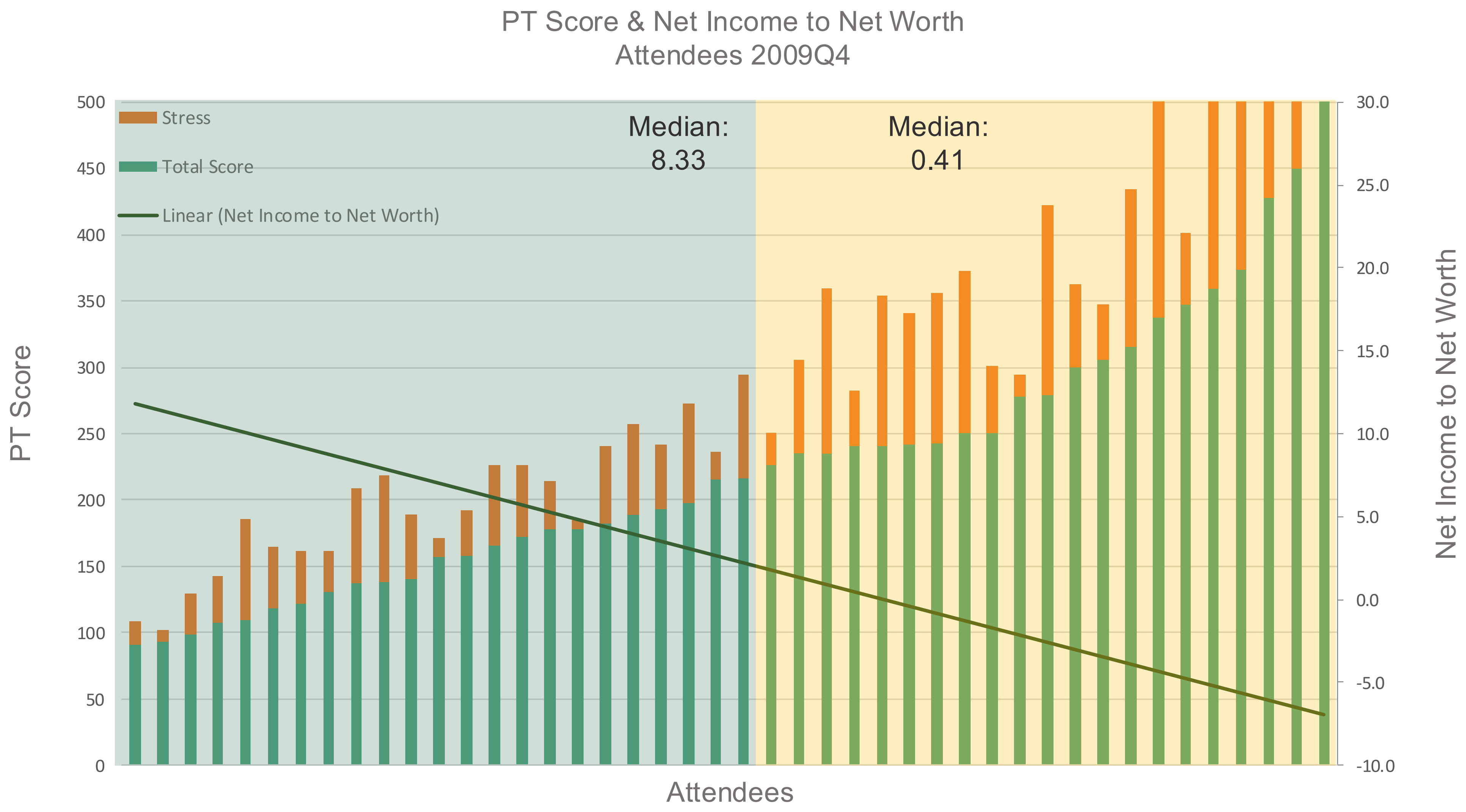
Source: PT Score®

Evaluating Risks with PT Score®



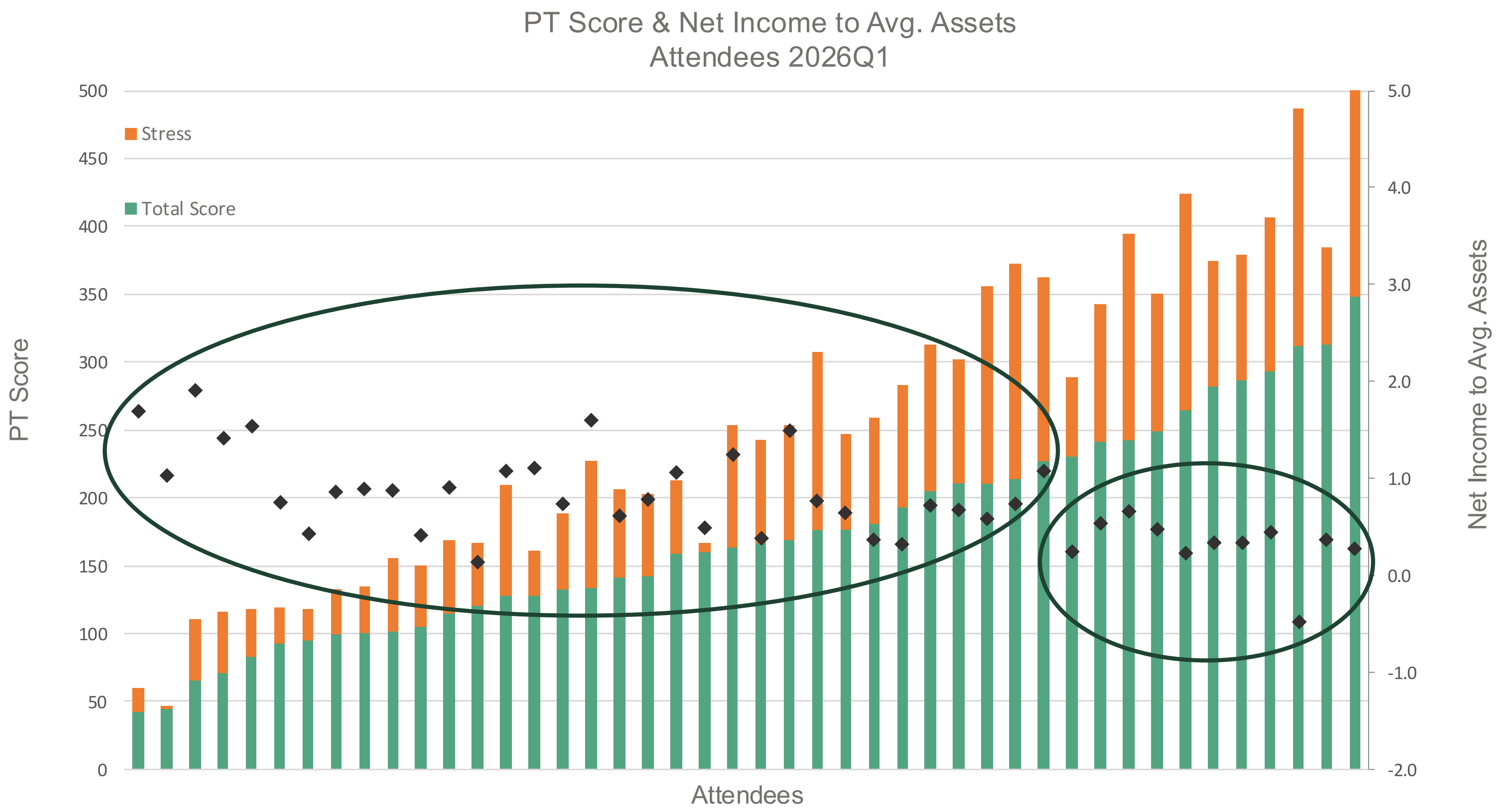
Source: PT Score®

Evaluating Risks with PT Score®



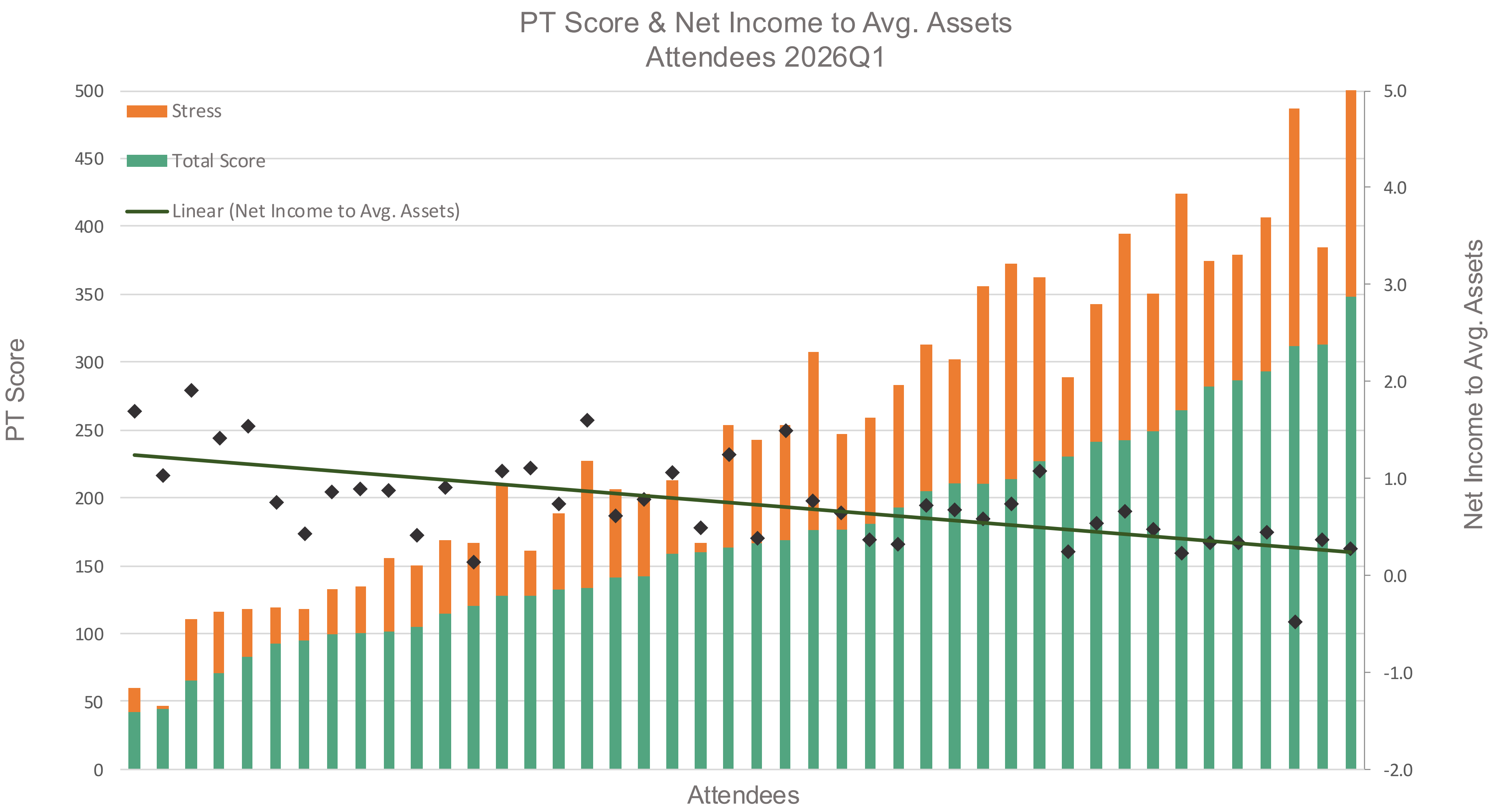
Source: PT Score®

Evaluating Risks with PT Score®



