BERNSTEIN

Certainly Uncertain

1Q 2025 Macro and Markets Review

What Are the Key Controversies?

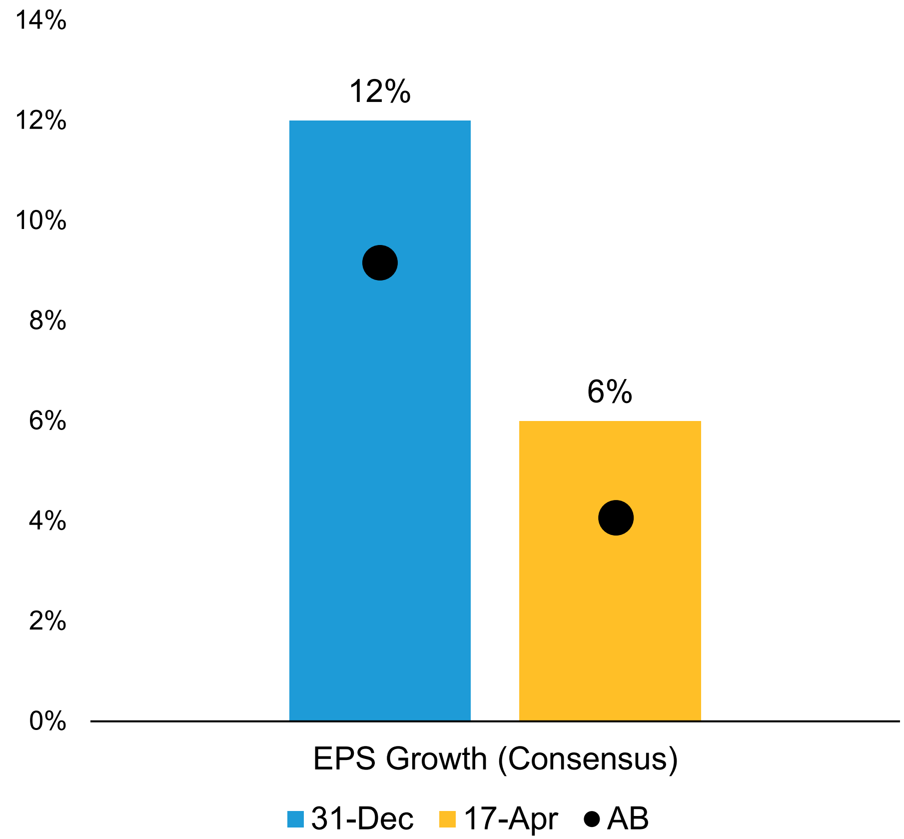
Our take on what market participants agree and disagree on

Can the economy hold up amid tariff uncertainty?	*It can, but a recession is now distinctly possible. For now, we expect a slowdown and will wait to see how trade negotiations evolve.*
Will tariffs hurt profits, cause inflation, or both?	*Both, with a growth headwind of ~0.5% and an inflation bump of 1.5%-2%*
Will non-US economies catch up to 'US exceptionalism'?	*The US' size, scale, diversification, and dynamism should allow for it to retain its advantage…but the gap should narrow given greater investment in Europe and headwinds at home*
How does the market price the long-term effects of DOGE, soft-power and a re-aligned global order?	*Markets are traditionally not good at pricing longer-term, non-quantifiable elements. We think these influences are largely being ignored, for now.*

As of April 10, 2025.
Source: Bernstein analysis

What's Changed Since Year-end 2024?

- The Trump administration has moved quickly to implement part of its policy agenda, notably tariffs and immigration
- Tariffs remain front and center for investors, with all trade partners 'in scope'
- The equity market's initial optimism that tariffs are more bark than bite has now fully reversed
- The belief is that both management uncertainty and tariff costs will weigh on profit growth
- We've lowered our profit forecast from a "below consensus" 9% growth in 2025 to now 4%. By extension, our YE25 SPX target is now 5,700 (from 6,400).
- We believe the Fed cuts three times in 2025, and may do more should the labor market soften more than expected



As of April 17, 2025. **Historical analysis is not necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.**
Source: Bloomberg and Bernstein analysis

1Q 2025: Certainly Uncertain

The Markets Price Tariff Effects

A steep early April selloff helped erase 12 months of gains. The culprit was tariff fears and what may come from a re-alignment of the global order. In our view, a recession is distinctly possible, and inflation is likely elevated.

Fed In A Bind

The Fed is in a tough spot, needing to thread a needle between, presumably, softening labor markets and higher price inflation. The Chair underscored the need for patience and waiting for incoming data to confirm or conflict with fears.

Diversification: Rumors of Its Demise Were Greatly Exaggerated

The value of thoughtful (diversified) portfolio construction has been highlighted once again. The use of strategies focused on mitigating risk, sticking with out-of-favor asset classes, while avoiding exposures with significant binary risk helped investors weather the US equity volatility.

As of April 10, 2025. **Current analysis and forecasts do not guarantee future results.**
Source: Bernstein analysis

2025 Macro Outlook

Our Key Economic and Market Expectations for 2025

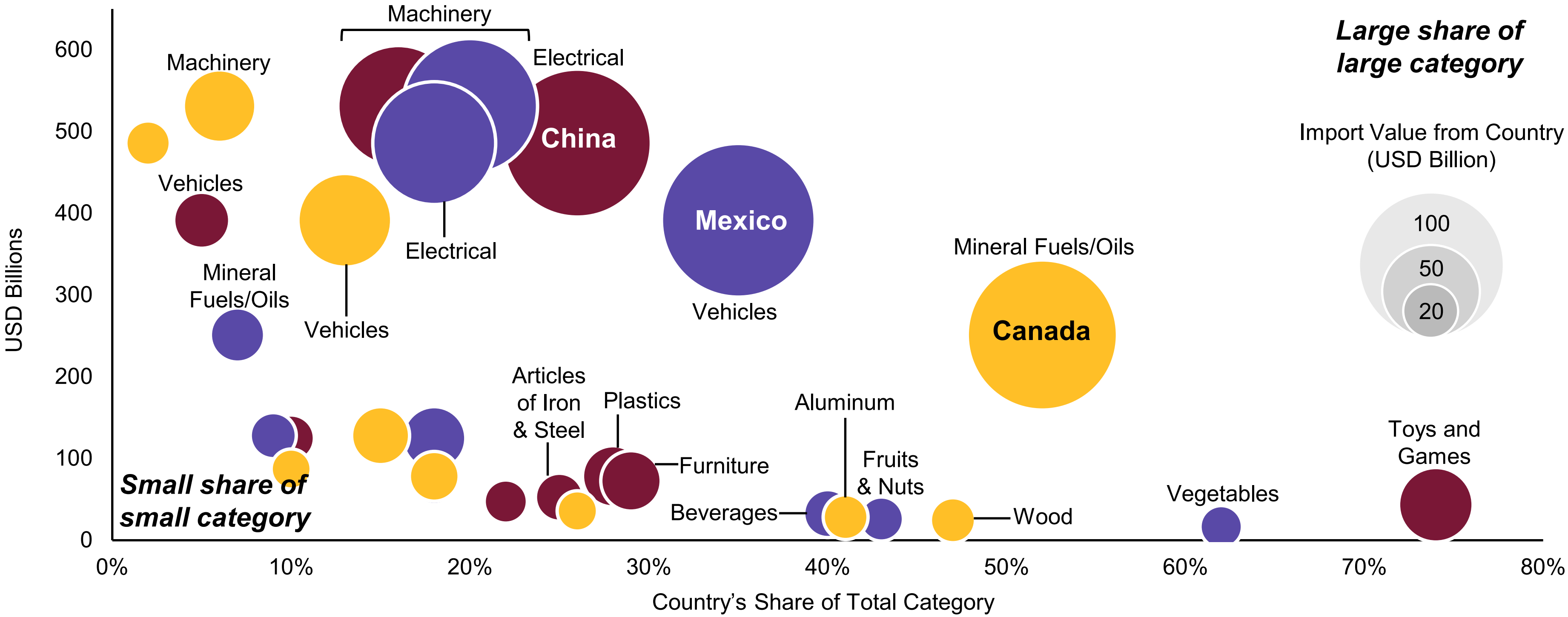
- **US Growth:** Growth is likely to slow as the tariff effects bite. We took ~0.5% out of our original 2025 US GDP forecast.
- **Monetary Policy:** With a now slower growth outlook, we think 3+ cuts are likely. Longer run inflation expectations will be closely monitored.
- **Inflation:** Next twelve months inflation is likely to be higher, provided the tariffs stick as announced. We model an extra ~1.5% above a normal 2.5% rise.
- **SPX Target**: We've taken our base case forecast down to 5,700 from 6,400 given the tariffs announced to date. Our target assumes low single-digit EPS growth and a lower PE than YE24.

2025	Bernstein
US GDP*	1.0%
Policy Rate Change	(0.75%)+
10Y Treasury Rate	3.5%-4.0%
US Inflation	3.8%
S&P 500	5,700
S&P 500 Earnings	$256 (+4% YoY)

As of April 10, 2025. **Historical analysis is not necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.**
*US GDP forecasts presented as 4Q/4Q; global is YoY. Outliers of more than 100 b.p. from difference from highest/lowest estimate are removed.
Source: Bloomberg, Bureau of Economic Analysis, Congressional Budget Office, Federal Reserve, FRED, S&P, and Bernstein analysis

Trade Dynamics Are Complex

Total US import value per category (all countries)



Trade issues are nuanced, not uniform. For example, some categories are more exposed (thus, at risk) than others—those with large share from a single country (e.g., Toys and Games from China) or those that represent a large import for the US (e.g., Electrical or Machinery).

As of April 4, 2025. **Historical analysis is not necessarily indicative of future results.** There is no guarantee that any estimates or forecasts will be realized.
All trade data as of 2024.
Source: United Nations Comtrade Database and AB

The Tariff State of Play

With trade policy this fluid, the latest figures should be written in pencil

Country	Imports	Tariff Change
Mexico	$475.6 bil.	10%
China	$427.2 bil.	145%
Canada	$421.1 bil.	10%
Germany	$159.7 bil.	10%
Japan	$147.3 bil.	10%
South Korea	$116.2 bil.	10%
Vietnam	$114.4 bil.	10%
Taiwan	$87.8 bil.	10%
India	$83.3 bil.	10%
Ireland	$82.3 bil.	10%
Italy	$72.9 bil.	10%
UK	$64.3 bil.	10%
France	$57.6 bil.	10%
Thailand	$56.4 bil.	10%
Switzerland	$52.2 bil.	10%

What's the Latest?

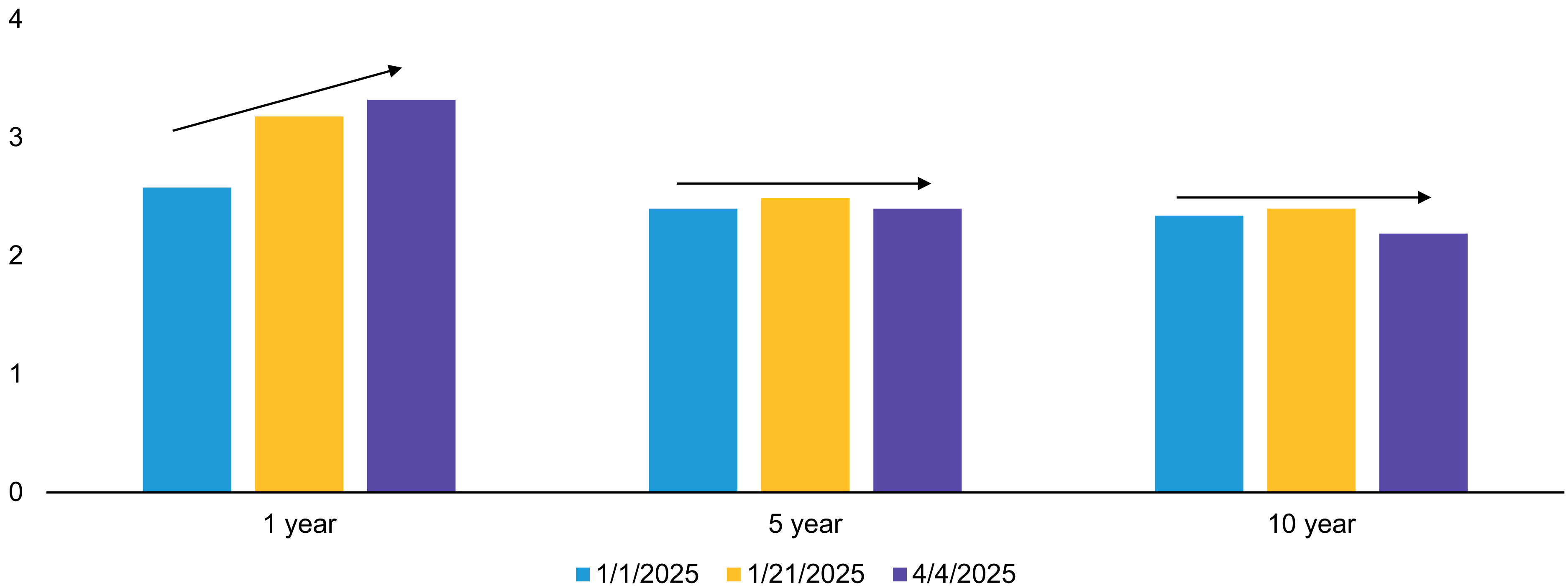
- As it currently stands, a baseline tariff of 10% has been announced upon all foreign importers
- In addition, China imports will face a tariff well in excess of 100%
- If implemented as announced, these changes represent a meaningful change vs. 2024's effective rate
- The US effective tariff rate is now in the mid-teens range, up from ~3% at year-end 2024
- The next phase of negotiation is now under way, and indeed, the White House has already highlighted its willingness to adjust these figures
- The hit to growth would be significant if implemented as announced (~0.5% GDP headwind) as would the inflation impact (~1.5%-2% incremental)

As of April 10, 2025.
Source: Bernstein analysis

Near-Term Inflation Expectations Increased, Longer-Term Anchored

Inflation Breakeven Rates

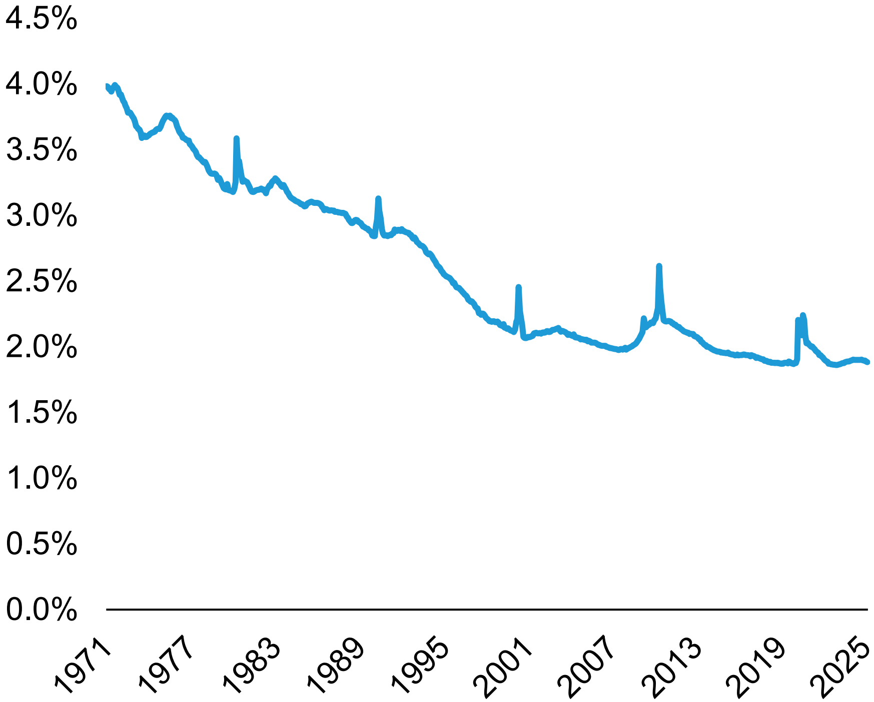
A rise in the 1-year breakeven rate without a corresponding rise in longer-term rates suggests the market believes the impact of tariffs will be one time (as opposed to prolonged)



