

Annual Investor Meeting

2025



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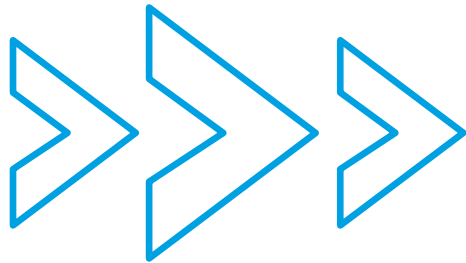
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Agenda: Today's Discussion

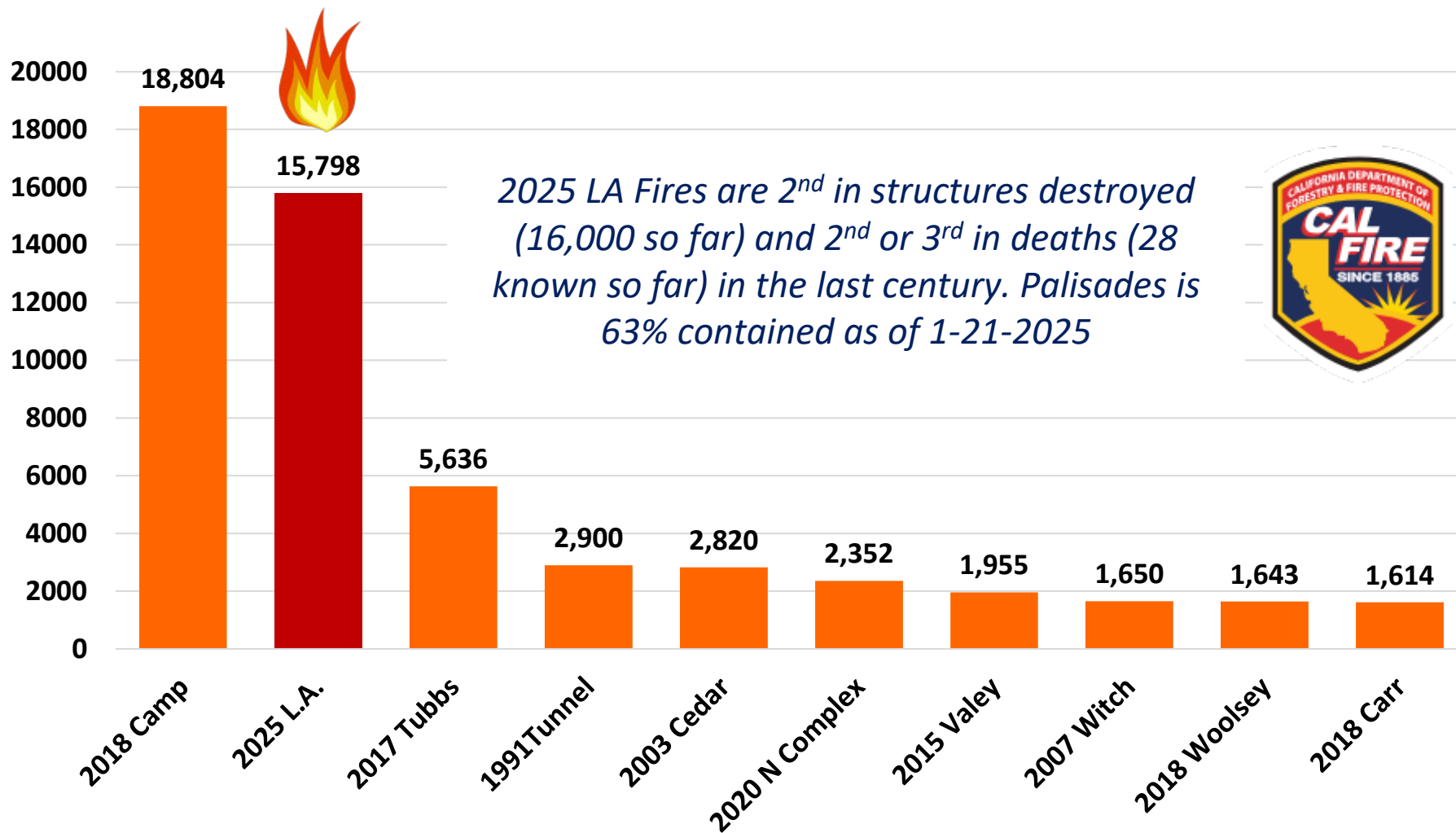
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Capital Markets Update

Destructive California Wildfires

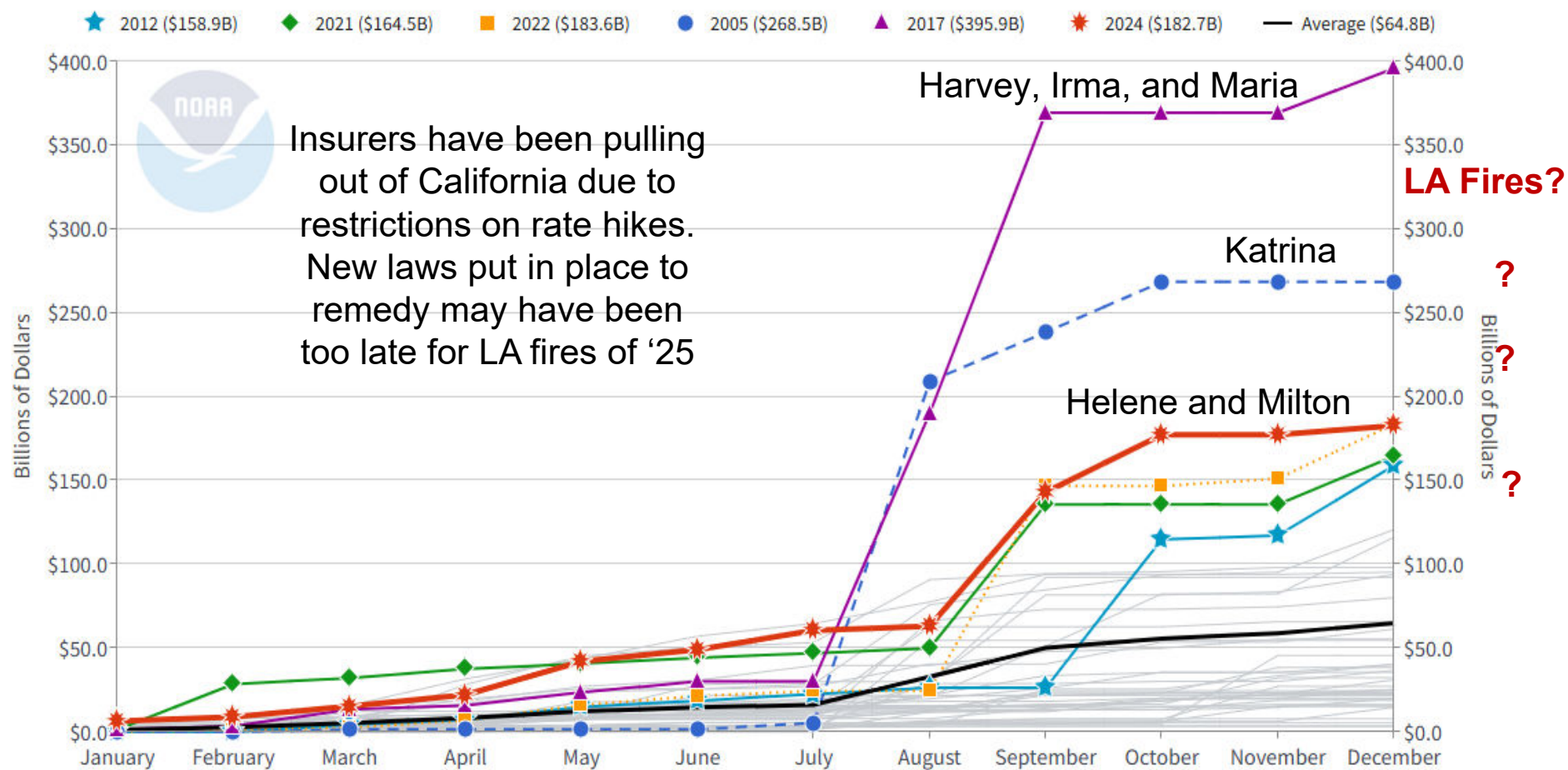


Source: <https://34c031f8-c9fd-4018-8c5a-4159cfff6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/our-impact/fire-statistics/top-20-destructive-ca-wildfires.pdf?rev=3be4ba51ba7f40de9afc7c07e0db18a8&hash=A6F1C5754C9F75FAFAD023CDA632FDDF>

This may turn out to be the costliest fire in California history.

L.A. Fires Will be one of the Costliest

1980-2024 United States Billion-Dollar Disaster Year-to-Date Event Cost (CPI-Adjusted)



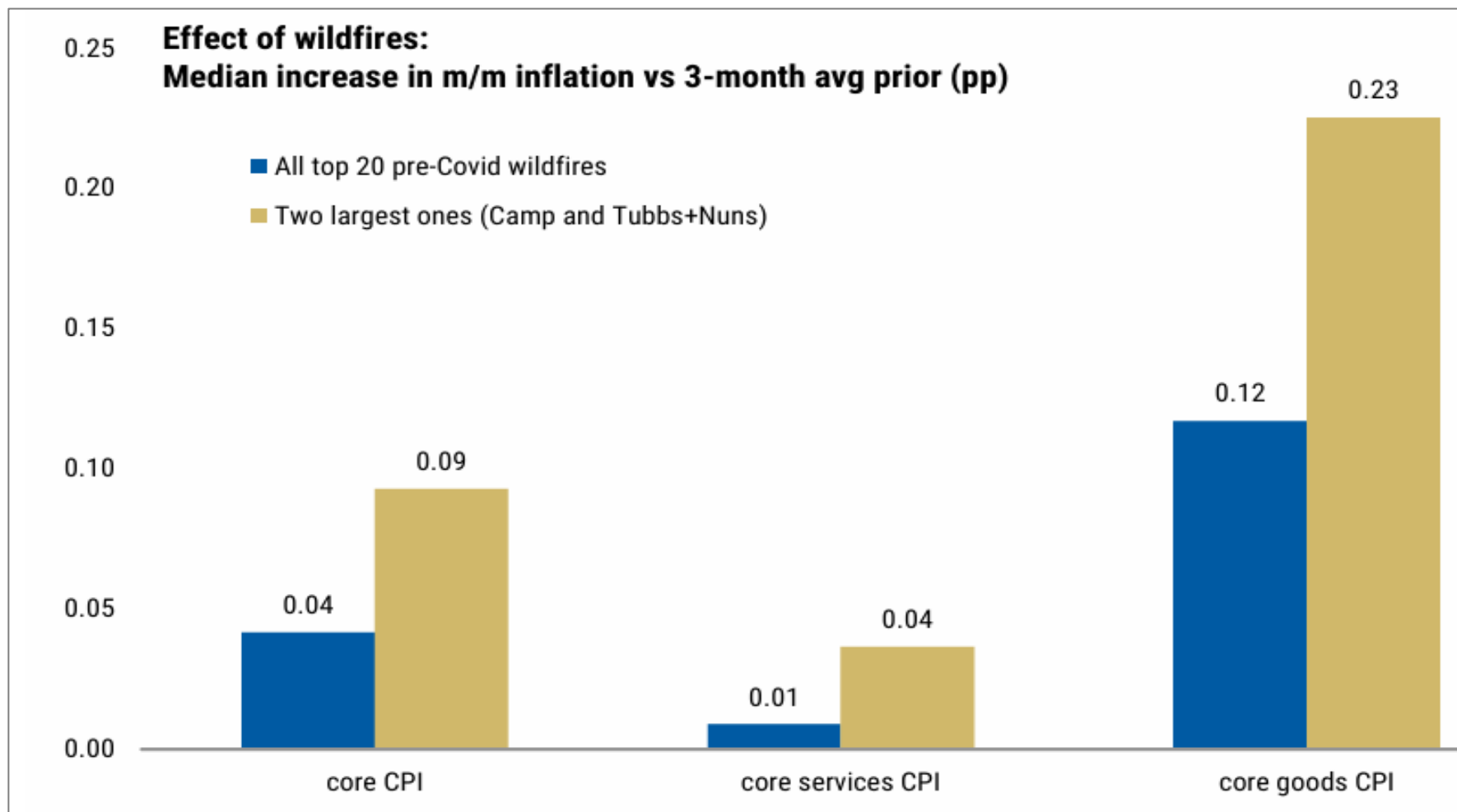
Updated: January 10, 2025

Event statistics are added according to the date on which they ended. Powered by ZingChart

Source: <https://www.ncei.noaa.gov/access/billions/>

LA fires may be the second or third most expensive national disaster combination.

Impact on Inflation

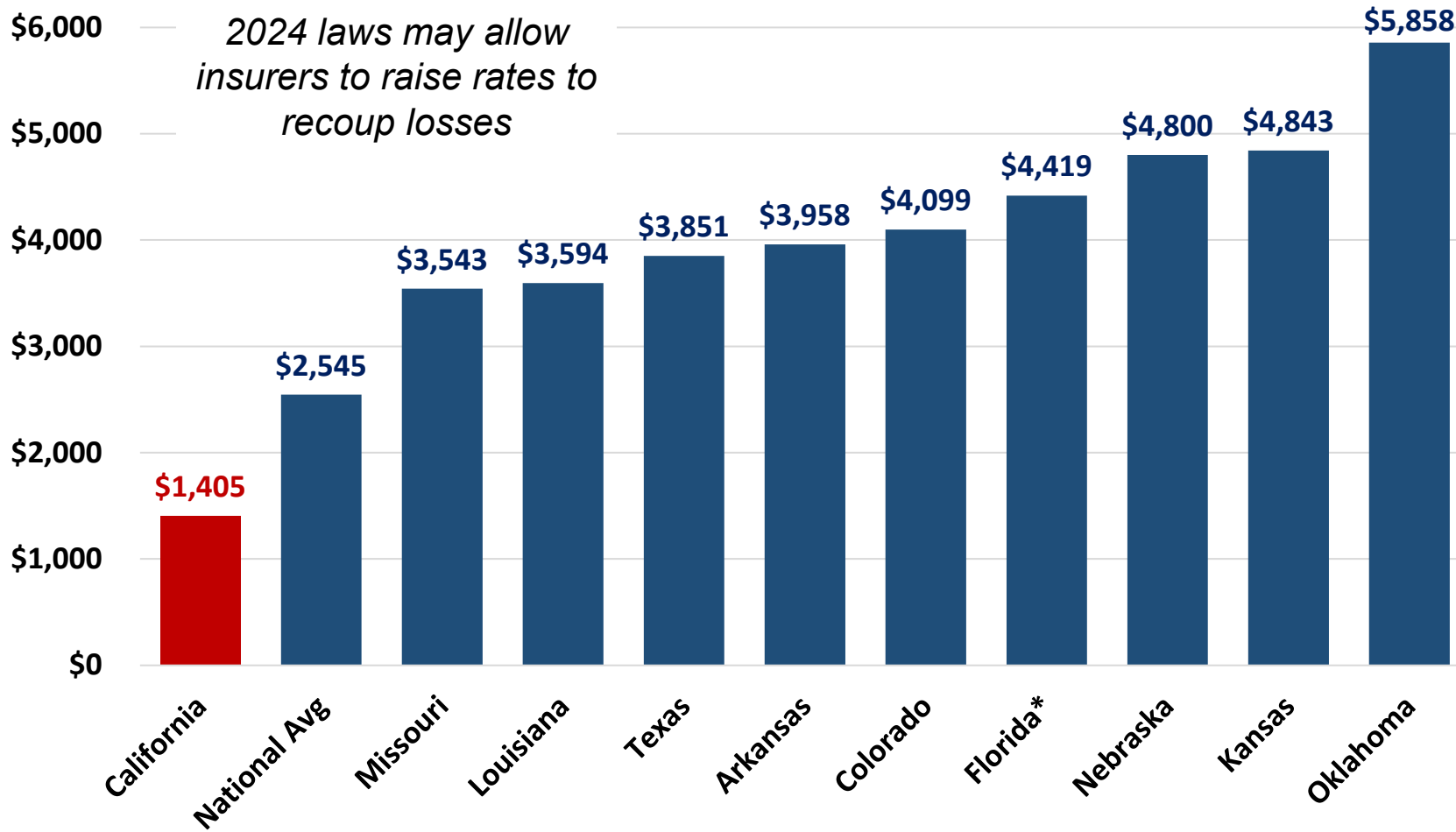


Source: Morgan Stanley Research 01-2025

If history is a guide, LA fires of 2025 will be inflationary – and likely stimulative to construction and materials.

California Insurance vs. National

Insurance on a \$300,000 home



Source: [://www.insurance.com/home-and-renters-insurance/home-insurance-basics/average-homeowners-insurance-rates-by-state#Home_insurance_trends_by_state](https://www.insurance.com/home-and-renters-insurance/home-insurance-basics/average-homeowners-insurance-rates-by-state#Home_insurance_trends_by_state)

California restrictions on insurance premiums have led to dependence on state managed plan of last resort called FAIR.

Current Administration Executive Orders

Significant Economic Impact Orders

- ❑ **(Only) +10% Tariff on China – Threaten Others**
- ❑ **Rescind Ban on Drilling and LNG Terminals**
- ❑ **Support Private \$500 Billion AI Infrastructure**

Social and Potential Economic Impact Orders

- **Limit Immigration**
- **Back to Office for All Fed Employees**
- **Delay TikTok ban**
- **Withdraw Paris Climate Accord**



Trump Announces Stargate

“Largest AI infrastructure project in history” White House 01-21-2025

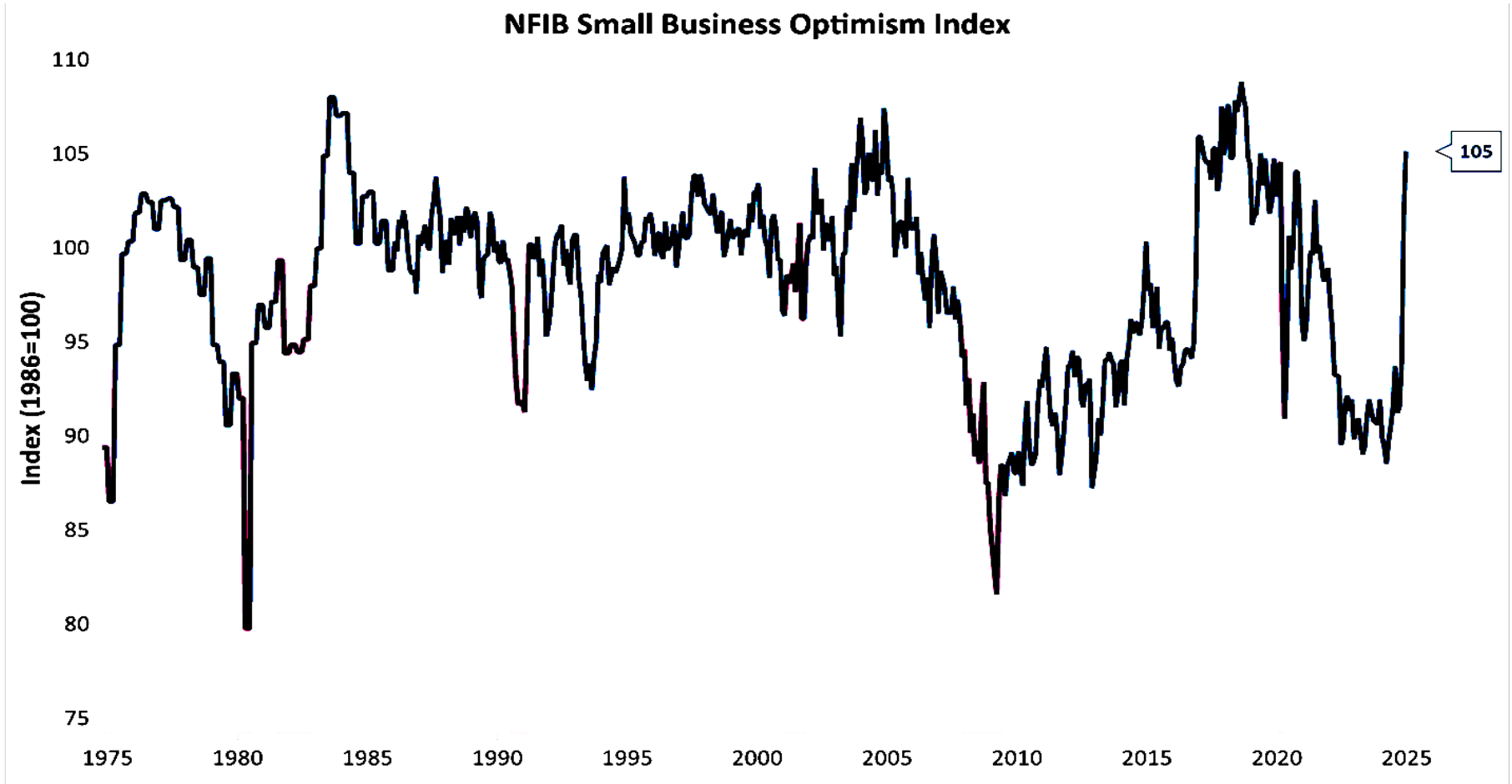


- Building 10 Data Centers in Texas
- Investment of \$100 billion
- May rise to \$500 billion by 2029
- May create more than 100,000 jobs