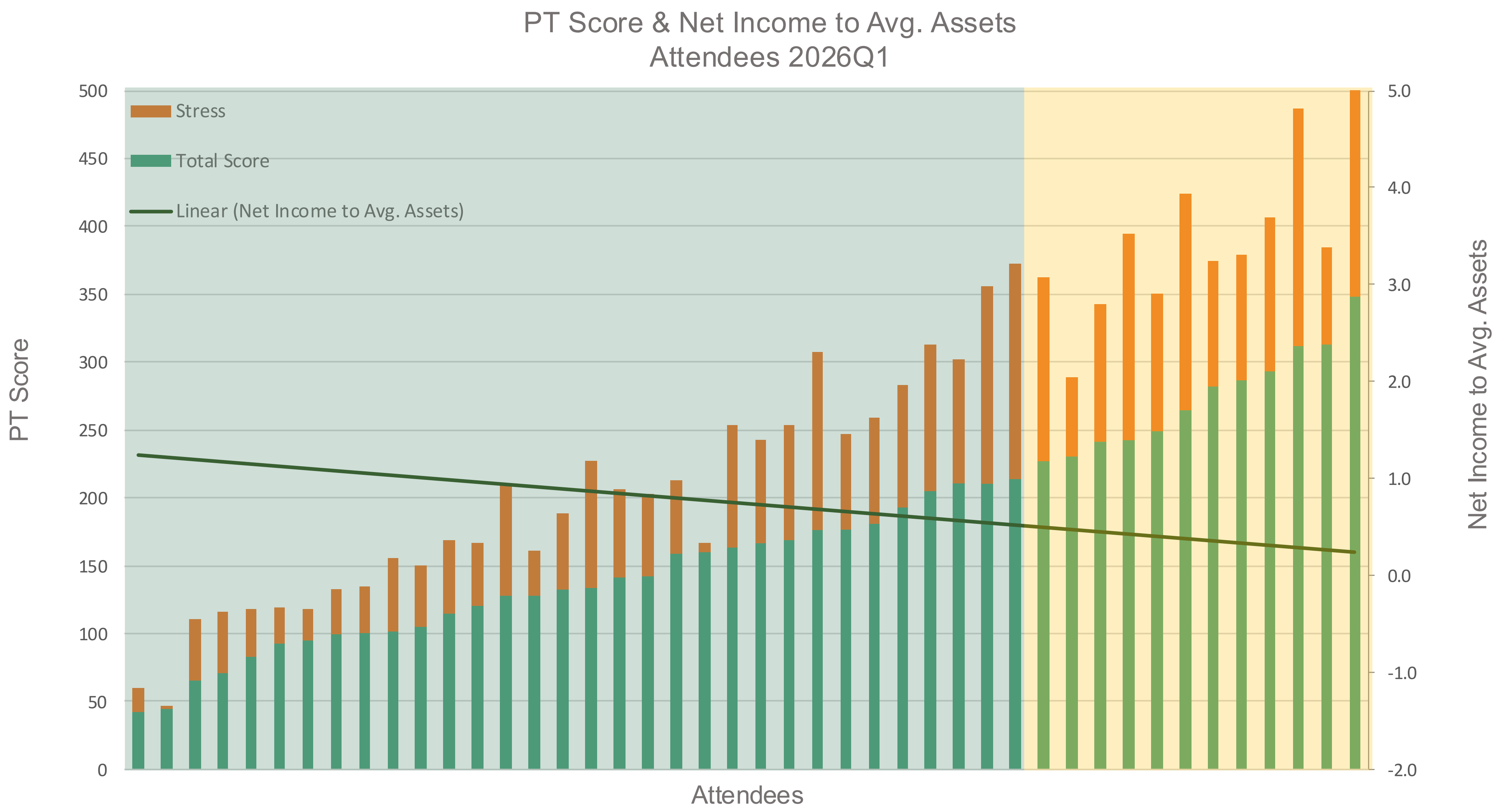
Source: PT Score®

Evaluating Risks with PT Score®



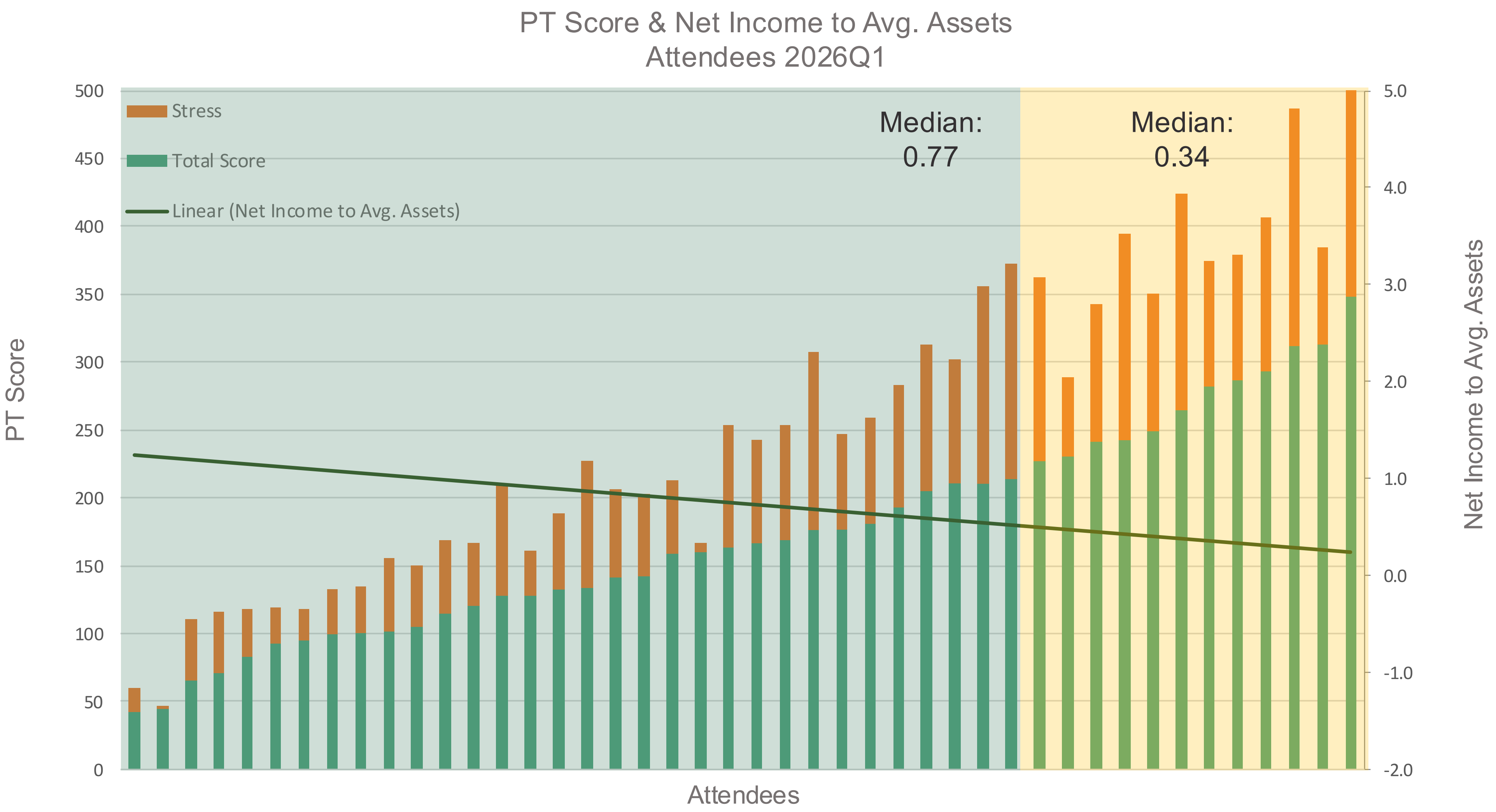
Source: PT Score®

Evaluating Risks with PT Score®



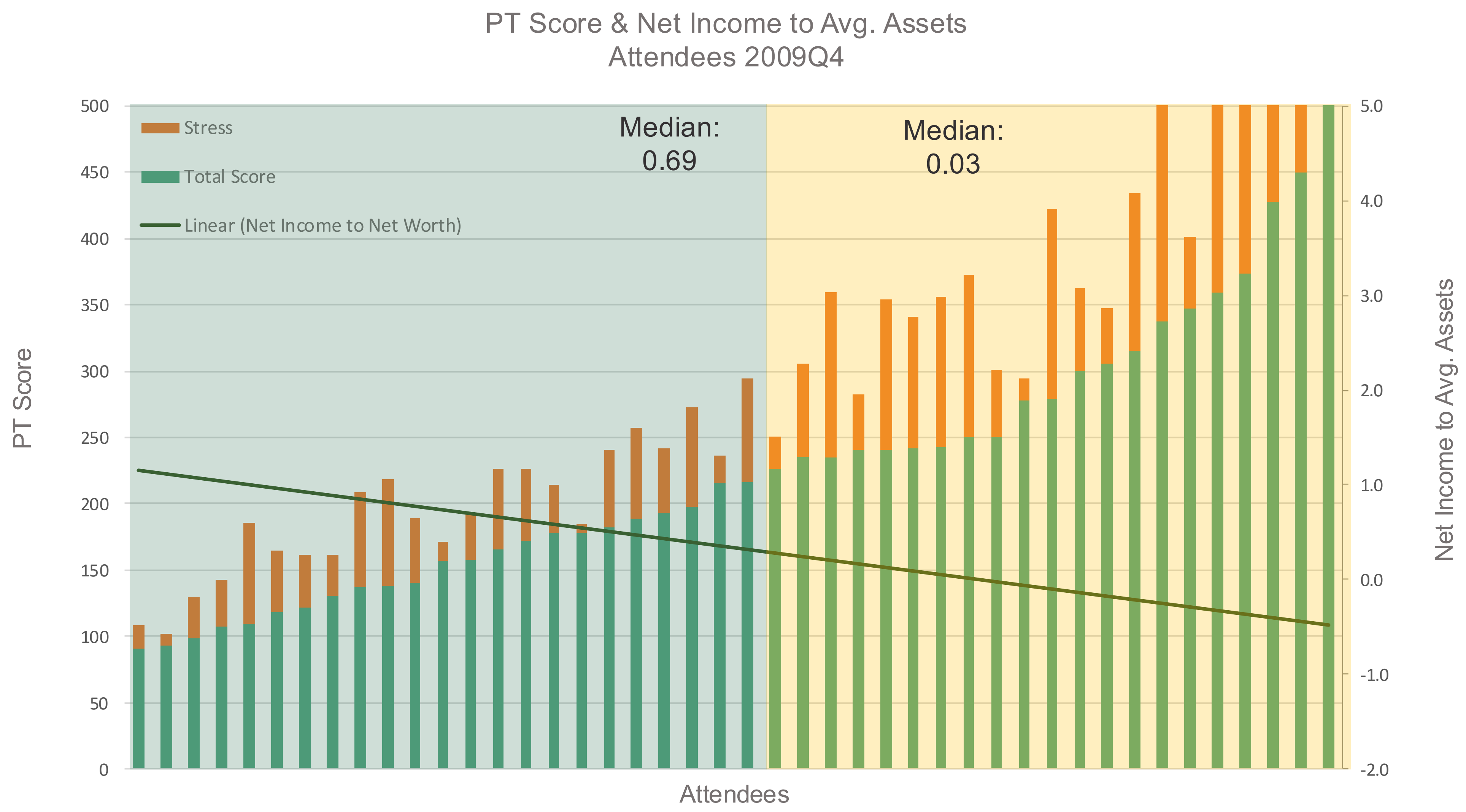
Source: PT Score®

Evaluating Risks with PT Score®