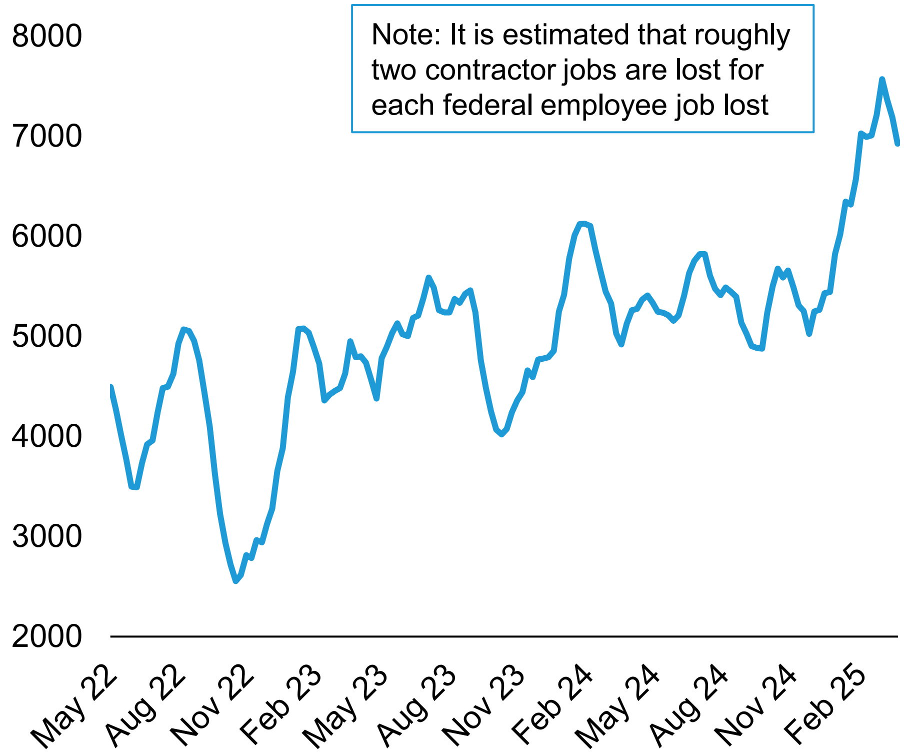
As of April 4, 2025.
Source: Bloomberg and Bernstein analysis

Federal Employees: Small Labor Force But Unemployment Moving Up

Federal Employment as a Percent of Total



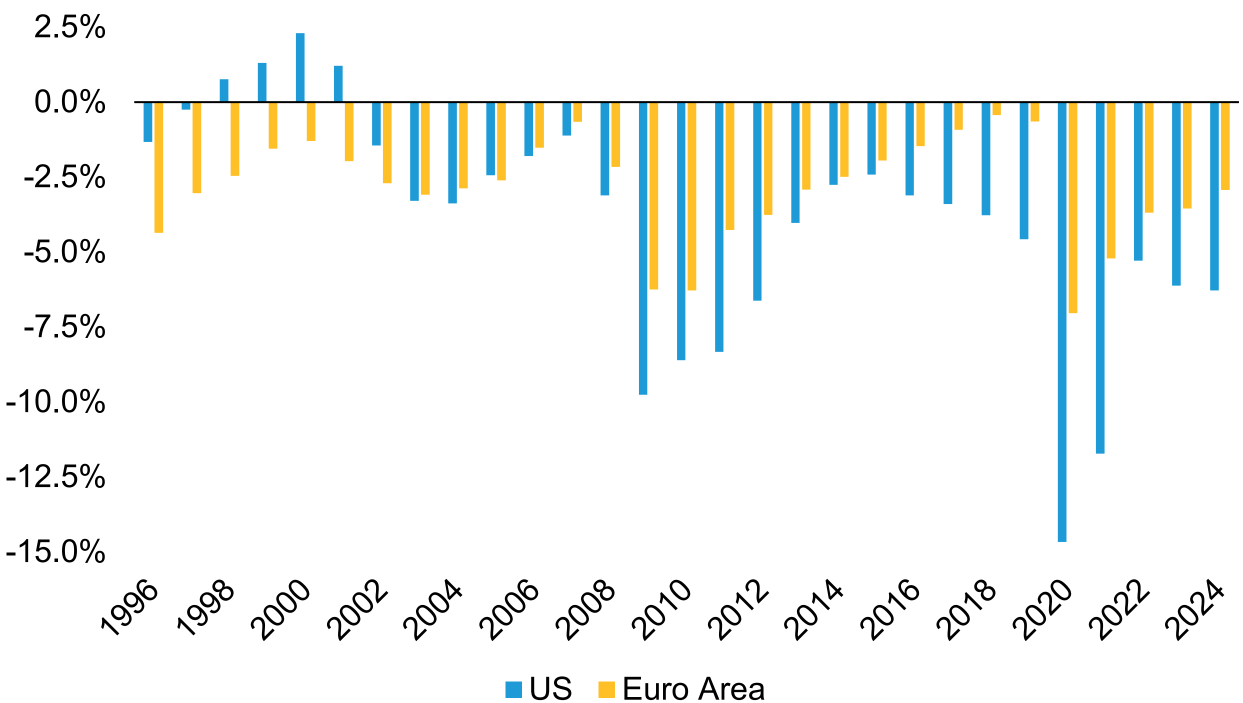
Unemployment Claims in Virginia, Maryland, and DC (1-month average)



As of April 4, 2025. **Past performance does not guarantee future results.**
Source: Federal Reserve, FRED, and Bernstein Analysis.

European Purse Strings May Loosen, Particularly as US Pulls Back

Surplus/Deficit as a Percent GDP



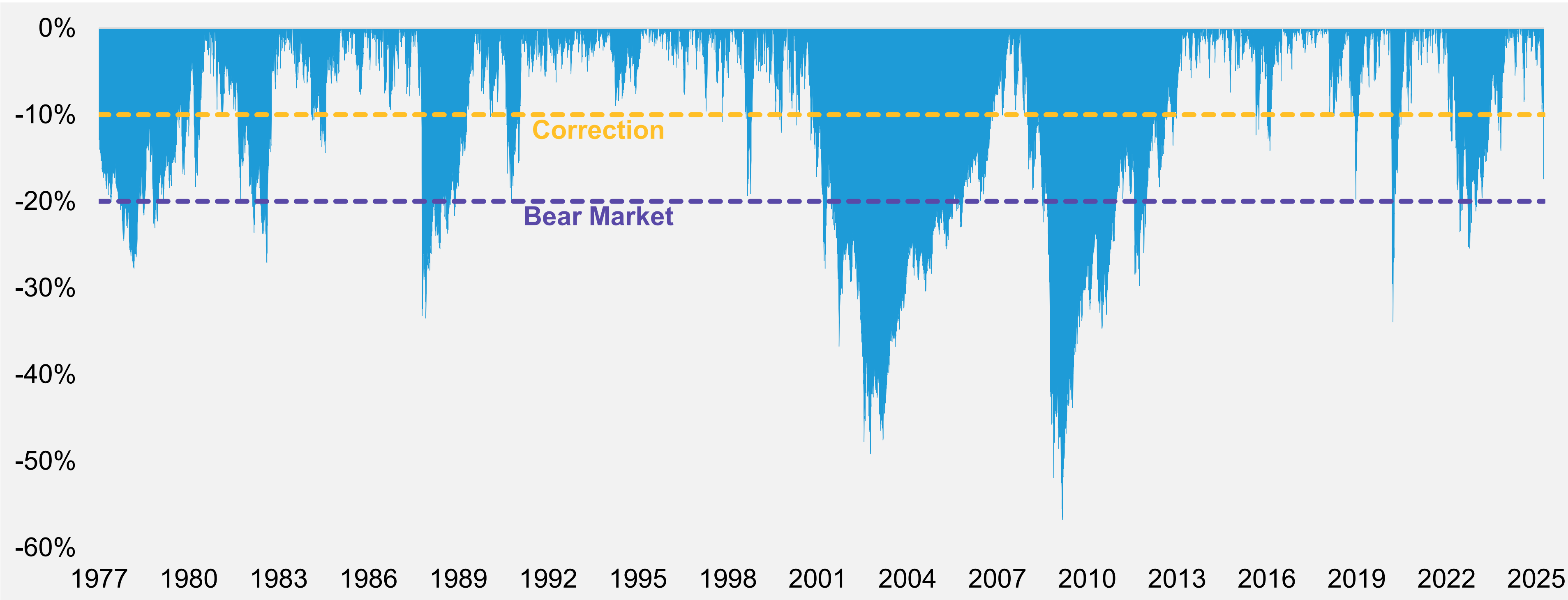
- Greater spending on defense and infrastructure would be a game changer in Europe given the region's historical austerity
- That said, the multiplier of defense spending is fairly limited (infrastructure is more broadly impactful)
- The benefit should accrue over a long-time period (5–10 years), which mutes the economic impact for the foreseeable future

As of April 4, 2025. **Past performance does not guarantee future results.**
Source: Office of Management and Budget, Federal Reserve, FRED, IMF, and Bernstein Analysis.

Markets Outlook

Selloffs Like The Current One Have Happened Before

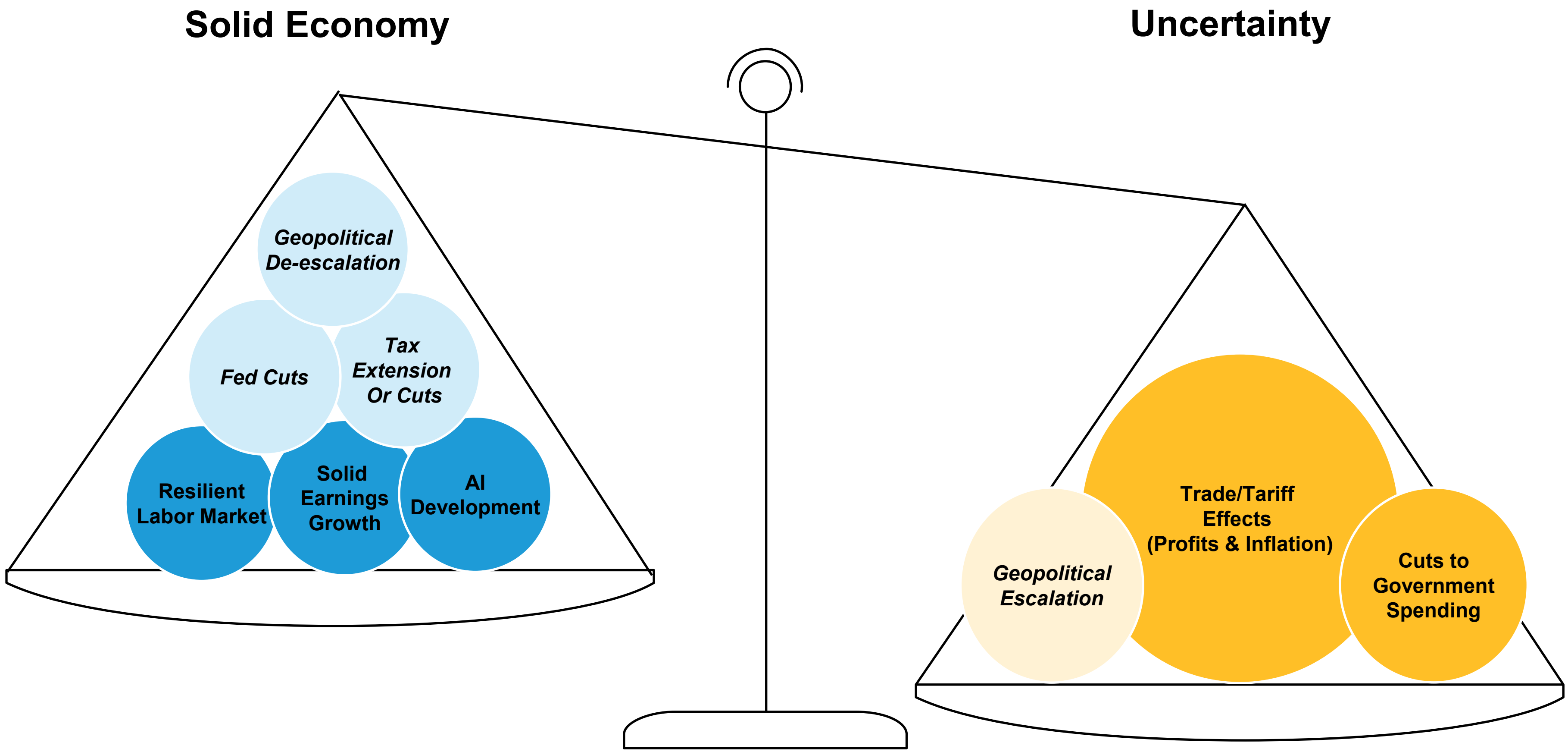
S&P 500 Drawdowns*



As of April 4, 2025. **Past performance is not necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.**
*Drawdown is defined as the percent decline from the prior peak for the index on a daily basis.
Source: FactSet, S&P, and AB Analysis

Uncertainty Has Weighed on an Otherwise Solid Economy

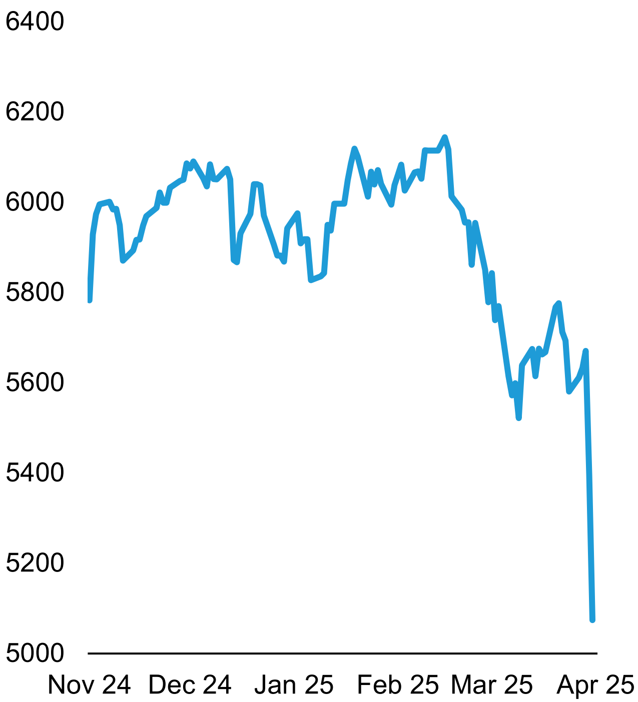
Contributing Factors: Current and *2H Potential*