- Trump to use executive orders to help build the infrastructure
- Partners: OpenAI, Microsoft, Nvidia, Oracle, Arm
- Funders: SoftBank, OpenAI, Oracle, and MGX

Small Business Optimism



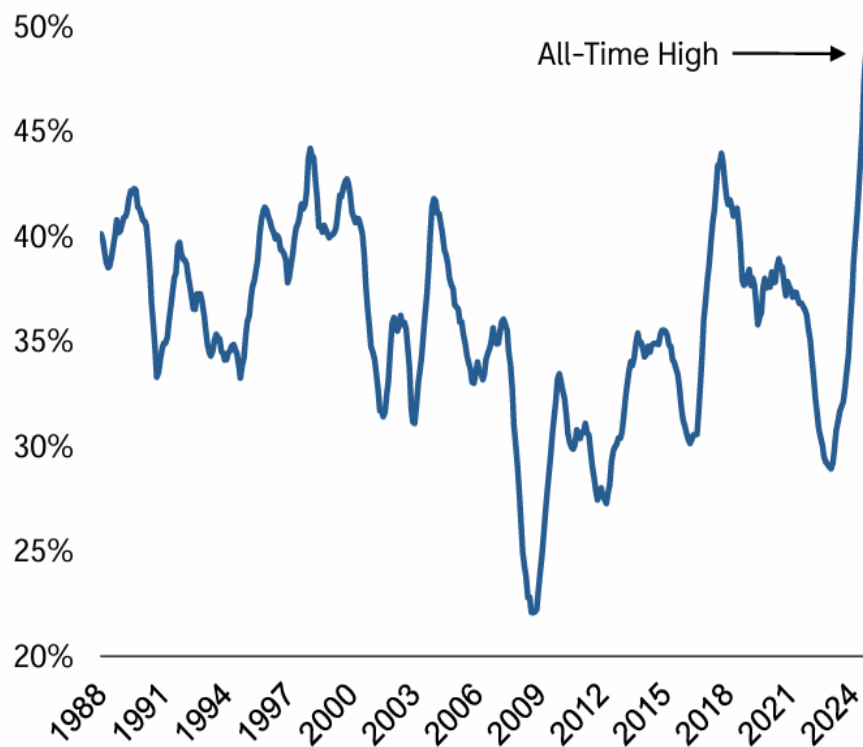
Source: DoubleLine, NFIB, Macrobond as of December 2024, https://www.nfib.com/news-article/monthly_report/sbet/

Referred to as the “Trump Bump”, small business sees less regulation and pro business policy as positive.

Optimism Abounds, But That Doesn't Often Bode Well for Stocks

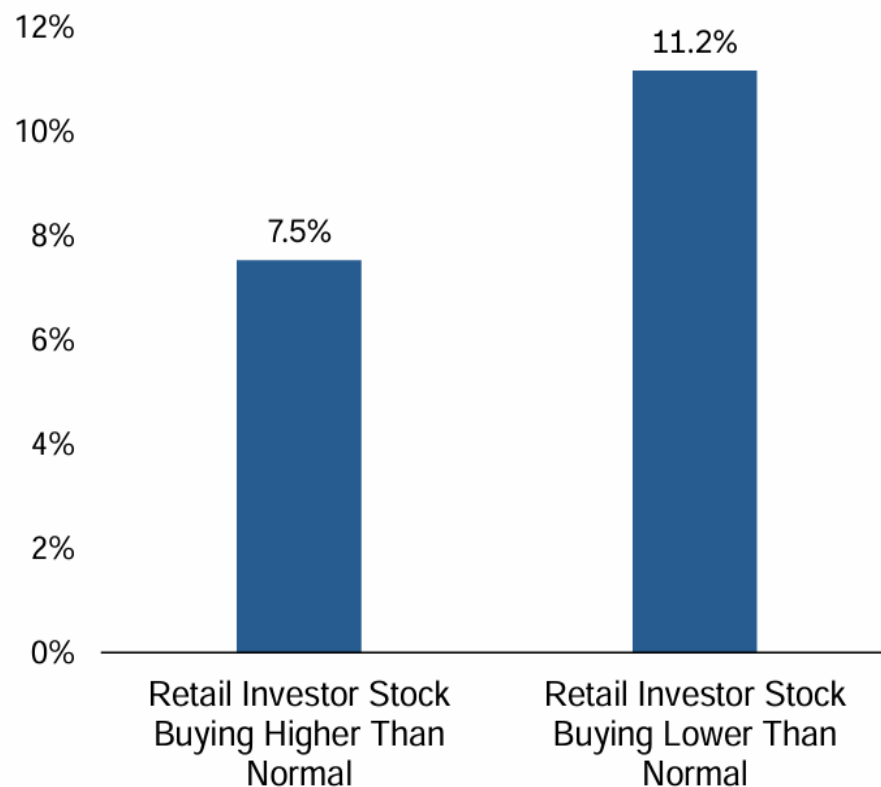
PERCENT OF CONSUMERS EXPECTING HIGHER STOCK PRICES IN ONE YEAR

As of December 31, 2024; 12-month moving average



AVERAGE NEXT 12 MONTH STOCK RETURNS

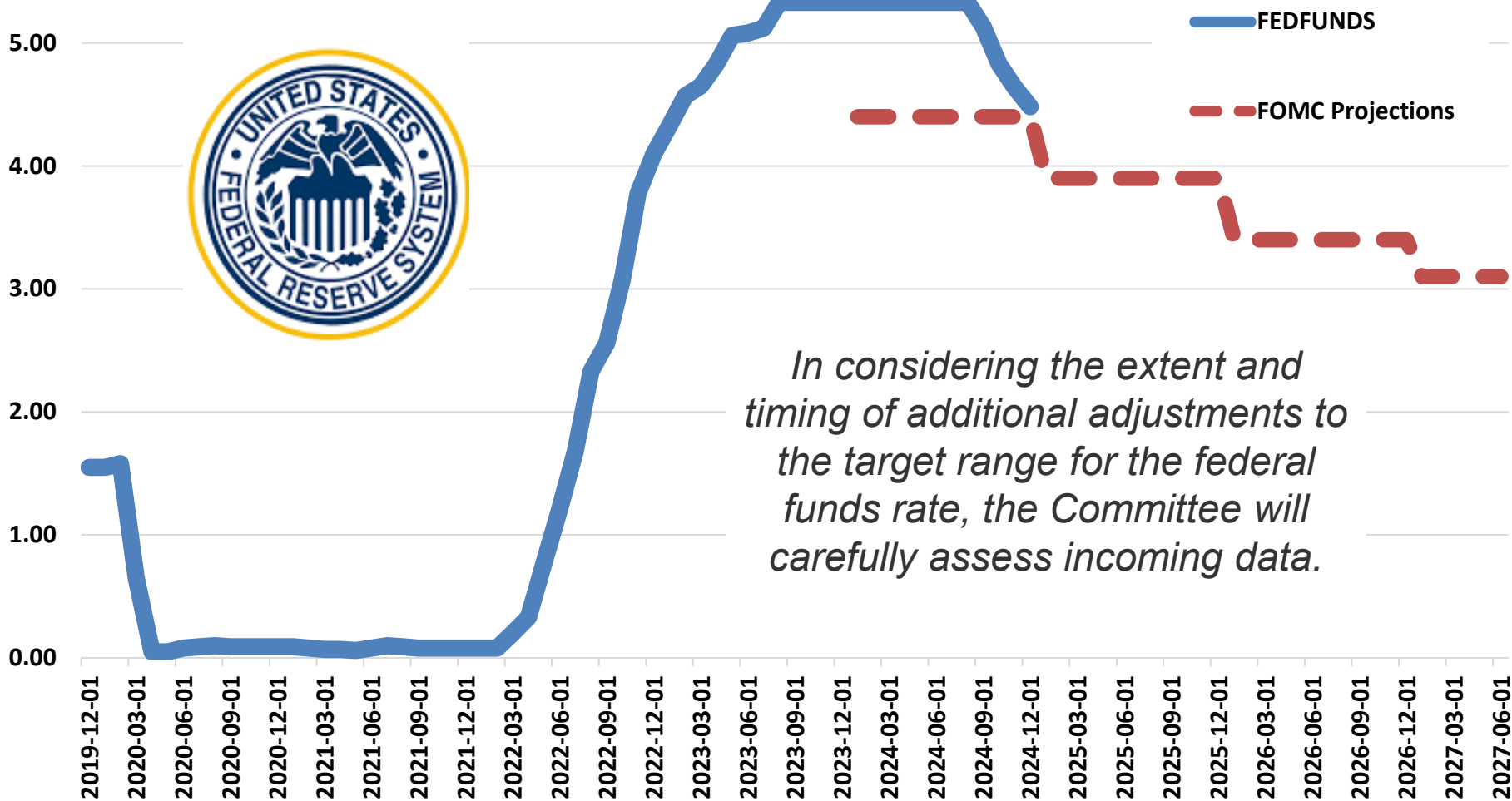
As of November 30, 2024



Source: Conference Board, Haver Analytics, ICI, Bloomberg, Morgan Stanley Wealth Management Global Investment Office

Statistics show that too much optimism may inflate prices, creating lower opportunity going forward.

3 Years of Fed Q.T. Over?



In considering the extent and timing of additional adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data.

Source: U.S. Federal Open Market Committee and Federal Reserve Bank of St. Louis, FOMC Summary of Economic Projections for the Fed Funds Rate, Median [FEDTARMD], January 22, 2025.

It appears that short rates will be higher for longer – and certainly far above what was expected a year ago.

Capital Markets Executive Summary

Markets

- 2024 marked a second year of top quartile returns for the US equity market. Continued price gains in the S&P 500 suggest best case scenarios are being priced in for 2025 where valuations are near extremes and expectations are rosy.
- Our forecast is that reality will prove more challenging while the vast policy agenda of the incoming administration will be noisy and lumpy making discounting of implications hard. Pro growth changes to regulation and taxes, stimulating “animal spirits” are likely ideally exploited through idiosyncratic company and sector selection as systemic impact is apt to be at least partially offset by disruptive policies around tariffs and immigration.
- 2025 S&P 500 gains likely at highest up **5-10%** as price/earnings multiple expansion is stalled and earnings struggle to surpass ambitious forecasts. Financials, domestic industrials, health care, energy infrastructure and mid-cap growth preferred. On a risk-adjusted basis, we suggest broad diversification where 10% potential total returns in areas like IG and real assets are possible.
- US equity valuations appear rich at more than 25x 2024 forward consensus earnings and 22.3x 2025 estimates; currently we are at an equity risk premium of only 26bps.
- Regarding Mag 7, we are observing rational “de-concentration” of the top of the index as idiosyncratic performance between and among the names become more pronounced.

Economy

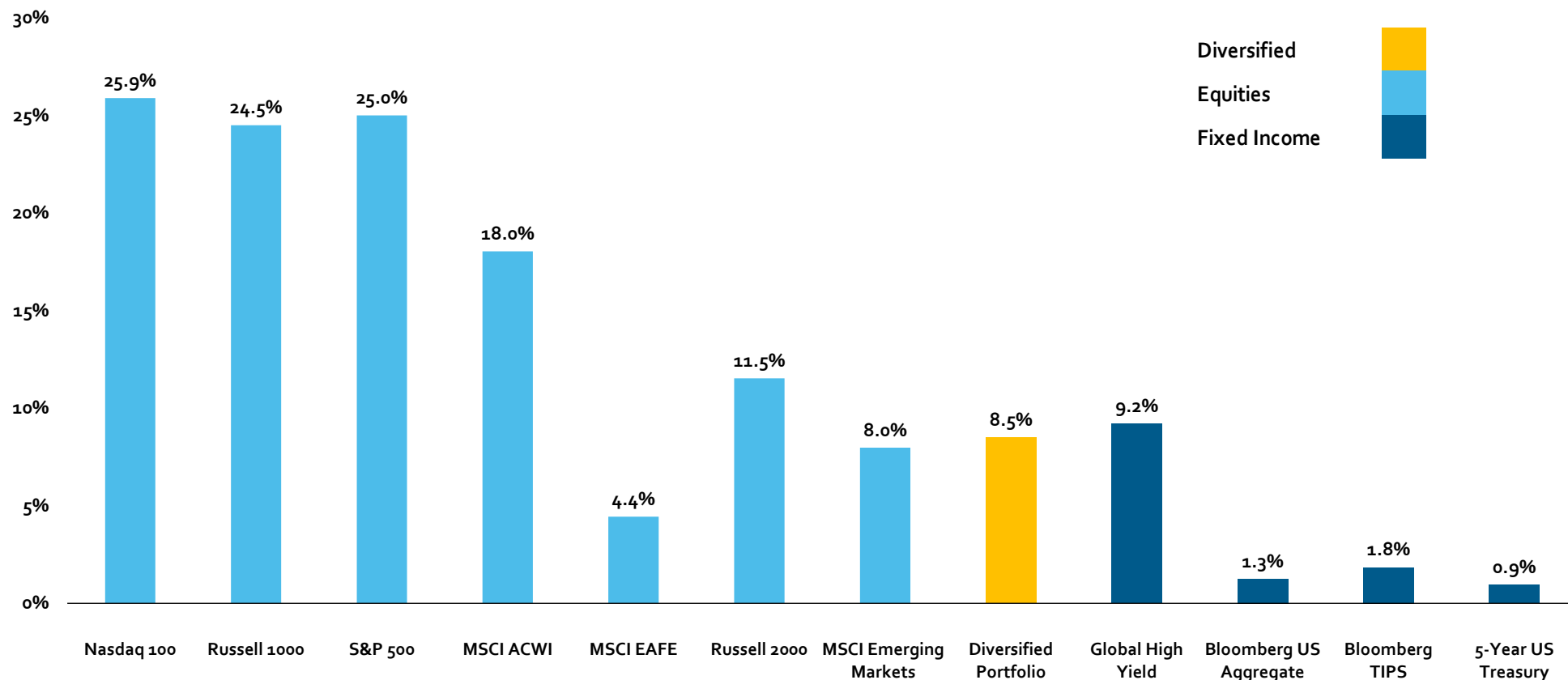
- The underlying economic scenario is conducive for growth still augers for a soft landing. MS & Co. real GDP forecasts remain quite solid at 2.2% in 2024 and 2.1% in 2025. However, risks to the forecasts are weakening labor market and a strained consumer. Service sector stability holds the key—tariffs and Immigration could be destabilizing. Changes to 2026 tax law mostly benefitting consumers, while debts and deficits constrain impact on corporate wealth transfers. The Fed policy path is shallower; rates are structurally higher than the past 15 years but fall into 2025. We now see the USD weakening by mid-year— aiding non-US markets.

Interest Rates

- MS is expecting 2-3 more rate cuts in 2025. We see cycle terminal rate end of 2025 at ~3.625%; We believe we are in a new secular rates regime driven by structural changes and higher debts/deficits.

Total Returns for Select Asset Classes Year-to-Date 2024

Cumulative Return from December 29, 2023 – December 31, 2024

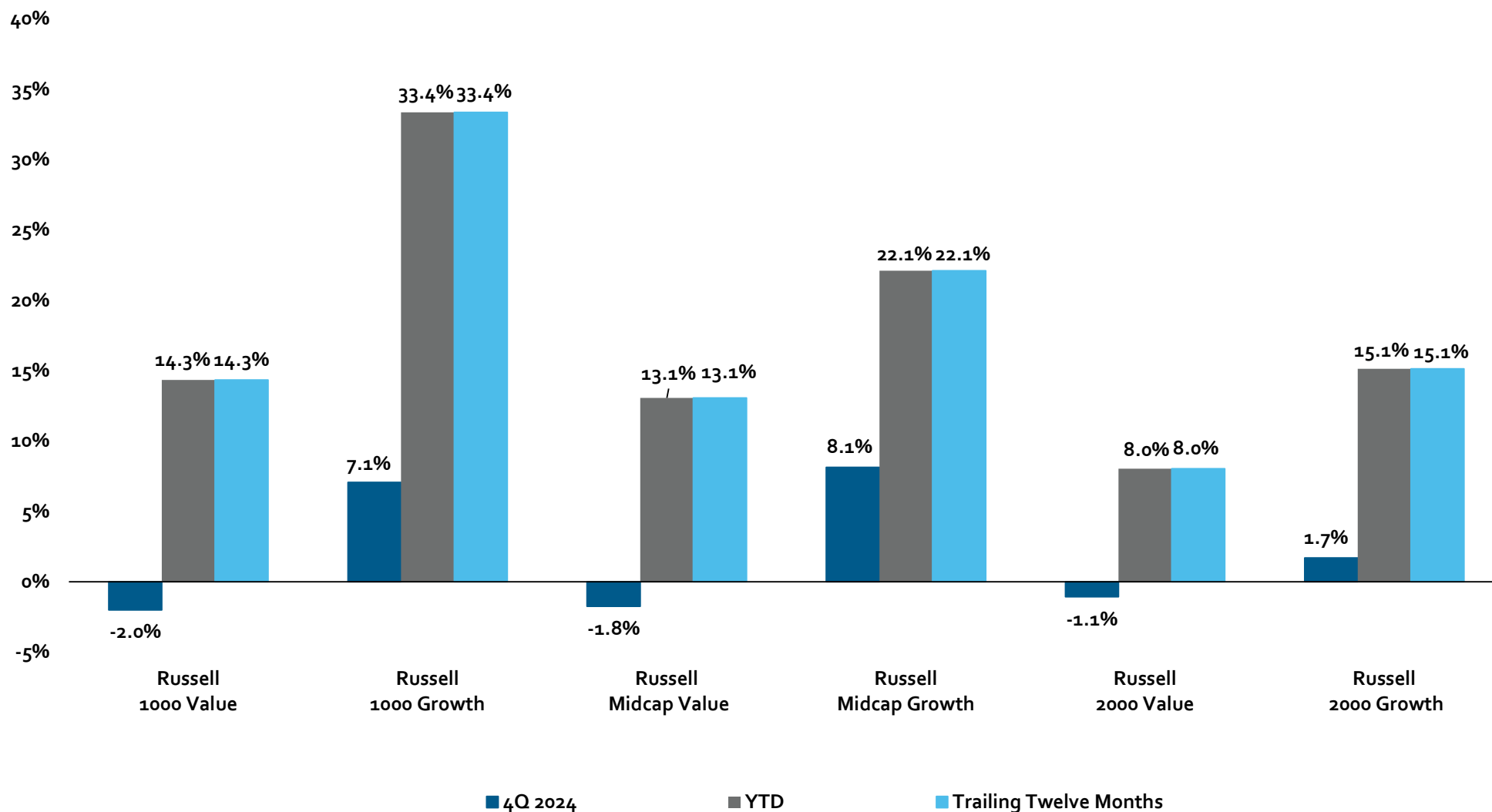


Source: FactSet, Bloomberg, Morgan Stanley Wealth Management Global Investment Office. Diversified portfolio is comprised of 40% MSCI ACWI, 40% Bloomberg US Aggregate, 5% FTSE US 3 mo. T-Bills, 9% HFRX Global Hedge Funds, 3% Bloomberg Commodity Index, and 3% FTSE NAREIT All Equity REITS Total Return Index.

