Capital Markets Outlook

Mind the Gaps

First Quarter 2025

Evolution of AB's Capital Markets Outlook Themes

3Q:23 — **"Resolution, Resistance and Normalization"**
Introduced the expectation of resolution in 1H:23, resistance in 2H:23, and normalization in 2024

4Q:23 — **"Finding the Path of Least Resistance"**
Acknowledged the likely brevity of the resistance phase in markets as…

1Q:24 — **"What to Expect When You're Expecting Economic Normalization"**
…the economy was quickly expected to emerge into the normalization phase

2Q:24 — **"At the Intersection of Hope and Fear"**
Spoke to the idea that progress is not linear

3Q:24 — **"Distinguishing Signal from Noise"**
Recognized that although the data have been noisy, we believed the soft-landing signal was growing stronger

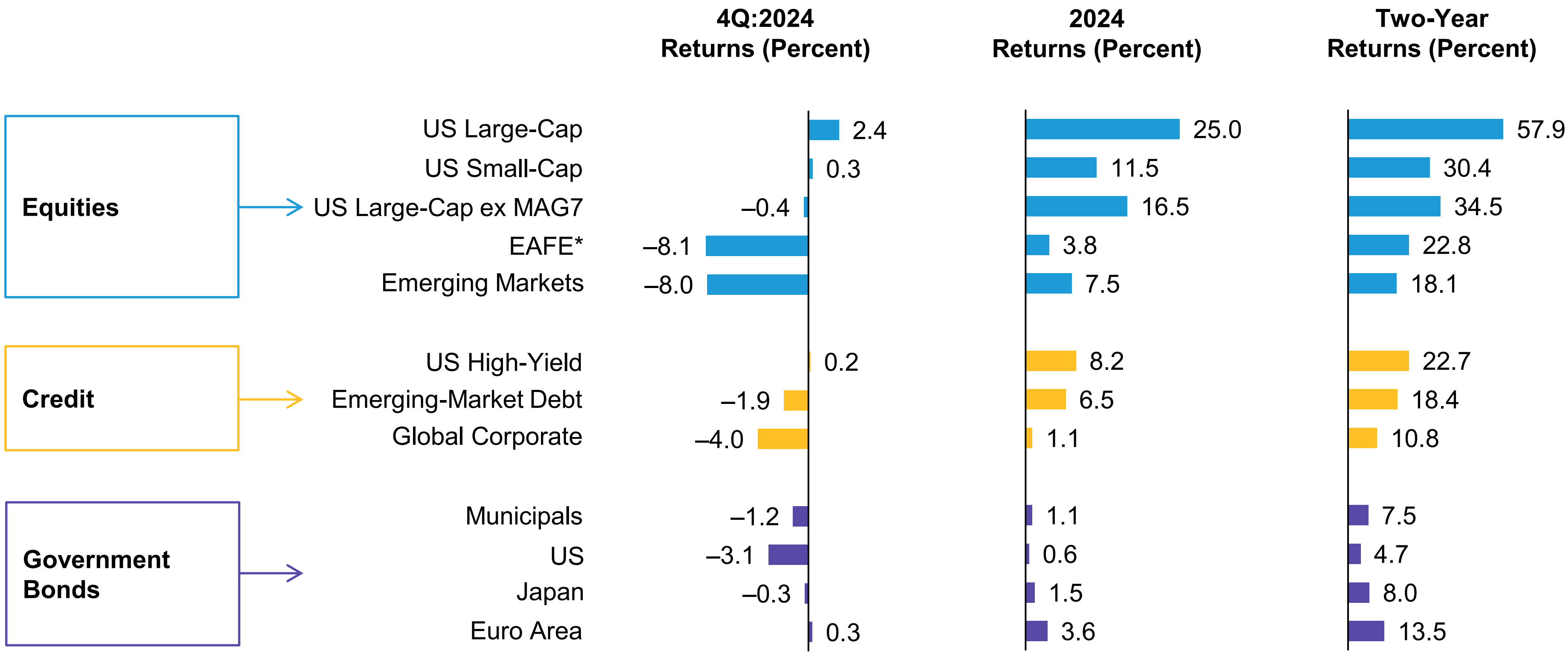
4Q:24 — **"Normalization: Endgame"**
Highlighted the latter stages of the normalization process as we began to exit the pandemic economy…

1Q:25 — **"Mind the Gaps"**
…and enter the post-pandemic economy with some degree of caution as we face new known unknowns

Current analysis does not guarantee future results.
1H: first half; 2H: second half; 1Q: first quarter; 2Q: second quarter; 3Q: third quarter; 4Q: fourth quarter
Source: AB

2024 Performance: Gas, Meet Fire

Economic normalization and artificial intelligence boon coalesce to spark historic US returns



Past performance does not guarantee future results.

Returns in US dollars. EAFE and emerging-market returns are net returns; all other returns are total returns. Japan government bonds are in hedged USD terms. All other non-US returns are in unhedged USD terms. US large-cap is represented by the S&P 500. US small-cap is represented by the Russell 2000 Index. US large-cap ex MAG7 is represented by the Bloomberg US Large Cap ex Magnificent 7 Total Return Index. An investor cannot invest directly in an index, and its performance does not reflect the performance of any AB portfolio. The unmanaged index does not reflect the fees and expenses associated with the active management of a portfolio.

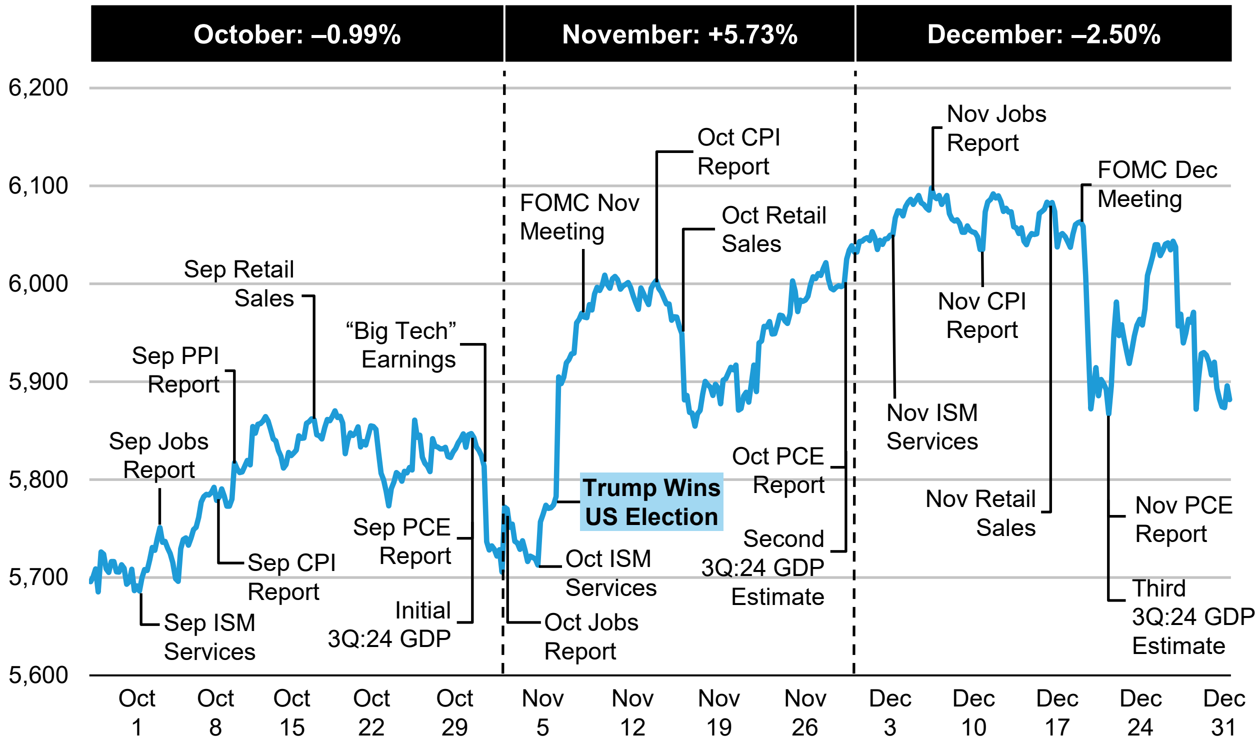
*Europe, Australasia and the Far East

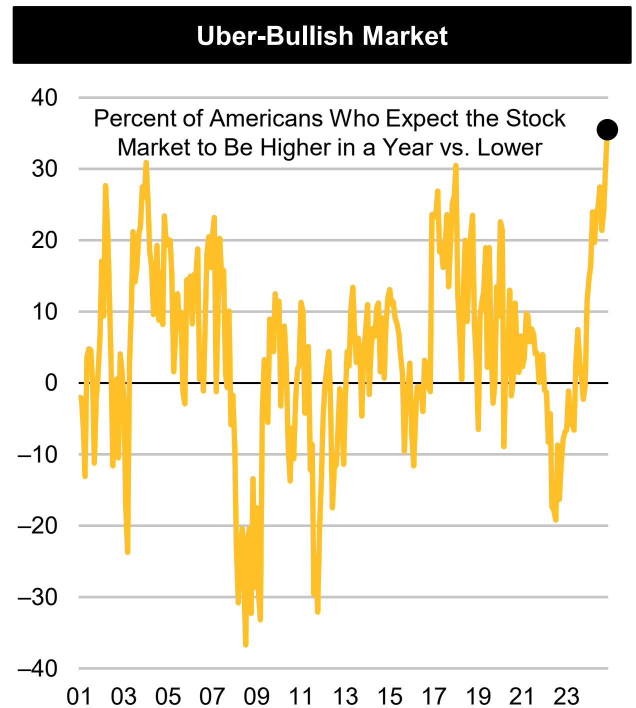
As of December 31, 2024

Source: Bloomberg, FTSE Russell, S&P and AB

4Q24: Strong Equity Performance Capped Off the Best Two-Year Calendar Return Since the 1990s Dot-Com Bubble Buildup

S&P 500 Price Chart (USD)





Past performance does not guarantee future results.

FOMC: Federal Open Market Committee; ISM: Institute for Supply Management; PCE: Personal Consumption Expenditures Price Index; PPI: Producer Price Index

Returns are price returns; event dates are approximate.

Left display through December 31, 2024; right display through November 30, 2024

Source: Bloomberg, The Conference Board, Federal Reserve, S&P and AB

Revisiting the "Holy Trinity" of Economic Drivers

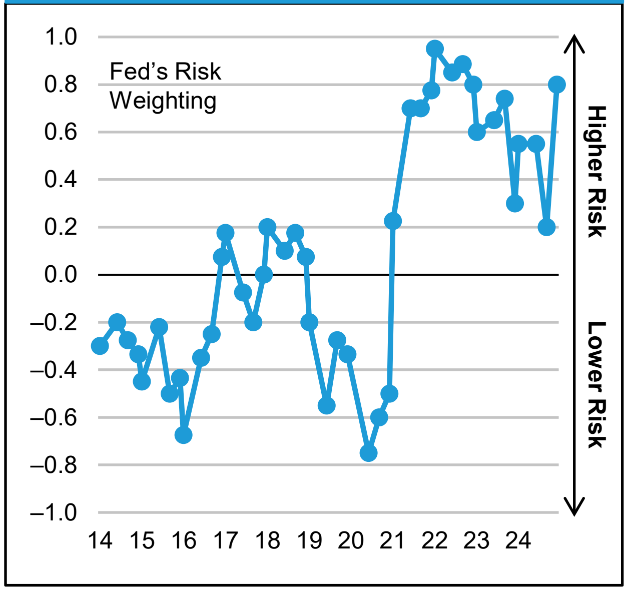
Rates

"Some did identify policy uncertainty as one of the reasons for their writing down *more uncertainty* around **inflation.**"

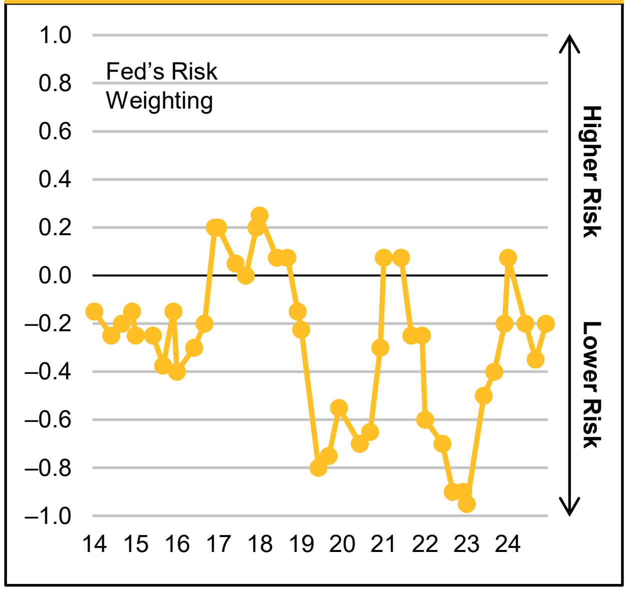
"Committee participants generally expect GDP **growth** to *remain solid*, with a median projection of about 2 percent over the next few years."

"Downside risks to the **labor market** do appear to have diminished, but the labor market is now *looser* than pre-pandemic, and it's clearly still cooling."