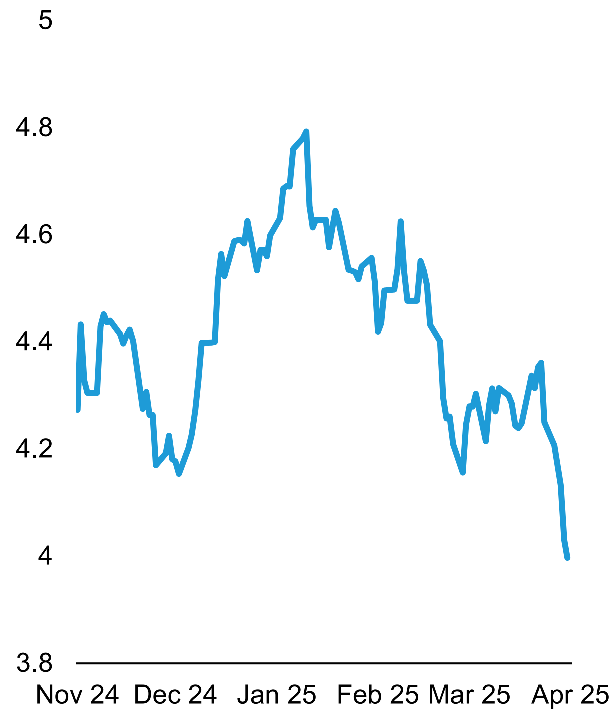
As of April 10, 2025. **Past performance is not necessarily indicative of future results.**
Source: AB

The Trump Trade More Than Round Trips

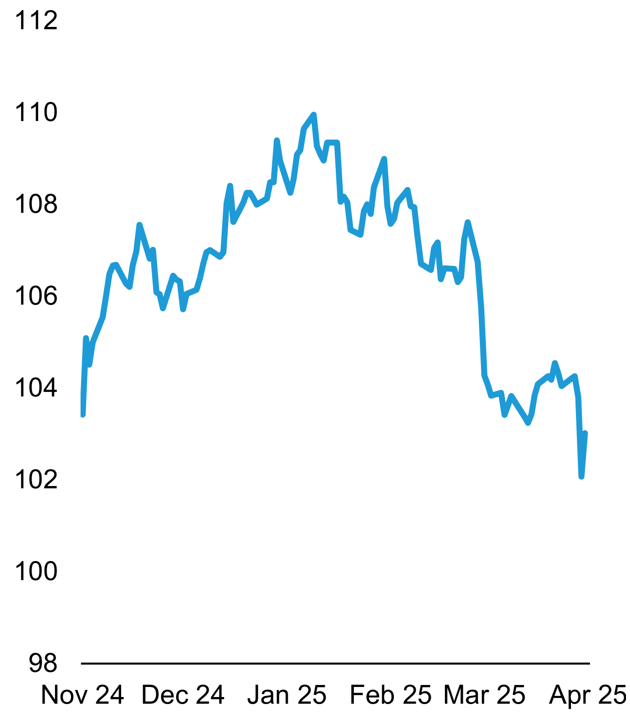
S&P 500 Price Index



10-Year US Treasury Yield, Percent



DXY Currency

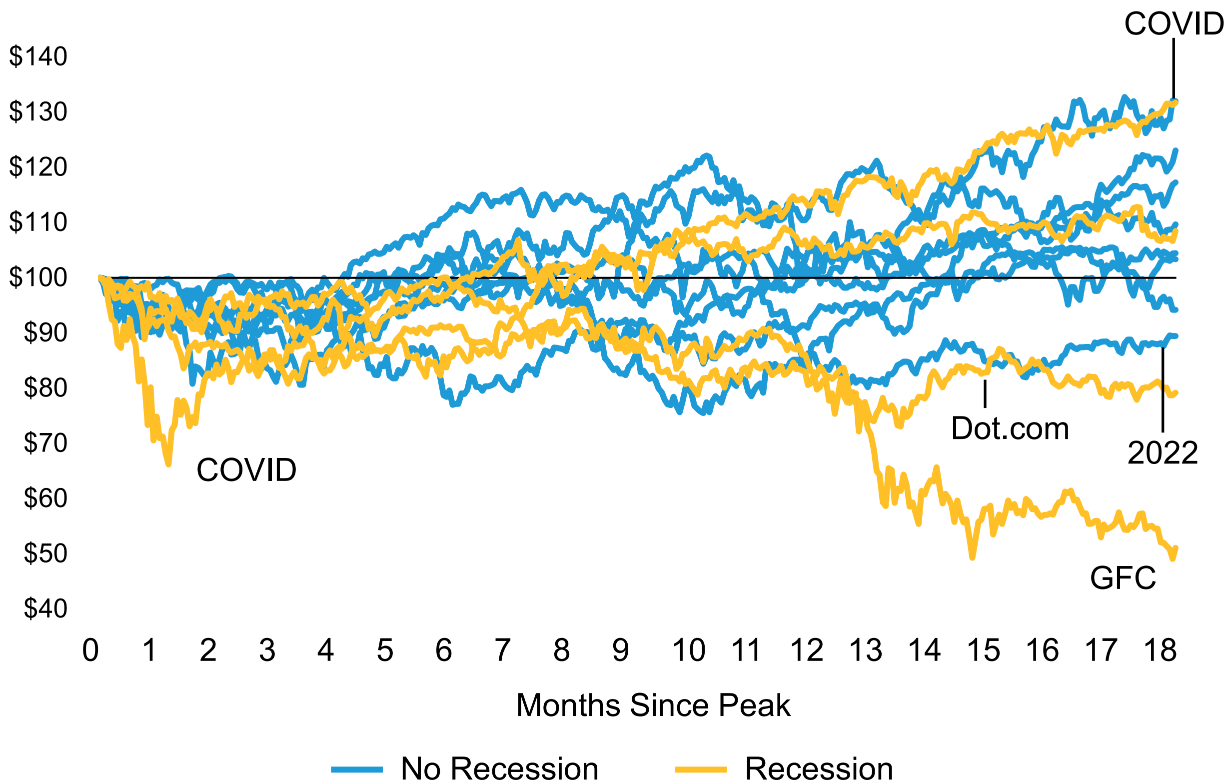


As of April 4, 2025.
Source: Bloomberg and Bernstein analysis

Recovery Quicker, Drawdown Less Acute For Non-Recessionary Declines

10%+ Sell-offs Since 1990

Growth of $100

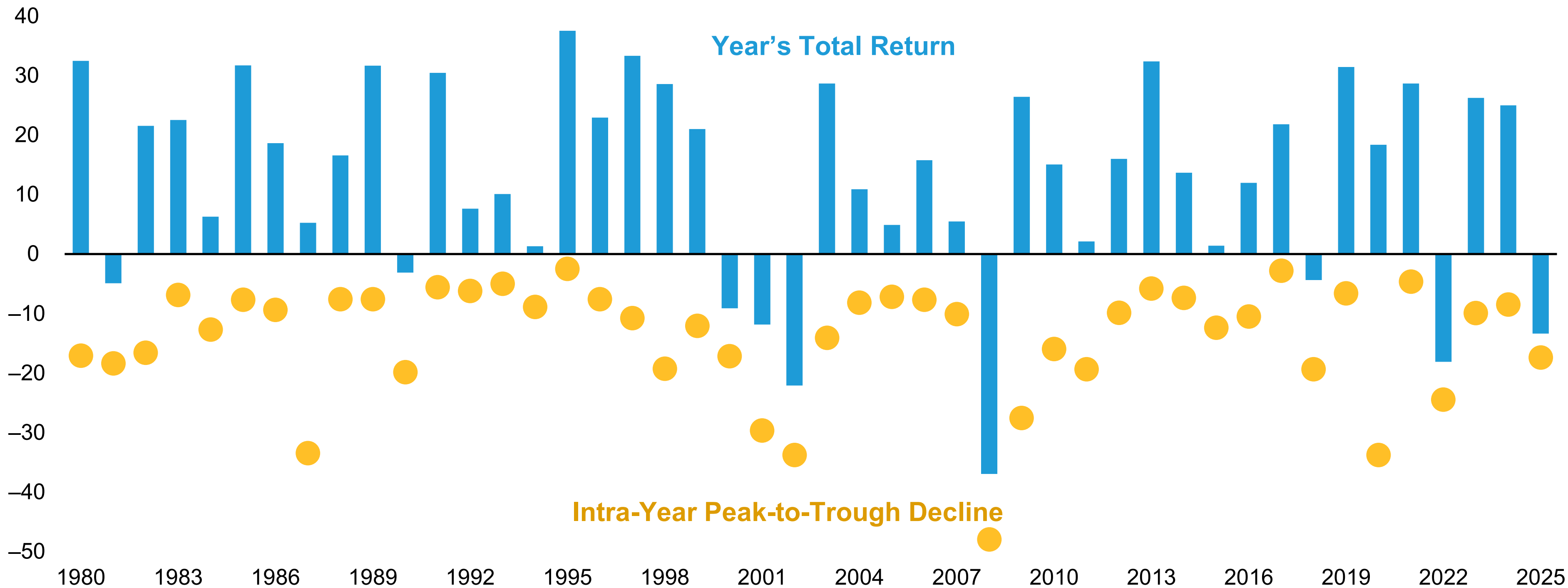


	No Recession	Recession
Count	8	4
Avg. Peak to Trough Decline	–14.8%	–29.8%
Largest (%)/Year	–24.5%/2022	–55.3%/2007/09
Avg. Time to Recover to Previous Peak	8 Months	18 Months
Avg. 12 Month Return After 10% Decline	14.2%	1.2%

As of April 4, 2025.
Recessions as determined by the US Recession Indicator Index. Months assumed to include 20 trading days.
Source: Bloomberg, National Bureau of Economic Research, and Bernstein analysis

Stocks Have Mostly Risen Despite Intra-Year Corrections

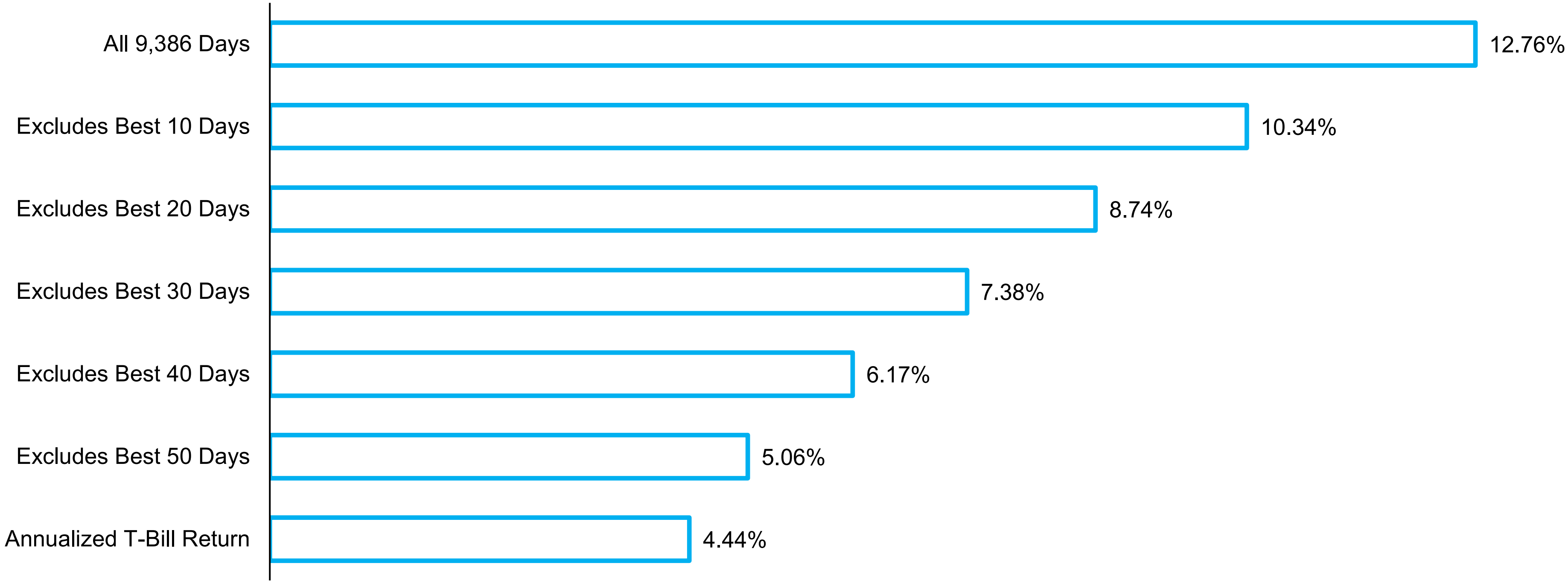
S&P 500 (%) by Calendar Year



As of April 4, 2025. **Past performance does not guarantee future results.**
Source: FactSet and AB analysis

Penalties for Missing the Market's Best Days Are Stiff

S&P 500 Total Return
Annualized, January 1988–March 2025



As of March 31, 2025.
Historical analysis is not necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.
T-bills are represented by the Lipper Three-Month T-Bill Index.
Source: Bloomberg, Lipper, S&P, and AB

Our 2025 S&P 500 Base, Bull, and Bear Case Assumptions

Increasing the likelihood of the bear case while lowering our targets across the board

Scenario Analysis: S&P 500, YE 2025—not incl. dividends

Bull: Would necessitate a quick reversal on tariffs and TCJA extension. Inflation falls toward target, Fed cuts through 2025. P/E ~21x.

Base: Assumes recession is averted, ~4% earnings growth, some but not all of Trump's pro-growth policies in 2H25. Inflation deceleration moderates. Fed cuts twice due to slowdown in 2025. P/E ~21x.