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Russell Style and Market Capitalization Indices

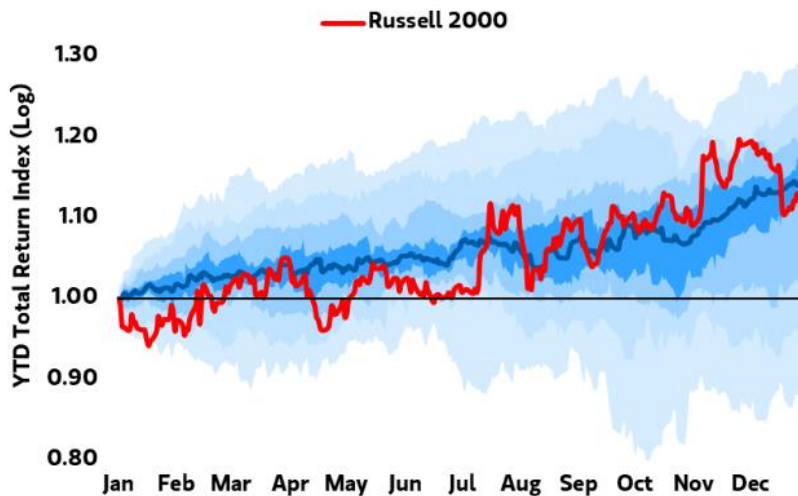
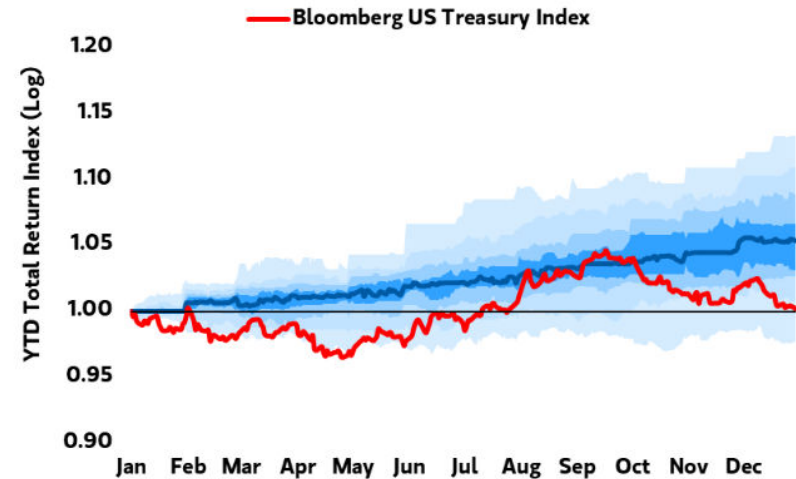
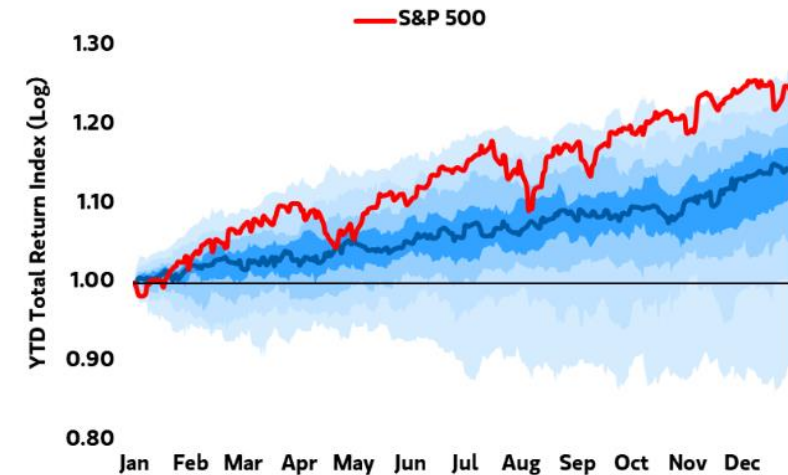
As of December 31, 2024



Source: Bloomberg, Morgan Stanley Wealth Management GIO

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2024 Performance compared to average years

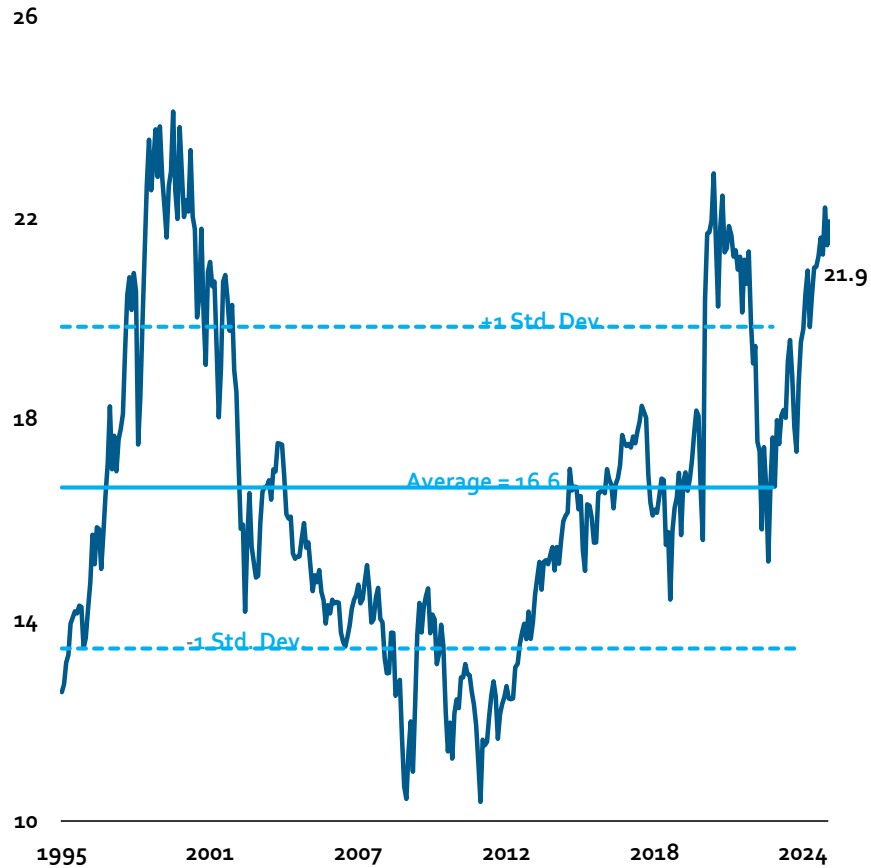


- 2025 Performance was among the best years for the S&P 500
- Lower tier for the treasury bond market
- Average for the Small Cap Russell 2000 index.

US Stocks Valuation Metrics

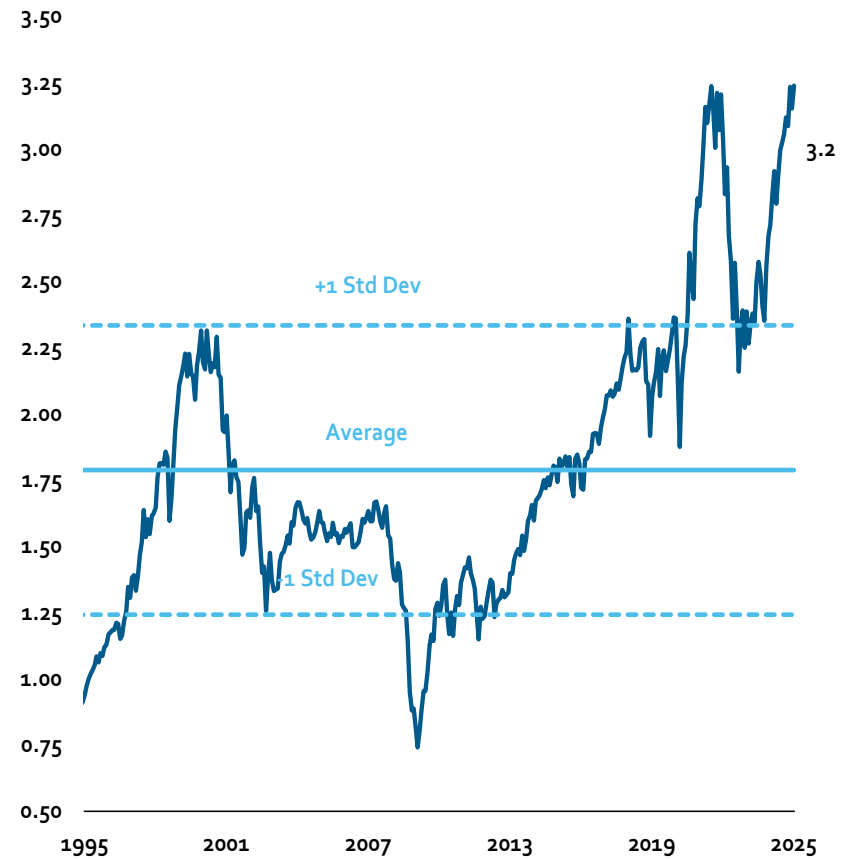
S&P 500 Forward P/E Ratio

As of January 31, 2025



Price-to-Sales of S&P 500

As of January 31, 2025



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIO. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

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Equity Markets: Returns and Valuations

Equity Market Relative Valuation

As of February 7, 2025

	Forward 12 Months									
	Price/Earnings		Price/Cash Flow		Price/Sales		Price/Book Value		Equity Risk Premium	
	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile
US Equities (Russell Indices)										
Large-Cap Growth	28.6	90%	27.4	99%	5.4	99%	10.1	91%	-105	1%
Large-Cap Value	17.3	92%	13.5	98%	1.9	93%	2.6	99%	121	0%
Mid-Cap Growth	30.0	88%	27.9	93%	2.4	82%	9.0	90%	-113	1%
Mid-Cap Value	16.7	66%	12.2	95%	1.5	92%	2.3	92%	143	1%
Small-Cap Growth	36.4	78%	4.4	8%	1.9	90%	4.4	92%	-186	1%
Small-Cap Value	18.9	74%	3.4	3%	1.0	71%	1.3	47%	70	2%
International Equities										
Europe	14.4	69%	9.1	82%	1.5	98%	2.0	97%	449	0%
Japan	15.2	79%	4.0	13%	1.2	98%	1.4	95%	518	6%
Asia Pacific ex Japan	16.3	86%	11.7	84%	2.7	92%	1.8	92%	172	3%
Emerging & Frontier Markets	12.1	72%	6.4	13%	1.4	88%	1.6	80%	836	28%
Total Equities										
US	22.1	92%	16.6	92%	2.7	99%	4.0	98%	-4	1%
International	14.9	75%	7.6	47%	1.5	100%	1.8	99%	672	25%
Emerging Markets	12.1	72%	6.4	13%	1.4	88%	1.6	80%	836	28%

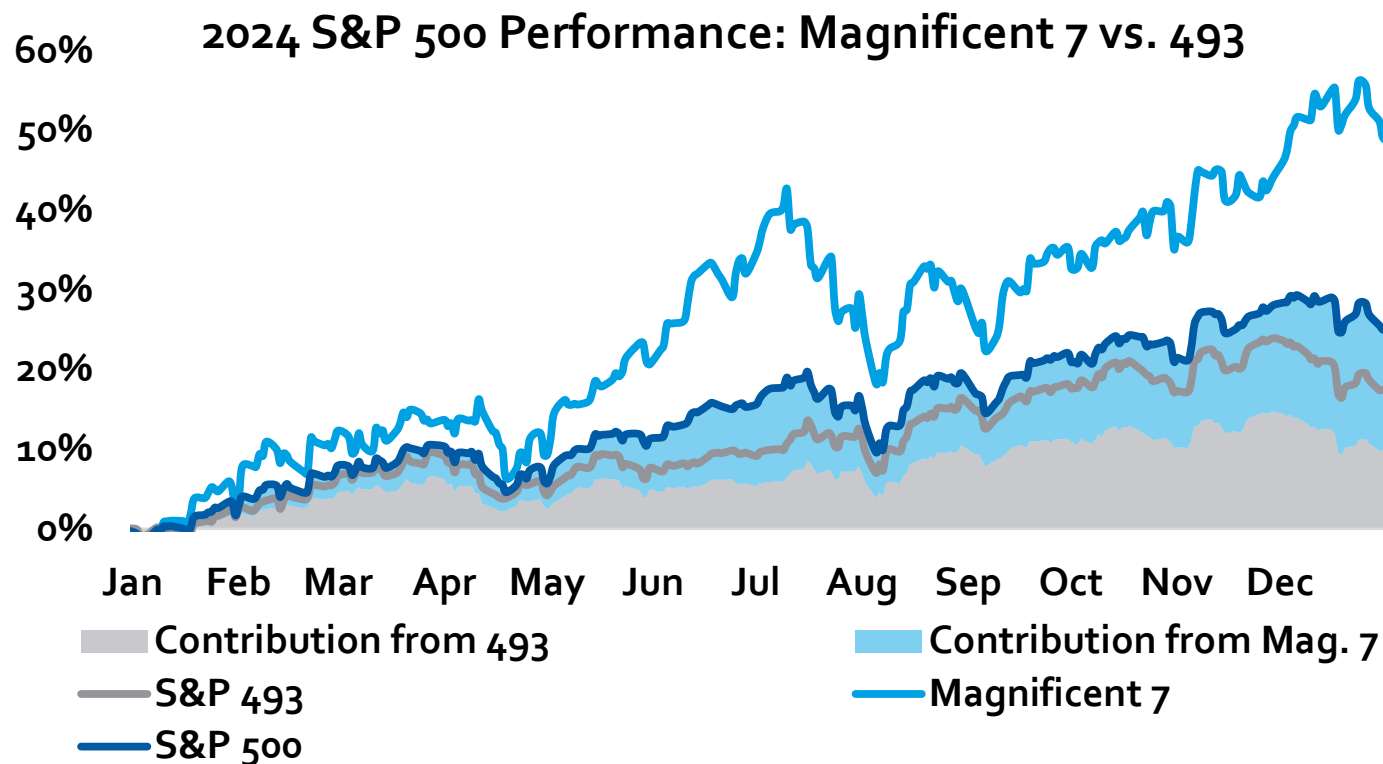
Source: Bloomberg

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The Magnificent Seven 2024 Performance

As of December 31, 2024

- In 2024, the Magnificent Seven increased 48.5%, while the overall S&P 500 increased 25.0% in the same period on a total return basis.
- Of the 25% S&P 500 total return, the Magnificent Seven contributed ~15% while the remaining S&P 493 contributed ~10%.
- The Russell Midcap Index gained 15.3% while the Russell 2000 Small Cap Index increased by 11.5% in 2024.
- The Bloomberg US Agg Total Return, a general measure of the bond market, increased 1.3% in 2024.



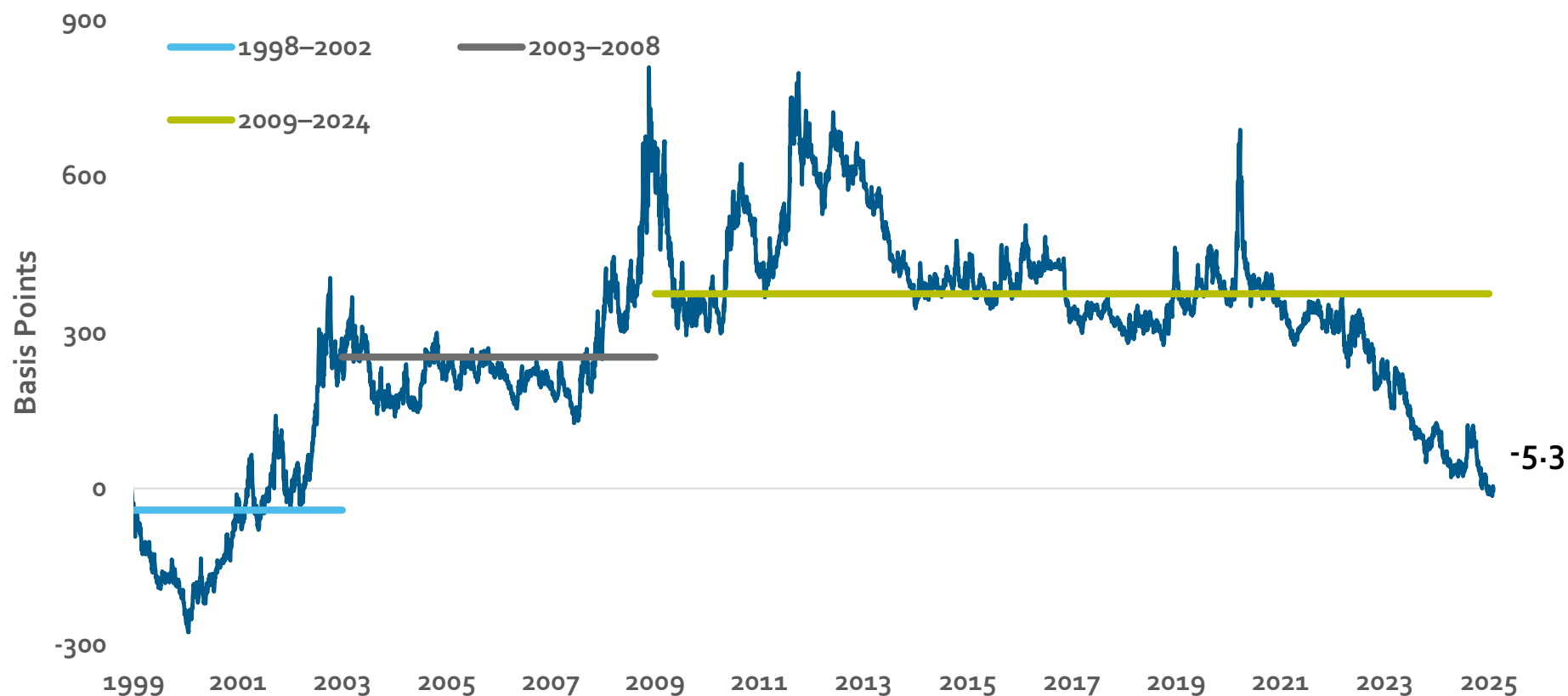
Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office

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Equity Risk Premium Provides Insight Into Valuations

Spread (bp) between the next-12-month consensus earnings yield and the nominal 10-year Treasury yield

As of January 31, 2025



Source: Bloomberg, Morgan Stanley Wealth Management GIO. Equity risk premium is the excess return that an individual stock or the overall stock market provides over a risk-free rate. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time.