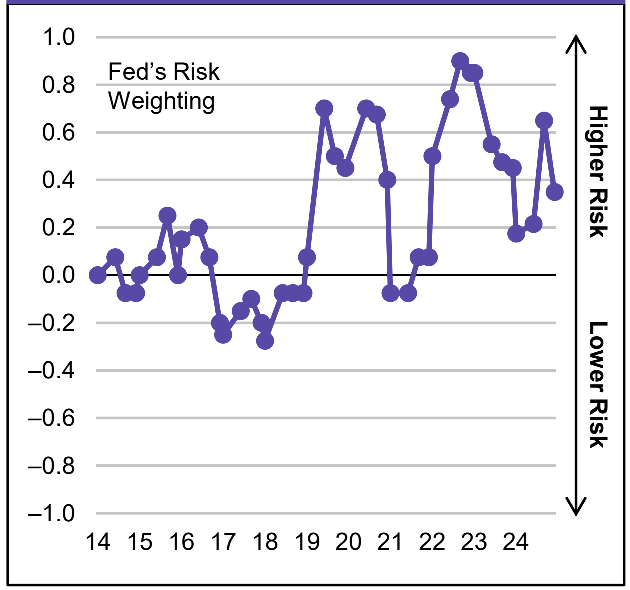
Inflation



Growth



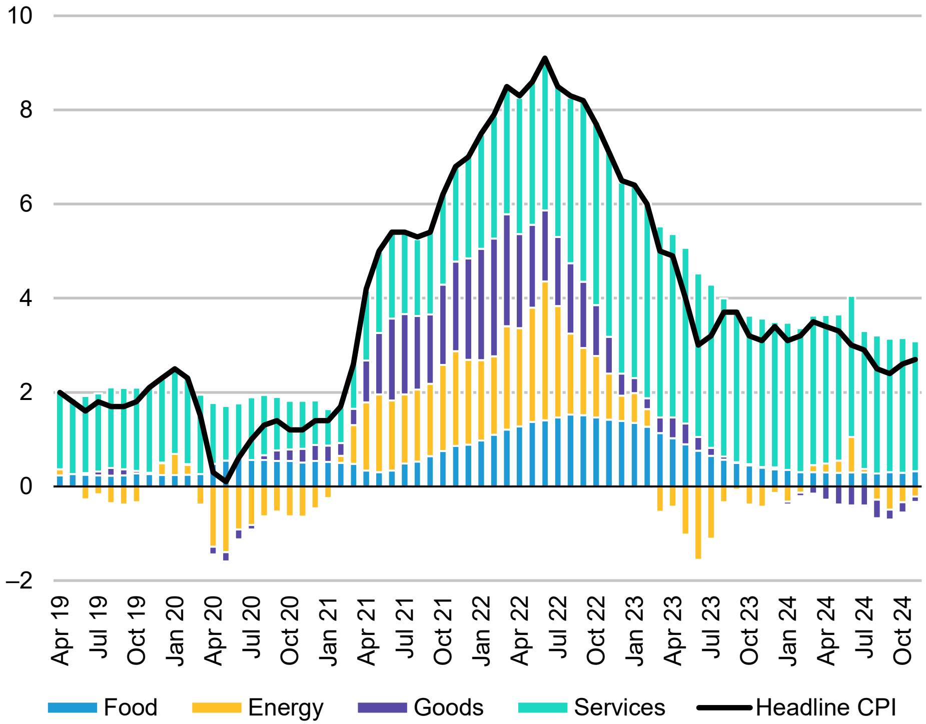
Labor Market



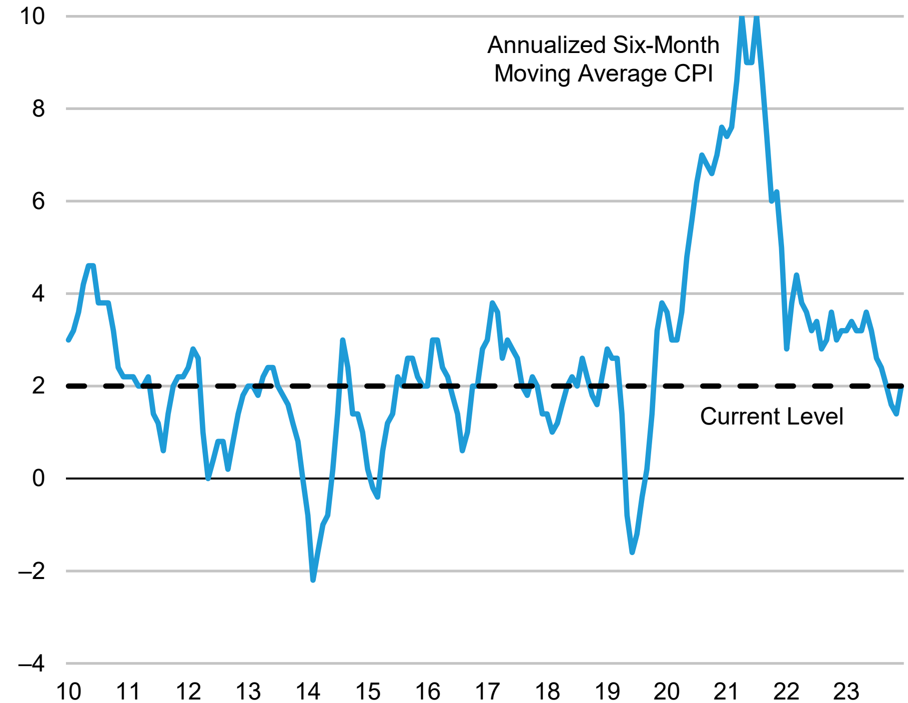
Historical analysis and current forecasts do not guarantee future results.
Quotes are from Jerome Powell on December 18, 2024.
Through December 31, 2024
Source: US Federal Reserve and AB

Inflation's 2024 Year-End Review: Met High Expectations, but Has Room for Improvement

Inflation's Progress Appears to Have Stalled Yet Again…
Contribution by category (percent)



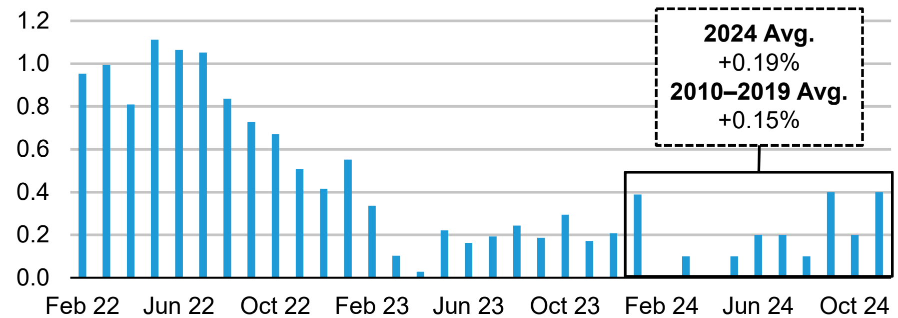
…but Remember, the Year-over-Year Story Is Being Distorted by Base Effects—So Let's Remove Them (Percent)



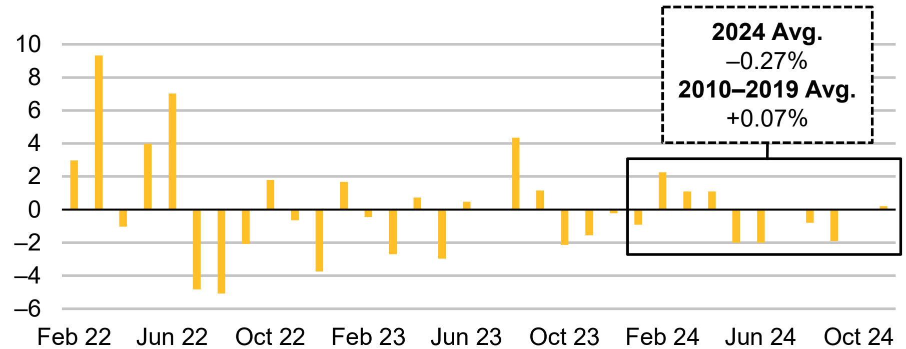
Current analysis does not guarantee future results.
Through December 31, 2024
Source: Bloomberg and AB

Each of the Four Main CPI Categories Made Progress Toward Achieving the Fed’s Target…

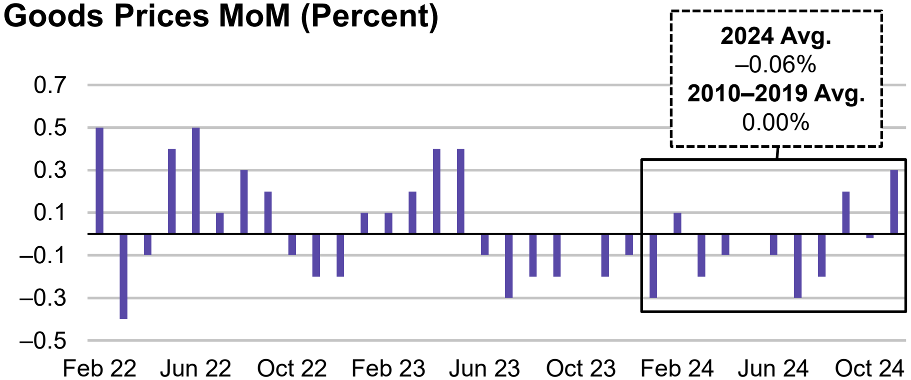
Food Prices MoM (Percent)



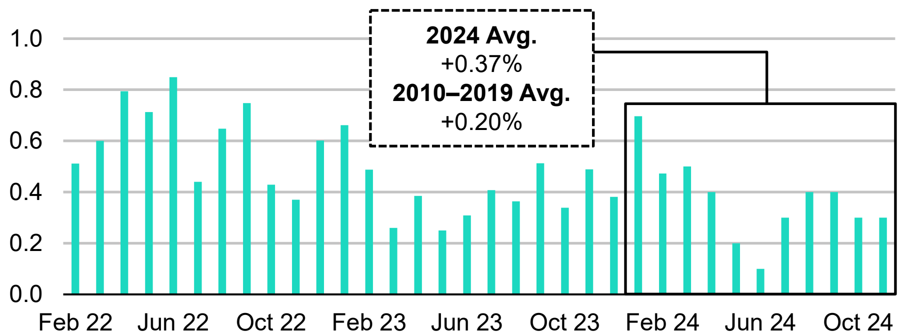
Energy Prices MoM (Percent)



Goods Prices MoM (Percent)



Services Prices MoM (Percent)

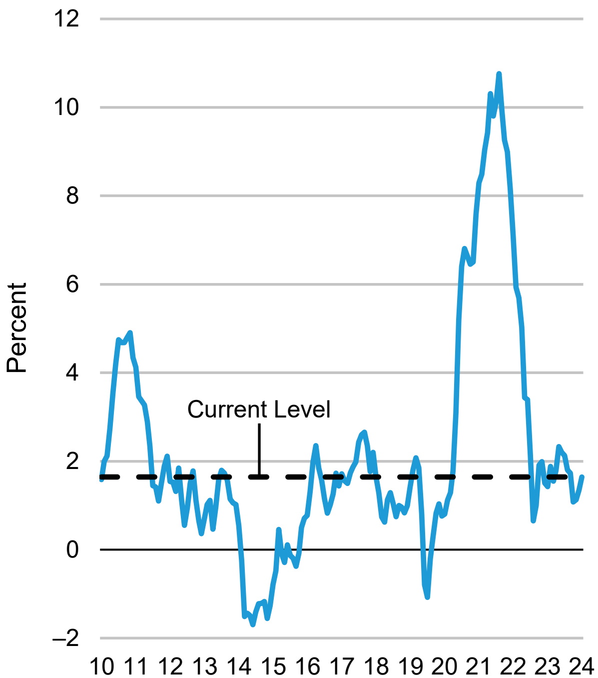


Current analysis does not guarantee future results.
MoM: month over month
Through December 31, 2024
Source: Bloomberg, US Bureau of Labor Statistics and AB

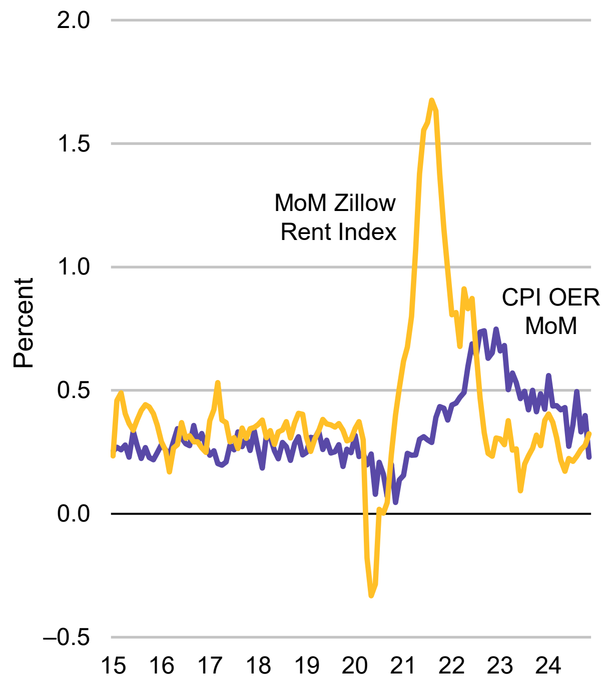
…Including Shelter, Which Has Embodied "Better Late than Never"

Shelter makes up nearly 60% of services, inflation's largest category

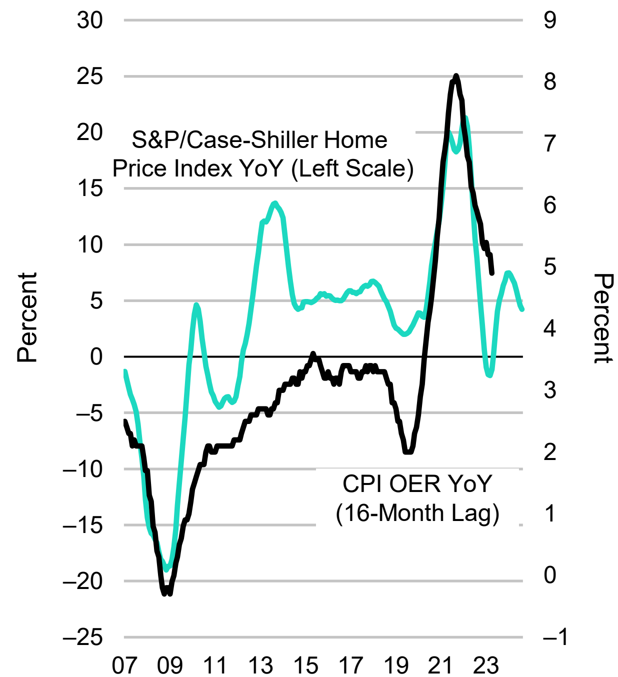
Removing Shelter: CPI ex Shelter Highlights Continued Lack of Reacceleration in Inflation



Focusing on Shelter: CPI's MoM Measurement Shows the Shelter Lag May Have Finally Turned Over



Focusing on Shelter: Case-Shiller's "Real Time" Data Suggests Further Progress Ahead for the Shelter Lag



Current analysis does not guarantee future results.