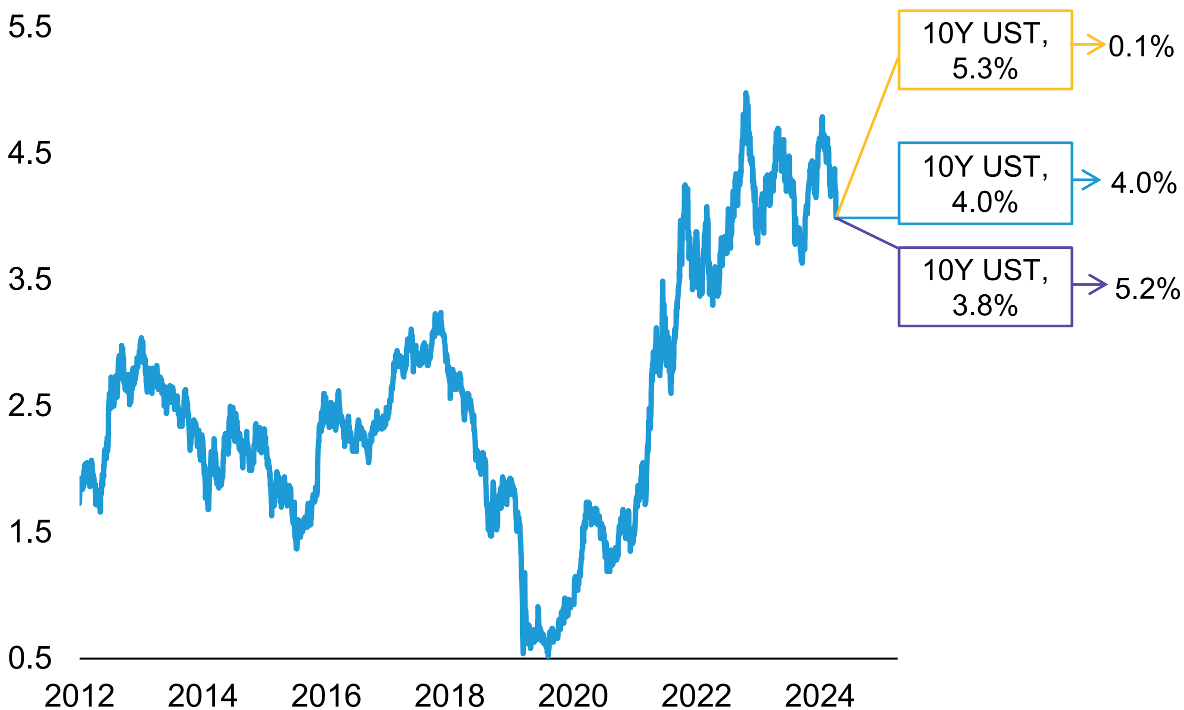
Bear: Assumes recession, ~10% profit headwind from tariffs/uncertainty and valuation re-rating to P/E ~18x

We took ~8-10% out of our base and bull case SPX targets given expectations for much slower EPS growth than previously assumed and a slightly lower valuation on those earnings. We also ***increased the likelihood of our bear case (***now 35% from 15%) while lowering the target. Admittedly, ***it's difficult to have confidence in any forecast*** given the uncertainty and fluidity of DC policy***.***

Source: Bloomberg, S&P, and Bernstein analysis

Expect Positive Returns…Even If Yields Rise Above 5%

Expected 12-Month Municipal Returns Scenario Analysis
10-Year US Treasury Yield, Percent



- Our year-end 2025 forecast is a 10Y yield at 3.5%
- If correct, munis should deliver a return of ~5+%
- But if rates rise above 5%, for example, investors should still earn a modestly positive return

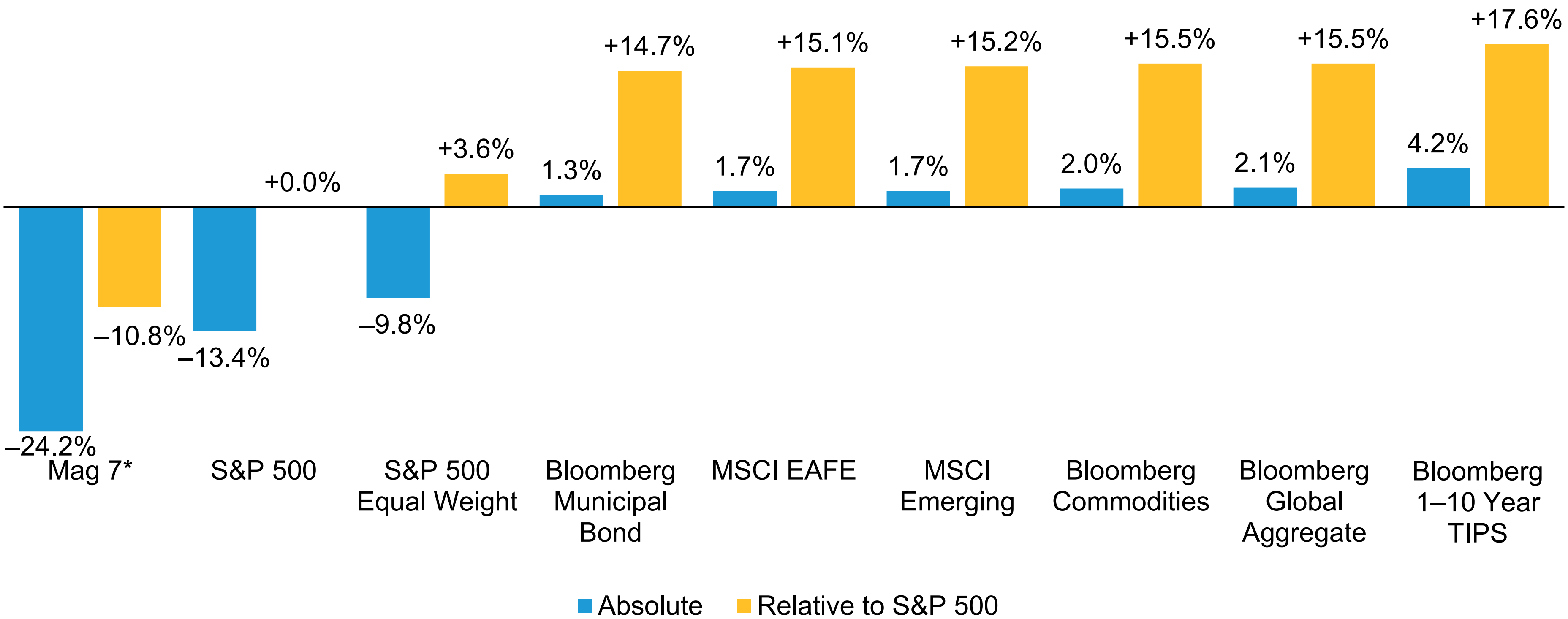
As of April 4, 2025. **Past performance and forecasts do not guarantee future results.** Display reflects expected returns of the Bloomberg Municipal Bond Index under three scenarios: 10-year US Treasury yields rise to 5.25%, remains the same, or declines to 3.75% over the next 12 months.
Source: Bloomberg and Bernstein analysis

Diversification Benefits

What Have You Done for Me Lately

Diversification (re)emerges as beneficial so far in 2025

Performance YTD

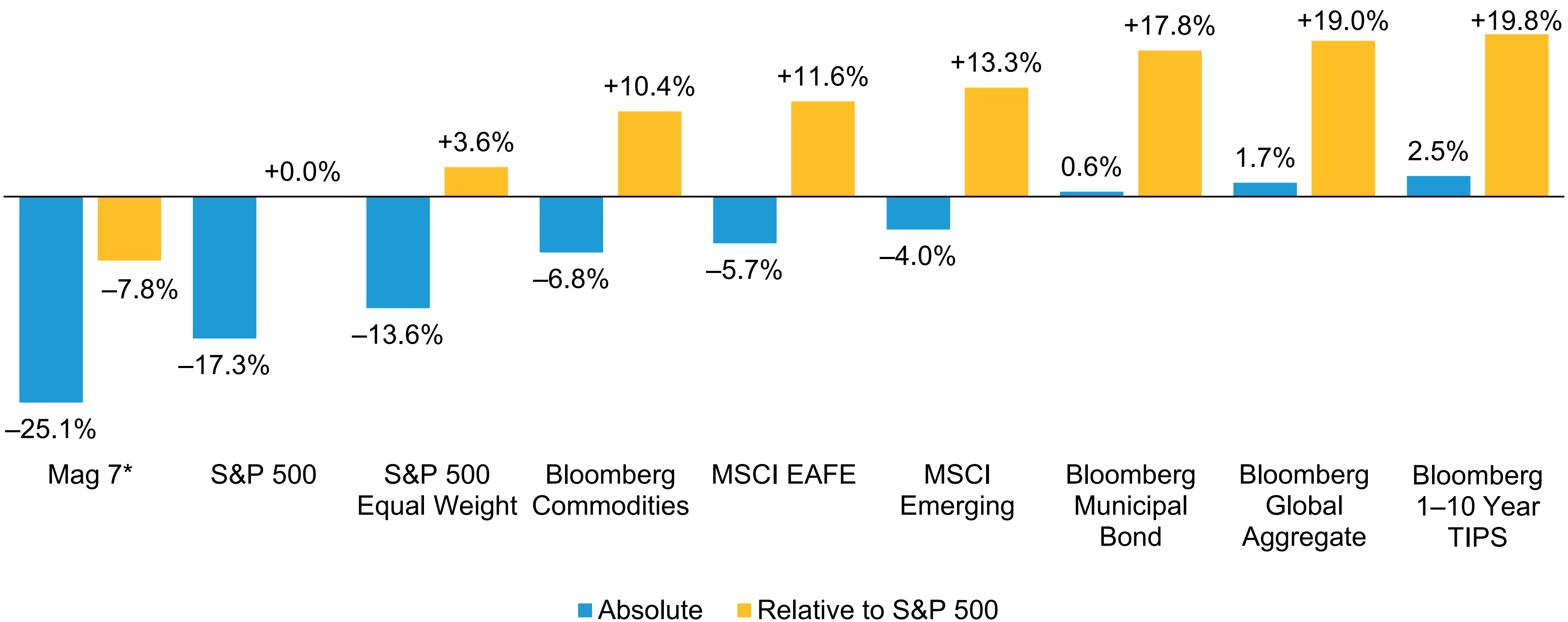


As of April 4, 2025. **Past performance does not guarantee future results.** Diversification does not eliminate the risk of loss.
*Magnificent 7 represented by the equal weighted Bloomberg Magnificent 7 Total Return Index.
Source: Bloomberg and Bernstein analysis

What Have You Done for Me Lately (Continued)

Diversification (re)emerges as beneficial so far in 2025

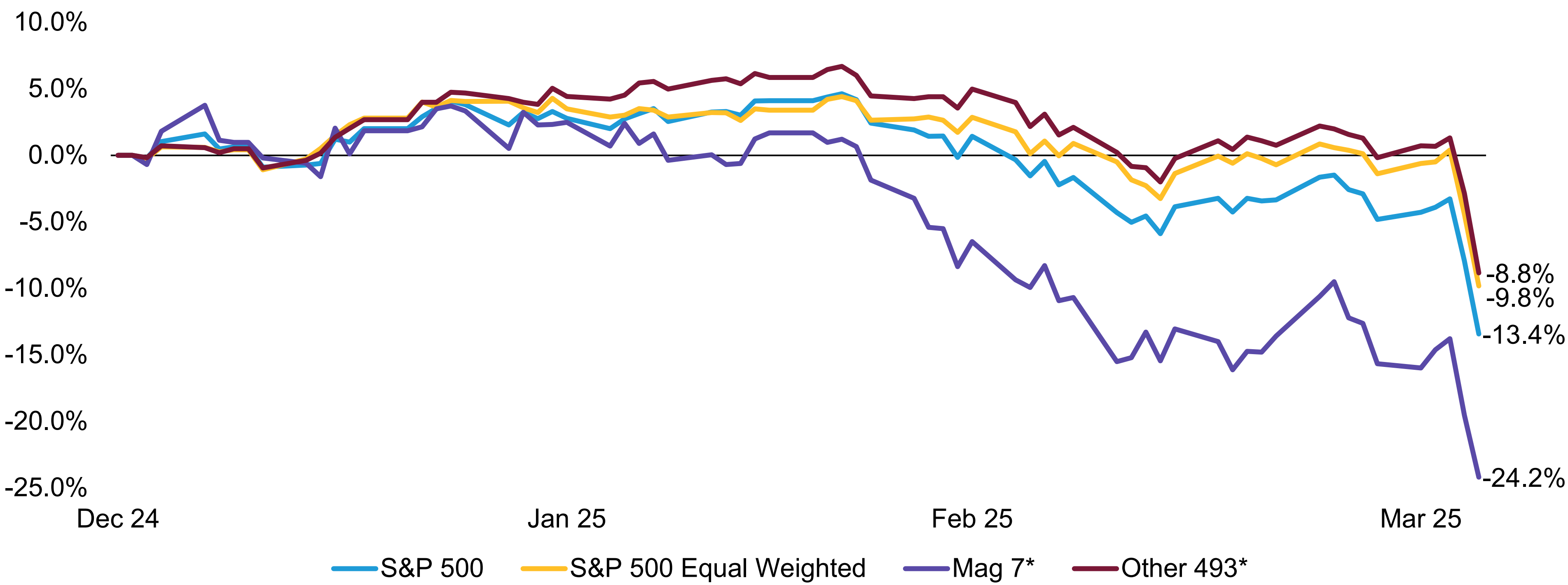
Performance Since S&P 500 Peak on Feb. 19



As of April 4, 2025. **Past performance does not guarantee future results.** Diversification does not eliminate the risk of loss.
*Magnificent 7 represented by the equal weighted Bloomberg Magnificent 7 Total Return Index.
Source: Bloomberg and Bernstein analysis

Equity Concentration Finally Bites

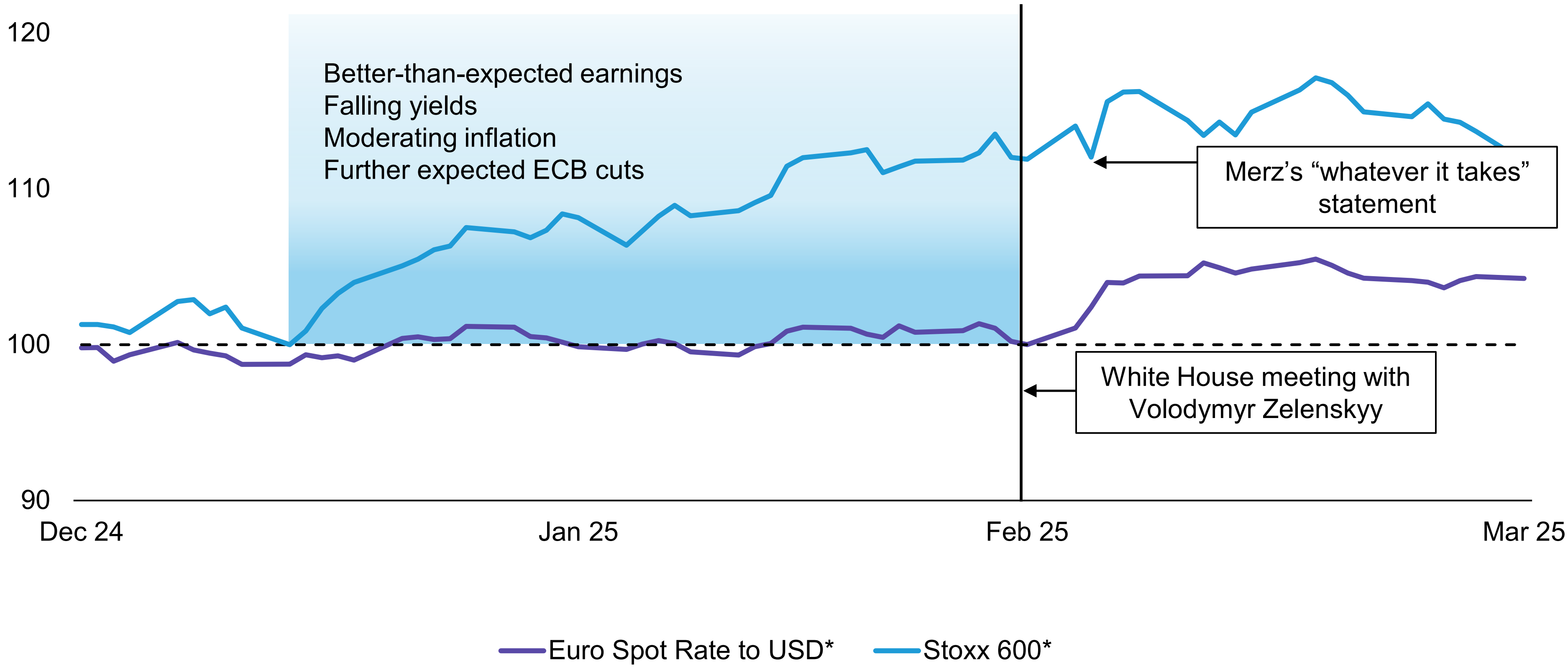
S&P 500, Equal Weighted Index, and Mag 7
Cumulative Total Return, Percent