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S&P 500 Sector Performance and Valuations

As of December 31, 2024

	S&P 500 Index	Financials	Tech.	Healthcare	Industrials	Energy	Consumer Disc.	Consumer Staples	Comms	Utilities	Materials	Real Estate
S&P Weight	100%	13.6%	32.5%	10.1%	8.1%	3.2%	11.1%	5.5%	9.5%	2.3%	1.9%	1.9%
YTD Return	25.0%	30.6%	36.6%	2.6%	17.5%	5.7%	30.1%	14.9%	40.2%	23.4%	0.0%	5.0%
December 2024 Return	-2.4%	-5.4%	1.2%	-6.2%	-7.9%	-9.5%	2.4%	-5.0%	3.6%	-7.9%	-10.7%	-8.6%
4Q 2024 Return	2.4%	7.1%	4.8%	-10.3%	-2.3%	-2.4%	14.3%	-3.3%	8.9%	-5.5%	-12.4%	-8.5%
Ret. Since Previous Peak (January 03, 2022)	28.5%	29.4%	53.3%	3.7%	32.3%	67.7%	13.6%	14.8%	30.6%	17.6%	0.1%	-12.0%
Ret. since Low (Oct. 12, 2022)	70.1%	66.6%	129.9%	17.2%	61.6%	14.9%	70.4%	28.4%	116.4%	32.6%	28.4%	29.6%
Beta to S&P 500	1.00	1.26	1.13	0.72	1.16	1.09	1.15	0.58	0.78	0.49	1.18	1.12
Fwd. P/E Ratio	21.5x	16.6x	28.9x	16.6x	21.6x	13.6x	28.6x	20.8x	19.4x	17.3x	18.3x	17.2x
10-Yr Average	18.1x	13.3x	21.2x	16.3x	18.3x	27.2x	23.5x	19.7x	16.3x	17.7x	17.0x	18.5x
P/B Ratio	5.0	2.2	13.0	4.7	6.3	2.0	10.2	6.5	5.0	2.2	2.7	3.0
10-Yr Average	2.8	1.3	4.2	3.8	3.6	2.0	4.6	5.0	2.7	1.9	2.8	3.0
Dividend Yield	1.2%	1.4%	0.6%	1.7%	1.3%	3.4%	0.6%	2.5%	0.7%	3.0%	2.0%	3.6%
10-Yr Average	1.7%	1.9%	1.1%	1.6%	1.8%	3.7%	1.1%	2.6%	2.5%	3.3%	2.0%	3.1%

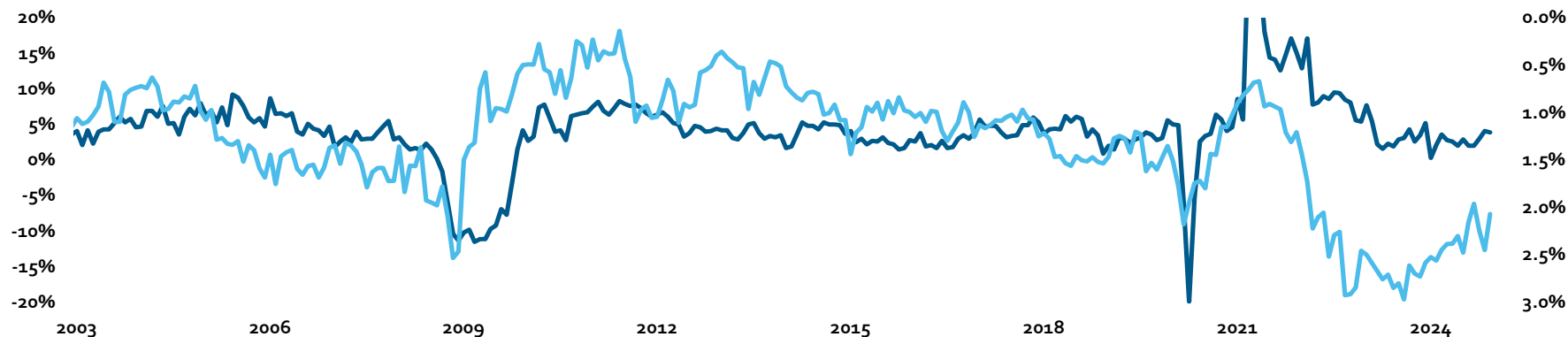
Source: FactSet, Morgan Stanley Wealth Management GIO

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Macro Outlook: US Consumer Debt

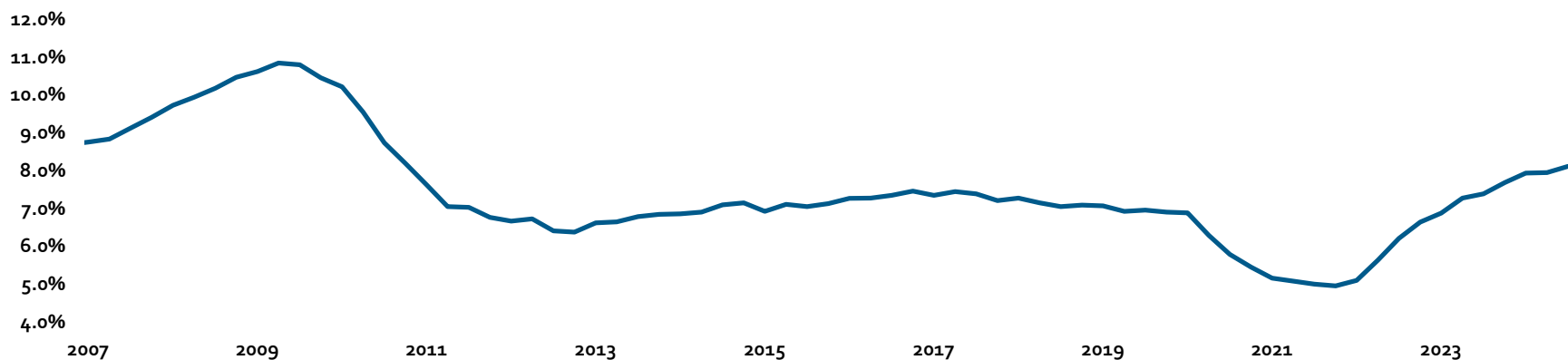
US Retail Sales, Year-Over-Year (left axis) US 30-Year Mortgage Spread (right axis, inverted)

As of January 31, 2025



Auto Loan Delinquency 30+ Rate

As of September 30, 2024

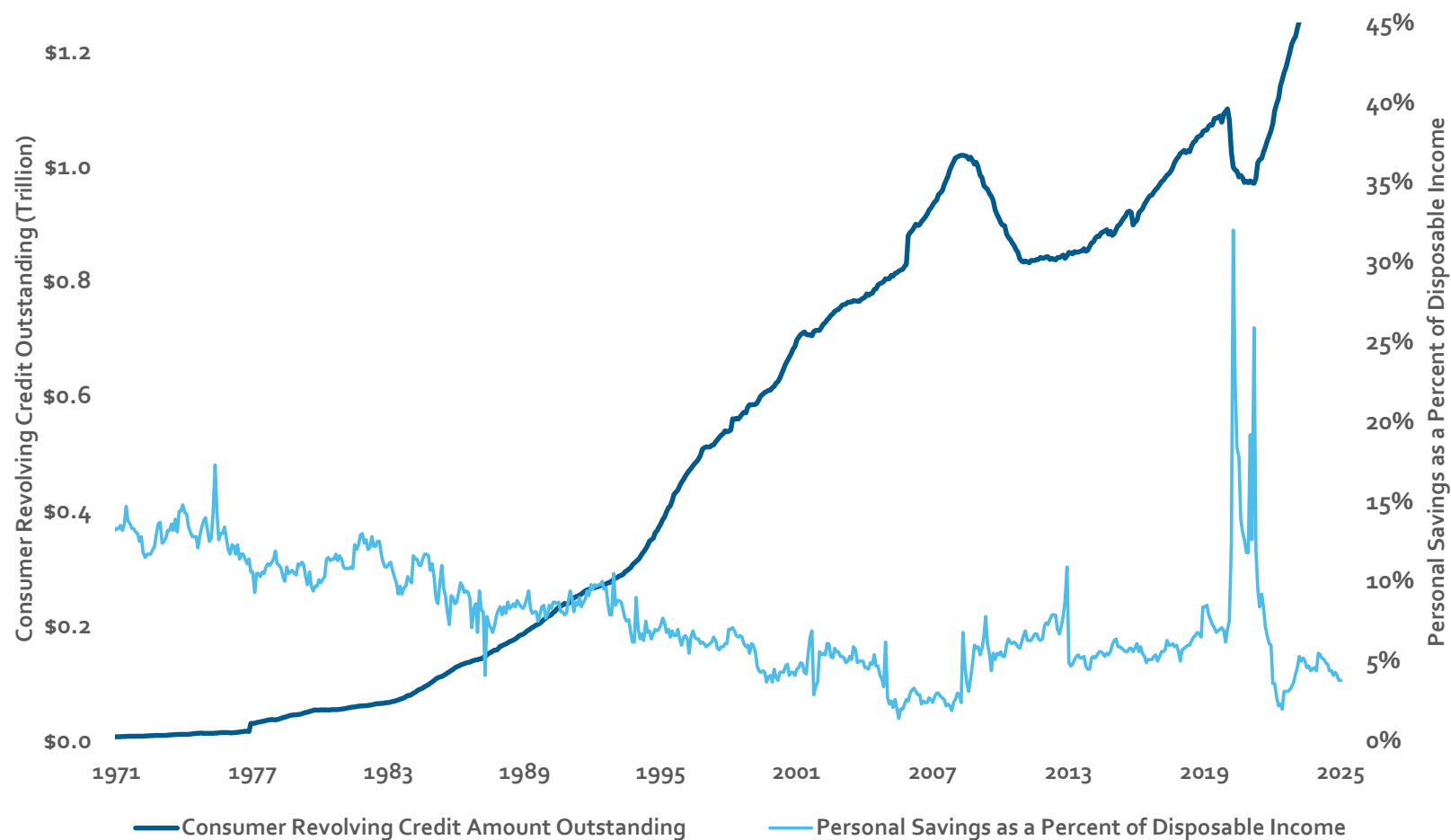


Source: Morgan Stanley Wealth Management GIO, Bloomberg

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Consumer Revolving Credit Outstanding vs. Personal Savings

As of January 31, 2025



- Revolving credit card balances exceed the pre-pandemic peak.
- Savings has plummeted to its lowest level in 15 years.

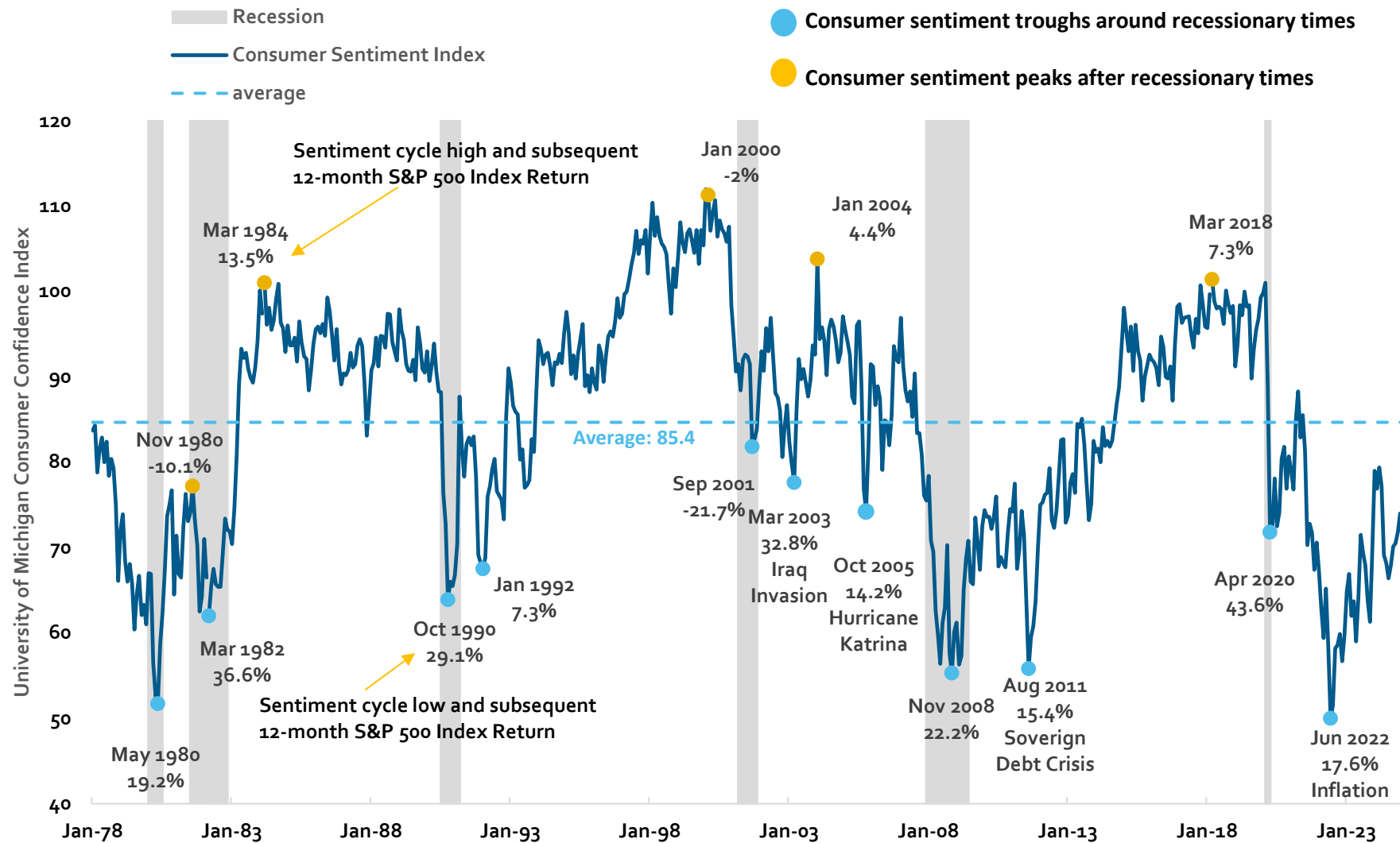
Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office

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Consumer Confidence and S&P 500 12-Month Forward Returns

Consumer Sentiment Index- University of Michigan

As of January 31, 2025



Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office

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CPI and the Fed-Preferred PCE Measure Different Things

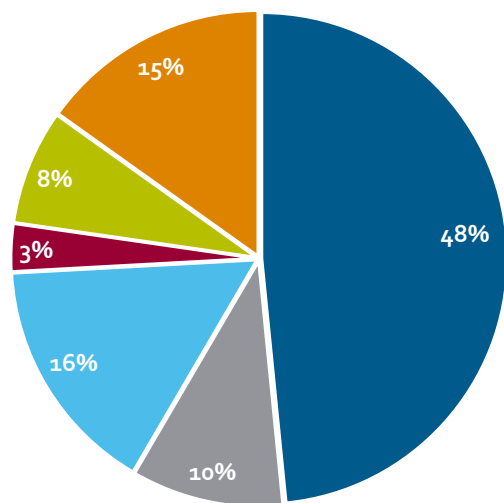
Differences Between Core CPI and PCE

Data through November 2024 for PCE and through December 2024 for CPI

The CPI & PCE weight difference between Housing, Transportation, and Health Care is significant:

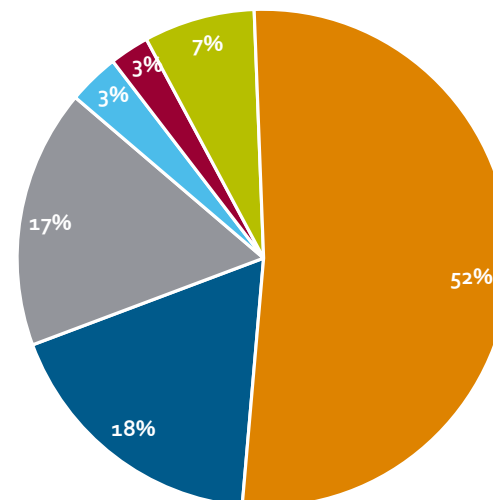
Housing: 30% Δ
Transportation: 12% Δ
Medical Care: 7% Δ

Core CPI Weights



- Housing
- Transportation
- Recreation
- Medical care
- Apparel
- Other goods and services

Core PCE Weights



- Housing
- Transportation
- Recreation
- Medical care
- Apparel
- Other goods and services

CPI data is based on what households are buying for out-of-pocket expenditures on goods and services

PCE data is based on what businesses are selling

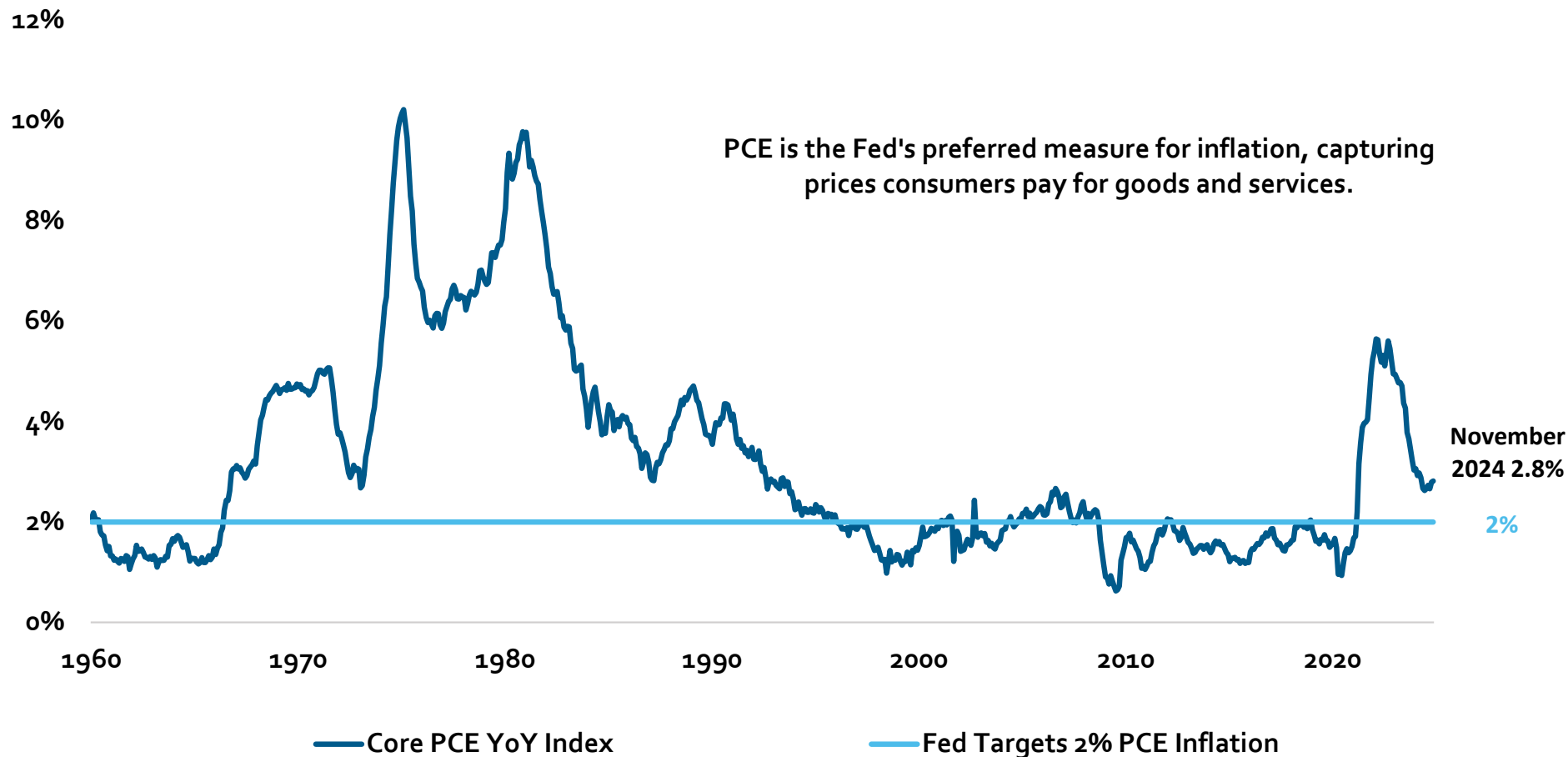
Source: Bureau of Economic Analysis, US Bureau of Labor Statistics, Morgan Stanley Wealth Management GIO

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PCE Inflation and the Fed's Target

Inflation Is Back to Levels Last Seen Several Decades Ago

As of November 30, 2024



Source: Bloomberg, Morgan Stanley Wealth Management GIO

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Inflation, Interest Rates and Unemployment Across the Globe