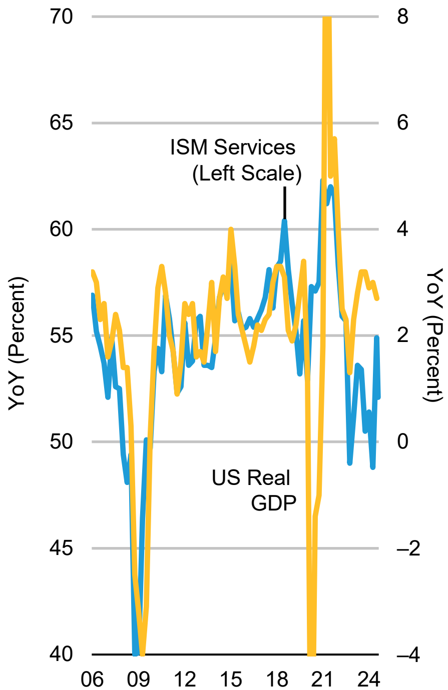
MoM: month over month; OER: owners' equivalent rent; YoY: year over year

Through December 31, 2024

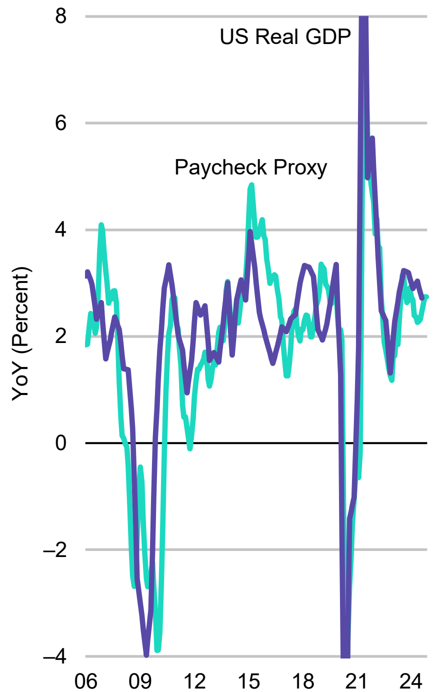
Source: Bloomberg, S&P/Case-Shiller Home Price Index, Zillow and AB

Growth: Continues to Surprise to the Upside, but How Sustainable Is This Rate of Expansion?

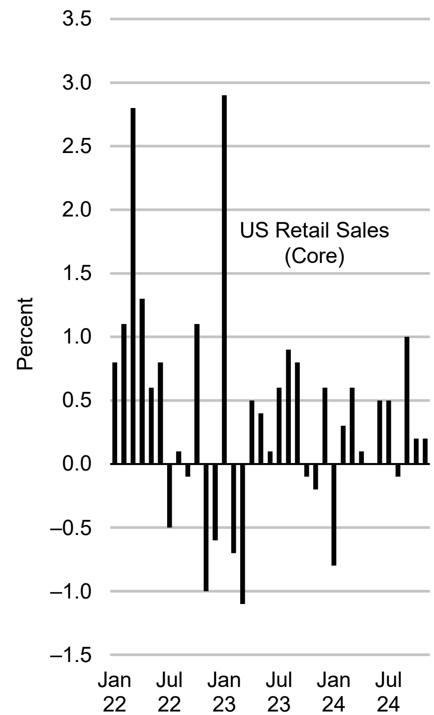
GDP Growth Has Disconnected from Its Traditional Signal…



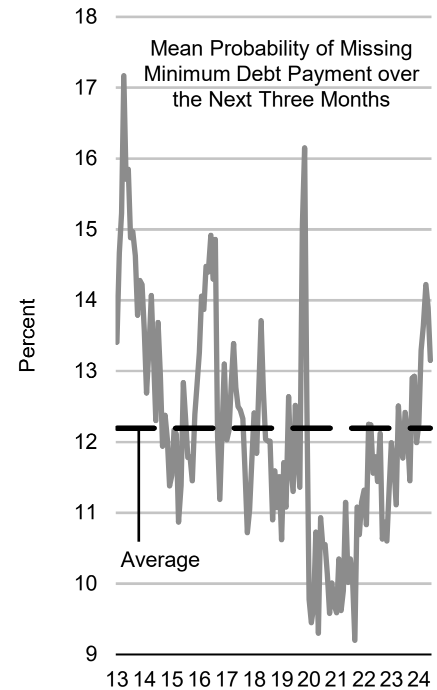
…Likely Due to Higher Real Household Paychecks Boosting Spending…



…Leading to a Remarkable Post-Pandemic Glide Path for Consumer Demand



However, Consumer Strength Is Still Waning, Suggesting a Return to Trend



Current analysis does not guarantee future results.

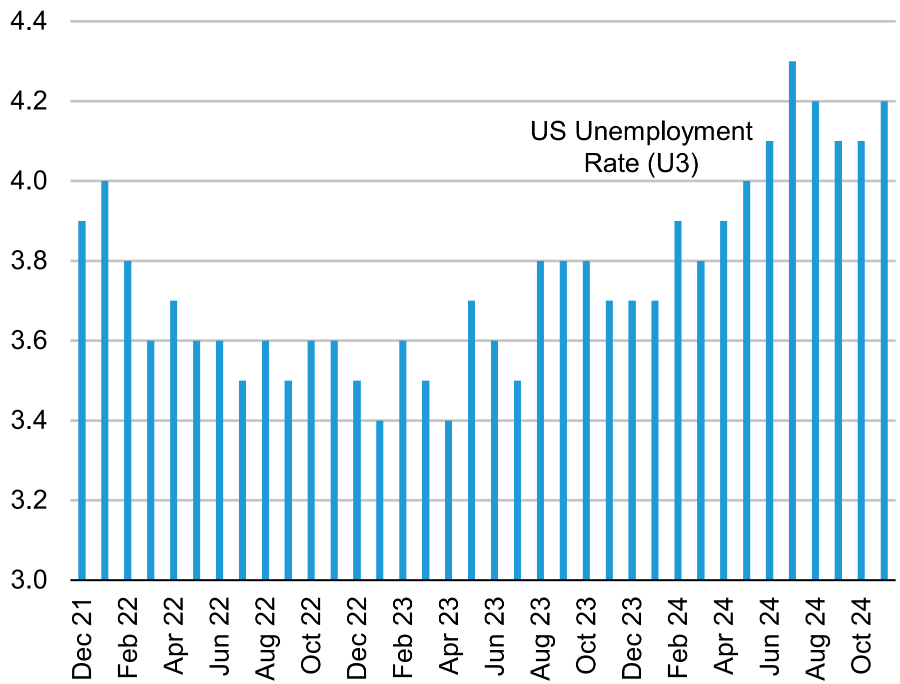
ISM: Institute for Supply Management; YoY: year over year

Through December 31, 2024

Source: Bloomberg, Federal Reserve Bank of New York and AB

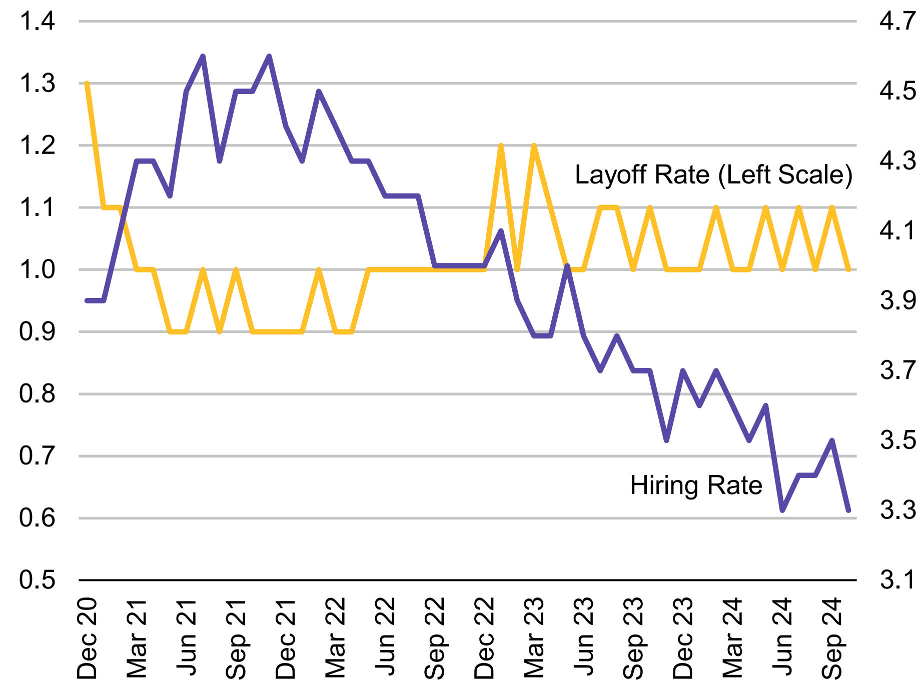
Labor Market: The Critical Determinant for Growth and the Other Half of the Fed's Mandate

The Labor Market Has Stabilized at Levels the Fed Is Comfortable With (Percent)



What to Keep an Eye On

The increase in the unemployment rate has been due to fewer people being hired, not an increase in layoffs (percent)



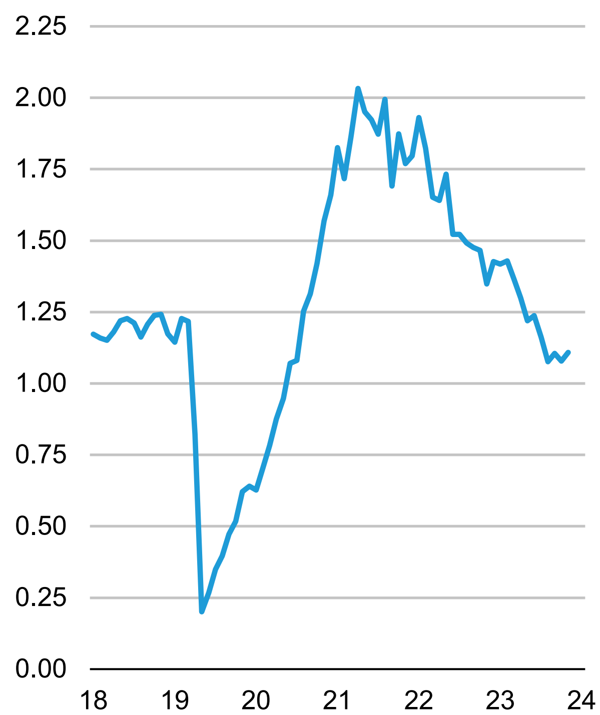
Current analysis does not guarantee future results.