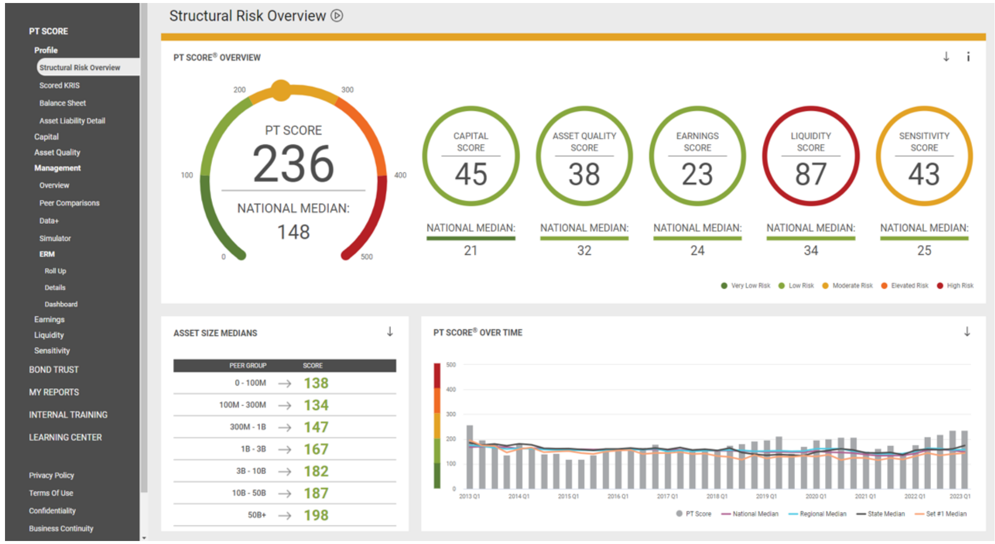
Source: PT Score®

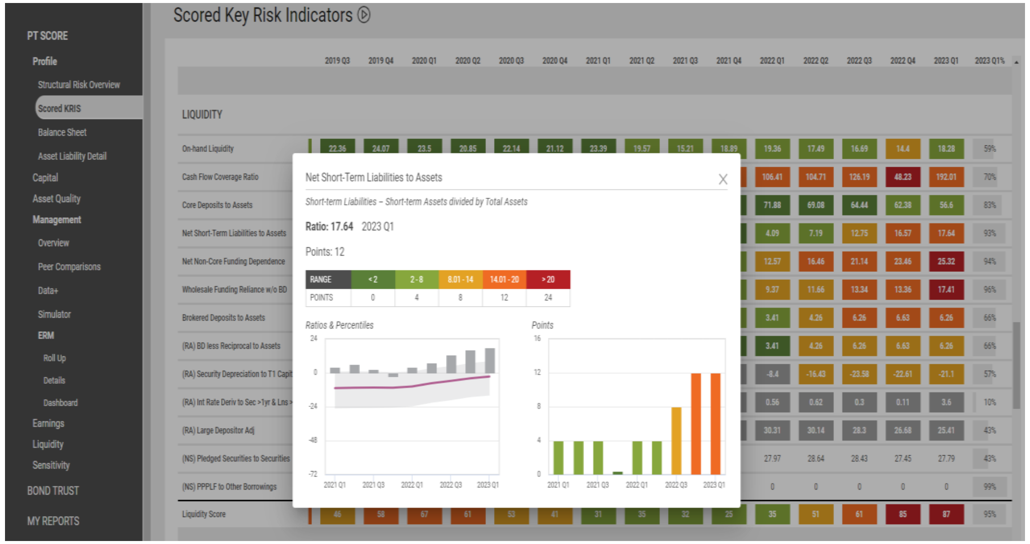
Evaluating Risks with PT Score®

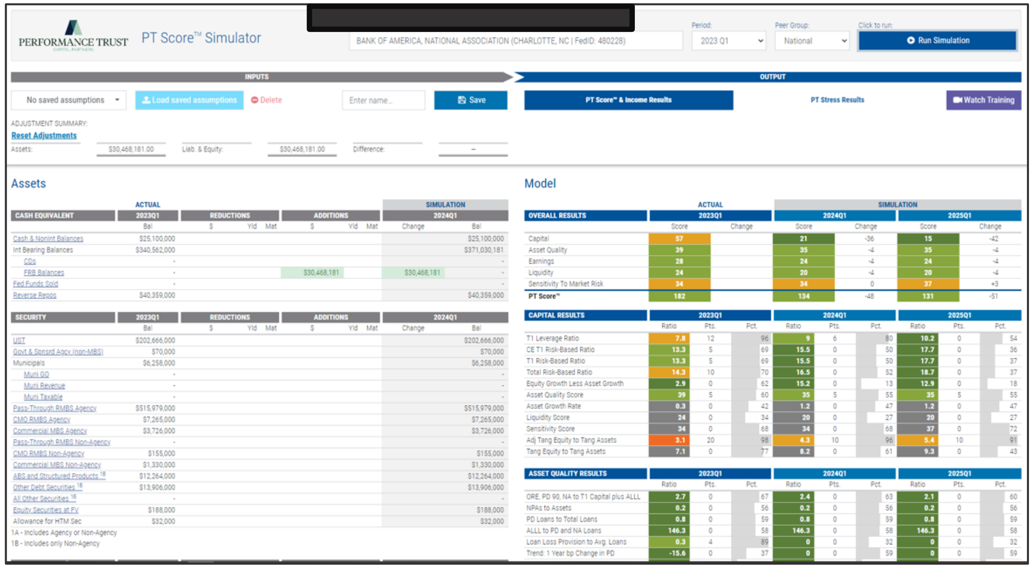


Source: PT Score®

PT Score® ERM







Source: PT Score®
For illustrative purposes only

PT Score® ERM

PERFORMANCE TRUST
CAPITAL PARTNERS

PT SCORE® REPORT

2020 Q4, Prepared For:

[redacted]

YOUR PT SCORE® IS **219**

+39PT. Your YoY Change

YOU

0 – 99	100 – 199	200 – 299	300 – 399	400 +
VERY LOW	LOW	MODERATE	ELEVATED	HIGH

Executive Summary—What Does This Score Mean for Your Institution?

Your score shows your institution is performing at the risk level of:

MODERATE

Institutions with this risk profile are generally satisfactory; however, increased risk positions could make these institutions more vulnerable to decline during stressed conditions.