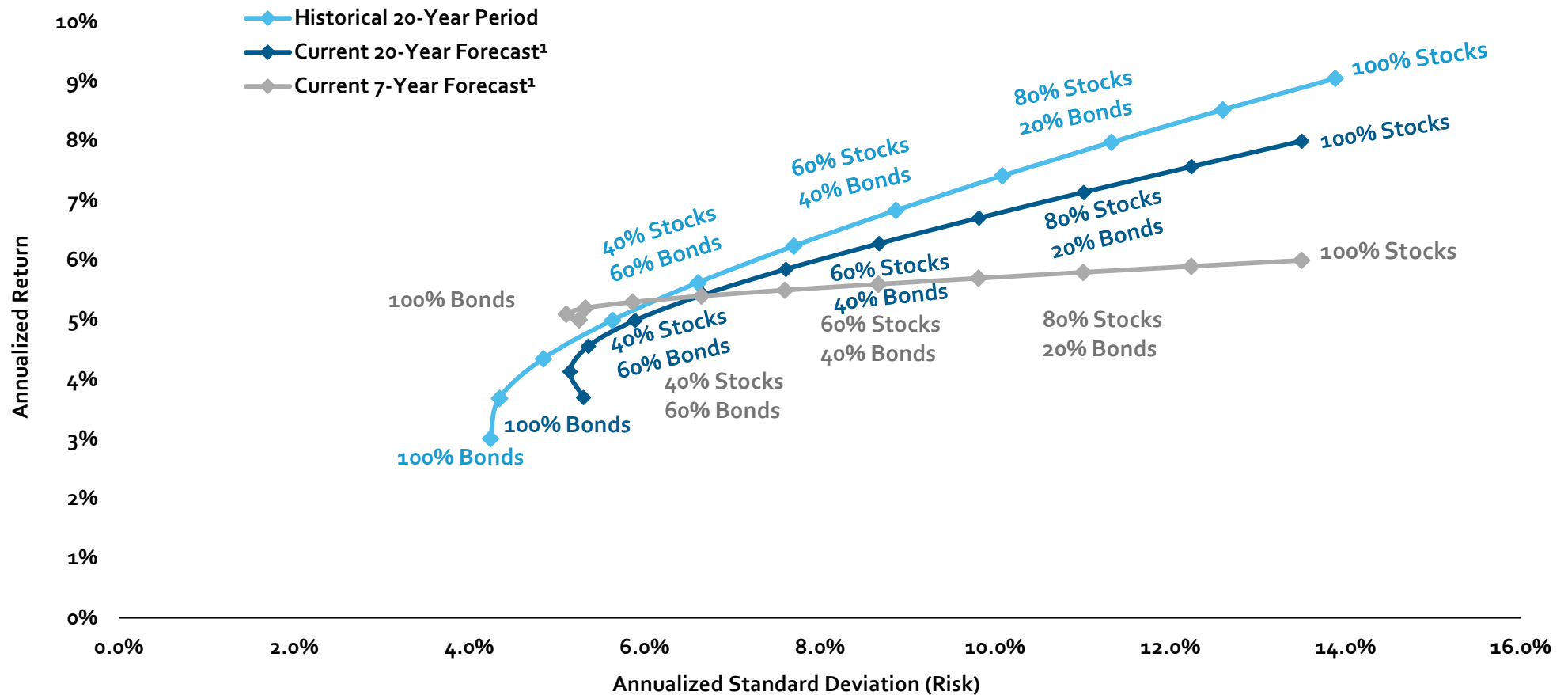
	COUNTRY	YOY INFLATION (%)		10-YR GOVT. BOND YIELD (%)		UNEMPLOYMENT RATE (%)		USD EXCHANGE RATE		CENTRAL BANK	
		CURRENT	YEAR AGO	CURRENT	YEAR AGO	CURRENT	YEAR AGO	CURRENT	YOY (%)	POLICY PHASE	
DEVELOPED MARKETS	US	2.7	3.1	4.4	3.9	4.2	3.7			Easing	
	Japan	2.6	2.7	1.1	0.7	2.5	2.5	JPY	154.24	7.4	Tightening
	Canada	2.0	3.1	3.2	3.1	6.8	5.8	CAD	1.42	5.8	Easing
	UK	2.3	4.6	4.4	3.7	4.3	4.1	GBP	0.79	0.3	Easing
	France	1.3	3.5	3.0	2.5	7.2	7.2				Easing
	Germany	2.2	3.2	2.2	2.0	6.1	5.8	EUR	0.95	-3.9	Easing
EMERGING MARKETS	China	0.2	-0.5	1.7	2.6	4.0	4.2	CNY	7.28	2.1	Easing
	India	5.5	5.6	6.7	7.2	7.7	7.1	INR	84.87	2.1	Easing
	Taiwan	2.1	2.9	1.6	1.3	3.4	3.4	TWD	32.50	3.7	Holding
	Korea	1.5	3.3	2.7	3.3	2.7	2.8	KRW	14.37	9.7	Easing
	Brazil	4.9	4.7	14.1	10.6	6.2	7.6	BRL	6.08	19.3	Tightening
	Mexico	4.6	4.3	10.1	9.1	2.5	2.8	MXN	20.12	14.7	Easing

Source: Bloomberg, Morgan Stanley Wealth Management Global Investment Office as of Dec. 13, 2024

Forecasted Efficient Frontiers

Stock and Bond Blends

As of January 31, 2025



Source: FactSet, Morgan Stanley Wealth Management GIO. For illustrative purposes only. Stocks are represented by the S&P 500 and bonds are represented by the Bloomberg US Aggregate Index. (1) Forecasts are based on capital market assumptions as published in the Annual Update of GIC Capital Market Assumptions, updated March 29, 2023. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

MS Targets 2025

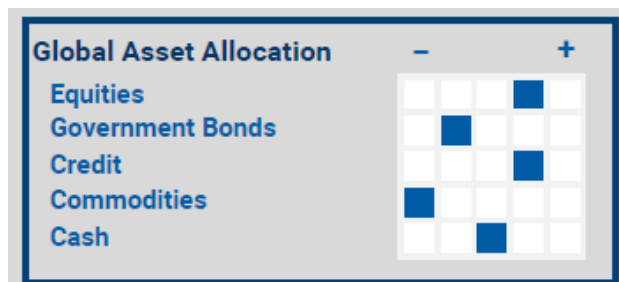
Index	Current Price	New Target Price - Dec 2025 (% from current levels)			Old Target Price - Jun 2025 (% from current levels)		
		Bull	Base	Bear	Bull	Base	Bear
S&P 500	5,949	7,400 24%	6,500 9%	4,600 -23%	6,350 7%	5,400 -9%	4,200 -29%
MSCI Europe	2,014	2,450 22%	2,150 7%	1,520 -25%	2,730 36%	2,500 24%	1,710 -15%
TOPIX	2,701	3,500 30%	3,000 11%	2,150 -20%	3,400 26%	3,000 11%	2,220 -18%
MSCI EM	1,084	1,400 29%	1,100 1%	750 -31%	1,410 30%	1,160 7%	760 -30%

Source: FactSet, IBES, Morgan Stanley Research forecasts; Note: Price data as of November 14, 2024.

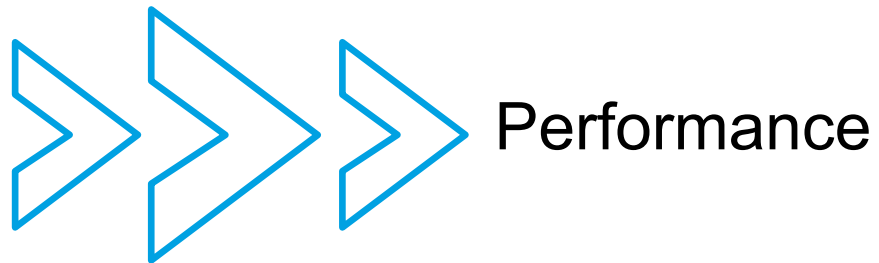
Index	Current Price	Dec 2025 Base Case Index Target (% from current)	Prior Target (Jun 2025) (% upside)	MS Top-Down EPS YoY %			Consensus EPS Forecast YoY %			MS Base Case N12M P/E Dec 2025	Current Consensus N12M P/E	10 Year Avg. Consensus N12M P/E
				2024	2025	2026	2024	2025	2026			
S&P 500	5,949	6,500 9%	5,400	239 9%	271 13%	303 12%	240 9%	275 14%	310 13%	21.5	22.2	17.9
MSCI Europe	2,014	2,150 7%	2,500	139 1%	146 5%	152 4%	140 2%	151 8%	167 11%	14.1	13.3	14.3
TOPIX	2,701	3,000 11%	3,000	182 10%	196 8%	214 9%	180 9%	195 8%	213 9%	14.0	13.6	14.3
MSCI EM	1,084	1,100 1%	1,160	79 18%	85 8%	92 8%	82 22%	94 15%	105 12%	12.0	12.4	12.1

Source: FactSet, IBES, Morgan Stanley Research forecasts; Note: Price data as of November 14, 2024.

Conclusion and Positioning



- Sources of material upside to the S&P500 index—2025 earnings estimates (up 15%) and multiples (23x)—are likely constrained; in a world of potentially 5-10% “at best” returns next year, we are tilt toward stock selection with a focus on value and earnings achievability. Financials and cyclicals like energy and industrials appear attractive.
- With this backdrop, Investment Grade corporate bonds remain in a sweet spot, and we remain overweight, with a neutral duration.
- 2025 policy execution and sequencing risks are paramount; watch for growth negative actions in immigration, tariffs and geo-politics to potentially offset growth positives from tax.
- Inflation risks are to the upside, and Fed rate path while now conservatively priced remains a source of disappointment.
- We are tactically reducing exposure to International stocks (esp. Europe) while remaining opportunistic on Japan and EM, which appear undervalued.
- Diversification and risk management remains our objective, we favor real assets, gold, hedge funds, private infrastructure, private equity secondaries and select private credit.



Fund Overview

Fund Assets Under Management

\$89.02m

Annual Investment Management Costs*

0.29%

Description

The Long Term Portfolio's objective is to maximize capital appreciation and income while maintaining purchasing power and maximizing excess investment returns over inflation.

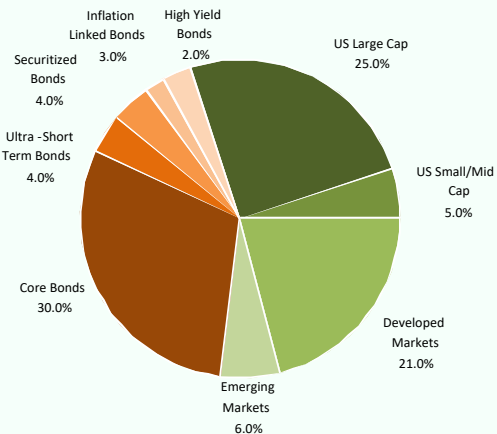
About Performance

*The investment results depicted herein represent historical Net performance after the deduction of investment manager and portfolio implementation costs.

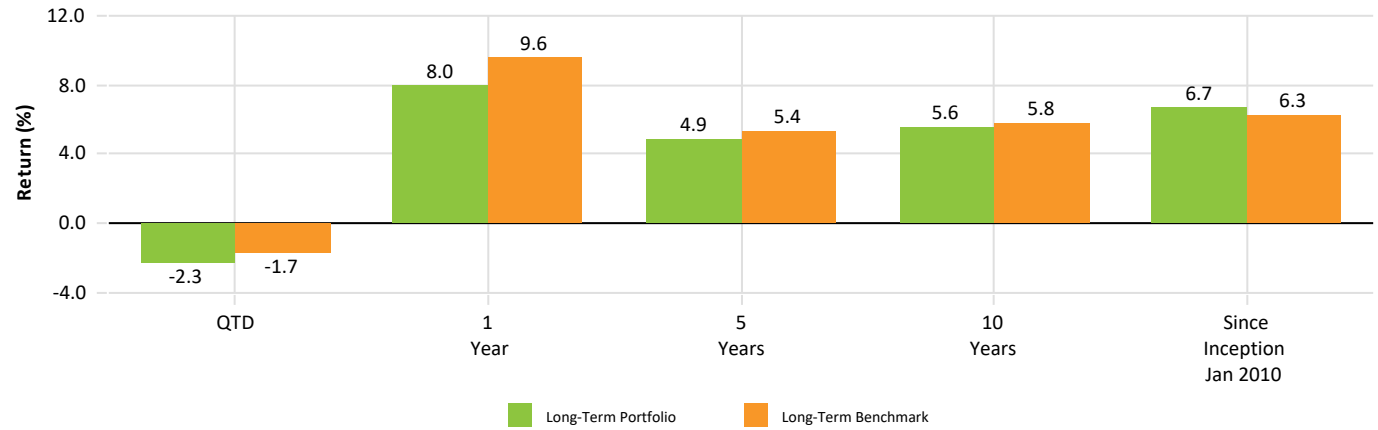
Annual, cumulative and annualized total returns are calculated assuming reinvestment of dividends and income plus capital appreciation. Performance for periods greater than one year is annualized. The performance data presented has been prepared by the fund or its sponsor.

Past performance is not a guarantee of future results.

Target Asset Allocation

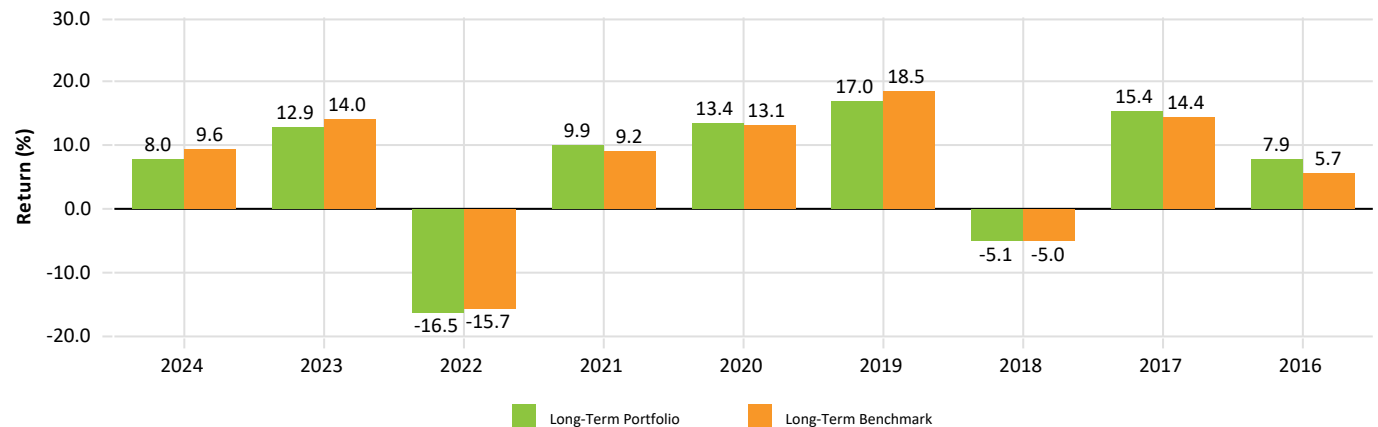


Multi-Period Performance Analysis



	QTD	1 Year	5 Years	10 Years	Since Inception Jan 2010
Long-Term Portfolio	-2.26	8.00	4.89	5.57	6.68
Long-Term Benchmark	-1.70	9.57	5.38	5.77	6.29

Calendar Year Performance Analysis



	YTD	2023	2022	2021	2020	2019	2018	2017	2016
Long-Term Portfolio	8.00	12.88	-16.49	9.94	13.45	16.97	-5.08	15.35	7.88
Long-Term Benchmark	9.57	14.03	-15.75	9.19	13.08	18.51	-5.04	14.37	5.66

Colorado Gives Foundation: Long-Term Fund

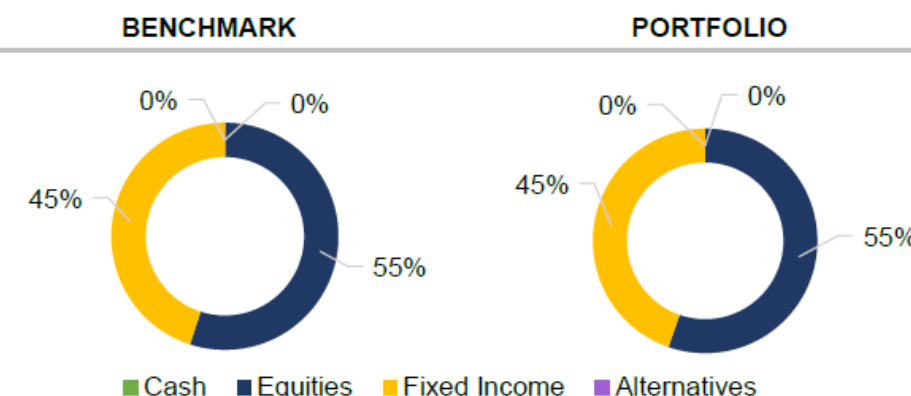


YEAR ENDED DECEMBER 31, 2024

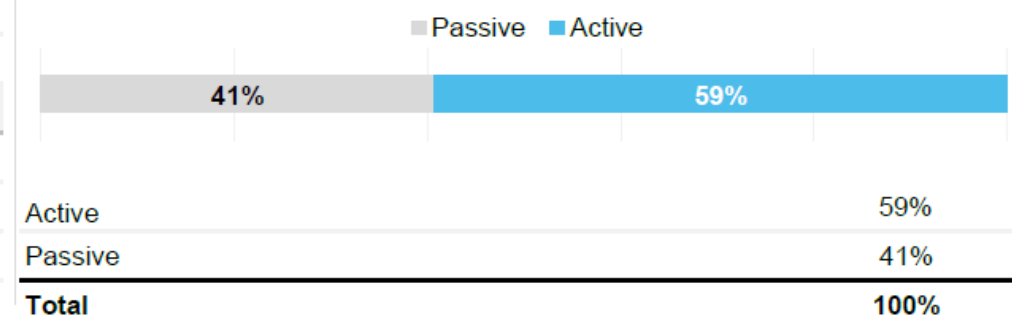
Asset Class / Manager	Benchmark	Benchmark Allocation	Average Allocation	Benchmark Index Return	CGF Asset Class Return	Benchmark Attribution Return	Asset Allocation Effect	Manager Selection Effect	Interaction Effect	Portfolio Attribution
Equities	MSCI ACWI	55.0%	53.5%	17.49%	13.49%	9.51%	-0.08%	-2.17%	0.10%	7.20%
Fixed Income	Bloombergs Barclays US Agg	45.0%	46.5%	1.25%	1.90%	0.45%	-0.10%	0.33%	0.04%	0.88%
Cash	90-Day Treasury Bill	0.0%	0.0%	5.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Attribution Totals		100.0%	100.0%			9.96%	-0.17%	-1.84%	0.14%	8.09%

PORTFOLIO POSITIONING VS. POLICY BENCHMARK

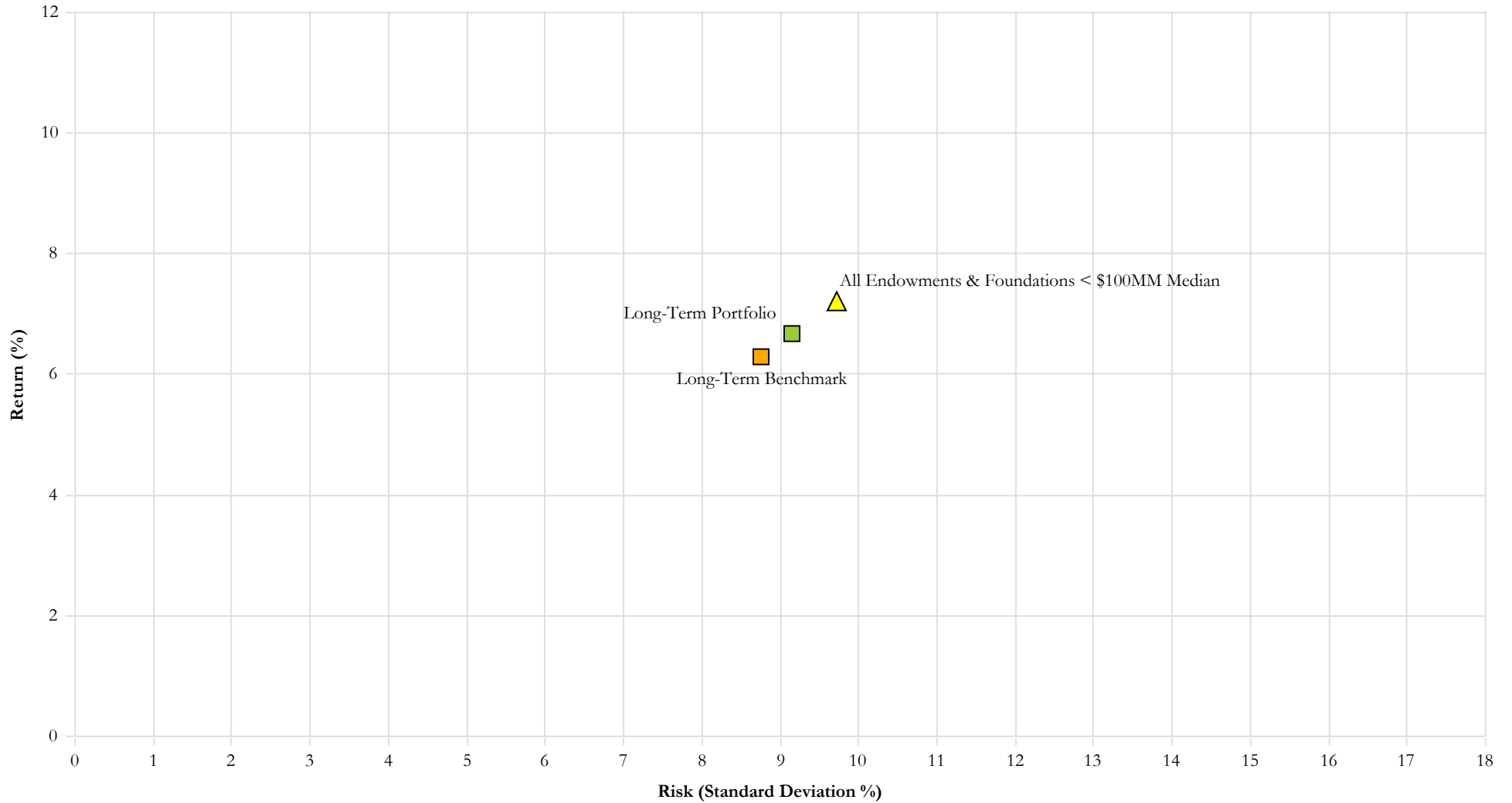
ASSET CLASS	BENCHMARK	PORTFOLIO	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
Cash	-	0.0%		■	
Equities	55.0%	55.3%		■	
US Large Cap	34.9%	35.9%		■	
US SMID Cap	0.4%	1.0%		■	
International	14.1%	13.1%		■	
Emerging Market	5.6%	5.3%		■	
Fixed Income	45.0%	44.7%		■	
Investment Grade FI	45.0%	44.7%		■	
Non-US Fixed Income	-	-			
Sub-Investment Grade FI	-	-			
Tax Exempt Fixed Income	-	-			
Alternatives	-	-			
Real Assets	-	-			
Hedged Strategies	-	-			
Private Investments	-	-			