Through December 31, 2024

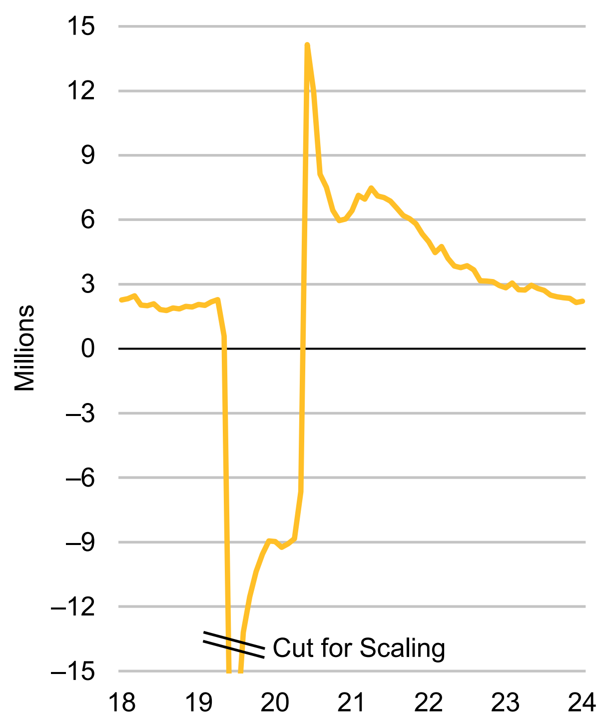
Source: Bloomberg and AB

The Labor Market Remains Balanced, but "No Further Cooling" Is Welcomed by the Fed

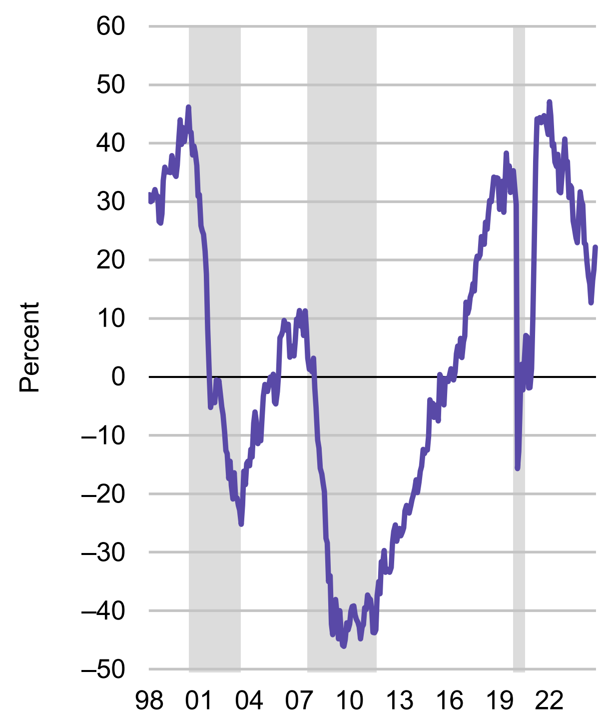
Job Openings per Unemployed Person Has Fully Normalized to Pre-Pandemic Levels



The Trailing 12-Month Net Change in Nonfarm Payrolls Has Also Returned to Trend



Hard vs. Soft Landing: For the First Time, Jobs "Plentiful" vs. "Hard to Get" Fell Meaningfully Outside of a Recession



Current analysis does not guarantee future results.

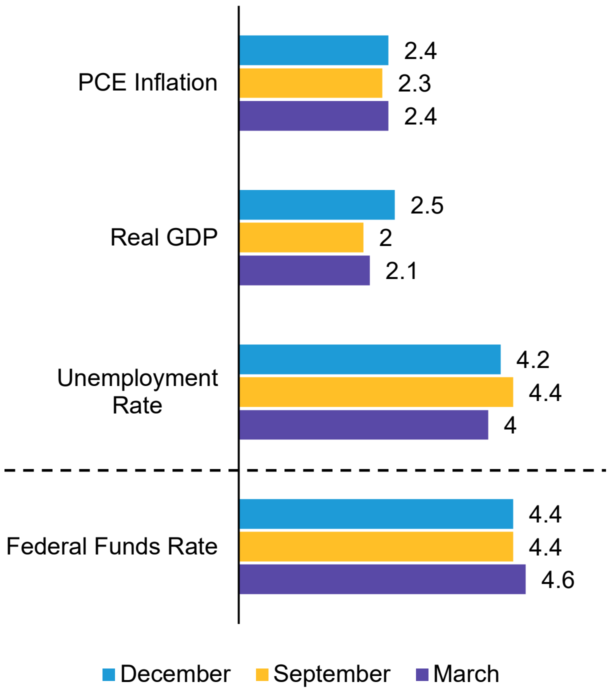
Right display's gray zones represent recessions.

Through December 31, 2024

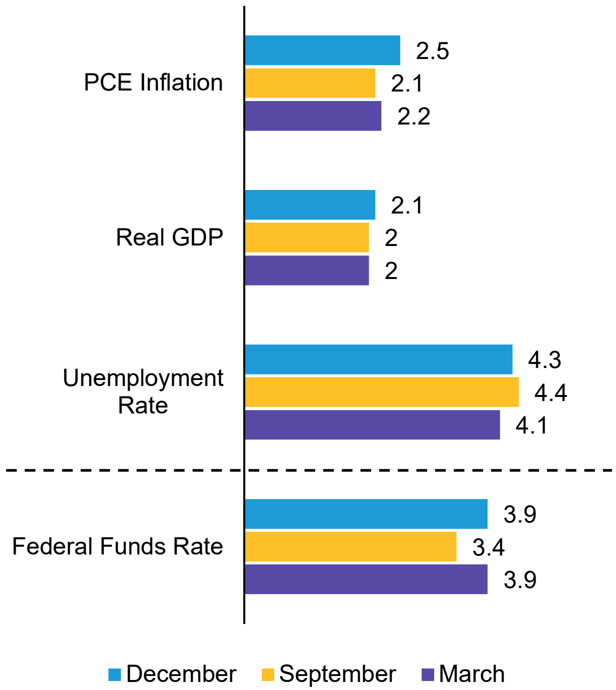
Source: Bloomberg and AB

The Fed's Take: Economic Forecasts Have Been Recalibrated to the Upside

Change in the Fed's YE 2024 Estimates
Growth revised higher; others essentially unchanged (percent)



Change in the Fed's YE 2025 Estimates
Inflation revised higher; others essentially unchanged (percent)



However, the Fed's Summary of Economic Projections Is a Snapshot in Time, with High Uncertainty

"We see ourselves as still on track to continue to cut. **I think the actual cuts that we will make next year will not be because of anything we wrote down today.** We're going to react to data. That's just a general sense of what the Committee thinks is likely to be appropriate [today]."

Jerome Powell (December 18, 2024)

Current analysis does not guarantee future results.
PCE: Personal Consumption Expenditures Price Index; YE: year-end
As of December 31, 2024
Source: US Federal Reserve and AB

Wishing Upon an R-Star on a Foggy Night

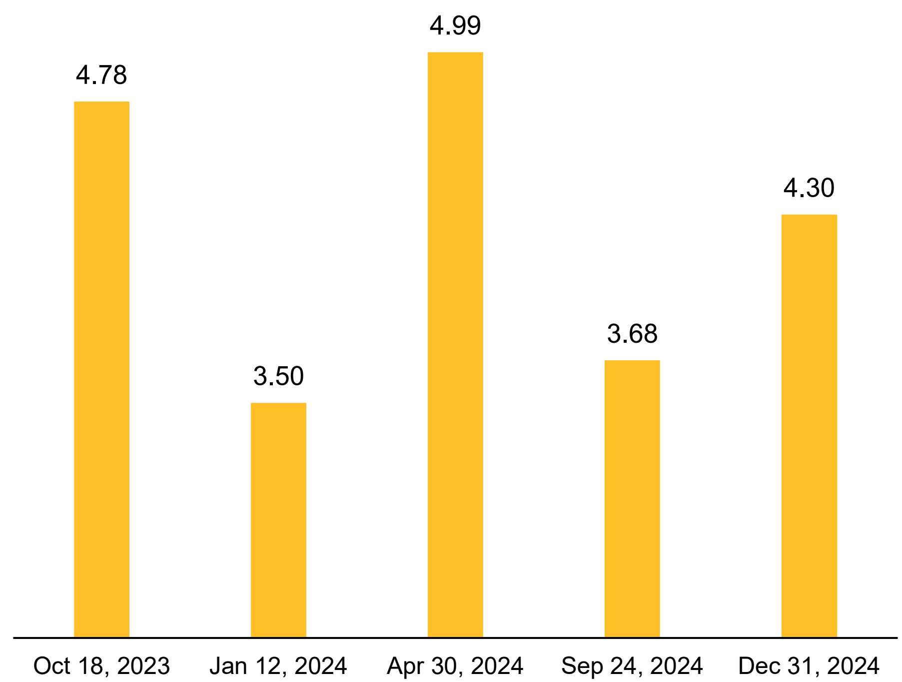
The Fed is taking a very cautious approach to rate cuts in 2025

The Fed’s Rate-Cutting Expectations Are Positioned for a Wide Range of Outcomes (Percent)

	2024	2025	2026	Longer Run
5.50	—	—	—	—
5.25	—	—	—	—
5.00	—	—	—	—
4.75	●●●●	—	—	—
4.50	●●●●●●●● ●●●●●●●	●	—	—
4.25	—	●●●	—	—
4.00	—	●●●●●●●●●●	●●●	●
3.75	—	●●●	●●●●	●●●
3.50	—	●	●●●●●	●●●
3.25	—	●	●●●●	●
3.00	—	—	●●	●●●●●●●
2.75	—	—	—	●●
2.50	—	—	●	●●
2.25	—	—	—	—
2.00	—	—	—	—
1.75	—	—	—	—

Volatility Around the Market’s Expectations for Rate Cuts Has Shown Similar Ambiguity

Implied FFR for January 2025 (percent)



Current analysis does not guarantee future results.

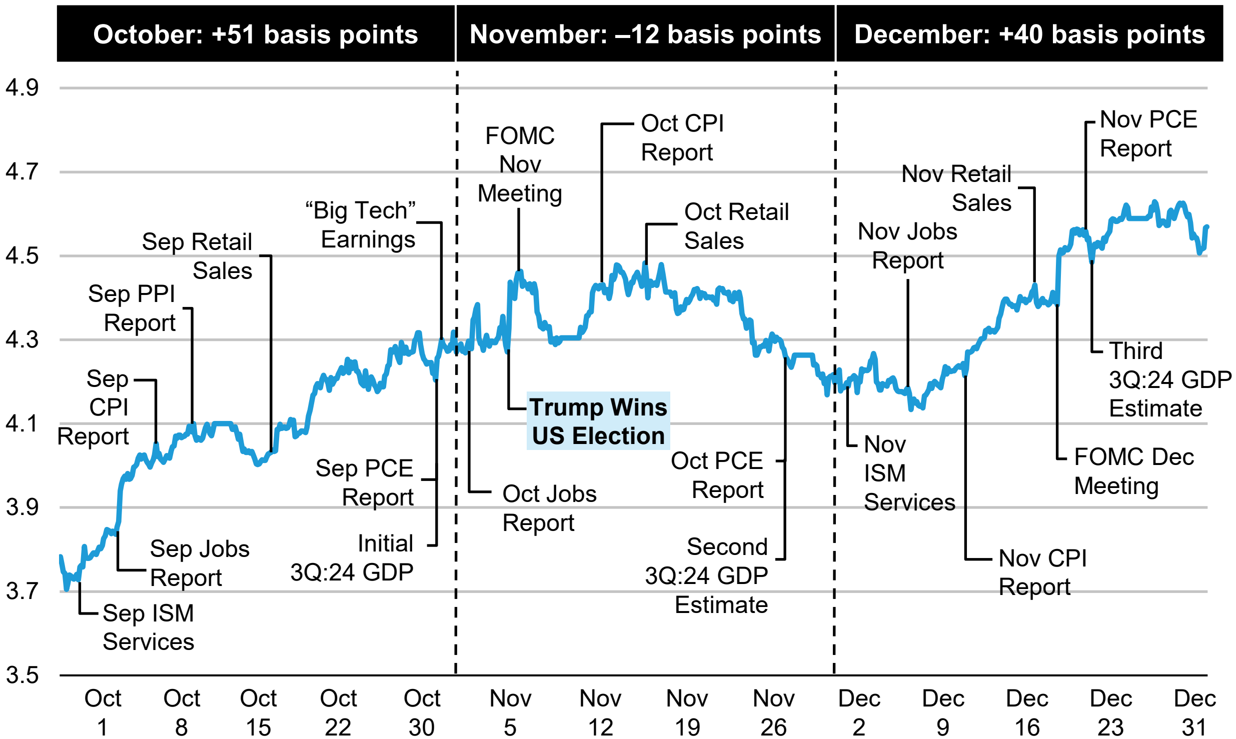
FFR: fed funds rate. The gold dot in the left display is approximately the median dot for the upper threshold of the FFR.

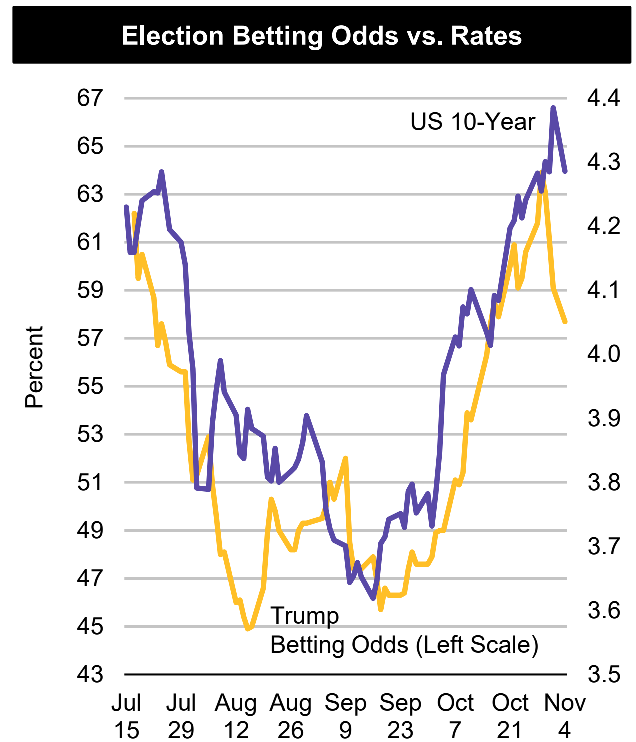
As of December 31, 2024

Source: Bloomberg, US Federal Reserve and AB

The Trump Overlay: Despite Economic Normalization, Rates Rose Dramatically Due to the Speculated Effects of a Second Trump Presidency

US 10-Year Treasury (Percent)





Past performance does not guarantee future results.