As of April 4, 2025.
*Magnificent 7 represented by the equal weighted Bloomberg Magnificent 7 Total Return Index. Other 493 represented by a market weighted index of the constituents of the S&P 500 less the Magnificent 7 stocks as of the start of 2025.
Source: Bloomberg and Bernstein analysis

A Game Changer in Europe? A Rally with Catalysts

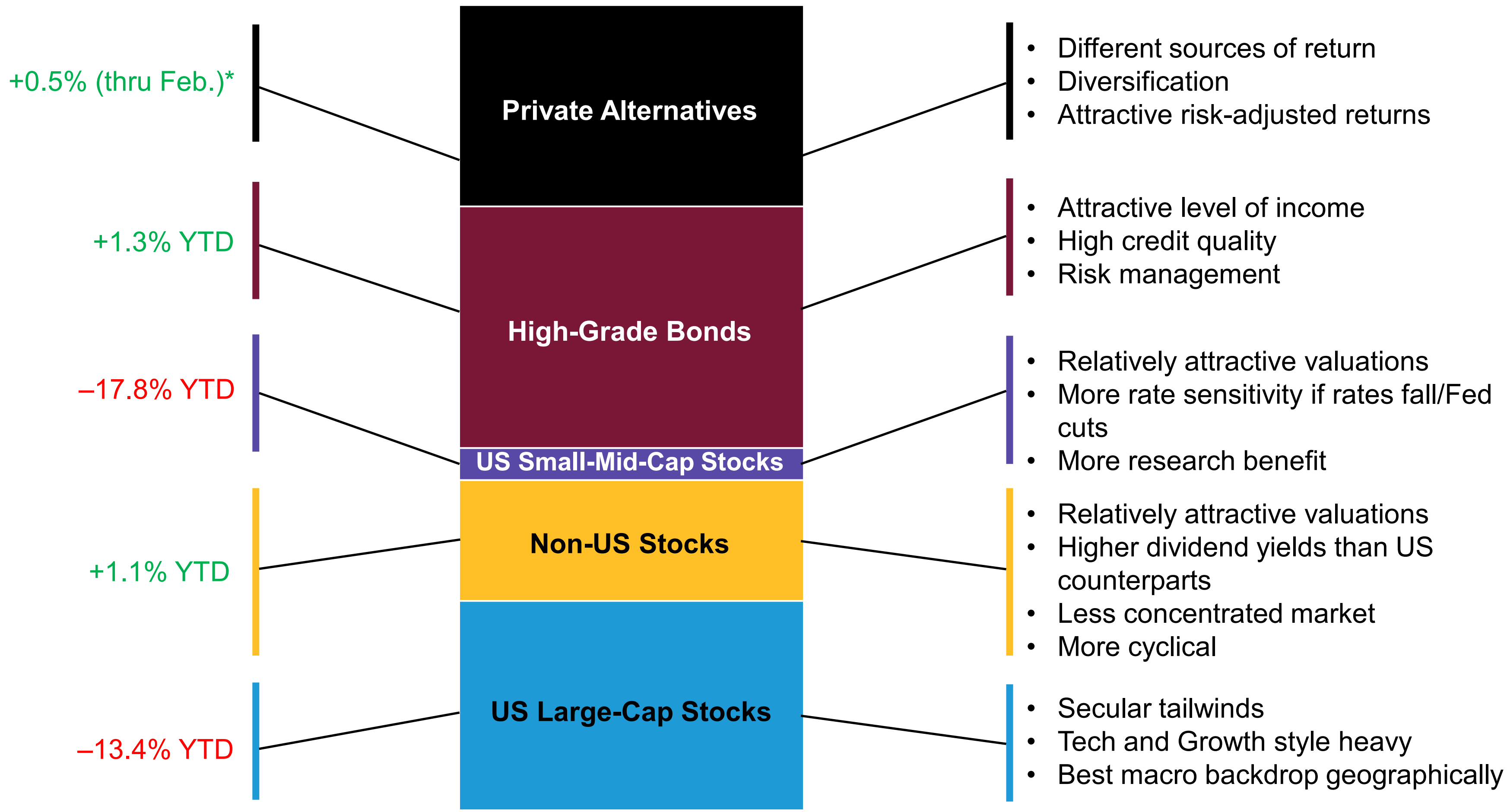
European Markets



As of March 31, 2025.
*Euro Spot Rate to USD indexed to February 28, 2025. Stoxx 600 indexed to beginning of the rally starting January 13, 2025.
Source: Bloomberg and Bernstein analysis

Why Be Balanced? Preparation for Varied Market Environments

Prudent diversification means an investor will never only own the best performer



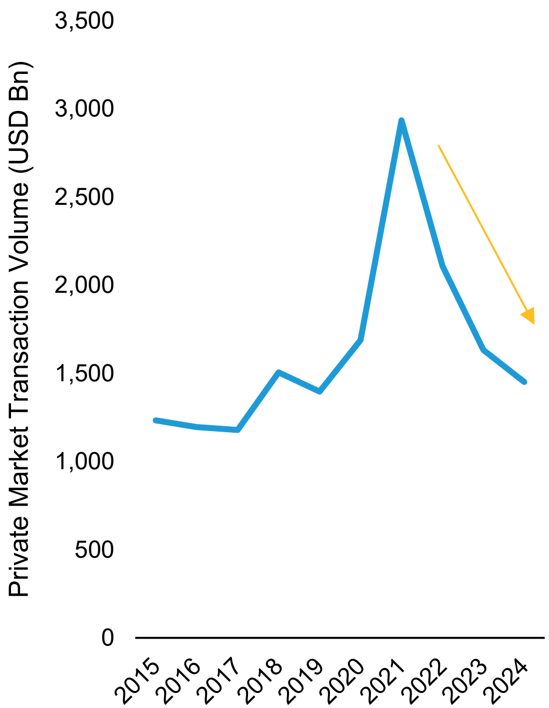
Balanced Allocation

As of April 4, 2025. Diversification does not eliminate the risk of loss. US Large-Cap Stocks represented by the S&P 500 Index, Non-US Stocks by the MSCI ACWI ex-US Index, Small-Mid-Cap Stocks by the Russell 2000 Index, High-Grade Bonds by the Bloomberg Municipal Bond Index and Private Alternatives by the HFRI Fund of Funds Composite Index. *As of 2/28/2025.
Source: Bernstein analysis

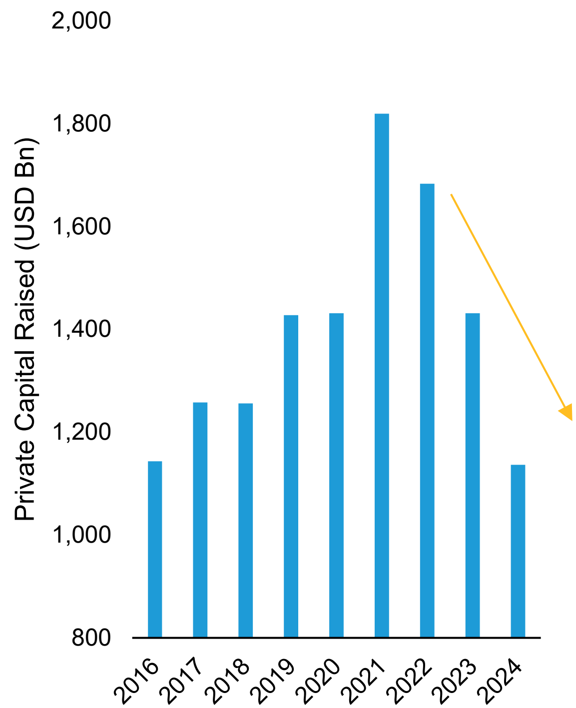
Dislocations Have Emerged Across Private Markets

Rising interest rates have reduced liquidity across private markets, creating an attractive entry point for liquidity providers

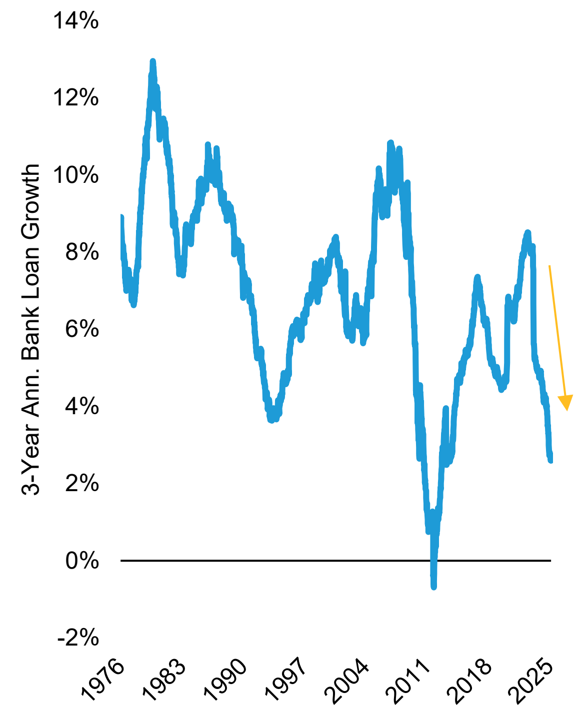
Decreased Transaction Volume Has Limited Exit Opportunities



Lack of Exits Has Contributed to Lack of New Funds to Invest

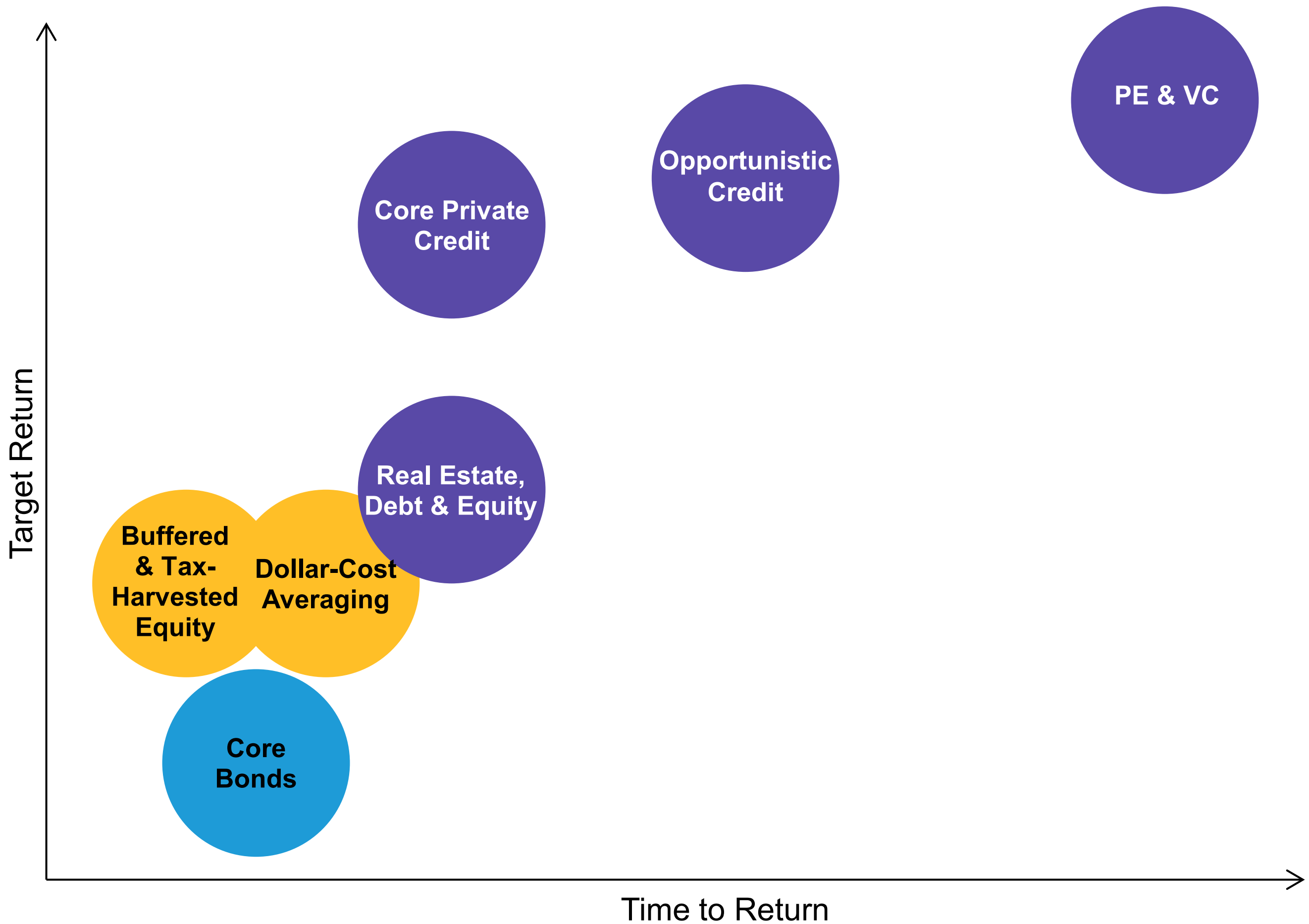


Traditional Lenders Have Pulled Back, an Opportunity for Private Lenders



As of April 4, 2025.
Source: Federal Reserve, FRED, Preqin and Bernstein analysis

Best Ideas for 2H 2025



Opportunities Catalyzed by the Current Environment:

Near-Term Volatility
Upside participation with downside protection or the benefit of active tax-loss harvesting

Peak Rates
The hiking cycle has ended, and the economy is expected to slow into 2025. Current yields plus potential for price appreciation look appealing.