ACTIVE/PASSIVE ALLOCATION

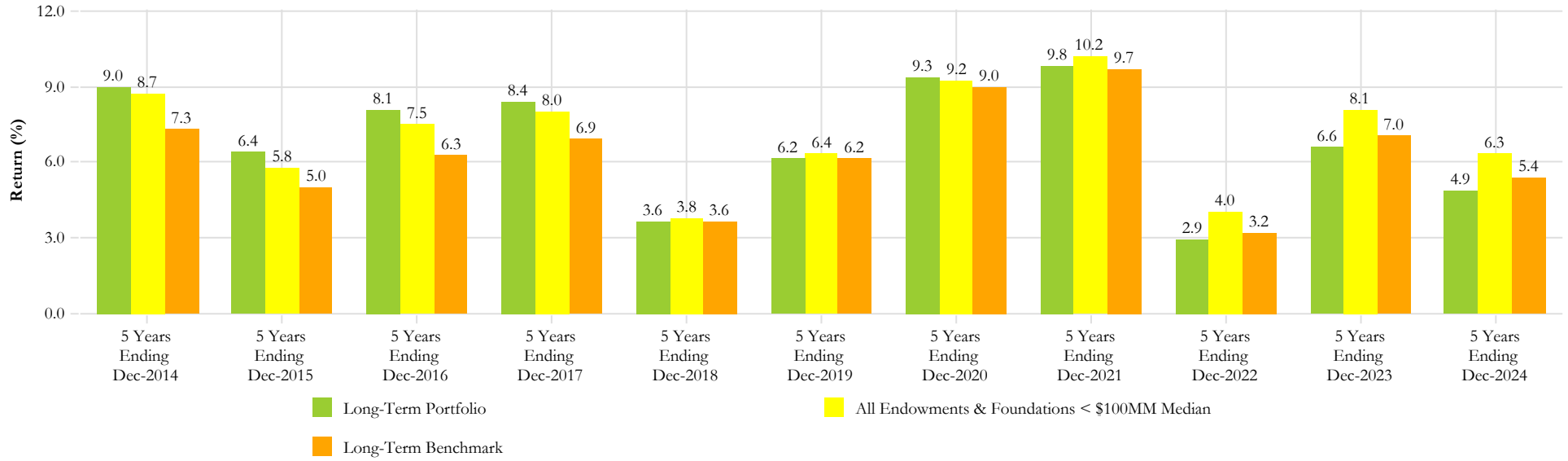


Since Inception (01/01/2010) Risk / Return Analysis

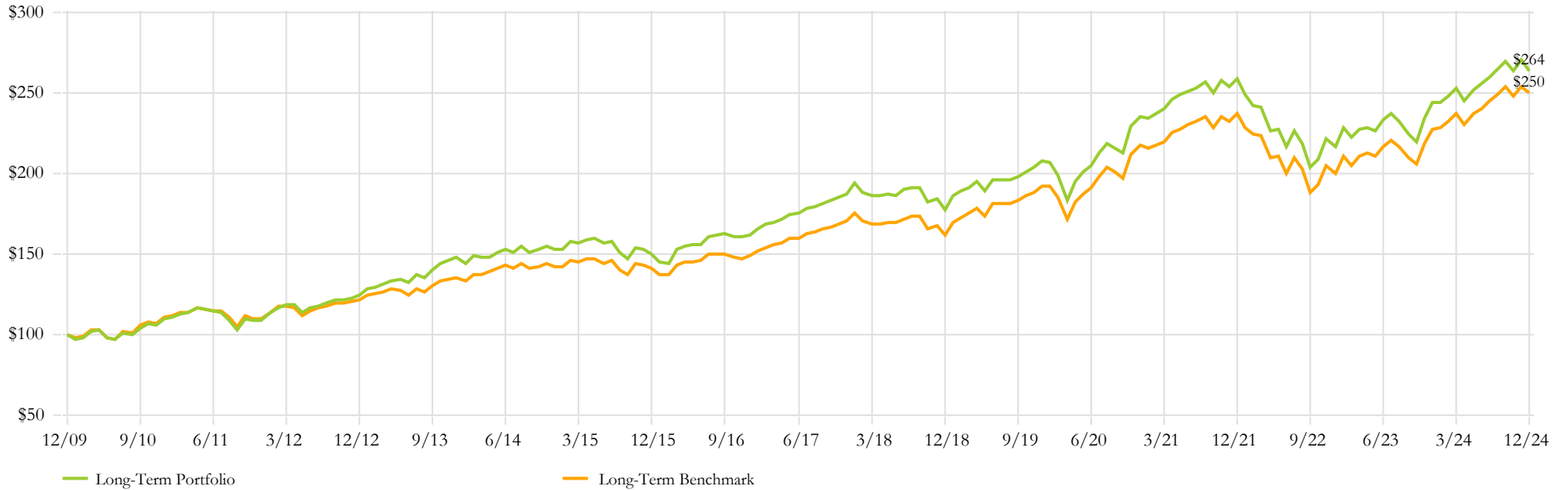


	Return	Standard Deviation	Sharpe Ratio
Long-Term Portfolio	6.68	9.17	0.62
Long-Term Benchmark	6.29	8.77	0.60
All Endowments & Foundations < \$100MM Median	7.20	9.74	0.64

Rolling 5 Year Returns vs Peer Universe



Growth of \$100 Since January 2010



Fund Overview

Fund Assets Under Management
\$8.38m

Annual Investment Management Costs*
0.21%

Description

The Short Term Portfolio's objective is to preserve capital, maintain purchasing power, and generate investment returns while carrying out the mission of the Foundation.

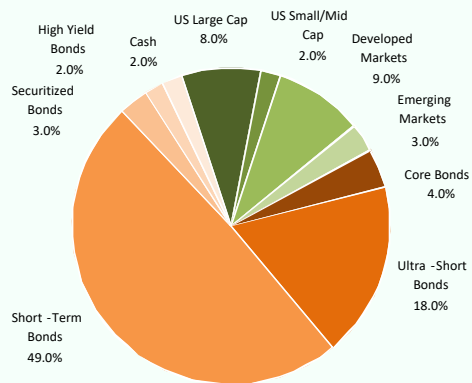
About Performance

*The investment results depicted herein represent historical Net performance after the deduction of investment manager and portfolio implementation costs.

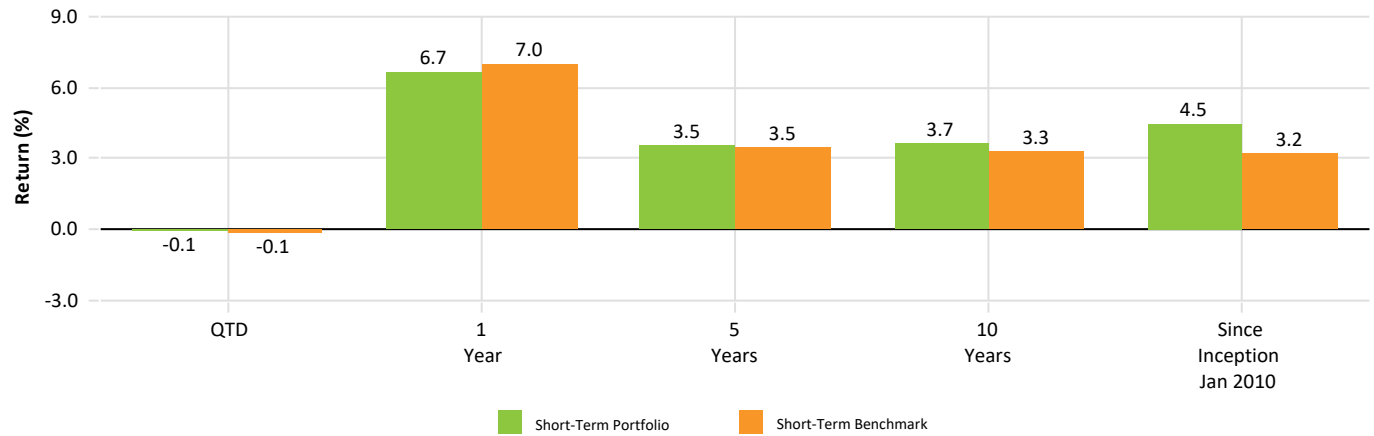
Annual, cumulative and annualized total returns are calculated assuming reinvestment of dividends and income plus capital appreciation. Performance for periods greater than one year is annualized. The performance data presented has been prepared by the fund or its sponsor.

Past performance is not a guarantee of future results.

Target Asset Allocation

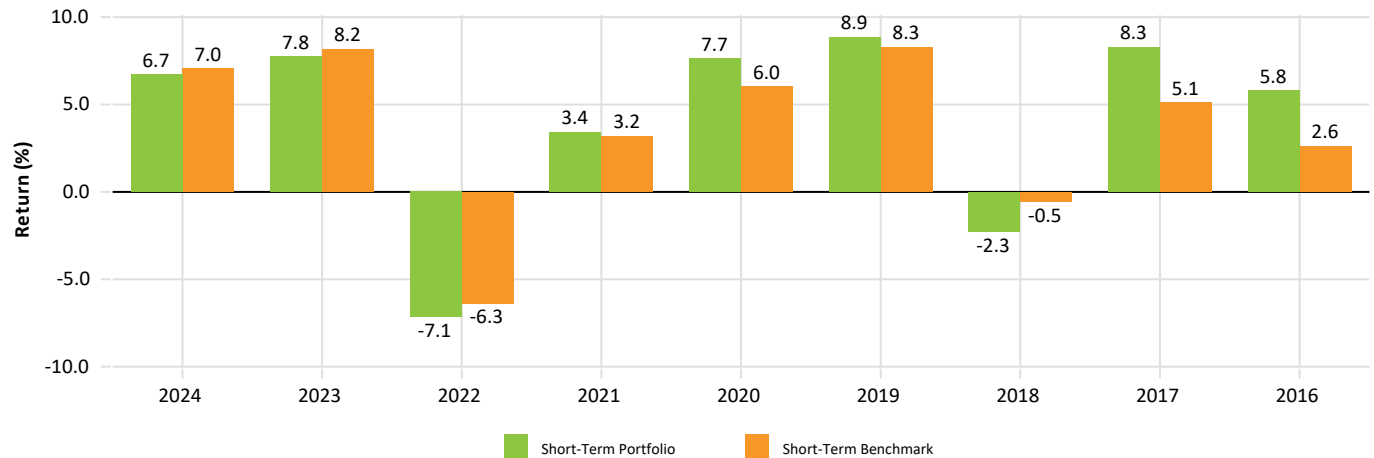


Multi-Period Performance Analysis



	QTD	1 Year	5 Years	10 Years	Since Inception Jan 2010
Short-Term Portfolio	-0.06	6.71	3.51	3.66	4.51
Short-Term Benchmark	-0.13	7.00	3.47	3.28	3.20

Calendar Year Performance Analysis



	YTD	2023	2022	2021	2020	2019	2018	2017	2016
Short-Term Portfolio	6.71	7.78	-7.15	3.37	7.67	8.88	-2.28	8.34	5.82
Short-Term Benchmark	7.00	8.16	-6.31	3.17	6.01	8.27	-0.54	5.15	2.63

*Short-term benchmark consist of: 20% MSCI All Country World Index, 75% Bloomberg Barclays US Aggregate Index, and 5% 90-day Treasury Bill.

Colorado Gives Foundation: Short-Term Fund

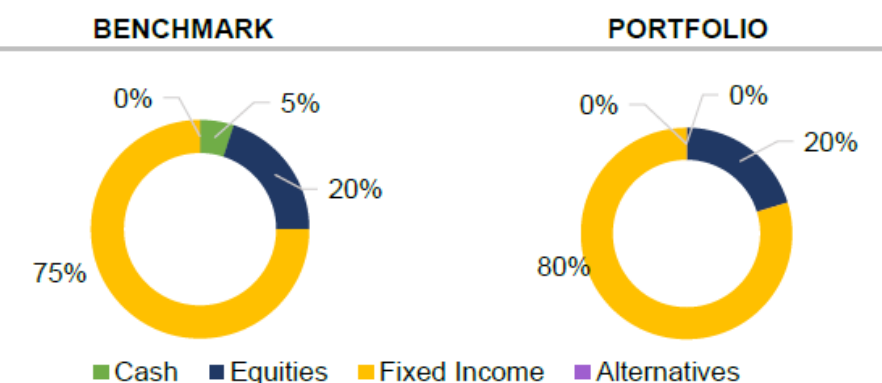


YEAR ENDED DECEMBER 31, 2024

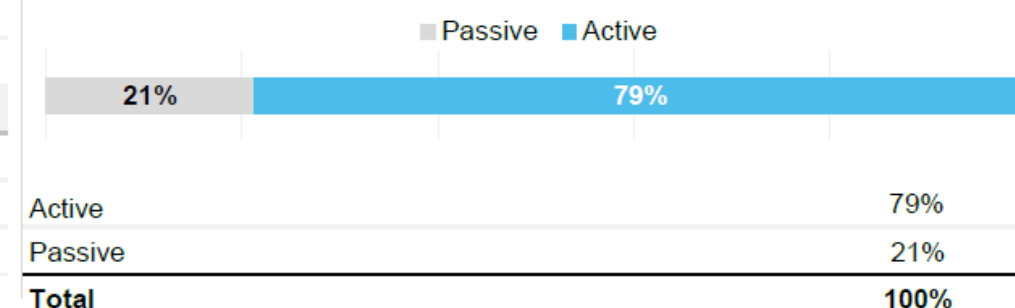
Asset Class / Manager	Benchmark	Benchmark Allocation	Average Allocation	Benchmark Index Return	CGF Asset Class Return	Benchmark Attribution Return	Asset Allocation Effect	Manager Selection Effect	Interaction Effect	Portfolio Attribution
Equities	MSCI ACWI	20.0%	21.0%	17.49%	14.30%	3.48%	0.11%	-0.62%	-0.03%	3.00%
Fixed Income	Bloombergs Barclays US Agg 1-3 Yr	75.0%	79.0%	4.39%	4.69%	3.27%	-0.09%	0.24%	0.01%	3.70%
Cash	90-Day Treasury Bill	5.0%	0.0%	5.45%	1.50%	0.25%	0.08%	-0.20%	0.21%	0.00%
Attribution Totals		100.0%	100.0%			7.00%	0.10%	-0.58%	0.19%	6.71%

PORTFOLIO POSITIONING VS. POLICY BENCHMARK

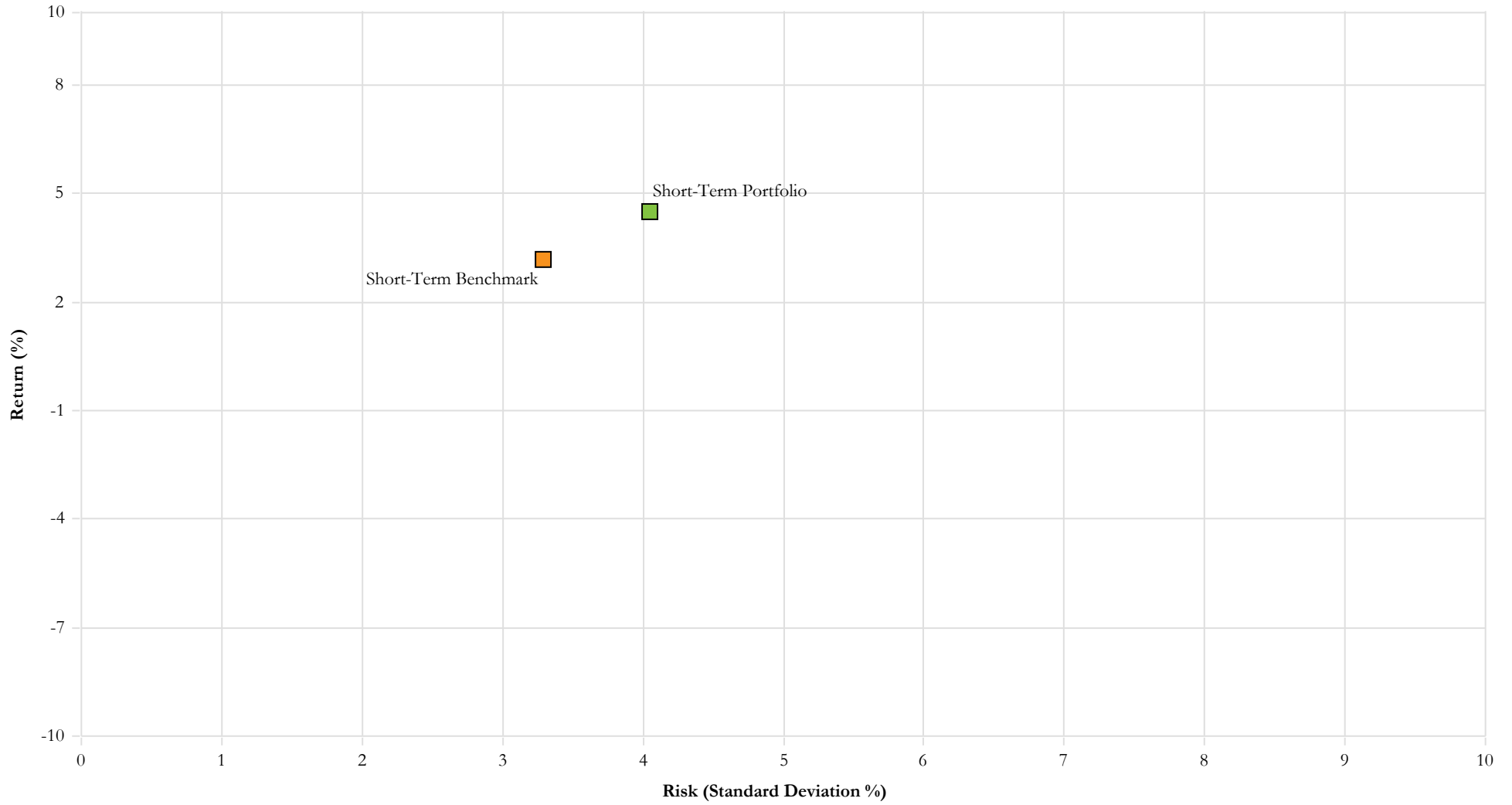
ASSET CLASS	BENCHMARK	PORTFOLIO	UNDERWEIGHT	NEUTRAL	OVERWEIGHT
Cash	5.0%	0.0%	■		
Equities	20.0%	20.3%		■	
US Large Cap	12.6%	13.2%		■	
US SMID Cap	0.1%	0.0%		■	
International	5.3%	4.8%		■	
Emerging Market	1.9%	2.3%		■	
Fixed Income	75.0%	79.7%			■
Investment Grade FI	75.0%	76.7%			■
Non-US Fixed Income	-	-			
Sub-Investment Grade FI	-	3.0%			■
Tax Exempt Fixed Income	-	-			
Alternatives	-	-			
Real Assets	-	-			
Hedged Strategies	-	-			
Private Investments	-	-			