FOMC: Federal Open Market Committee; ISM: Institute for Supply Management; PCE: Personal Consumption Expenditures Price Index; PPI: Producer Price Index

Returns are price returns; event dates are approximate.

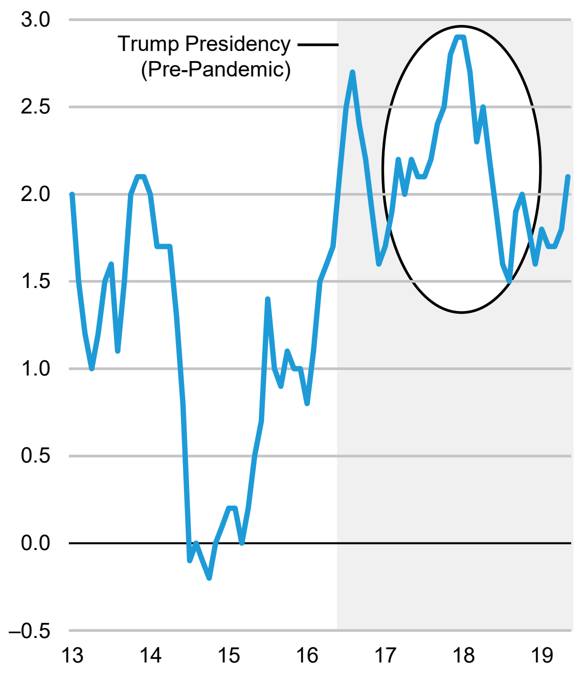
Through December 31, 2024

Source: Bloomberg, RealClearPolitics, S&P and AB

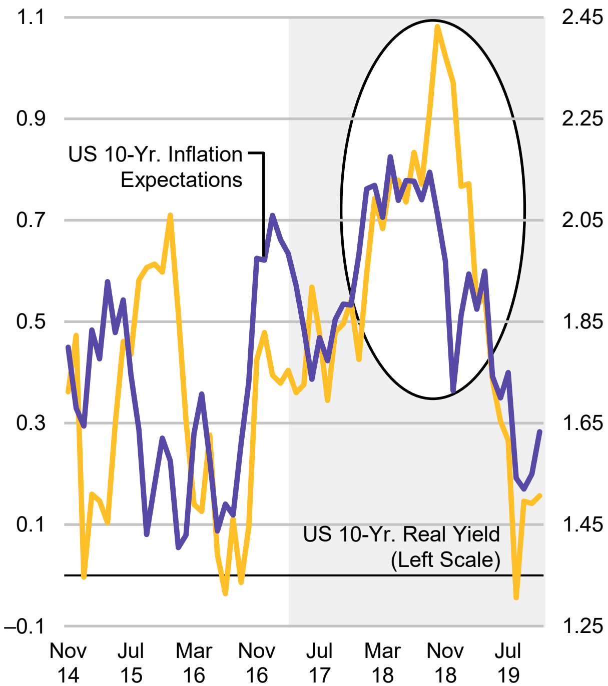
Wall Street’s Boogeyman: Tariff Trade War and Its Impact on Inflation

Fear of the unknown has been the real mind killer

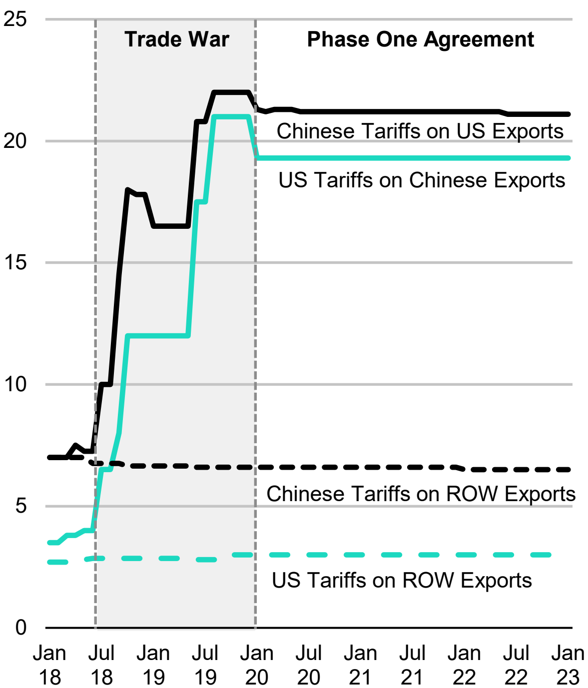
During Trump’s First Presidency, Tariffs Temporarily Pushed Inflation Higher Before Returning to Trend (Percent)



Critically, Inflation Expectations Remained Relatively Anchored, Whereas Real Yields Rose (Percent)



Tariffs Under a Second Trump Term May Be More Widespread and Prolonged, but the Outcome Should Be Similar (Percent)



Current analysis does not guarantee future results.

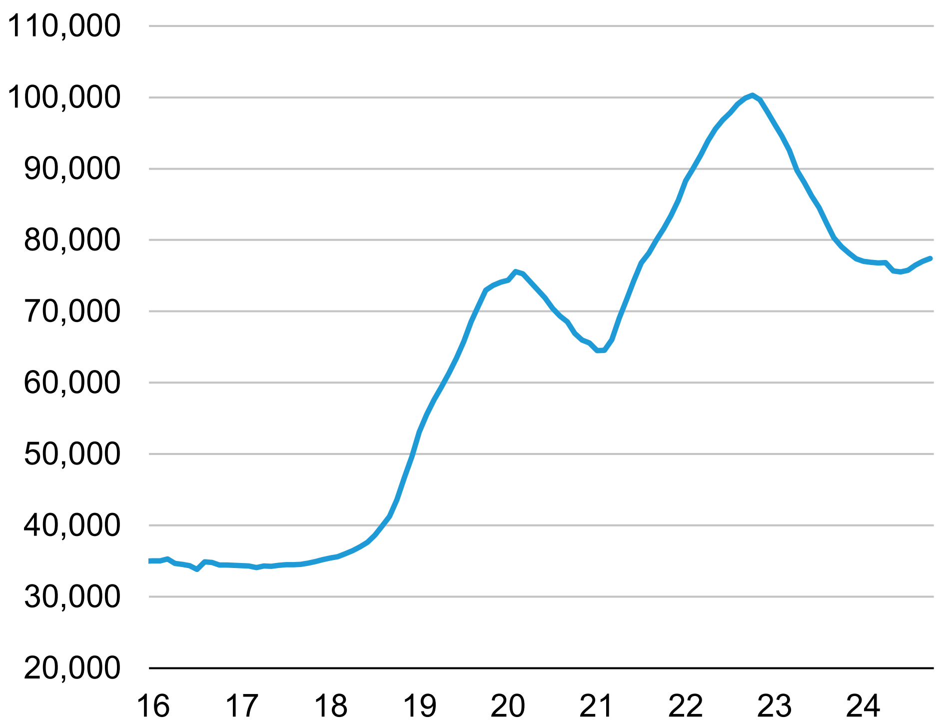
ROW: rest of world

As of December 31, 2024

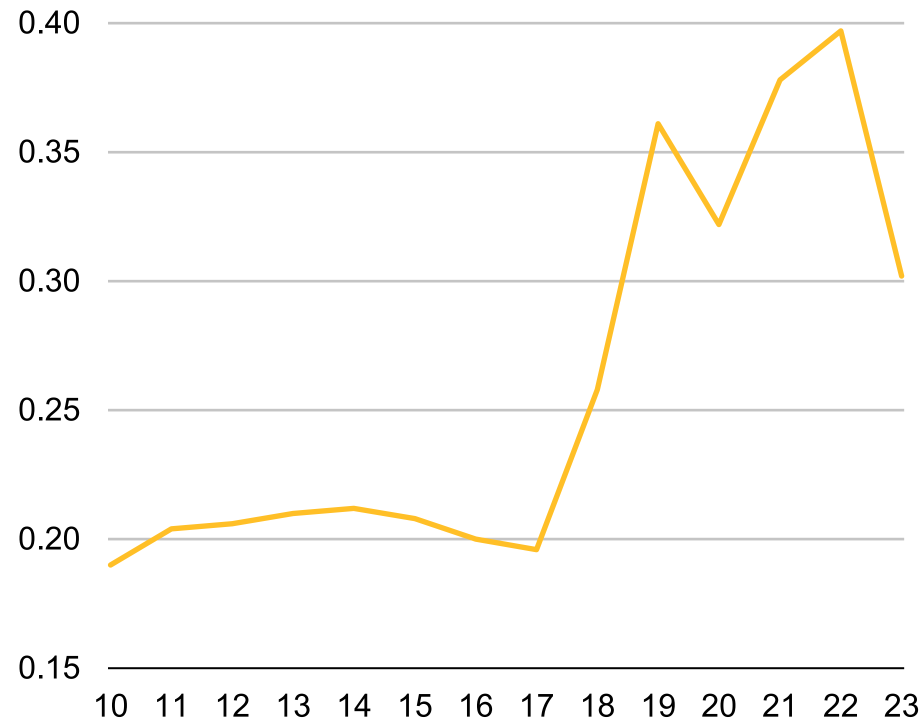
Source: Peterson Institute for International Economics, US Federal Reserve and AB

What About the Impact of Tariffs on the US Budget?

Customs Revenue Increased for a Time...
Billions



...but Ultimately Had a Muted Impact
Customs revenue as a percent of GDP



Current analysis does not guarantee future results.
Through December 31, 2024
Source: LSEG and AB

Summarizing the Impact of Trump's Tariffs

Inflation

- The inflation pattern realized from 2018 to 2019 emphasized that tariffs are *not* truly inflationary so much as a one-off price adjustment
- However, the tariffs may not all be imposed on day one, which could delay the impact. In that scenario, keep a close eye on inflation expectations
- A reasonable estimate is that for every 1% increase in the effective tariff rate, core prices push up around 0.1 percentage points. In our base case, a 10% increase in the effective tariff rate would push up core CPI by roughly 1%

Growth

- Positive:
  - A reduction in the trade deficit would boost GDP, even if for the "wrong" reasons
  - Firms would have an incentive to "reshore" production and to invest more in the US
- Negative:
  - Tariffs function as a tax on the domestic consumer and/or domestic companies that import goods
  - Retaliatory tariffs would hurt US exporters (~1/3 of the S&P 500's total revenue comes from abroad)
  - Trade policy uncertainty could limit domestic investment and production

Rates

- Although inflation progress has not been linear, we still expect rate cuts in 2025
- The Fed is willing to leave inflation somewhat higher in order to keep the labor market somewhat stronger
- The Fed currently has only two cuts priced in, but we believe the risks are tilted toward more cuts rather than fewer. Either additional progress or any sign of weakening of the labor market will trigger additional easing
- It would take a significant deterioration of the inflation outlook to get them to cut by less

Current analysis does not guarantee future results.
As of December 31, 2024
Source: S&P and AB

Macro Summary

AB Global Economic Forecast

	Real Growth (Percent)		Inflation (Percent)		Official Rates (Percent)		Long Rates (Percent)	
	24F	25F	24F	25F	24F	25F	24F	25F
Global ex Russia	2.6	2.5	4.7	3.2	4.96	3.82	4.08	3.79
Industrial Countries	1.6	1.5	2.7	2.7	3.61	2.69	3.58	3.04
Emerging Countries	4.0	3.9	7.6	4.1	7.80	6.07	4.57	4.68
US	**2.4**	**1.6**	**3.1**	**3.3**	**4.38**	**3.62**	**4.75**	**3.75**
Euro Area	0.3	0.5	2.3	1.9	3.00	1.75	2.36	1.90
UK	0.5	1.0	2.5	2.3	4.75	3.75	4.56	3.80
Japan	0.3	1.3	2.4	1.8	0.25	0.50	1.10	1.25
China	4.6	4.5	0.8	1.0	1.50	1.50	1.68	2.35

Past performance and current analysis do not guarantee future results.
Inflation is a Core Consumer Price Index (CPI) estimate. Growth and inflation forecasts are calendar-year averages. Interest rates are year-end forecasts. Real growth aggregates represent 48 country forecasts, not all of which are shown. Long rates are 10-year yields.
As of December 31, 2024
Source: AB

2025 Fixed-Income Outlook

Blending macro and potential policy implications

What's Shifting the Future

- US elections suggest greater **policy and economic divergence** within the global economy
- Slower growth **leads to deceleration of inflation in the global economy**; US is subject to policy changes
- **Easing will continue but be gradual.** Central banks will see what policies are implemented
- Easing cycles and existing investors' cash should support fixed-income markets