Model 1.12; data as of 02/16/2021 p. 1

PERFORMANCE TRUST
CAPITAL PARTNERS

2020 Q4 PT Score®

NATIONAL RISK REVIEW

NATIONAL MEDIAN PT SCORE® **141**

-1 PT. Median Q2Q Change

MEDIAN

0–99	100–199	200–299	300–399	400+
VERY LOW	LOW	MODERATE	ELEVATED	HIGH

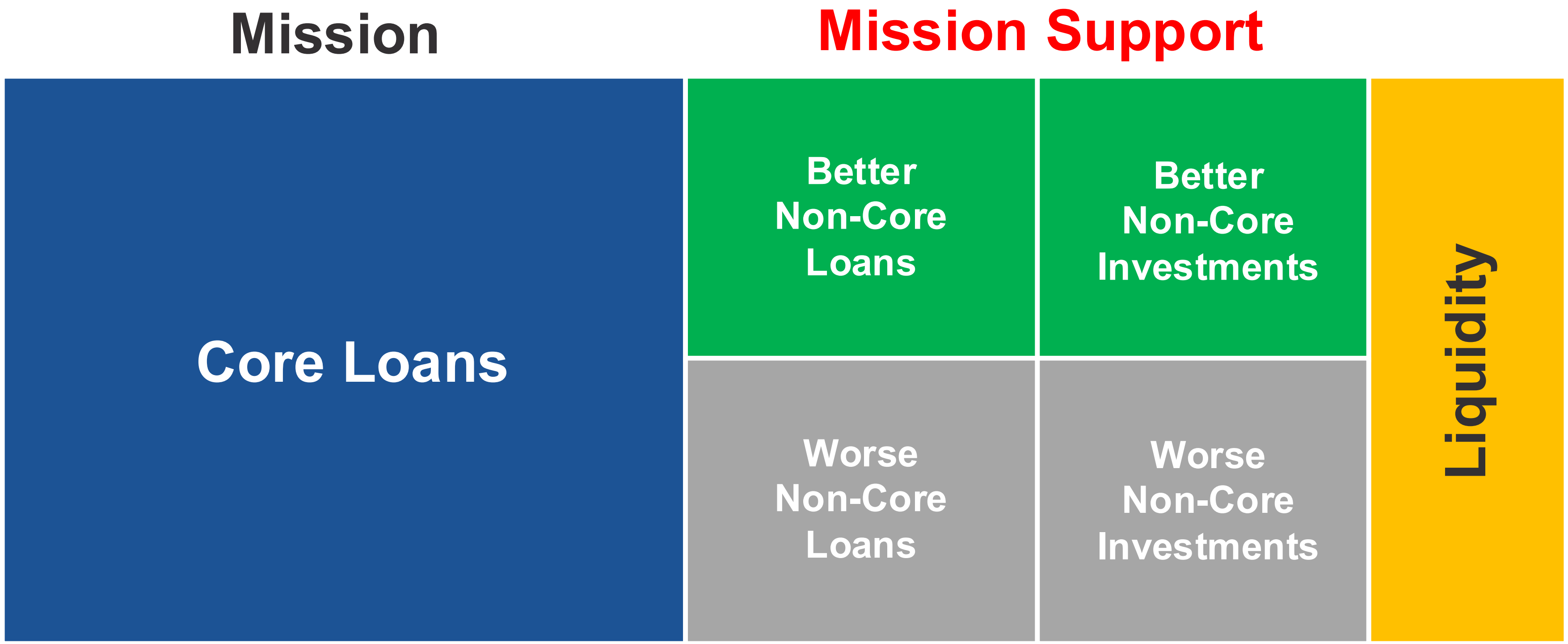
The national median PT Score® fell to an all-time low of 141 at year-end 2020. Key risk indicators, which are adjusted for the temporary effects of the Payment Protection Loan Program, indicate that balance sheet positions have generally strengthened and profitability levels, while tightened, remain favorable. The potential for more substantive credit deterioration remains present, but there are no significant signs that credit performance is in decline. Government stimulus and programs continue to buoy the COVID economy, but the long-term impact of this intervention on general credit conditions is not yet known.

MEDIAN PT SCORE® THROUGHOUT THE U.S. BY STATE

PT Score® Model 1.10; data as of 02/24/2021 FOR INSTITUTIONAL USE ONLY p. 1

Supplement Core with Wholesale

Balance Sheet in Color



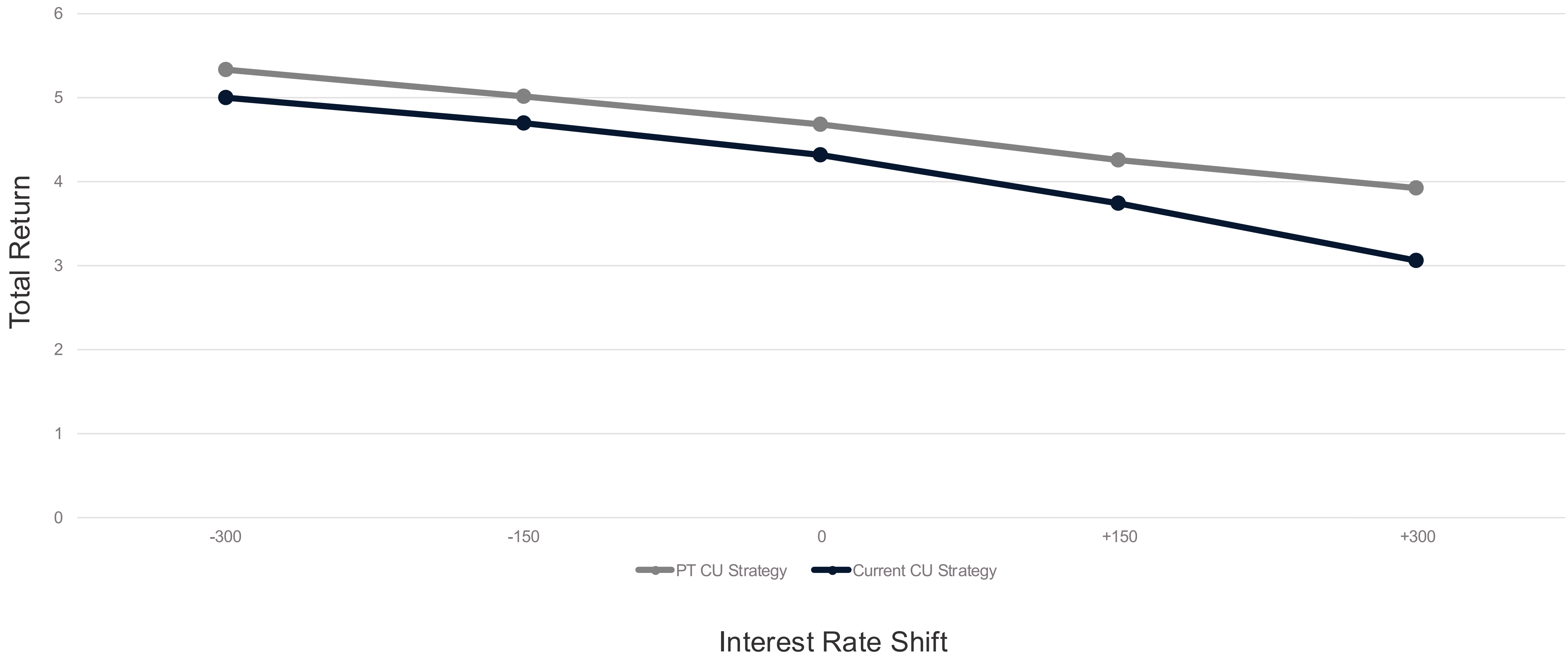
Core Relationship (All In) > Target ROA/ROE