ACTIVE/PASSIVE ALLOCATION

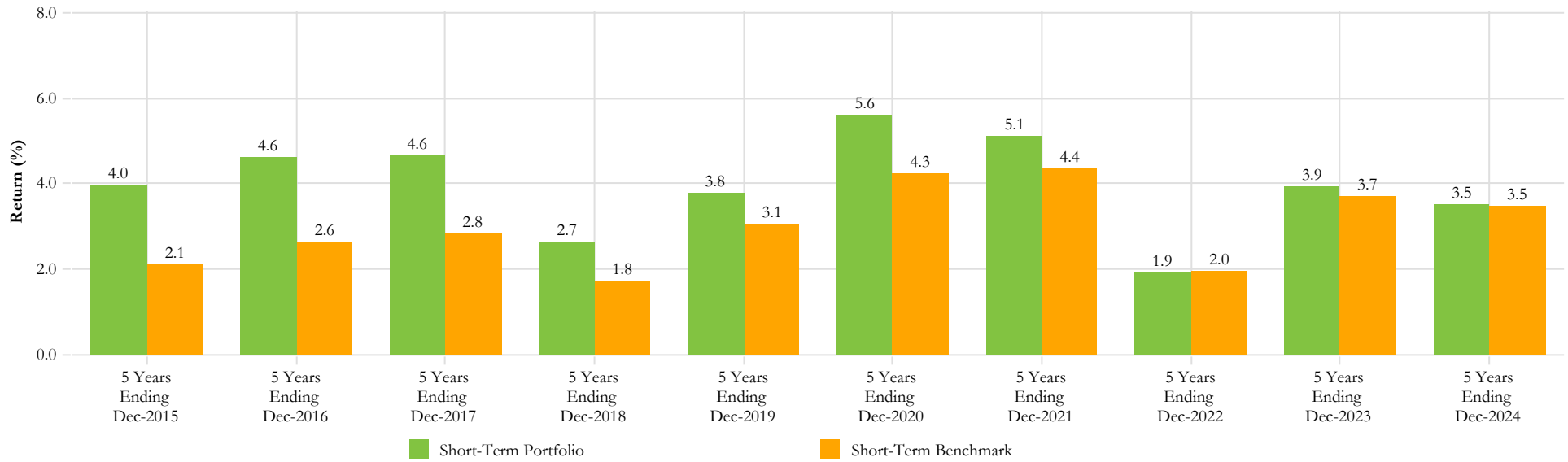


Since Inception (01/01/2010) Risk / Return Analysis

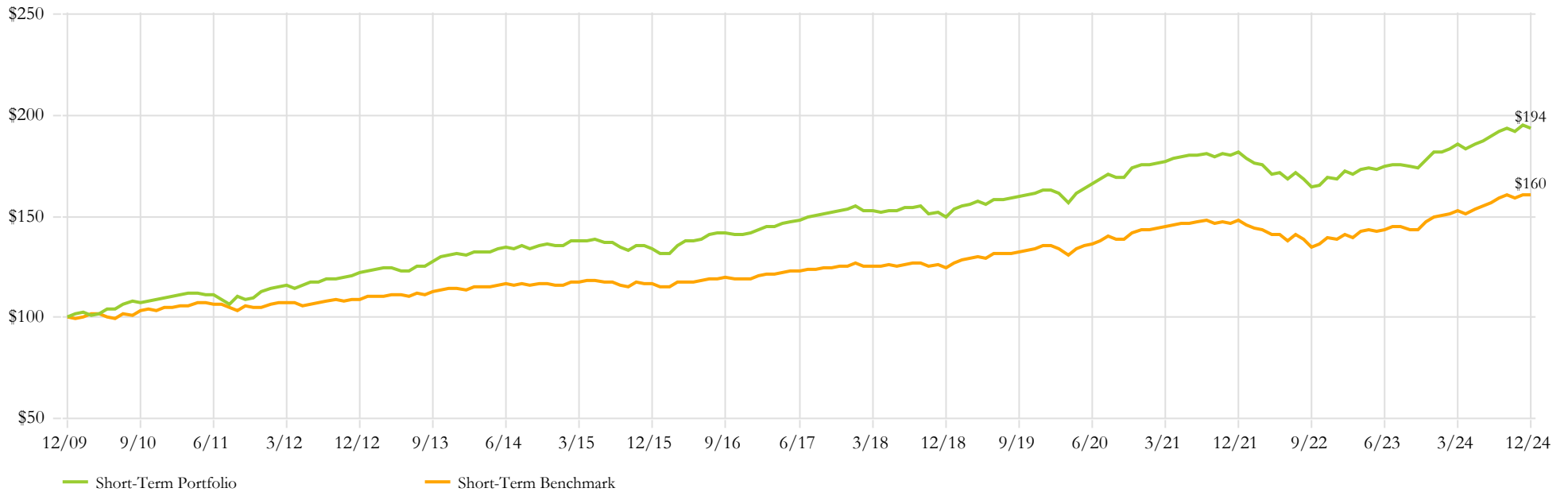


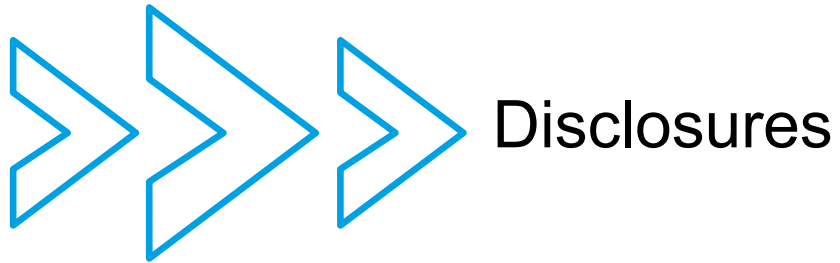
	Return	Standard Deviation	Sharpe Ratio
Short-Term Portfolio	4.51	4.06	0.81
Short-Term Benchmark	3.20	3.30	0.61

Rolling 5 Year Returns vs Benchmark



Growth of \$100 Since January 2010





Information Disclosures

Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

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The performance data shown reflects past performance, which does not guarantee future results. Investment return and principal will fluctuate so that an investor's shares when redeemed may be worth more or less than original cost. Please note, current performance may be higher or lower than the performance data shown. For up to date month-end performance information, please contact your Financial Advisor or visit the funds' company website.

Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company website.

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Composites are the aggregate of multiple portfolios within an asset pool.

Investing involves market risk, including possible loss of principal. **Growth investing** does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. **Value investing** involves the risk that the market may not recognize that securities are undervalued, and they may not appreciate as anticipated. **Small and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. **Bond funds** and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. **International securities'** prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. **Alternative investments**, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. **Master Limited Partnerships (MLPs)** are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk; and MLP interests in the real estate sector are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. Because of their narrow focus, MLPs maintain exposure to price volatility of commodities and/or underlying assets and tend to be more volatile than investments that diversify across many sectors and companies. MLPs are also subject to additional risks including investors having limited control and rights to vote on matters affecting the MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, conflict of interests, and limited call rights related to acquisitions.

Mortgage backed securities also involve prepayment risk, in that faster or slower prepayments than expected on underlying mortgage loans can dramatically alter the yield-to-maturity of a mortgage-backed security and prepayment risk includes the possibility that a fund may invest the proceeds at generally lower interest rates.

Tax managed funds may not meet their objective of being tax-efficient.

Real estate investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions.

High yield fixed income securities, also known as "junk bonds", are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Credit quality is a measure of a bond issuer's creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on security rating as provided by Standard & Poor's, Moody's and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the

highest, to D, being the lowest based on S&P and Fitch's classification (the equivalent of Aaa and C, respectively, by Moody's). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody's) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as "NR".

Money Market Funds

You could lose money in Money Market Funds. Although MMFs classified as government funds (i.e., MMFs that invest 99.5% of total assets in cash and/or securities backed by the U.S government) and retail funds (i.e., MMFs open to natural person investors only) seek to preserve value at \$1.00 per share, they cannot guarantee they will do so. The price of other MMFs will fluctuate and when you sell shares they may be worth more or less than originally paid. MMFs may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A MMF investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency.

"Alpha tilt strategies comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance."

Custom Account Index: The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client's investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups
<https://www.invmetrics.com/style-peer-groups>

Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying

that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Your interests in Alternative Investments, which may have been purchased through us, are generally not held here, and are generally not covered by SIPC. The information provided to you: 1) is included as a service to you, valuations for certain products may not be available; 2) is derived from you or another external source for which we are not responsible, and may have been modified to take into consideration capital calls or distributions to the extent applicable; 3) may not reflect actual shares, share prices or values; 4) may include invested or distributed amounts in addition to a fair value estimate; and 5) should not be relied upon for tax reporting purposes. Notwithstanding the foregoing,

1) to the extent this report displays Alternative Investment positions within a Morgan Stanley Individual Retirement Account ("IRA"), such positions are held by Morgan Stanley Smith Barney LLC as the custodian of your Morgan Stanley IRA; and 2) if your Alternative Investment position(s) is held by us and is registered pursuant to the Securities Act of 1933, as amended, your Alternative Investment position(s) is covered by SIPC.

Alternatives may be either traditional alternative investment vehicles or non-traditional alternative strategy vehicles. Traditional alternative investment vehicles may include, but are not limited to, Hedge Funds, Fund of Funds (both registered and unregistered), Exchange Funds, Private Equity Funds, Private Credit Funds, Real Estate Funds, and Managed Futures Funds. Non-traditional alternative strategy vehicles may include, but are not limited to, Open or Closed End Mutual Funds, Exchange-Traded and Closed-End Funds, Unit Investment Trusts, exchange listed Real Estate Investment Trusts (REITs), and Master Limited Partnerships (MLPs). These non-traditional alternative strategy vehicles also seek alternative-like exposure but have significant differences from traditional alternative investment vehicles. Non-traditional alternative strategy vehicles may behave like, have characteristics of, or employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives, and options, which can increase volatility and the risk of investment loss. Characteristics such as correlation to traditional markets, investment strategy, and market sector exposure can play a role in the classification of a traditional security being classified as alternative.

Traditional alternative investment vehicles are illiquid and usually are not valued daily. The estimated valuation provided will be as of the most recent date available and will be included in summaries of your assets. Such valuation may not be the most recent provided by the fund in which you are invested. No representation is made that the valuation is a market value or that the interest could be liquidated at this value. We are not required to take any action with respect to your investment unless valid instructions are received from you in a timely manner. Some positions reflected herein may not represent interests in the fund, but rather redemption proceeds withheld by the issuer pending final valuations which are not subject to the investment performance of the fund and may or may not accrue interest for the length of the withholding. Morgan Stanley does not engage in an independent valuation of your alternative investment assets. Morgan Stanley provides periodic information to you including the market value of an alternative investment vehicle based on information received from the management entity of the alternative investment vehicle or another service provider.

Traditional alternative investment vehicles often are speculative and include a high degree of risk. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: • Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; • Lack of liquidity in that there may be no secondary market for a

fund;• Volatility of returns;• Restrictions on transferring interests in a fund;• Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;• Absence of information regarding valuations and pricing;• Complex tax structures and delays in tax reporting;• Less regulation and higher fees than mutual funds; and• Risks associated with the operations, personnel, and processes of the manager. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank

SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments.

Indices are unmanaged and investors cannot directly invest in them. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Diversification does not assure a profit or protect against loss in a declining market. Any performance or related information presented has not been adjusted to reflect the impact of any the additional fees paid to a placement agent by an investor (for Morgan Stanley placement clients, a one-time upfront Placement Fee of up to 3%, and for Morgan Stanley investment advisory clients, an annual advisory fee of up to 2.5%), which would result in a substantial reduction in the returns if such fees were incorporated.

For most investment advisory clients, the program account will be charged an asset-based wrap fee every quarter ("the Fee"). In general, the Fee covers investment advisory services and reporting. In addition to the Fee, clients will pay the fees and expenses of any funds in which their account is invested. Fund fees and expenses are charged directly to the pool of assets the fund invests in and impact the valuations. Clients must understand that these fees and expenses are an additional cost and will not be included in the Fee amount in the account statements

As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of \$100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately \$115,762.50 without the fees and \$107,372.63 with the fees. Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at www.morganstanley.com/ADV or from your Financial Advisor/Private Wealth Advisor.

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The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance. Morgan Stanley Smith Barney LLC offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program.

Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be appropriate for you. Please see the Morgan Stanley Smith Barney LLC program disclosure brochure (the "Morgan Stanley ADV") for more information in the investment advisory programs available. The Morgan Stanley ADV is available at www.morganstanley.com/ADV.

Sources of Data. Information in this material in this report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third-party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data. All opinions included in this material constitute the Firm's judgment as of the date of this material and are subject to change without notice. This material was not prepared by the research departments of Morgan Stanley & Co. LLC or Morgan Stanley Smith Barney LLC. Some historical figures may be revised due to newly identified programs, firm restatements, etc.

Global Investment Manager Analysis (GIMA) Focus List, Approved List and Tactical Opportunities List; Watch Policy. GIMA uses two methods to evaluate investment products in applicable advisory programs: **Focus** (and investment products meeting this standard are described as being on the Focus List) and **Approved** (and investment products meeting this standard are described as being on the Approved List). In general, Focus entails a more thorough evaluation of an investment product than Approved. Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List. Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status). GIMA has a **Watch** policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved." The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager or fund to address any concerns. Certain investment products on either the Focus List or Approved List may also be recommended for the **Tactical Opportunities List** based in part on tactical opportunities existing at a given time. The investment products on the Tactical Opportunities List change over time. For more information on the Focus List, Approved List, Tactical Opportunities List and Watch processes, please see the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management. Your Financial Advisor or Private Wealth Advisor can also provide upon request a copy of a publication entitled "Manager Selection Process."

The **Global Investment Committee** is a group of seasoned investment professionals who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

The GIC Asset Allocation Models are not available to be directly implemented as part of an investment advisory service and should not be regarded as a recommendation of any Morgan Stanley investment advisory service. The GIC Asset Allocation Models do not represent actual trading or any type of account or any type of investment strategies and none of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, advisory fees, fund expenses) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models which, when compounded over a period of years, would decrease returns.

Adverse Active AlphaSM 2.0 is a patented screening and scoring process designed to help identify high-quality equity and fixed income managers with characteristics that may lead to future outperformance relative to index and peers. While highly ranked managers performed well as a group in our Adverse Active Alpha model back tests, not all of the managers will outperform. Please note that this data may be derived from back-testing, which has the benefit of hindsight. In addition, highly ranked managers can have differing risk profiles that might not be appropriate for all investors.

Our view is that Adverse Active Alpha is a good starting point and should be used in conjunction with other information. Morgan Stanley Wealth Management's qualitative and quantitative investment

manager due diligence process are equally important factors for investors when considering managers for use through an investment advisory program. Factors including, but not limited to, manager turnover and changes to investment process can partially or fully negate a positive Adverse Active Alpha ranking. Additionally, highly ranked managers can have differing risk profiles that might not be appropriate for all investors.

The proprietary **Value Score** methodology considers an active investment strategies' value proposition relative to its costs. From a historical quantitative study of several quantitative markers, Value Score measures perceived forward-looking benefit and computes (1) "fair value" expense ratios for most traditional investment managers across 40 categories and (2) managers' perceived "excess value" by comparing the fair value expense ratios to actual expense ratios. Managers are then ranked within each category by their excess value to assign a Value Score. Our analysis suggests that greater levels of excess value have historically corresponded to attractive subsequent performance.

For more information on the ranking models, please see Adverse Active AlphaSM 2.0: Scoring Active Managers According to Potential Alpha and Value Score: Scoring Fee Efficiency by Comparing Managers' "Fair Value" and Actual Expense Ratios. The whitepapers are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

Additionally, highly ranked managers can have differing risk profiles that might not be appropriate for all investors. For more information on AAA, please see the Adverse Active Alpha Ranking Model and Selecting Managers with Adverse Active Alpha whitepapers. The whitepaper are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

The Global Investment Manager Analysis (GIMA) Services Only Apply to Certain Investment Advisory Programs GIMA evaluates certain investment products for the purposes of some – but not all – of Morgan Stanley Smith Barney LLC's investment advisory programs (as described in more detail in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management). If you do not invest through one of these investment advisory programs, Morgan Stanley Wealth Management is not obligated to provide you notice of any GIMA Status changes even though it may give notice to clients in other programs.

Strategy May Be Available as a Separately Managed Account or Mutual Fund Strategies are sometimes available in Morgan Stanley Wealth Management investment advisory programs both in the form of a separately managed account ("SMA") and a mutual fund. These may have different expenses and investment minimums. Your Financial Advisor or Private Wealth Advisor can provide more information on whether any particular strategy is available in more than one form in a particular investment advisory program. Generally, investment advisory accounts are subject to an annual asset-based fee (the "Fee") which is payable monthly in advance (some account types may be billed differently). In general, the Fee covers Morgan Stanley investment advisory services, custody of securities with Morgan Stanley, trade execution with or through Morgan Stanley or its affiliates, as well as compensation to any Morgan Stanley Financial Advisor.

In addition, each account that is invested in a program that is eligible to purchase certain investment products, such as mutual funds, will also pay a Platform Fee (which is subject to a Platform Fee of set) as described in the applicable ADV brochure. Accounts invested in the Select UMA program may also pay a separate Sub-Manager fee, if applicable.

If your account is invested in mutual funds or exchange traded funds (collectively "funds"), you will pay the fees and expenses of any funds in which your account is invested. Fees and expenses are charged directly to the pool of assets the fund invests in and are reflected in each fund's share price. These fees and expenses are an additional cost to you and would not be included in the Fee amount in your account statements. The advisory program you choose is described in the applicable Morgan Stanley Smith Barney LLC ADV Brochure, available at www.morganstanley.com/ADV.

Morgan Stanley or Executing Sub-Managers, as applicable, in some of Morgan Stanley's Separately Managed Account ("SMA") programs may effect transactions through broker-dealers other than Morgan Stanley or our affiliates. In such instances, you may be assessed additional costs by the other firm in addition to the Morgan Stanley and Sub-Manager fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain Sub-Managers have historically directed most, if not all, of their trades to outside firms. Information provided by Sub-Managers concerning trade execution away from Morgan Stanley is summarized at: www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf. For more information on trading and costs, please refer to the ADV Brochure for your program(s), available at www.morganstanley.com/ADV, or contact your Financial Advisor / Private Wealth Advisor.

Conflicts of Interest: GIMA's goal is to provide professional, objective evaluations in support of the Morgan Stanley Wealth Management investment advisory programs. We have policies and procedures to help us meet this goal. However, our business is subject to various conflicts of interest. For example, ideas and suggestions for which investment products should be evaluated by GIMA come from a variety of sources, including our Morgan Stanley Wealth Management Financial Advisors and their direct or indirect managers, and other business persons within Morgan Stanley Wealth Management or its affiliates. Such persons may have an ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth

Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. Separately, certain strategies managed or sub-advised by us or our affiliates, including but not limited to MSIM and Eaton Vance Management ("EVM") and its investment affiliates, may be included in your account. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, MS&Co., managers and their affiliates provide a variety of services (including research, brokerage, asset management, trading, lending and investment banking services) for each other and for various clients, including issuers of securities that may be recommended for purchase or sale by clients or are otherwise held in client accounts, and managers in various advisory programs.

Morgan Stanley Wealth Management, managers, MS & Co., and their affiliates receive compensation and fees in connection with these services. Morgan Stanley Wealth Management believes that the nature and range of clients to which such services are rendered is such that it would be inadvisable to exclude categorically all of these companies from an account.

Morgan Stanley charges each fund family we offer a mutual fund support fee, also called a "revenue-sharing payment," on client account holdings in fund families according to a tiered rate that increases along with the management fee of the fund so that lower management fee funds pay lower rates than those with higher management fees.

Consider Your Own Investment Needs: The model portfolios and strategies discussed in the material are formulated based on general client characteristics including risk tolerance. This material is not intended to be an analysis of whether particular investments or strategies are appropriate for you or a recommendation, or an offer to participate in any investment. Therefore, clients should not use this material as the sole basis for investment decisions. They should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a determination may lead to asset allocation results that are materially different from the asset allocation shown in this profile. Talk to your Financial Advisor about what would be an appropriate asset allocation for you, whether Morgan Stanley Pathway Funds is an appropriate program for you.

No obligation to notify – Morgan Stanley Wealth Management has no obligation to notify you when the model portfolios, strategies, or any other information, in this material changes.

For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

The Morgan Stanley Pathway Funds, Firm Discretionary UMA Model Portfolios, and other asset allocation or any other model portfolios discussed in this material are available only to investors participating in Morgan Stanley Consulting Group advisory programs. For additional information on the Morgan Stanley Consulting Group advisory programs, see the applicable ADV brochure, available at www.morganstanley.com/ADV or from your Morgan Stanley Financial Advisor or Private Wealth Advisor. To learn more about the Morgan Stanley Pathway Funds, visit the Funds' website at <https://www.morganstanley.com/wealth-investmentsolutions/cgcm>. Consulting Group is a business of Morgan Stanley.

Morgan Stanley Pathway Program Asset Allocation Models There are model portfolios corresponding to five risk-tolerance levels available in the Pathway program. Model 1 is the least aggressive portfolio and consists mostly of bonds. As the model numbers increase, the models have higher allocations to equities and become more aggressive. Pathway is a mutual fund asset allocation program. In constructing the Pathway Program Model Portfolios, Morgan Stanley Wealth Management uses, among other things, model asset allocations produced by Morgan Wealth Management's Global Investment Committee (the "GIC"). The Pathway Program Model Portfolios are specific to the Pathway program (based on program features and parameters, and any other requirements of Morgan Stanley Wealth Management's Consulting Group). The Pathway Program Model Portfolios may therefore differ in some respects from model portfolios available in other Morgan Stanley Wealth Management programs or from asset allocation models published by the Global Investment Committee.