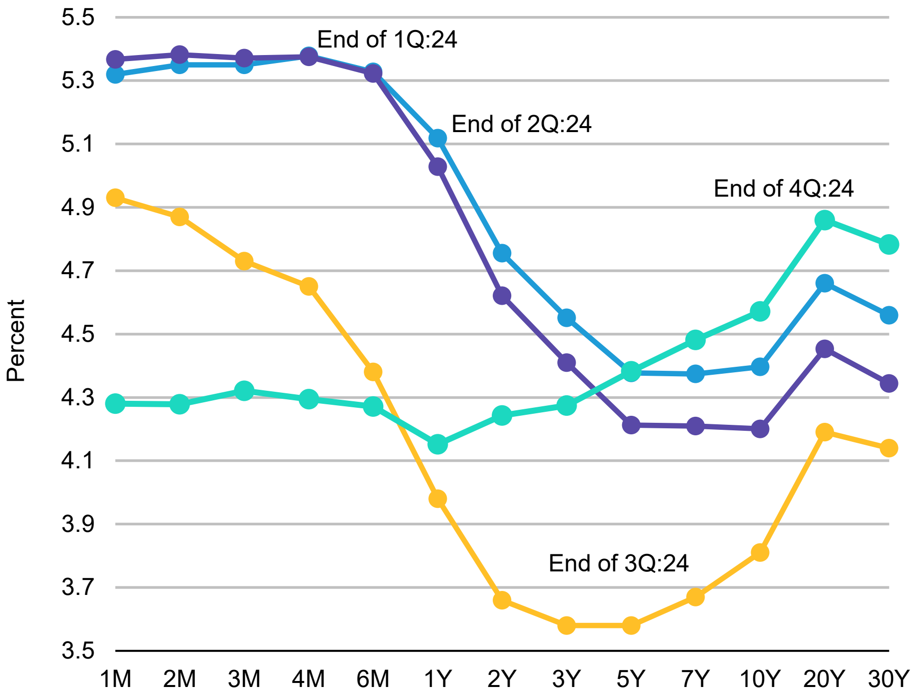
Selected Opportunities

- **Credit** benefits from deregulations, but impact varies by industry
- **High-yield** remains supported by healthy fundamental and positive technicals
- **Global bonds and multi-sector** offer diversification benefits
- **Seize the opportunities** created by volatility and market tailwinds

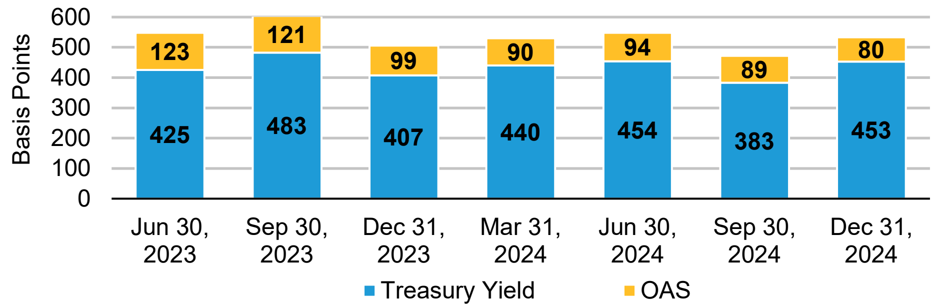
Current analysis and forecasts do not guarantee future results.
As of December 31, 2024
Source: AB

After Years of Inversion, the US Treasury Curve Also Joined the Normalization Party

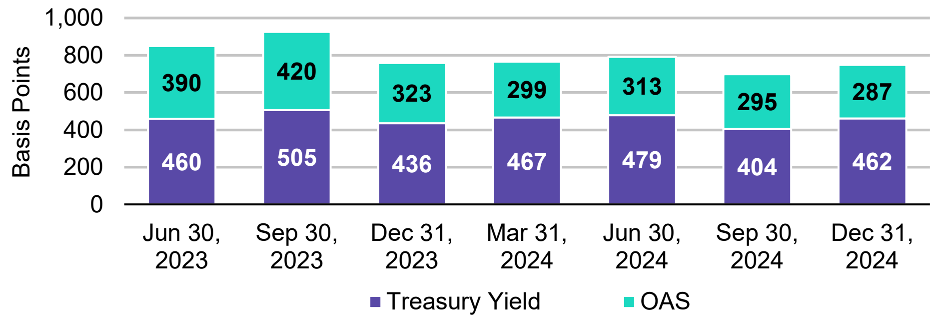
US Treasuries Steepened as the Fed Continued to Cut Rates, While Fiscal Fears Pushed the Long End Higher



Investment-Grade YTW: Spreads Tightened Even Further and Rates Rose



High-Yield YTW: Similar Story in HY—Spreads Tightened and Rates Rose



Historical analysis does not guarantee future results.

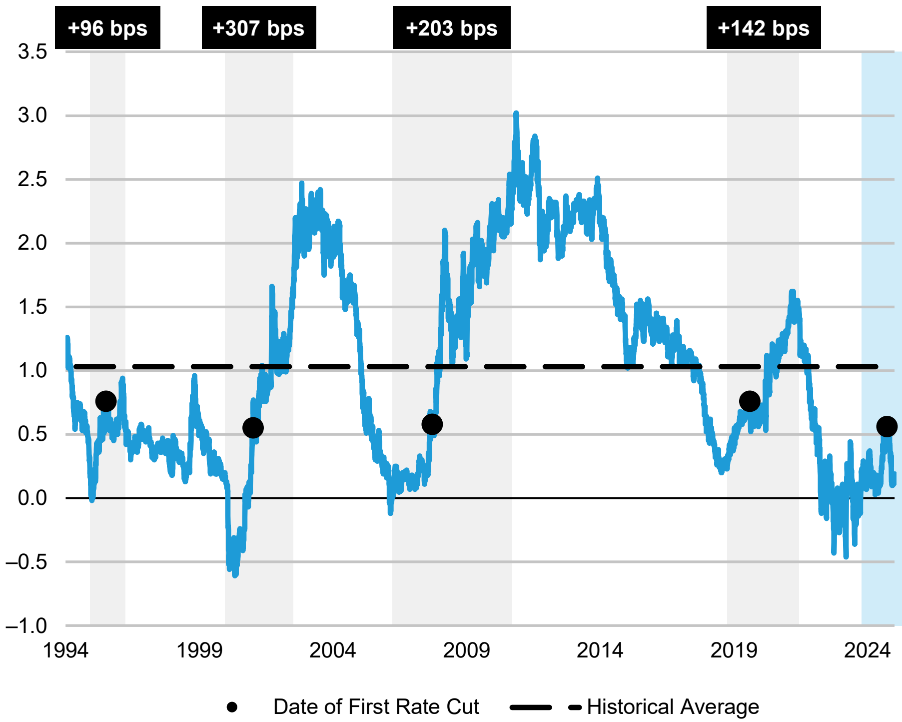
HY: high yield; OAS: option-adjusted spread; YTW: yield to worst

As of December 31, 2024

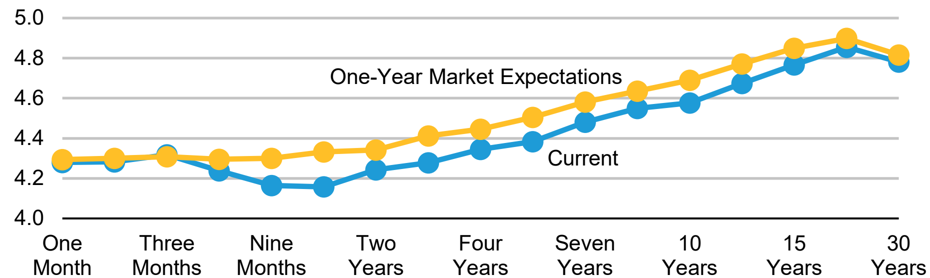
Source: Bloomberg, US Department of the Treasury and AB

Curve Positioning Is Key for Duration Exposure

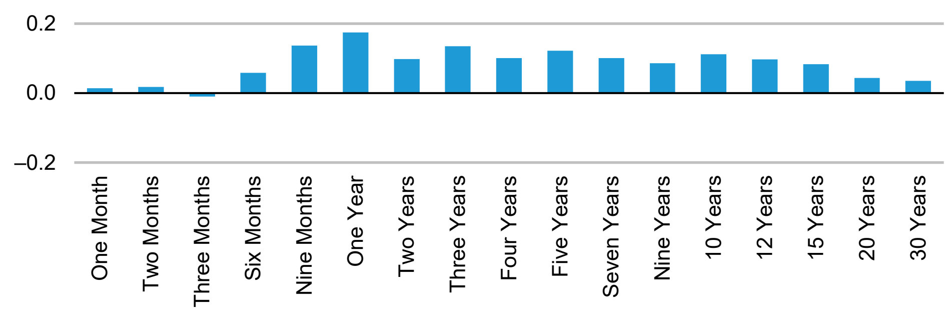
Historically, Curves Steepen During Easing Cycles; 5s/30s* Is Still Below Historical Average
5s/30s curve (percent)



Yield Curve Should Continue to Normalize over Next Year
US Treasury yield curve (percent)



Steepening Expected to Be Driven by Shorter Maturities
Market expectations of changes in yields in one year (percent)

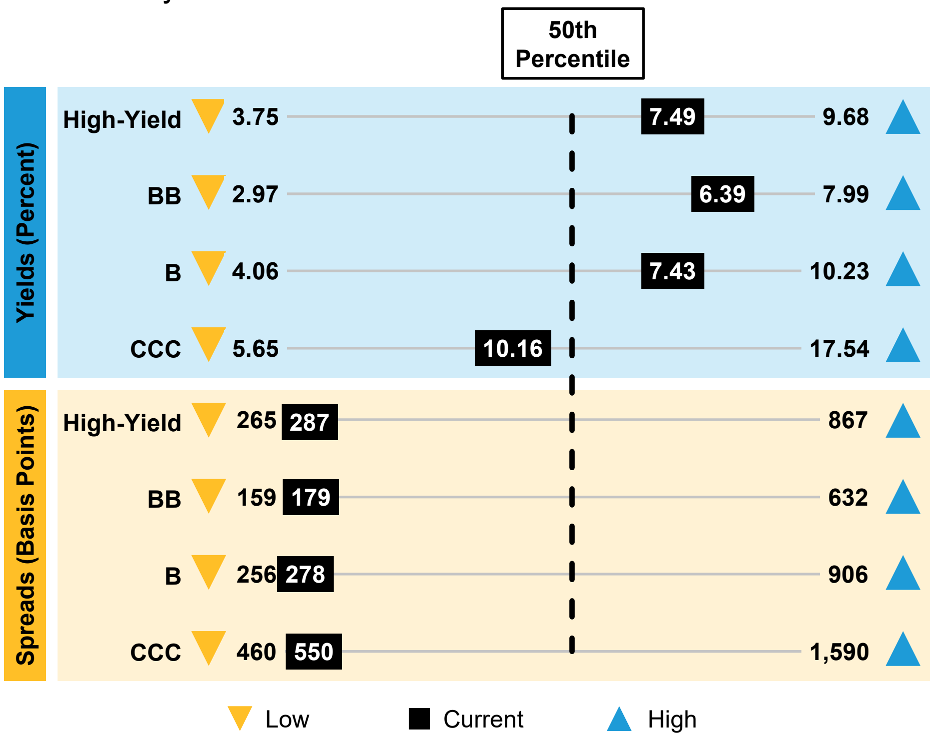


Current analysis and forecasts do not guarantee future results.
bps: basis points
Historical average since January 1, 1990
*5s/30s: Difference between the current yield on the 30-year US Treasury and the five-year US Treasury
As of December 31, 2024. Source: Bloomberg, US Federal Reserve and AB

US High-Yield: Current High-Yield Valuations May Still Lead to Attractive Future Returns

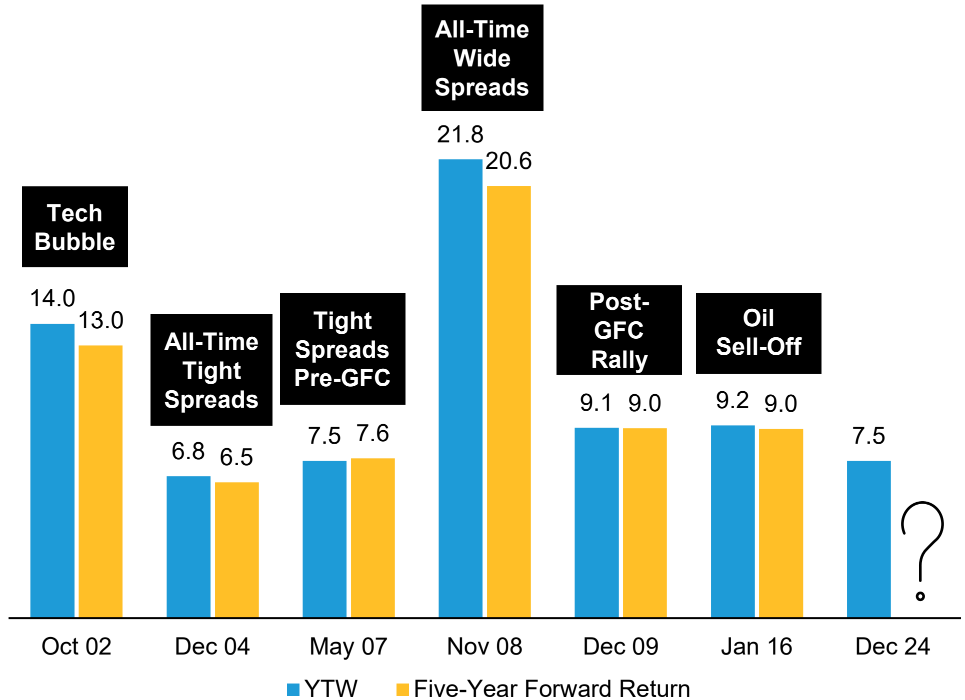
Spreads Are Tight but Yields Are Still High

Yields on the high-yield index are above the 70th percentile over the last 10 years



Yield to Worst Has Historically Been a Strong Predictor of Future Returns

Yield to worst and five-year forward annualized returns (percent)



Past performance and historical analysis do not guarantee future results.