subject to assumptions and conditions

Source: Performance Trust Analytics

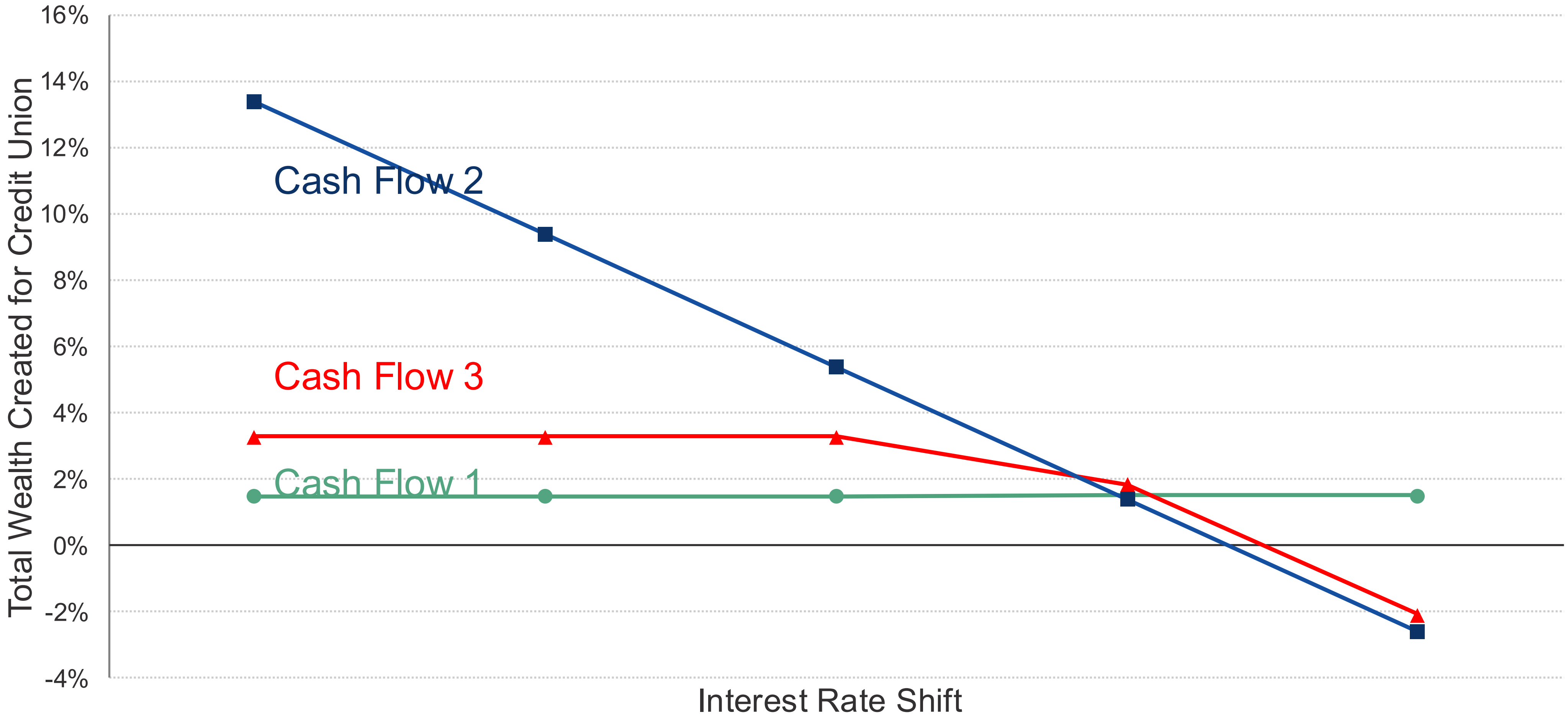
Positioning outcomes will vary based on assumptions, market conditions, and implementation decisions.