The type of mutual funds and ETFs discussed in this presentation utilizes nontraditional or complex investment strategies and/or derivatives. Examples of these types of funds include those that utilize one or more of the below noted investment strategies or categories or which seek exposure to the following markets: (1) commodities (e.g., agricultural, energy and metals), currency, precious metals; (2) managed futures; (3) leveraged, inverse or inverse leveraged; (4) bear market, hedging, long-short equity, market neutral; (5) real estate; (6) volatility (seeking exposure to the CBOE VIX Index). Investors should keep in mind that while mutual funds and ETFs may, at times, utilize nontraditional investment options and strategies, they should not be equated with unregistered privately offered alternative investments. Because of regulatory limitations, mutual funds and ETFs that seek alternative-like investment exposure must utilize a more limited investment universe. As a result, investment returns and portfolio characteristics of alternative mutual funds and ETFs may vary from traditional hedge funds pursuing similar investment objectives. Moreover, traditional hedge funds have limited liquidity with long "lock-up" periods allowing them to pursue investment strategies without having to factor in the need to meet client redemptions and ETFs trade on an exchange. On the other hand, mutual funds typically must meet daily client redemptions. This differing liquidity profile can have a material impact on the investment returns generated by a mutual fund or ETF pursuing an alternative investing strategy compared with a traditional hedge fund pursuing the same strategy.

Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund's investment objective and to help of set market risks. However, these features may be complex, making it more difficult to understand the fund's essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and/or accompanied by the use of borrowing or "leverage."

Please consider the investment objectives, risks, fees, and charges and expenses of mutual funds, ETFs, closed end funds, unit investment trusts, and variable insurance products carefully before investing. The prospectus contains this and other information about each fund. To obtain a prospectus, contact your Financial Advisor or Private Wealth Advisor or visit the Morgan Stanley website at www.morganstanley.com. Please read it carefully before investing.

Money Market Funds: You could lose money in money market funds. Although money market funds classified as government funds (i.e., money market funds that invest 99.5% of total assets in cash and/or securities backed by the U.S government) and retail funds (i.e., money market funds open to natural person investors only) seek to preserve value at \$1.00 per share, they cannot guarantee they will do so. The price of other money market funds will fluctuate and when you sell shares they may be worth more or less than originally paid. Money market funds may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A money market fund investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency. The Fund's sponsor has no legal obligation to provide financial support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

Investors should carefully consider the investment objectives, risks, charges and expenses of a money market fund before investing. The prospectus contains this and other information about the money market fund. To obtain a prospectus, contact your Financial Advisor or visit the money market fund company's website. Please read the prospectus carefully before investing.

Exchange Funds are private placement vehicles that enable holders of concentrated single-stock positions to exchange those stocks for a diversified portfolio. Investors may benefit from greater diversification by exchanging a concentrated stock position for fund shares without triggering a taxable event. These funds are available only to qualified investors and may only be offered by Financial Advisors who are qualified to sell alternative investments. Before investing, investors should consider the following:

- Dividends are pooled
- Investors may forfeit their stock voting rights
- Investment may be illiquid for several years
- Investments may be leveraged or contain derivatives
- Significant early redemption fees may apply
- Changes to the U.S. tax code, which could be retroactive (potentially disallowing the favorable tax treatment of exchange funds)
- Investment risk and potential loss of principal

KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds ("ETFs"), closed-end funds, and unit investment trusts, may increase or decrease over varying time periods. To the extent the investments depicted herein represent **international securities**, you should be aware that there may be additional risks associated with international investing, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards. These risks may be magnified in **emerging markets and frontier markets**. Some funds also invest in foreign securities, which may involve currency risk. There is no assurance that the fund will achieve its investment objective. **Small- and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small- and mid-capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. The value of **fixed income securities** will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer. **High yield bonds** are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. In the case of **municipal bonds**, income is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax. **Treasury Inflation Protection Securities' (TIPS)** coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation. There is no guarantee that investors will receive par if TIPS are sold prior to maturity.

Structured Investments are complex and not appropriate for all investors. An investment in Structures Investments involve risks. These risks can include but are not limited to: (1) Fluctuations in the price, level or yield of underlying instruments, interest rates, currency values and credit quality, (2) Substantial or total loss of principal, (3) Limits on participation in appreciation of underlying instrument, (4) Limited liquidity, (5) Issuer credit risk and (6) Conf icts of Interest. There is no assurance that a strategy of using structured product for wealth preservation, yield enhancement, and/or interest rate risk hedging will meet its objectives.

Alternative Investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; Risks associated with the operations, personnel, and processes of the manager; and Risks associated with cybersecurity. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 or a "debt research report" as defined by FINRA Rule 2242 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Wealth Management and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley Wealth Management or any of its affiliates, (3) are not guaranteed by Morgan Stanley Wealth Management and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Wealth Management is a registered broker-dealer, not a bank. This material is not to be reproduced or distributed to any other persons (other than professional advisors of the investors or prospective investors, as applicable, receiving this material) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public. Past performance is no guarantee of future results. Actual results may vary. SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not appropriate for all investors.

A majority of Alternative Investment managers reviewed and selected by GIMA pay or cause to be paid an ongoing fee for distribution from their management fees to Morgan Stanley Wealth Management in connection with Morgan Stanley Wealth Management clients that purchase an interest in an Alternative Investment and in some instances pay these fees on the investments held by advisory clients. Morgan Stanley Wealth Management rebates such fees that are received and attributable to an Investment held by an advisory client and retains the fees paid in connection with investments held by brokerage clients. Morgan Stanley Wealth Management has a conflict of interest in offering alternative investments because Morgan Stanley Wealth Management or our affiliates, in most instances, earn more money in your account from your investments in alternative investments than from other investment options.

It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and of er complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inf ate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inf ated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could af ect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is dif cult to quantify the ef ects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artif cial “lift” or upwards bias.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualif ed private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inef cient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will of set returns. An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market f uctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a **target date portfolio** is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor’s goals by the pre-established year or “target date.” A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. **Managed futures** investments are speculative, involve a high degree of risk, use signif cant leverage, are generally illiquid, have substantial charges, subject investors to conf icts of interest, and are appropriate only for the risk capital portion of an investor’s portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversif ed portfolio. Managed Futures are complex and not appropriate for all investors.

As a diversif ed global f nancial services f rm, Morgan Stanley engages in a broad spectrum of activities including f nancial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley therefore engages in activities where Morgan Stanley interests may conf ict with the interests of its clients, including the private investment funds it manages. Morgan Stanley can give no assurance that conf icts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. **Private Markets:** As part of the Morgan Stanley Private Markets – Access program, Morgan Stanley will be limited solely to a role as an introducer and will not be serving as a placement agent or adviser. Eligible investors must enroll in the program in order to see any investment opportunities. Investments require independent evaluation, due diligence, review & analysis. Neither Morgan Stanley nor any of its af liates is making any recommendation to purchase or take any action of any sort and is not providing any advice on investments. Investors are asked to work directly with the issuer/sponsor and with your own independent (non-Morgan Stanley) f nancial, legal, accounting, tax, and other professional advisors to evaluate the investment opportunity.

Investors are responsible for complying with the terms of any applicable exemption from securities law requirements and any potential Private Company issuer restrictions for any sale of Private Company shares, and you must obtain your own legal counsel to advise you in connection with such requirements and Private Company issuer restrictions. You should consult with your third-party advisors regarding the risks of transacting in Private Company shares, including the risk of transacting in a market with little or no price transparency or liquidity. Morgan Stanley provides no opinion or view on the valuation of any Private Company shares, or the suf ciency, fairness or competitiveness of any price obtained. Private Securities do not trade on any national securities exchange and, as such, any potential liquidity (i.e., the potential for any buying interest that might satisfy your sell interest) in such Private Company shares is very limited.

Virtual Currency Products (Cryptocurrencies)

Buying, selling, and transacting in Bitcoin, Ethereum or other digital assets ("Digital Assets"), and related funds and products, is highly speculative and may result in a loss of the entire investment. Risks and considerations include but are not limited to:

- Digital Assets have only been in existence for a short period of time and historical trading prices for Digital Assets have been highly volatile. The price of Digital Assets could decline rapidly, and investors could lose their entire investment.
- Certain Digital Asset funds and products, allow investors to invest on a more frequent basis than investors may withdraw from the fund or product, and interests in such funds or products are generally not freely transferrable. This means that, particularly given the volatility of Digital Assets, an investor will have to bear any losses with respect to its investment for an extended period of time and will not be able to react to changes in the price of the Digital Asset once invested (for example, by seeking to withdraw) as quickly as when making the decision to invest. Such Digital Asset funds and products, are intended only for persons who are able to bear the economic risk of investment and who do not need liquidity with respect to their investments.
- Given the volatility in the price of Digital Assets, the net asset value of a fund or product that invests in such assets at the time an investor's subscription for interests in the fund or product is accepted may be significantly below or above the net asset value of the product or fund at the time the investor submitted subscription materials.
- Certain Digital Assets are not intended to function as currencies but are intended to have other use cases. These other Digital Assets may be subject to some or all of the risks and considerations set forth herein, as well as additional risks applicable to such Digital Assets. Buyers, sellers and users of such Digital Assets should thoroughly familiarize themselves with such risks and considerations before transacting in such Digital Assets.
- The value of Digital Assets may be negatively impacted by future legal and regulatory developments, including but not limited to increased regulation of such Digital Assets. Any such developments may make such Digital Assets less valuable, impose additional burdens and expenses on a fund or product investing in such assets or impact the ability of such a fund or product to continue to operate, which may materially decrease the value of an investment therein.
- Due to the new and evolving nature of digital currencies and the absence of comprehensive guidance, many significant aspects of the tax treatment of Digital Assets are uncertain. Prospective investors should consult their own tax advisors concerning the tax consequences to them of the purchase, ownership and disposition of Digital Assets, directly or indirectly through a fund or product, under U.S. federal income tax law, as well as the tax law of any relevant state, local or other jurisdiction.
- Over the past several years, certain Digital Asset exchanges have experienced failures or interruptions in service due to fraud, security breaches, operational problems or business failure. Such events in the future could impact any fund's or product's ability to transact in Digital Assets if the fund or product relies on an impacted exchange and may also materially decrease the price of Digital Assets, thereby impacting the value of your investment, regardless of whether the fund or product relies on such an impacted exchange.
- Although any Digital Asset product and its service providers have in place significant safeguards against loss, theft, destruction and inaccessibility, there is nonetheless a risk that some or all of a product's Digital Asset could be permanently lost, stolen, destroyed or inaccessible by virtue of, among other things, the loss or theft of the "private keys" necessary to access a product's Digital Asset.
- Investors in funds or products investing or transacting in Digital Assets may not benefit to the same extent (or at all) from "airdrops" with respect to, or "forks" in, a Digital Asset's blockchain, compared to investors who hold Digital Assets directly instead of through a fund or product. Additionally, a "fork" in the Digital Asset blockchain could materially decrease the price of such Digital Asset.
- Digital Assets are not legal tender, and are not backed by any government, corporation or other identified body, other than with respect to certain digital currencies that certain governments are or may be developing now or in the future. No law requires companies or individuals to accept digital currency as a form of payment (except, potentially, with respect to digital currencies developed by certain governments where such acceptance may be mandated). Instead, other than as described in the preceding sentences, Digital Asset products' use is limited to businesses and individuals that are willing to accept them. If no one were to accept digital currencies, virtual currency products would very likely become worthless.
- Platforms that buy and sell Digital Assets can be hacked, and some have failed. In addition, like the platforms themselves, digital wallets can be hacked, and are subject to theft and fraud. As a result,

like other investors have, you can lose some or all of your holdings of Digital Assets.

- Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to Digital Assets held in digital wallets by their providers or by regulators.

- Due to the anonymity Digital Assets offer, they have known use in illegal activity, including drug dealing, money laundering, human trafficking, sanction evasion and other forms of illegal commerce. Abuses could impact legitimate consumers and speculators; for instance, law enforcement agencies could shut down or restrict the use of platforms and exchanges, limiting or shutting off entirely the ability to use or trade Digital Asset products.

- Digital Assets may not have an established track record of credibility and trust. Further, any performance data relating to Digital Asset products may not be verifiable as pricing models are not uniform.

Investors should be aware of the potentially increased risks of transacting in Digital Assets relating to the risks and considerations, including fraud, theft, and lack of legitimacy, and other aspects and qualities of Digital Assets, before transacting in such assets.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. Past performance is no guarantee of future results. Actual results may vary.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Indices are unmanaged and investors cannot directly invest in them. They are not subject to expenses or fees and are often comprised of securities and other investment instruments the liquidity of which is not restricted. A particular investment product may consist of securities significantly different than those in any index referred to herein. Composite index results are shown for illustrative purposes only, generally do not represent the performance of a specific investment, may not, for a variety of reasons, be an appropriate comparison or benchmark for a particular investment and may not necessarily reflect the actual investment strategy or objective of a particular investment. Consequently, comparing an investment to a particular index may be of limited use.

Artificial intelligence (AI) is subject to limitations, and you should be aware that any output from an AI-supported tool or service made available by the Firm for your use is subject to such limitations, including but not limited to inaccuracy, incompleteness, or embedded bias. You should always verify the results of any AI-generated output.

To obtain **Tax-Management Services**, a client must complete the Tax-Management Form, and deliver the signed form to Morgan Stanley. For more information on Tax-Management Services, including its features and limitations, please ask your Financial Advisor for the Tax Management Form. Review the form carefully with your tax advisor. Tax-Management Services: (a) apply only to equity investments in separate account sleeves of client accounts; (b) are not available for all accounts or clients; and (c) may adversely impact account performance. Tax-management services do not constitute tax advice or a complete tax-sensitive investment management program. There is no guarantee that tax-management services will produce the desired tax results.

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The Morgan Stanley Goals-Planning System (GPS) includes a brokerage investment analysis tool. While securities held in a client's investment advisory account may be included in the analysis, the reports generated from the GPS Platform are not financial plans nor constitute a financial planning service. A financial plan generally seeks to address a wide spectrum of a client's long-term financial needs, and can include recommendations about insurance, savings, tax and estate planning, and investments, taking into consideration the client's goals and situation, including anticipated retirement or other employee benefits. Morgan Stanley Smith Barney LLC ("Morgan Stanley") will only prepare a financial plan at a client's specific request using Morgan Stanley approved financial planning software. Investing in financial instruments carries with it the possibility of losses and that a focus on above-market returns exposes the portfolio to above-average risk. Performance aspirations are not guaranteed and are subject to market conditions. High volatility investments may be subject to sudden and large falls in value, and there could be a large loss on realization which could be equal to the amount invested. **IMPORTANT:** The projections or other information provided by the Morgan Stanley Goals Planning System regarding the likelihood of various investment outcomes (including any assumed rates of return and income) are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Morgan Stanley does not represent or guarantee that the projected returns or income will or can be attained.

A LifeView Financial Goal Analysis ("Financial Goal Analysis") or LifeView Financial Plan ("Financial Plan") is based on the methodology, estimates, and assumptions, as described in your report, as well as personal data provided by you. It should be considered a working document that can assist you with your objectives. Morgan Stanley makes no guarantees as to future results or that an individual's investment objectives will be achieved. The responsibility for implementing, monitoring and adjusting your Financial Goal Analysis or Financial Plan rests with you. After your Financial Advisor delivers your report to you, if you so desire, your Financial Advisor can help you implement any part that you choose; however, you are not obligated to work with your Financial Advisor or Morgan Stanley.

Important information about your relationship with your Financial Advisor and Morgan Stanley Smith Barney LLC when using LifeView Goal Analysis or LifeView Advisor. When your Financial Advisor prepares and delivers a Financial Goal Analysis (i.e., when using LifeView Goal Analysis), they will be acting in a brokerage capacity. When your Financial Advisor prepares a Financial Plan (i.e., when using LifeView Advisor), they will be acting in an investment advisory capacity with respect to the delivery of your Financial Plan. This Investment Advisory relationship will begin with the delivery of the Financial Plan and ends thirty days later, during which time your Financial Advisor can review the Financial Plan with you. To understand the differences between brokerage and advisory relationships, you should consult your Financial Advisor, or review our "Understanding Your Brokerage and Investment Advisory Relationships," brochure available at <https://www.morganstanley.com/wealth-relationshipwithms/pdfs/understandingyourrelationship.pdf>

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Financial Advisor or Private Wealth Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Financial Advisor or Private Wealth Advisor, may vary by product and over time.

Investment and services offered through Morgan Stanley Smith Barney LLC, Member SIPC.

GLOBAL INVESTMENT COMMITTEE (GIC) ASSET ALLOCATION MODELS: The Asset Allocation Models are created by Morgan Stanley Wealth Management's GIC.

HYPOTHETICAL MODEL PERFORMANCE (GROSS): Hypothetical model performance results do not reflect the investment or performance of an actual portfolio following a GIC Strategy, but simply reflect actual historical performance of selected indices on a real-time basis over the specified period of time representing the GIC's strategic and tactical allocations as of the date of this report. The past performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation or trading strategy. Hypothetical performance results do not represent actual trading and are generally designed

with the benefit of hindsight. Actual performance results of accounts vary due to, for example, market factors (such as liquidity) and client-specific factors (such as investment vehicle selection, timing of contributions and withdrawals, restrictions and rebalancing schedules). Clients would not necessarily have obtained the performance results shown here if they had invested in accordance with any GIC Asset Allocation Model for the periods indicated. Despite the limitations of hypothetical performance, these hypothetical performance results allow clients and Financial Advisors to obtain a sense of the risk/return trade-off of different asset allocation constructs. The hypothetical performance results in this report are calculated using the returns of benchmark indices for the asset classes, and not the returns of securities, fund or other investment products. Models may contain allocations to Hedge Funds, Private Equity and Private Real Estate. The benchmark indices for these asset classes are not issued on a daily basis. When calculating model performance on a day for which no benchmark index data is issued, we have assumed straight line growth between the index levels issued before and after that date.

FEES REDUCE THE PERFORMANCE OF ACTUAL ACCOUNTS: None of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, fees) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models. The GIC Asset Allocation Models and any model performance included in this presentation are intended as educational materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley's standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio's annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients' returns. The impact of fees and/or expenses can be material.

Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a **variable annuity** through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. **Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline,

depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be appropriate for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor.

Environmental, Social and Governance (“ESG”) investments in a portfolio may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. Certain issuers of investments may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. ESG designations are as of the date of this material, and no assurance is provided that the underlying assets have maintained or will maintain and such designation or any stated ESG compliance. As a result, it is difficult to compare ESG investment products or to evaluate an ESG investment product in comparison to one that does not focus on ESG. Investors should also independently consider whether the ESG investment product meets their own ESG objectives or criteria. There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein. **Options** and margin trading involve substantial risk and are not appropriate for all investors. Besides the general investment risk of holding securities that may decline in value and the possible loss of principal invested, **closed-end funds** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance and potential leverage. Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange. Shares of closed-end funds frequently trade at a discount from their NAV which may increase investors' risk of loss. The risk of loss due to this discount may be greater for investors expecting to sell their shares in a relatively short period after completion of the public offering. This characteristic is a risk separate and distinct from the risk that a closed-end fund's net asset value may decrease as a result of investment activities. NAV is total assets less total liabilities divided by the number of shares outstanding. At the time an investor purchases or sells shares of a closed-end fund, shares may have a market price that is above or below NAV. Portfolios that invest a large percentage of assets in only one industry **sector** (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. **Asset-backed securities** generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. The majority of \$25 and \$1000 par **preferred securities** are “callable” meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date. Companies paying **dividends** can reduce or cut payouts at any time.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk. **Health care sector stocks** are subject to government regulation, as well as government approval of products and services, which can significantly impact price and availability, and which can also be significantly affected by rapid obsolescence and patent expirations. **Nondiversification:** For a portfolio that holds a concentrated or limited number of securities, a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. Portfolios that invest a large percentage of assets in only one industry sector (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. The indices are not subject to expenses or fees and are often comprised of securities and other investment instruments the liquidity of which is not restricted. A particular investment product may consist of securities significantly different than those in any index referred to herein. Comparing an investment to a particular index may be of limited use.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

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