GFC: global financial crisis; YTW: yield to worst

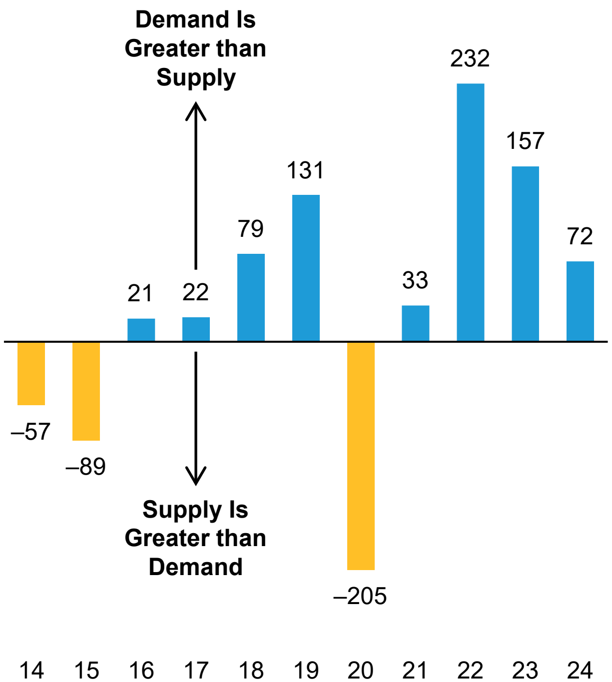
Both displays are represented by the Bloomberg US Corporate High Yield.

As of December 31, 2024

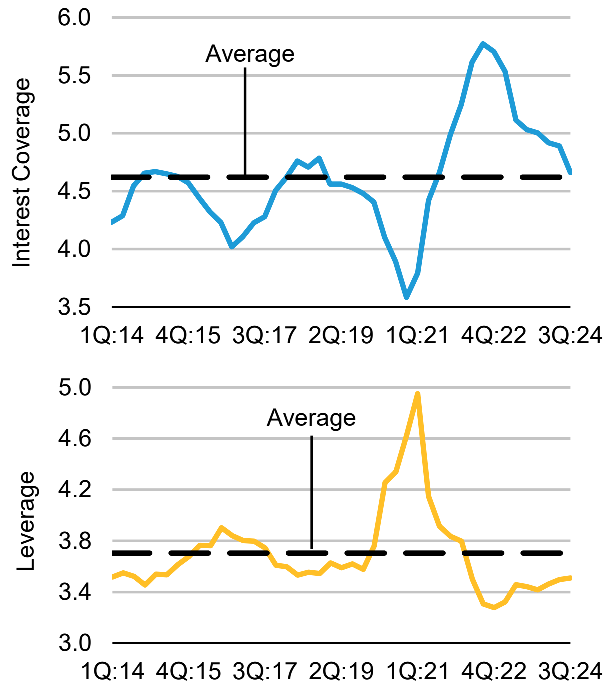
Source: Bloomberg and AB

Technicals and Fundamentals Remain Supportive of High-Yield Credit

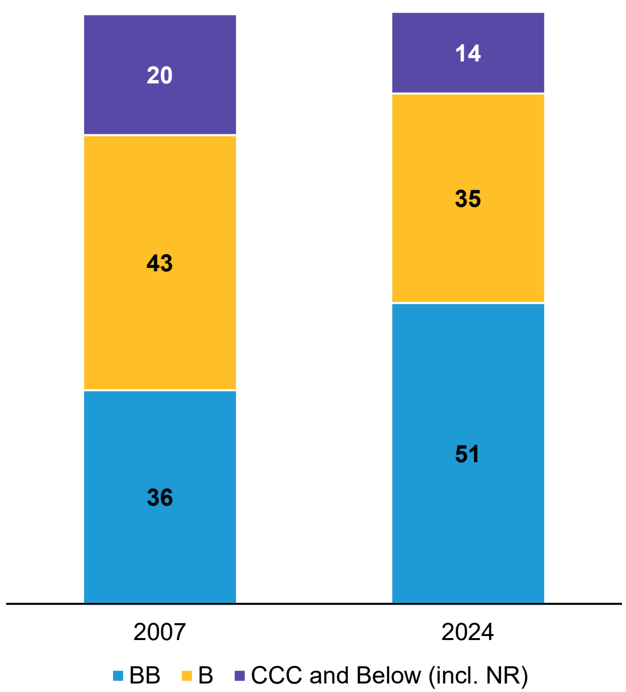
Technicals Still Supportive of Credit, with Demand Outpacing Supply
USD billions



Interest Coverage and Leverage Starting from Positions of Strength*
Percent



HY Index Is Much Higher Quality Today, with Fewer CCCs than Before the GFC
Percent



Current and historical analyses do not guarantee future results.

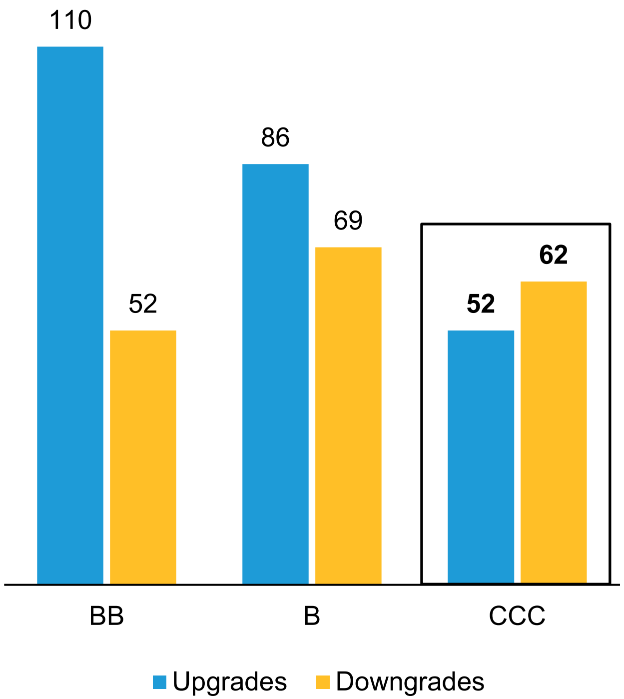
USD: US dollar; HY: high-yield; GFC: global financial crisis; NR: not rated. Left display: high-yield bond and levered loan surplus/shortfall are the difference of high-yield bond supply minus demand. High-yield bond supply is composed of the sum of gross new issuance and fallen angels. High-yield bond demand is composed of the sum of called bonds, tenders, matured bonds, rising stars, assumed 75% of coupons reinvested into market and mutual fund flows. Averages are since January 1, 2014. Rating weights are represented by quality buckets within the Bloomberg US Corporate High Yield. *Interest coverage (EBITDA/interest); EBITDA: earnings before interest, taxes, depreciation and amortization. Left and right displays through December 31, 2024; middle display as of September 30, 2024. Source: Bloomberg, J.P. Morgan and AB

Strong Fundamentals and Higher-Quality Market Should Help with Defaults

Defaults are slowly increasing, but we expect longer-term defaults to be closer to average

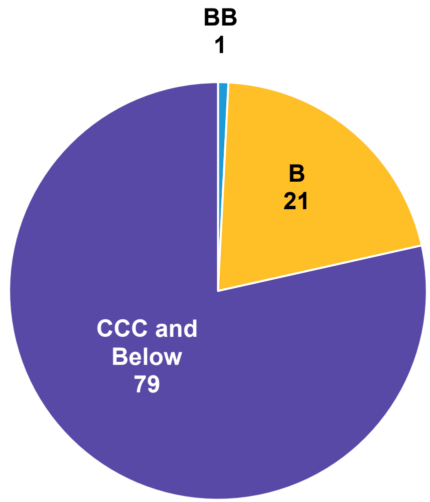
Year to Date, More CCC Issuers Have Been Downgraded than Upgraded

Number of issuers by rating bucket

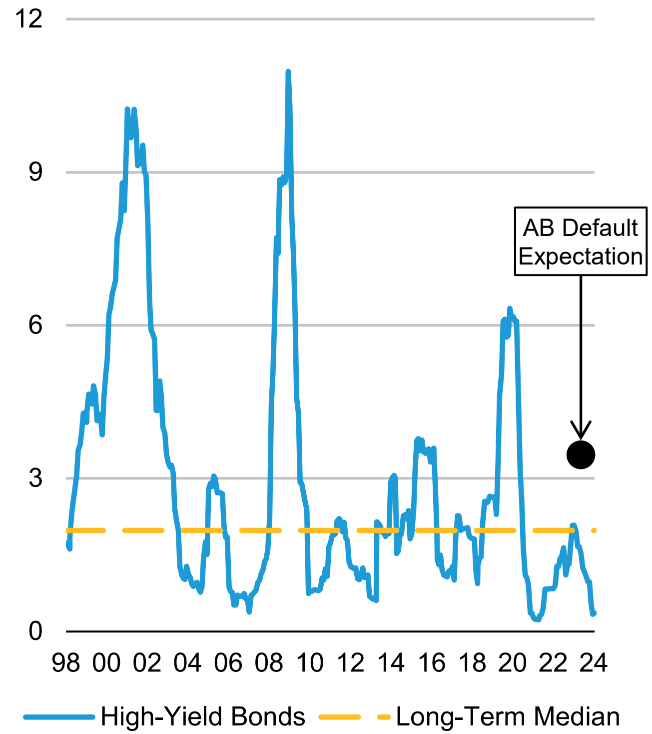


Defaults Tend to Be Concentrated in CCCs

Default by rating January 1998 to April 2024 (percent)



Defaults Are Low but Are Expected to Increase to 3%–4% in the US (Percent)



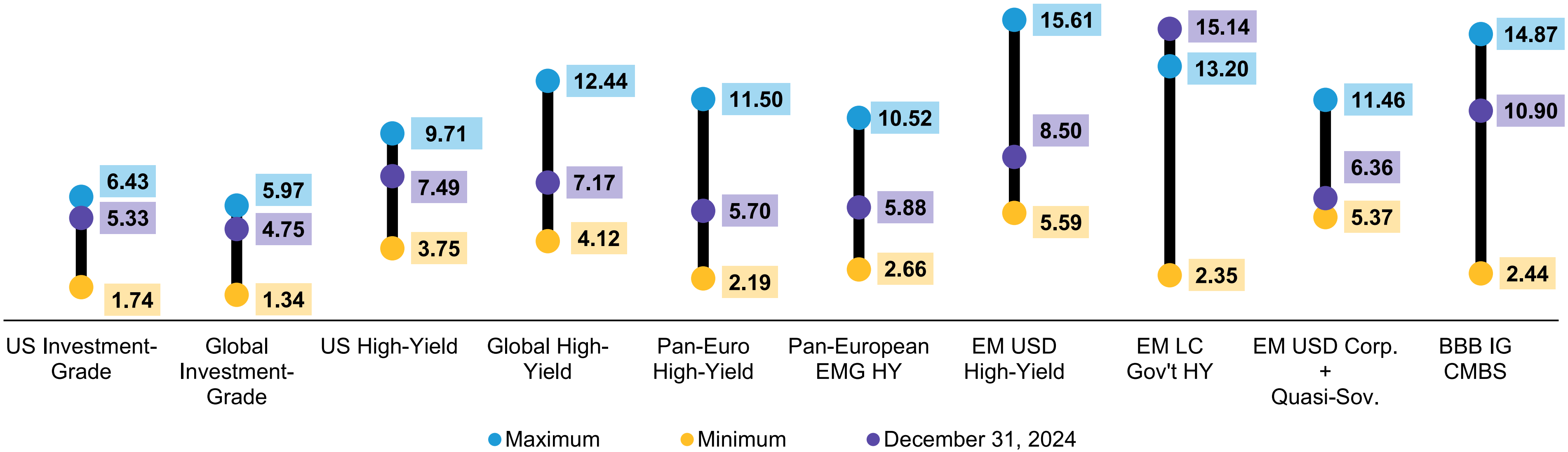
Historical analysis does not guarantee future results.

Left display: Issuers upgraded or downgraded by credit rating. Middle display: Based on credit rating one year prior to default. Right display: High-yield index ex defaults based on high-yield index returns, excluding returns of defaulted issuers in the given year. Based on Bloomberg US High Yield Index.