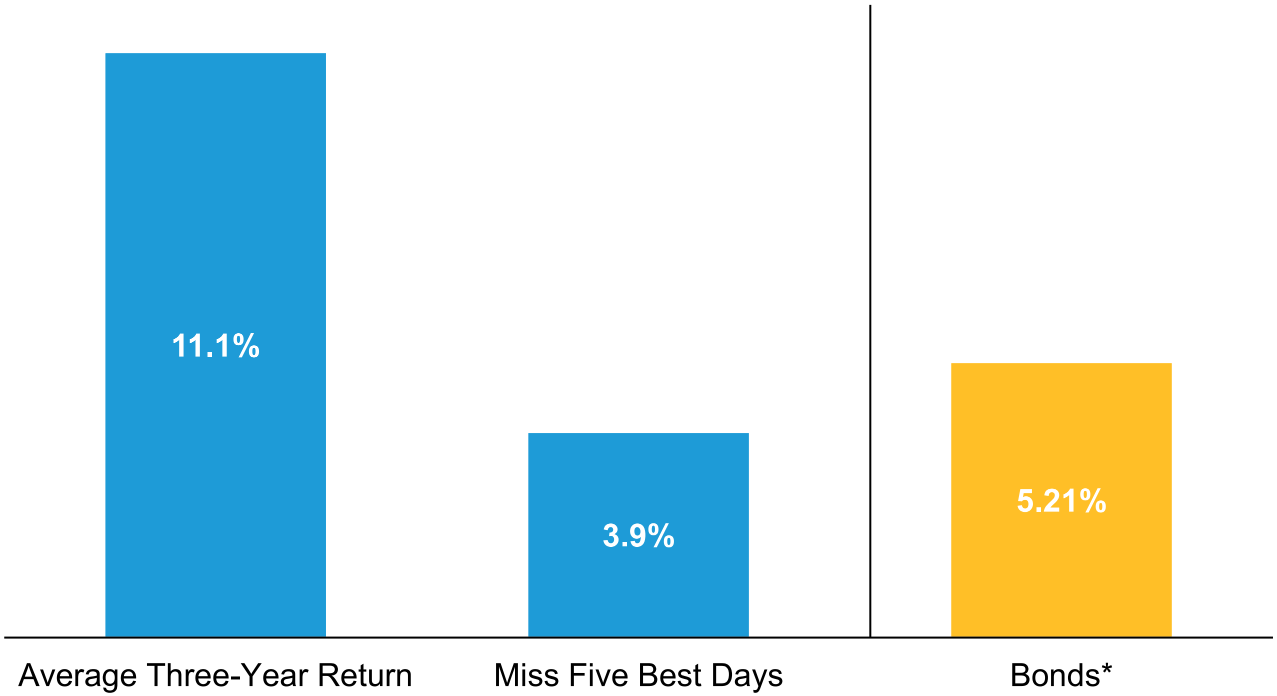
Liquidity Dislocation
Still constrained supply of capital in private markets, creating opportunity for those who can provide liquidity

As of April 10, 2025. **For illustrative purposes only. Past performance is no guarantee of future returns. Target returns are hypothetical performance and not projections, predictions, or guarantees of future performance, and there can be no assurance that the target return will be achieved.**
Source: Bernstein analysis

Appendix

Timing the Market Means Getting Out *and* Getting Back In

S&P 500 Rolling Three-Year Returns, Annualized, Jan 1988–Mar 2025



The Cost of Missing Out

- Getting out in advance of a major sell-off is difficult to time. Getting back in is equally difficult.
- Further, the after-tax impact makes the hurdle for success even higher.
- More often than not, investors miss out on further upside rather than downside.
- Missing just the five best days over a three-year period can be detrimental.

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*Bonds represented by the average of the monthly rolling 1 year return of the Bloomberg Municipal Bond Index from January 1988 through March 2025.
Source: Bloomberg, S&P, and AB

Return Factors and Geography Are Cyclical

Geography Returns

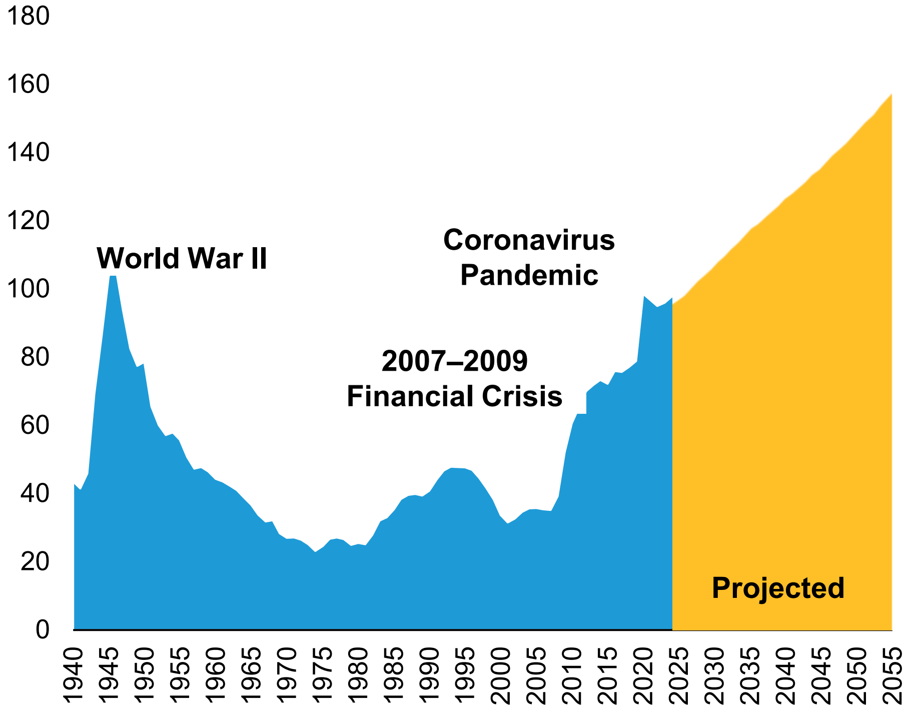
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD 2025
Emerging Markets 34.0%	Emerging Markets 32.2%	Emerging Markets 39.4%	S&P 500 (37.0)%	Emerging Markets 78.5%	Int'l Small Cap 25.2%	S&P 500 2.1%	Int'l Small Cap 18.5%	S&P 500 32.4%	S&P 500 13.7%	Int'l Small Cap 2.6%	S&P 500 12.0%	Emerging Markets 37.3%	S&P 500 (4.4)%	S&P 500 31.5%	S&P 500 18.4%	S&P 500 28.7%	Developed Int'l Stocks (14.5)%	S&P 500 26.3%	S&P 500 25.0%	Developed Int'l Stocks 6.9%
Int'l Small Cap 22.6%	Int'l Small Cap 26.9%	Non-US Stocks 16.7%	Global Equities (incl US) (42.3)%	Int'l Small Cap 62.9%	Emerging Markets 18.9%	Global Equities (incl US) (7.9)%	Emerging Markets 18.2%	Global Equities (incl US) 23.6%	Global Equities (incl US) 3.8%	S&P 500 1.4%	Emerging Markets 11.2%	Int'l Small Cap 31.6%	Global Equities (incl US) (10.1)%	Global Equities (incl US) 26.4%	Emerging Markets 18.3%	Global Equities (incl US) 18.2%	Non-US Stocks (16.0)%	Global Equities (incl US) 21.6%	Global Equities (incl US) 16.4%	Non-US Stocks 5.2%
Non-US Stocks 16.6%	Non-US Stocks 26.7%	Developed Int'l Stocks 11.2%	Developed Int'l Stocks (43.4)%	Non-US Stocks 41.4%	S&P 500 15.1%	Developed Int'l Stocks (12.1)%	Developed Int'l Stocks 17.3%	Developed Int'l Stocks 22.8%	Emerging Markets (2.2)%	Developed Int'l Stocks (0.8)%	Global Equities (incl US) 8.4%	Non-US Stocks 27.2%	Developed Int'l Stocks (13.8)%	Int'l Small Cap 22.4%	Global Equities (incl US) 16.3%	Int'l Small Cap 12.9%	S&P 500 (18.1)%	Developed Int'l Stocks 18.2%	Emerging Markets 7.5%	Emerging Markets 2.9%
Developed Int'l Stocks 13.5%	Developed Int'l Stocks 26.3%	Global Equities (incl US) 11.2%	Non-US Stocks (45.5)%	Global Equities (incl US) 36.4%	Global Equities (incl US) 14.3%	Non-US Stocks (13.7)%	Non-US Stocks 16.8%	Int'l Small Cap 19.7%	Non-US Stocks (3.9)%	Global Equities (incl US) (2.2)%	Non-US Stocks 4.5%	Developed Int'l Stocks 25.0%	Non-US Stocks (14.2)%	Developed Int'l Stocks 22.0%	Int'l Small Cap 14.2%	Developed Int'l Stocks 11.3%	Global Equities (incl US) (18.4)%	Int'l Small Cap 15.7%	Non-US Stocks 5.5%	Int'l Small Cap 0.6%
Global Equities (incl US) 11.5%	Global Equities (incl US) 20.9%	Int'l Small Cap 10.8%	Int'l Small Cap (50.2)%	Developed Int'l Stocks 31.8%	Non-US Stocks 11.2%	Emerging Markets (18.4)%	Global Equities (incl US) 16.4%	Non-US Stocks 15.3%	Int'l Small Cap (4.0)%	Non-US Stocks (5.7)%	Int'l Small Cap 3.9%	Global Equities (incl US) 23.9%	Emerging Markets (14.6)%	Non-US Stocks 21.5%	Non-US Stocks 10.7%	Non-US Stocks 7.8%	Int'l Small Cap (20.0)%	Non-US Stocks 15.6%	Developed Int'l Stocks 3.8%	Global Equities (incl US) (1.6)%
S&P 500 4.9%	S&P 500 15.8%	S&P 500 5.5%	Emerging Markets (53.3)%	S&P 500 26.5%	Developed Int'l Stocks 7.8%	Int'l Small Cap (18.5)%	S&P 500 16.0%	Emerging Markets (2.6)%	Developed Int'l Stocks (4.9)%	Emerging Markets (14.9)%	Developed Int'l Stocks 1.0%	S&P 500 21.8%	Int'l Small Cap (18.2)%	Emerging Markets 18.4%	Developed Int'l Stocks 7.8%	Emerging Markets (2.5)%	Emerging Markets (20.1)%	Emerging Markets 9.8%	Int'l Small Cap 3.4%	S&P 500 (4.3)%

As of March 31, 2025. **Historical analysis is not necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.**
Return factors refer to certain characteristics that may apply to an individual security. Factor indices are as follows: S&P 500 – S&P 500 Index; Int'l small cap – MSCI ACWI ex USA Small Cap Index; Global equities – MSCI ACWI IMI Index; Non-US Stocks: MSCI ACWI ex US Index; Developed int'l stocks: MSCI EAFE Index; Emerging markets: MSCI Emerging Markets Index.
Source: Morningstar, Morgan Stanley Capital International (MSCI), Russell and Standard & Poor's

Warning Lights Are Flashing, but Alarms Are Not Blaring

It is simply too soon to say how DOGE and other policy shifts will impact the trajectory on net

Federal Debt Held by the Public
Percentage of GDP

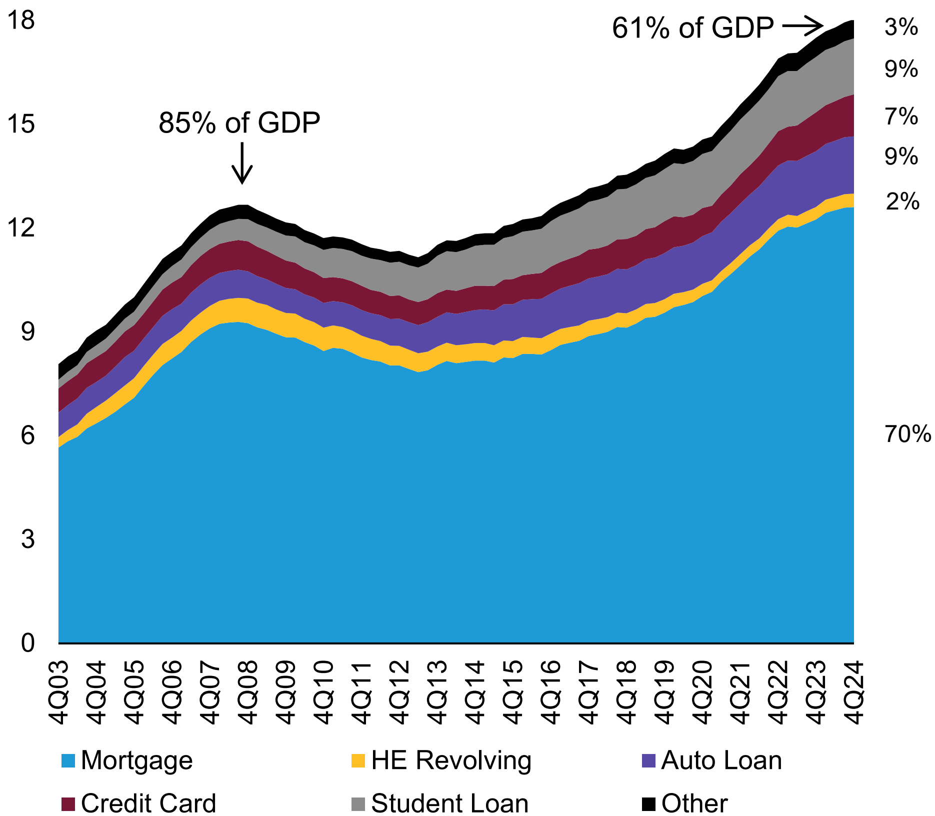


Click below for our latest white paper for more insights

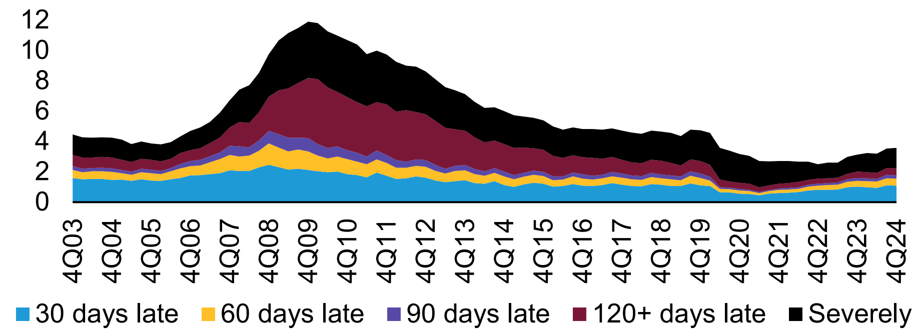
As of April 4, 2025. **Historical analysis is not necessarily indicative of future results.**
Source: Congressional Budget Office and Bernstein analysis

Consumer Debt Causing Some Strain, Though Shouldn't Be Overstated

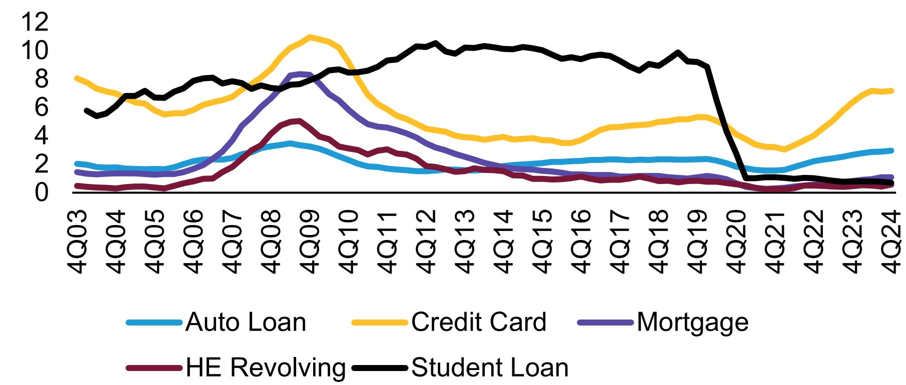
Total Debt Balance and Its Composition
Trillions of Dollars