Use Shape to See Different CU Mission Support Strategies



Use Shape Management® to Bring Clarity

1-Yr Scenario

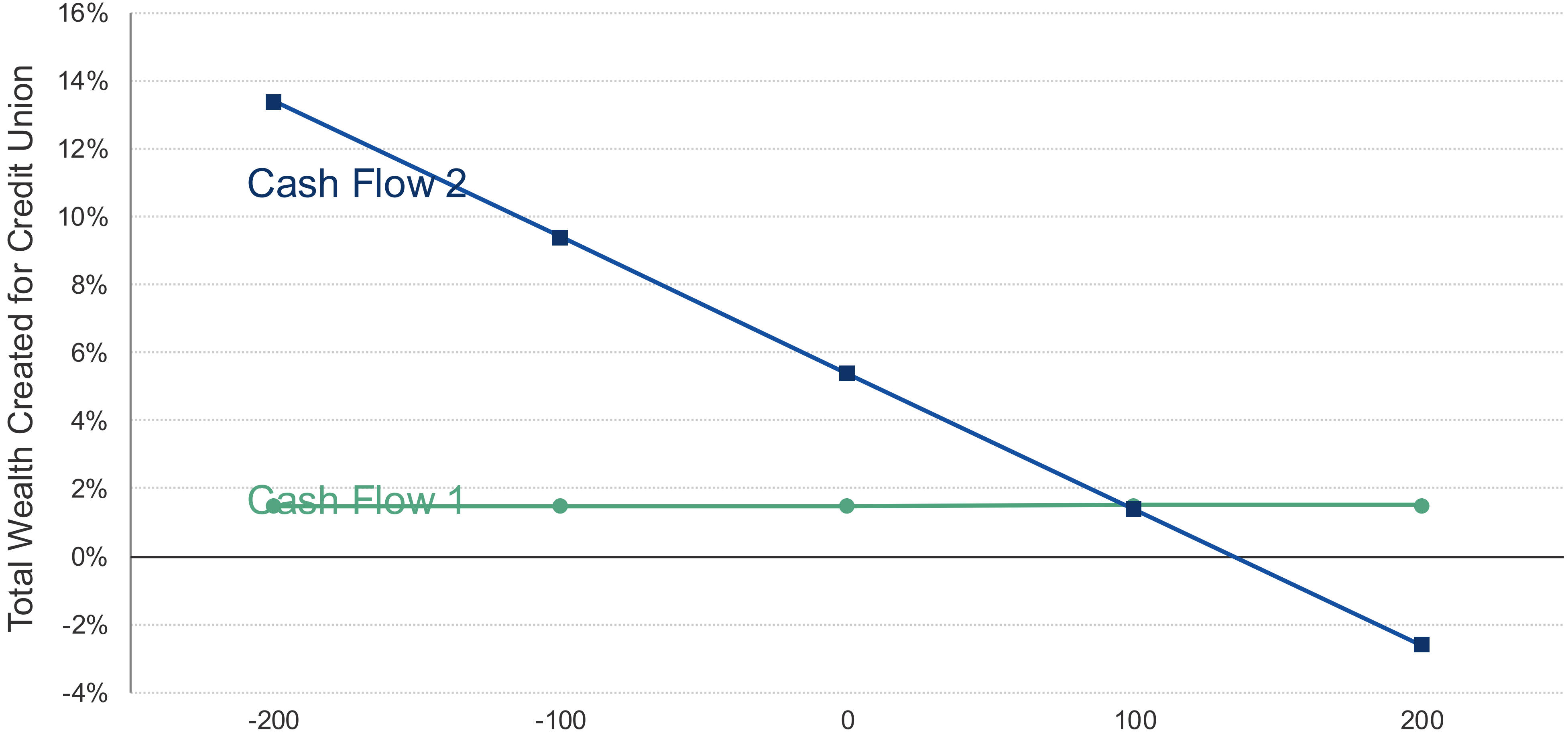


1 Yr @ 1.5%	1.49%	1.49%	1.49%	1.51%	1.51%
5nc1 @ 3.30%	3.30%	3.30%	3.30%	1.84%	-2.08%
5 Yr @ 3%	13.40%	9.40%	5.40%	1.40%	-2.60%

Source: Performance Trust Analytics

Use Shape Management® to bring Clarity

1-Yr Scenario

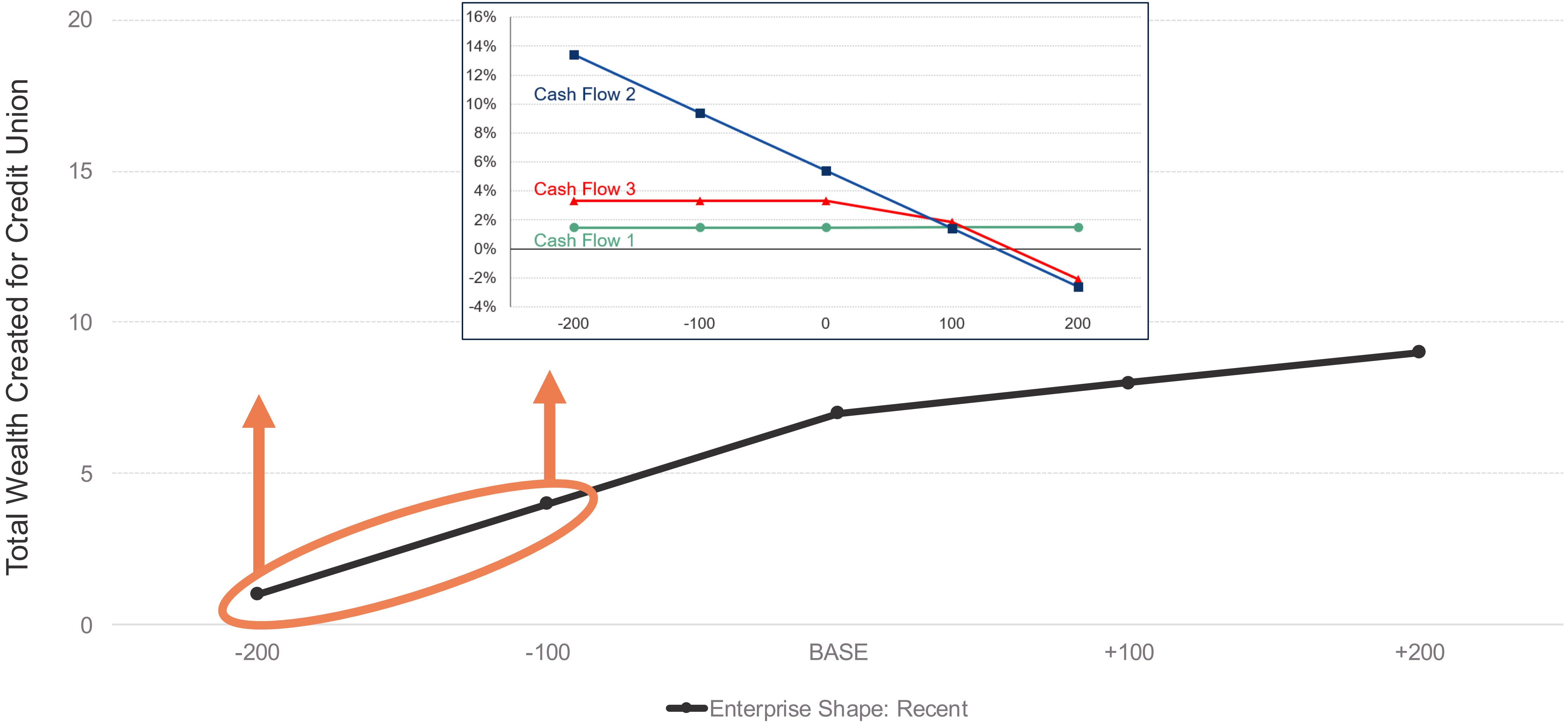


	-200	-100	0	100	200
1 Yr @ 1.5%	1.49%	1.49%	1.49%	1.51%	1.51%
5 Yr @ 3%	13.40%	9.40%	5.40%	1.40%	-2.60%

Source: Performance Trust Analytics

Proactively Change Our Enterprise Shape

- *Annualized Shareholder Return, 1 Year Horizon*



Source: Performance Trust Analytics

Stewardship

The responsible management and care of something that has been entrusted to

you

- Protecting
- Improving
- Using resources wisely for the benefit of others and the future

Mission Member Margin