Total Balance by Delinquency Status
Percent



Transition into Serious Delinquency (90+) by Loan Type
Percent of Balance*

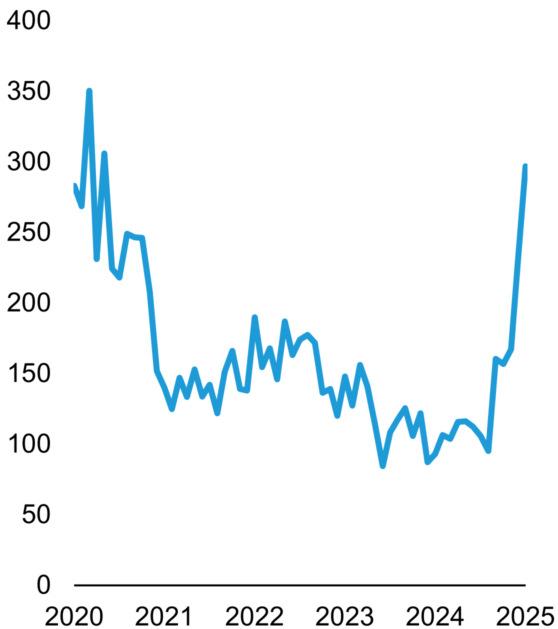


As of April 4, 2025. **Historical analysis is not necessarily indicative of future results.** *4-quarter moving sum. Student loans are not included prior to 2004 due to uneven reporting.
Source: New York Fed Consumer Credit Panel/Equifax and Bernstein analysis

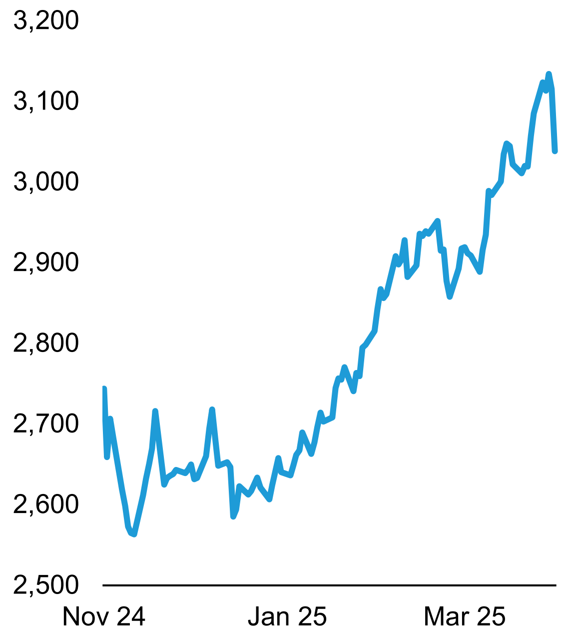
BERNSTEIN

What's Going On with Gold?

US Economic Policy Uncertainty Index



Gold Spot Rate to USD



Our Insights

- Central bank purchases have contributed to rising gold prices for over a year now, but the safe-haven asset is now rallying further, hitting multiple new highs this year
- High levels of uncertainty, particularly surrounding tariffs, have been a catalyst, as growth expectations dampened as a result
- As a real asset, gold can serve as a source of diversification and a hedge against inflation
- However, as any savvy investor knows, no single asset class presents the perfect solution for the aforementioned goals

As of April 4, 2025. **Past performance is not necessarily indicative of future results.**
Source: Bloomberg, Federal Reserve, FRED, Policyuncertainty.com, and Bernstein analysis

BERNSTEIN

Geopolitics: Events Rarely Have a Lasting Market Impact

Select geopolitical events since 1970 and S&P 500 returns (percent)

Event	First Trading Day	1 Week	1 Month	1 Quarter	1 Year
Watergate	6/19/1972	–0.1	–1.4	0.4	–3.0
Yom Kippur War*	10/8/1973	1.4	–3.9	–10.0	–43.2
Three Mile Island Accident	3/28/1979	–0.1	–0.7	–0.2	–4.2
Iran Hostage Crisis*	11/5/1979	–1.0	3.6	12.3	24.3
Reagan Assassination Attempt*	3/30/1981	0.6	0.6	–1.6	–16.9
Challenger Space Shuttle	1/28/1986	3.2	9.3	16.8	32.0
Iran-Contra Affair	11/3/1986	0.7	2.1	12.3	3.2
Iraq Invades Kuwait*	8/2/1990	–4.7	–8.9	–12.8	12.8
Desert Storm/First Gulf War*	1/17/1991	4.5	17.2	23.6	36.6
LA Riots	4/29/1992	2.0	2.3	2.8	10.2
WTC Bombing (1993)	2/26/1993	1.2	2.1	2.2	8.3
Oklahoma City Bombing	4/19/1995	1.4	3.1	11.3	30.5
Centennial Park Olympic Bombing	7/29/1996	4.3	4.6	10.8	50.6
Kenya/Tanzania Embassy Bombings	8/7/1998	–1.3	–10.5	5.1	21.0
USS Cole Bombing*	10/12/2000	–1.6	0.2	–2.5	–18.5
Bush-Gore Hanging Chad*	11/7/2000	–5.6	–5.5	–5.3	–20.9
9/11*	9/17/2001	–4.9	–0.9	4.7	–15.5
War in Afghanistan*	10/8/2001	1.9	3.0	9.8	–24.2

Key Takeaway: Stocks have generally shrugged off geopolitical events, since they rarely have a lasting impact on the business cycle.

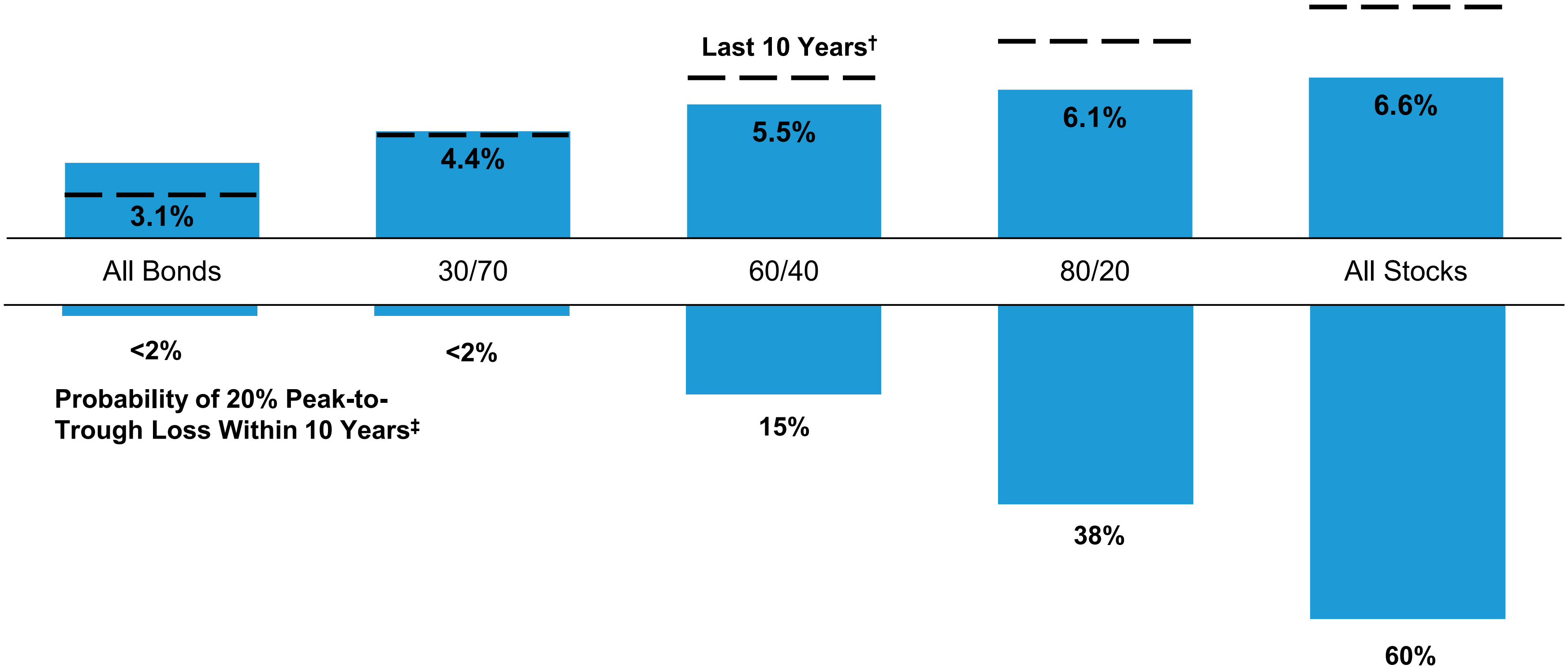
Event	First Trading Day	1 Week	1 Month	1 Quarter	1 Year
SARS†	2/11/2003	–0.1	–3.2	12.2	39.5
Second Gulf War	3/20/2003	–0.5	2.4	14.3	29.2
Madrid Train Bombings	3/11/2004	0.0	1.5	1.5	9.5
Orange Revolution–Ukraine	11/22/2004	1.1	2.2	3.1	8.6
Asian Tsunami	12/27/2004	0.3	–3.4	–2.7	6.8
London Bombings	7/7/2005	2.4	2.7	0.2	8.6
Hurricane Katrina	8/29/2005	1.1	1.0	5.7	9.5
Arab Spring	12/17/2010	1.2	4.2	1.6	0.2
Hurricane Sandy	10/29/2012	1.1	–0.0	7.0	27.3
Boston Marathon Bombing	4/15/2013	–2.1	3.0	6.3	16.7
Russia/Ukraine/Crimea	2/27/2014	1.6	0.5	3.5	16.8
Greek Referendum	11/5/2015	–1.2	–0.3	–8.4	1.4
Brexit	6/24/2016	–0.7	3.1	3.0	17.8
Trump Surprise Election Win	11/8/2016	1.6	5.4	8.1	24.0
Hurricane Harvey/Irma/Maria	8/25/2017	1.4	2.8	7.2	20.2
US-China Trade War‡	1/22/2018	2.2	–2.6	–3.7	–3.1
Coronavirus Outbreak†	3/11/2020	–12.5	2.0	10.1	46.2
Russia Invades Ukraine	2/24/2022	1.8	5.5	–7.8	–7.4
Israel-Hamas War	10/9/2023	0.9	0.4	10.1	35.5

Summary	1 Week	1 Month	1 Quarter	1 Year
Average	0.4	1.2	4.1	10.6
% of Events Negative	36	33	28	28
Conflict/War Avg.	0.9	2.0	3.8	7.0
Terrorism Avg.	–0.1	0.7	4.4	12.4
Political Avg.	–0.2	1.1	2.4	5.3
Environmental Avg.	0.8	–0.1	3.4	11.9
Social/ Public Health Avg.	1.4	2.2	8.1	22.2

As of April 4, 2025. **Past performance does not guarantee future results.**
*Denotes the geopolitical event occurred during a recession or six months prior to the start of a recession.
†Date that China officially notified the WHO of the outbreak.
‡Tariffs on imports of solar panels and washing machines imposed.
Source: Bloomberg, FactSet, National Bureau of Economic Research, S&P 500, World Health Organization, and Bernstein analysis

Expected Returns Across Allocations

Projected median 10-year annualized return*



As of March 31, 2025. **Neither past nor forecasted performance is necessarily indicative of future results. There is no guarantee that any estimates or forecasts will be realized.**
***Median 10-year forecast represents pretax compound annual growth rates and reflects Bernstein's estimates and the capital-market conditions as of December 31, 2024.** Stocks are represented by the MSCI World Index, and bonds are represented by intermediate-term diversified municipals.
†Stocks are represented by the MSCI World Index, and bonds are represented by the Lipper Intermediate Muni Bond Fund Avg.
‡Projections indicate the probability of a peak-to-trough decline in pretax, pre-cash-flow cumulative returns of 20% over the period analyzed. Because the Bernstein Wealth Forecasting System uses annual capital-market returns, the probability of peak-to-trough losses measured on a more frequent basis (such as daily or monthly) may be understated. The probabilities depicted above include an upward adjustment intended to account for the incidence of peak-to-trough losses that do not last an exact number of years. Stocks are represented by the MSCI World Index, and bonds are represented by intermediate-term diversified municipals.
See Notes on the Bernstein Wealth Forecasting System at the end of this presentation for further details.
Source: Bloomberg Barclays, FactSet, Lipper, MSCI, Russell, S&P, and AB

Ten-Year Capital Market Projections: Asset Classes

	Median 10-Year Growth Rate	Mean Annual Return	Mean Annual Income	One-Year Volatility	10-Year Annual Equivalent Volatility
Cash Equivalents	3.4%	3.5%	3.5%	0.5%	5.0%
Short-Term Treasuries	3.9%	4.0%	3.8%	1.2%	4.2%
Short-Term Taxables	4.1%	4.2%	4.2%	1.5%	4.3%
Short-Term Diversified Municipals	2.7%	2.8%	2.7%	0.9%	3.0%
Int.-Term Treasuries	4.5%	4.7%	4.2%	5.1%	3.0%
Int.-Term Taxables	4.7%	4.9%	4.6%	5.6%	3.4%
Int.-Term Corporates	4.8%	5.0%	4.9%	6.4%	4.0%
Int.-Term Diversified Municipals	3.1%	3.2%	3.0%	4.6%	3.0%
Global Int.-Term Taxables (Hedged)	4.2%	4.4%	4.0%	4.6%	3.7%
Int.-Term TIPS	4.9%	5.4%	4.7%	3.7%	7.4%
High Yield	5.4%	6.0%	7.7%	12.3%	7.8%
Global Large-Cap (Unhedged)	6.6%	7.8%	2.0%	16.1%	14.9%
US Diversified	5.7%	7.2%	1.6%	17.0%	15.6%
US Value	6.1%	7.6%	1.8%	16.7%	15.4%
US Growth	5.3%	7.2%	1.4%	18.8%	17.1%
US Mid-Cap	5.8%	7.6%	1.5%	18.4%	17.2%
US Small/Mid-Cap	5.7%	7.7%	1.3%	19.3%	18.0%
US Small-Cap	5.6%	7.9%	1.2%	21.1%	19.9%
Developed International	8.4%	10.3%	3.2%	18.6%	17.1%
Emerging Markets	7.0%	9.9%	2.8%	22.8%	20.0%
Global REITs	6.0%	7.7%	4.5%	18.6%	16.2%
Real Assets	6.1%	7.2%	3.4%	13.9%	14.3%
Diversified Hedge Fund	5.8%	6.1%	3.0%	10.7%	14.9%
Inflation	2.5%	2.9%	n/a	1.5%	6.4%

Based on 10,000 simulated trials each consisting of ten-year periods. Reflects AB’s estimates and the capital-market conditions of December 31, 2024. For hedge fund asset classes, ‘Mean Annual Income’ represents income and short-term capital gains. **Data do not represent past performance and are not a promise or a range of future results.**

Notes on Wealth Forecasting System

1. **Purpose and Description of Wealth Forecasting Analysis**

   Bernstein's Wealth Forecasting Analysis is designed to assist investors in making their long-term investment decisions as to their allocation of investments among categories of financial assets. Our planning tool consists of a four-step process: (1) Client-Profile Input: the client's asset allocation, income, expenses, cash withdrawals, tax rate, risk-tolerance level, goals and other factors; (2) Client Scenarios: in effect, questions the client would like our guidance on, which may touch on issues such as when to retire, what his/her cash-flow stream is likely to be, whether his/her portfolio can beat inflation long-term, and how different asset allocations might impact his/her long-term security; (3) The Capital-Markets Engine: our proprietary model that uses our research and historical data to create a vast range of market returns, which takes into account the linkages within and among the capital markets, as well as their unpredictability; and finally (4) A Probability Distribution of Outcomes: based on the assets invested pursuant to the stated asset allocation, 90% of the estimated ranges of returns and asset values the client could expect to experience are represented within the range established by the 5th and 95th percentiles on "box-and-whiskers" graphs. However, outcomes outside this range are expected to occur 10% of the time; thus, the range does not establish the boundaries for all outcomes. Expected market returns on bonds are derived taking into account yield and other criteria. An important assumption is that stocks will, over time, outperform long bonds by a reasonable amount, although this is in no way a certainty. Moreover, actual future results may not meet Bernstein's estimates of the range of market returns, as these results are subject to a variety of economic, market and other variables. Accordingly, the analysis should not be construed as a promise of actual future results, the actual range of future results or the actual probability that these results will be realized. The information provided here is not intended for public use or distribution beyond our private meeting.

Notes on Wealth Forecasting System

2. Modeled Asset Classes

The following assets or indexes were used in this analysis to represent the various model classes:

Asset Class	Modeled As	Annual Turnover
Cash Equivalents	3-month US Treasury bills	100%
Short-Term Treasuries	US Treasuries of 2-year maturity	50%
Short-Term Taxables	Taxable bonds of 2-year maturity	50%
Short-Term Diversified Municipals	AA-rated diversified municipal bonds of 2-year maturity	50%
Int.-Term Treasuries	US Treasuries of 7-year maturity	30%
Int.-Term Taxables	Taxable bonds of 7-year maturity	30%
Int.-Term Corporates	US investment grade corporate debt of 7-year maturity	30%
Int.-Term Diversified Municipals	AA-rated diversified municipal bonds of 7-year maturity	30%
Global Int.-Term Taxables (Hedged)	50% sovereign and 50% investment grade corporate debt of developed countries of 7-year maturity	30%
Int.-Term TIPS	US TIPS of 7-year maturity	30%
High Yield	Taxable bonds of 7-year maturity with credit characteristics of CSFB High Yield Index II	30%
Global Large-Cap (Unhedged)	MSCI World Index	15%
US Diversified	S&P 500 Index	15%
US Value	S&P/Barra Value Index	15%
US Growth	S&P/Barra Growth Index	15%
US Mid-Cap	Russell Mid-Cap Index	15%
US Small/Mid-Cap	Russell 2500 Index	15%
US Small-Cap	Russell 2000 Index	15%
Developed International	MSCI EAFE Index (Unhedged)	15%
Emerging Markets	MSCI Emerging Markets Index	20%
Global REITs	NAREIT Index	30%
Real Assets	1/3 NAREIT, 1/3 MSCI ACWI Commodity Producer Index, 1/3 DJ-UBS Commodity Futures Index	30%
Diversified Hedge Fund	Diversified Hedge Fund Asset Class	33%

Notes on Wealth Forecasting System

3. **Volatility**

   Volatility is a measure of dispersion of expected returns around the average. The greater the volatility, the more likely it is that returns in any one period will be substantially above or below the expected result. The volatility for each asset class used in this analysis is listed on the Capital-Market Projections page at the end of these Notes. In general, two-thirds of the returns will be within one standard deviation. For example, assuming that stocks are expected to return 8.0% on a compounded basis and the volatility of returns on stocks is 17.0%, in any one year it is likely that two-thirds of the projected returns will be between (8.9)% and 28.8%. With intermediate government bonds, if the expected compound return is assumed to be 5.0% and the volatility is assumed to be 6.0%, two-thirds of the outcomes will typically be between (1.1)% and 11.5%. Bernstein’s forecast of volatility is based on historical data and incorporates Bernstein’s judgment that the volatility of fixed income assets is different for different time periods.

4. **Technical Assumptions**

   Bernstein’s Wealth Forecasting System is based on a number of technical assumptions regarding the future behavior of financial markets. Bernstein’s Capital Markets Engine is the module responsible for creating simulations of returns in the capital markets. These simulations are based on inputs that summarize the current condition of the capital markets as of June 30, 2024. Therefore, the first 12-month period of simulated returns represents the period from June 30, 2024, through June 30, 2025, and not necessarily the calendar year of 2024. A description of these technical assumptions is available on request.

5. **Expenses and Spending Plans (Withdrawals)**

   All results are generally shown after applicable taxes and after anticipated withdrawals and/or additions, unless otherwise noted. Liquidations may result in realized gains or losses, which will have capital gains tax implications.

6. **Tax Implications**

   Before making any asset allocation decisions, an investor should review with his/her tax advisor the tax liabilities incurred by the different investment alternatives presented herein, including any capital gains that would be incurred as a result of liquidating all or part of his/her portfolio, retirement-plan distributions, investments in municipal or taxable bonds, etc. Bernstein does not provide tax, legal, or accounting advice. In considering this material, you should discuss your individual circumstances with professionals in those areas before making any decisions.

Notes on Wealth Forecasting System

7. **Tax Rates**
   Bernstein's Wealth Forecasting Analysis has used the following tax rates for this analysis:

Taxpayer	Scenario	Start Year	End Year	Federal Income Tax Rate	Federal Capital Gains Tax Rate	State Income Tax Rate	State Capital Gains Tax Rate	Tax Method Type
Client	All	2024	2025	40.8%	23.8%	0.0%	0.0%	Top Marginal
Client	All	2026	2034	43.4%	23.8%	0.0%	0.0%	Top Marginal

The federal income tax rate represents Bernstein's estimate of either the top marginal tax bracket or an "average" rate calculated based upon the marginal rate schedule. The federal capital gains tax rate is represented by the lesser of the top marginal income tax bracket or the current cap on capital gains for an individual or corporation, as applicable. Federal tax rates are blended with applicable state tax rates by including, among other things, federal deductions for state income and capital gains taxes. The state income tax rate represents Bernstein's estimate of the 'average' rate calculated based upon the applicable state's marginal tax schedule. Where an applicable state tax code permits the exclusion of a portion of capital gain income from gross income for purposes of calculating state income tax, such exclusions have been included in the calculation.

Summary Notes on Our Capital Markets Engine

Effective investment planning requires an understanding of the plausible range of long-term investment outcomes. Through careful use of historical data and proprietary research, the AllianceBernstein Global Capital Markets Engine projects—via simulation—the future behavior of asset classes and instruments.

As we considered the problem, it became clear that a CME must be:

- Globally integrated—that is, cover all geographies in a consistent manner
- Complete—address all major investment choices
- Flexible on currency—support major currencies and their various roles
- Forward looking—properly reflect initial market conditions and their often pervasive impact
- Dynamic—incorporate realistic time-series patterns, resulting in a term structure of risk and return
- Logical—uphold accounting rules and the temporal, economic and inner logic of markets
- Humble—recognize what is unknown and/or unknowable

We believe the AllianceBernstein CME meets all the above requirements—to our knowledge, uniquely.

The CME recognizes that many of the same underlying economic and fundamental forces (“building blocks”—such as inflation, term, credit, earnings, size, style, alpha and liquidity) drive long-term asset returns across all markets. CME simulations are based on a number of technical assumptions—which may or may not prove valid—regarding the future behavior of financial markets. These include the reversion of building blocks and returns toward equilibrium or “normal” values that in turn vary.

The simulations are driven off initial market conditions that summarize the state of capital markets as of the date indicated. The simulated returns are intended for strategic-planning purposes only; they are not meant to be used to time the market and are not a guarantee of future returns. Projections are updated semiannually and are reviewed by a committee of senior investment and research personnel.

The CME’s long-term projections are distinct from the short-term (one-year) risk and return projections of our Dynamic Asset Allocation model, although the two models have some elements in common.

Glossary of Risk and Return Statistics

Summary statistics are based on 10,000 simulated trials. Along each trial (or “path”), price changes and cash flows are projected at an annual interval, out to 50 years. Statistics are computed based on the ranges of outcomes across these paths.

Median Annualized Growth Rate is the annualized median across paths of the compound return over the path to the horizon indicated. This number should not be used in a portfolio optimizer—it reflects the asset class in isolation and can be compared with historical growth rates.

Mean Arithmetic Average Return is the average return across all years and paths to the horizon indicated. It reflects the return that you can expect in a typical year. This number can be entered into a portfolio optimizer.

First-Year Volatility is the standard deviation of log returns across all paths in the first simulated year. It is typically comparable to historical volatilities.

The Dispersion of Cumulative Returns is expressed on an annualized basis as **Annual Equivalent Volatility**; more technically, it is the standard deviation of log cumulative returns, divided by the square root of the horizon in years. If the annual returns are serially independent and identically distributed, then dispersion will equal first-year volatility. When returns are mean reverting—as for equities whose fundamentals and valuations follow the business cycle—dispersion is smaller than first-year volatility. When returns are persistent—as for bonds driven by yield momentum—dispersion exceeds first-year volatility.

Correlation is measured analogously to dispersion by looking at compound returns across the paths—not by looking along a single path, as the historical estimate implicitly does. Looking historically, we would find that interest-rate levels on cash and bonds have generally moved in tandem, resulting in a positive correlation between them. In CME, if interest rates steadily rise on a particular 10-year path, cash tends to fare better than on the median interest-rate path, while bonds fare worse. So across all paths, cash and bonds are negatively correlated. This perspective is better suited to forward-looking analysis.

Index Descriptions

The **Bloomberg Global High Yield Index** represents noninvestment-grade fixed-income securities of companies in the US, developed, and emerging markets.

The **Bloomberg US Treasury Index** represents the performance of US Treasuries within the US government fixed-income market.

The **Bloomberg 1–10-Year Municipal Bond Index** represents the performance of the long-term tax-exempt bond market consisting of investment-grade bonds.

The **S&P Global Real Estate Investment Trust (REIT) Index** measures the securitized REITs from both developed and emerging markets. REITs act as operating companies that purchase, manage, invest in, maintain, and market real estate.

The **MSCI All-Country World Index (ACWI)** is a market-capitalization-weighted index designed to provide a broad measure of equity market performance throughout the world.

The **MSCI ACWI Commodity Producers Index** is a free-float-adjusted market-capitalization-weighted index that is designed to track the performance of global listed commodity producers.

The **MSCI EAFE (Europe, Australasia, Far East) Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure developed-market equity performance, excluding the US and Canada.

The **MSCI Emerging Markets Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure equity market performance in the global emerging markets.

The **MSCI USA Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure large- and mid-cap US equity market performance.

The **MSCI USA Minimum Volatility Index** aims to reflect the performance characteristics of a minimum variance strategy applied to the US large- and mid-cap equity universe. The index is calculated by optimizing the MSCI USA Index, its parent index, for the lowest absolute risk (within a given set of constraints). Historically, the index has shown lower beta and volatility characteristics relative to the MSCI USA Index.

The **MSCI World Index** is a free-float-adjusted, market-capitalization-weighted index that is designed to measure global developed-market equity performance.

The **Russell 1000® Growth Index** measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.*

The **Russell 1000® Value Index** measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.*

The unmanaged **S&P 500 Index** comprises 500 large-capitalization US stocks and is a common measure of the performance of the US stock market.

*The Russell Index methodology results in some companies appearing in both the growth and value indices.

Glossary

Active Management: Managing a portfolio through security selection designed to outperform the portfolio's benchmark.

Active Share: The degree of difference between a portfolio and its benchmark index, calculated using the weight of individual securities in the portfolio relative to the benchmark. Active share varies between 0% (a portfolio that mirrors its benchmark) and 100% (a portfolio totally different from its benchmark).

Central Bank Policy: The monetary stance taken by a country's central bank, which can vary from extremely accommodative (keeping short-term interest rates very low, typical when economic growth is slow or negative) to extremely tight (raising rates to high levels, typical when inflation is very high).

Correlation: The degree to which two or more securities, asset classes, and/or benchmarks perform in the same direction and magnitude; a lower correlation is generally favorable for active management, and a higher correlation for passive management.

Dispersion (of returns): The difference in return, often between the best- and worst-performing security in a given asset class or investment category. Generally, the higher the dispersion, the more favorable for active management.

Distressed-Credit Hedge Fund: A hedge fund that invests in the debt of companies in financial trouble, including companies that may file for bankruptcy in the near future. If the company emerges from its distress, its debt will sell far above the price paid by the fund.

Duration: For bonds, a measure of interest-rate risk akin to, but more sensitive than, maturity. For every year of a bond's duration, its price can be expected to fall 1% with every one-percentage-point increase in interest rates, or rise 1% with every one-percentage-point decrease in rates.

Dynamic Asset Allocation: Bernstein's research-based tactical-risk-management service (*see below*), designed to reduce the volatility of a balanced-asset portfolio without sacrificing return.

Event-Driven Hedge Fund: Event-driven strategies take advantage of transaction announcements and other one-time events; one example is merger-arbitrage funds, which buy the stock of a target company and hedge the purchase by selling short the stock of the acquiring company.

Global Macro Hedge Fund: A hedge fund that bases its holdings primarily on overall economic and political views of various countries.

Hedging (currency): Using futures and other contracts to exchange one currency for another; for US investors, hedging is generally exchanging a non-US currency for dollars.

Glossary (cont.)

Inflation-Protected Bonds: Bonds whose values are indexed to inflation, normally adjusted on a semiannual basis. The most well known are Treasury Inflation-Protected Securities, or TIPS. Inflation-protected bonds are designed to shield investors from the negative impact of inflation.

Liquidity: The ease with which assets can be traded; the degree of liquidity for any given asset class or security depends on the prevailing market conditions, dealer inventories, and other factors.

Long/Short Hedge Fund: A hedge fund that takes "long" positions—positions of securities bought in the expectation that they will appreciate in value—as well as short-selling other positions, anticipating that they will decline in value. In short selling, the investor generally sells a borrowed security in the expectation that its price will decline and hence can be bought back at a lower price.

Passive Management: Managing a portfolio to essentially duplicate its benchmark index.

Price/Book Ratio: A stock's current price divided by its book value: its total tangible assets minus its liabilities. A lower price-to-book ratio indicates a low price for a stock relative to the value of its underlying assets.

Price/Earnings Ratio: A stock's current price divided by the company's historical or projected earnings per share. A lower price/earnings ratio indicates a low price for a stock relative to its earnings history or potential. The **cyclically adjusted or Shiller P/E**, usually applied to the broad S&P 500 market, generally uses the average of the past 10 years of earnings, adjusted for inflation.

Real Assets: Assets that have tangible value, or are based on assets with tangible value, such as real estate, commodities, and commodity futures.

Roll (bonds): The tendency of a bond to sell for premium returns before maturity as long as the yield curve (*see below*) is upward-sloping, since its coupon rate is normally competing with lower rates as it "rolls down the yield curve." Roll is a component of bond returns that active managers can exploit.

Tactical Risk Management: Varying the allocation of asset classes in a portfolio in line with generally short-term forecasts of risk and return.

Yield: The income return from an investment, typically based on the interest paid by a bond or the dividends paid by a stock; usually expressed as a percentage based on the security's cost, market value, or face value.

Yield Curve: The relationship between the yields being offered by bonds at any given time and their maturity; normally, the curve is upward-sloping, but flat or inverted yield curves are not uncommon. Different yield-curve shapes suggest different optimal maturity configurations for a portfolio.

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