Left and right displays as of December 31, 2024; middle display as of April 30, 2024. Source: Bloomberg, J.P. Morgan, Moody's Investors Service and AB

Beyond High-Yield: We Are Finding Other Opportunities Around the Globe as the Normalization Process Proceeds at Different Speeds

Yield-to-Worst Range
January 2012–September 2024

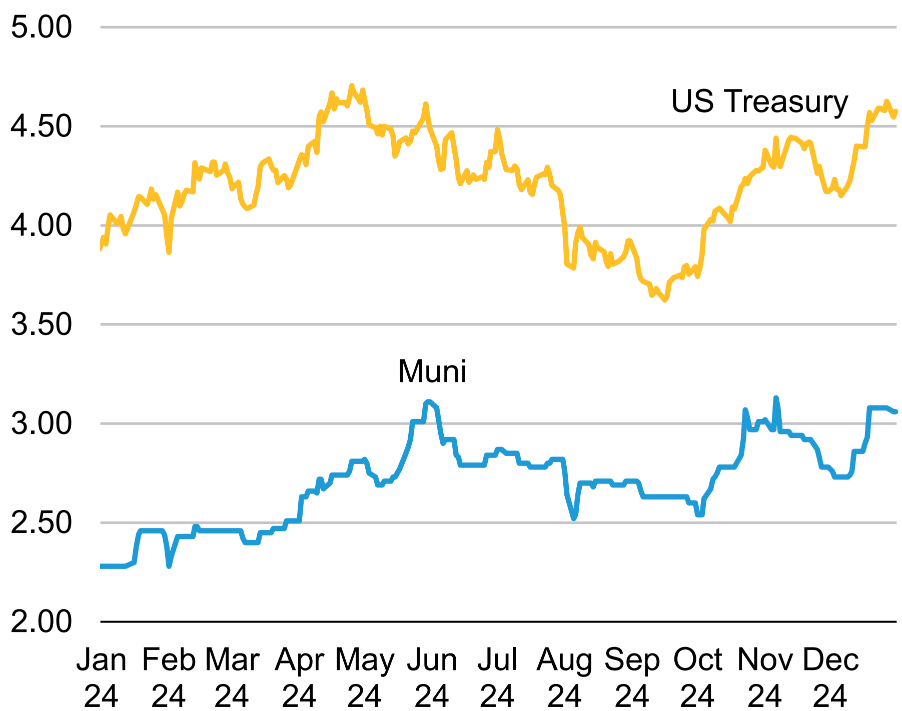


Past performance does not guarantee future results.
CMBS: commercial mortgage-backed securities; EM: emerging-market; EMG: emerging; HY: high-yield; IG: investment-grade; LC: local-currency; Quasi-Sov.: quasi-sovereign; USD: US dollar. Historical information is provided for illustrative purposes only. US investment-grade is represented by Bloomberg US Agg Corporate Index; global investment-grade by Bloomberg Global Agg Corporate; US high-yield by Bloomberg US High Yield Corporate; global high-yield by Bloomberg Global High Yield Corporate; pan-Euro high-yield by Bloomberg Pan-European High Yield; pan-European EMG HY by Bloomberg Pan European EMG High Yield; EM USD high-yield by Bloomberg EM USD Sovereign High Yield; EM LC gov't HY by Bloomberg EM Local Currency Government High Yield; EM USD corp. + quasi-sov. by Bloomberg EM USD Corp + Quasi Sovereign High Yield; BBB IG CMBS by Bloomberg CMBS IG BBB.
As of December 31, 2024
Source: Bloomberg and AB

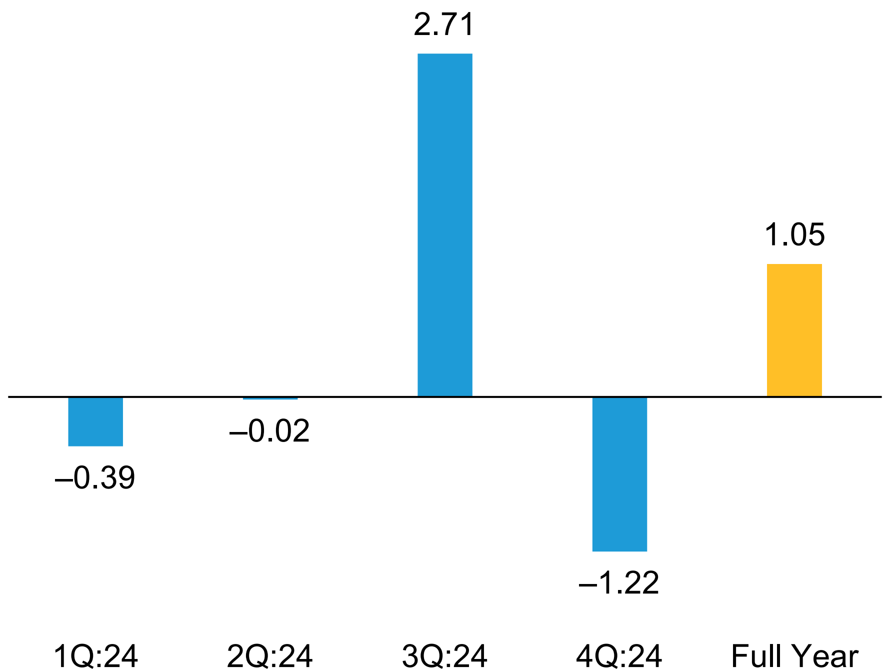
2024 Was a Disappointing Year in Fixed Income…

Yields rose and index returns were marginally positive

10-Year US Treasury and Municipal Yields (Percent)



Bloomberg Municipal Bond Index Returns (Percent)



Current analysis and forecasts do not guarantee future results.

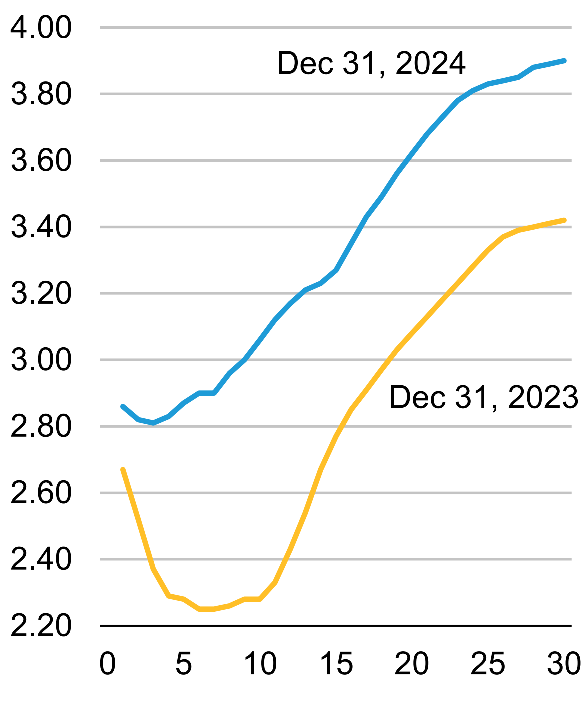
As of December 31, 2024

Source: Bloomberg, Municipal Market Data and AB

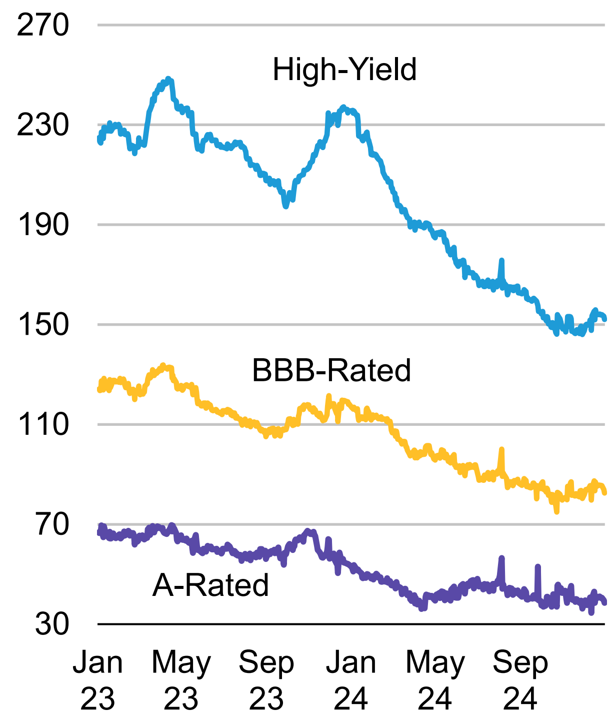
…but a Good Year for Active Management

The inefficient municipal market creates opportunities if you know where to look

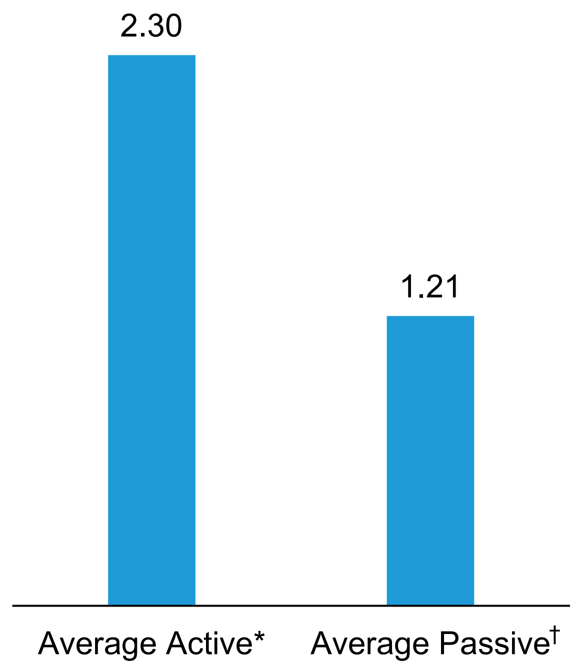
Municipal Yield Curve (Percent)



Municipal Credit
Spreads (basis points)



2024 Returns, Active vs. Passive
Percent



Current analysis and forecasts do not guarantee future results.

*Average active returns assumes the cheapest share class of the top 20 funds by asset size in the intermediate municipal peer group. †Average passive returns is the average return of passive exchange-traded funds in 2024.

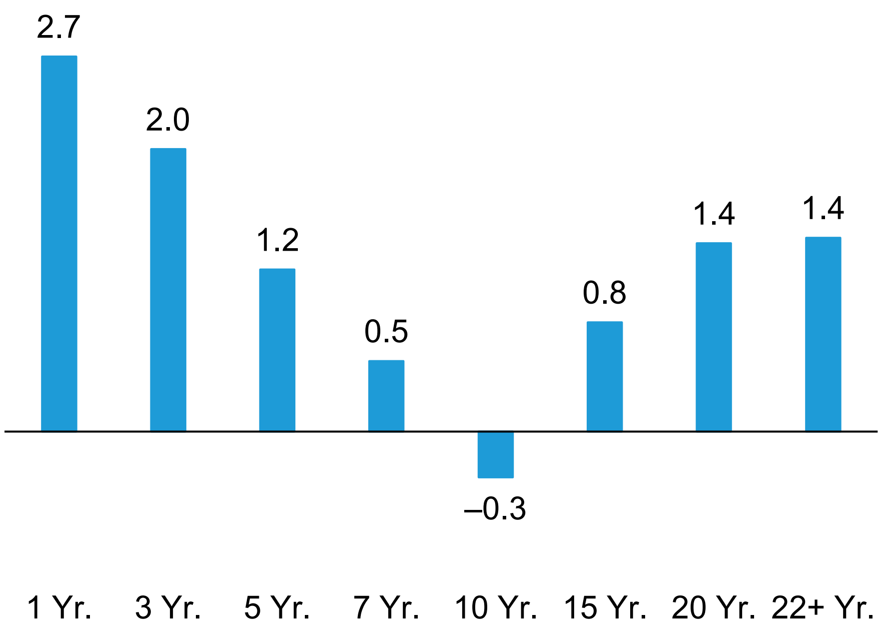
As of December 31, 2024

Source: Bloomberg, Morningstar, Municipal Market Data and AB

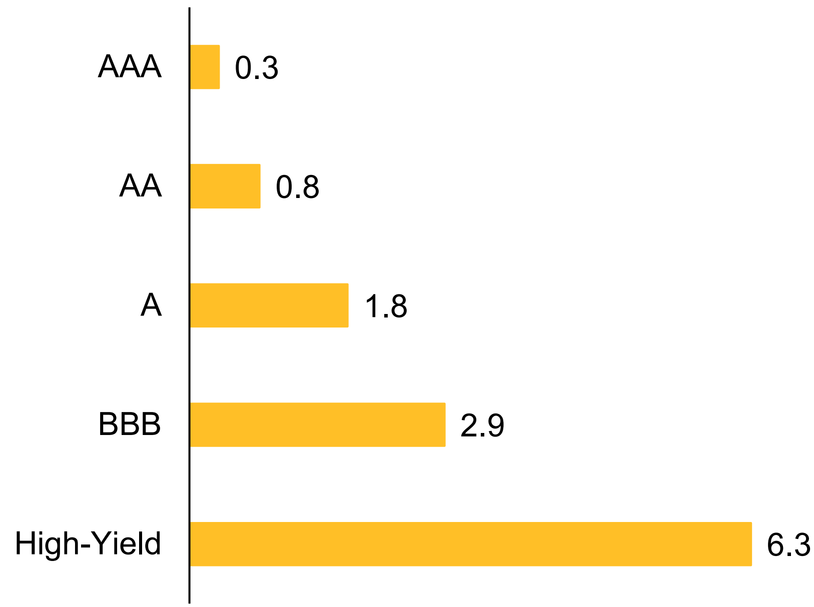
Maturity Structure and Credit Positioning Led the Way

Barbell maturity structure, along with mid-grade and high-yield credit

Returns by Maturity (Percent)



Municipal Credit Drastically Outperformed (Percent)



Past performance does not guarantee future results. There is no guarantee any investment objective will be achieved. An investor cannot invest in an index. Index figures do not reflect the deduction of management fees and other expenses an investor would incur when investing in a fund or separately managed portfolio.

Returns for indices by maturity are the respective Bloomberg municipal indices in those maturity tranches. Returns for indices by credit are the respective Bloomberg municipal indices in those credit cohorts.

As of December 31, 2024

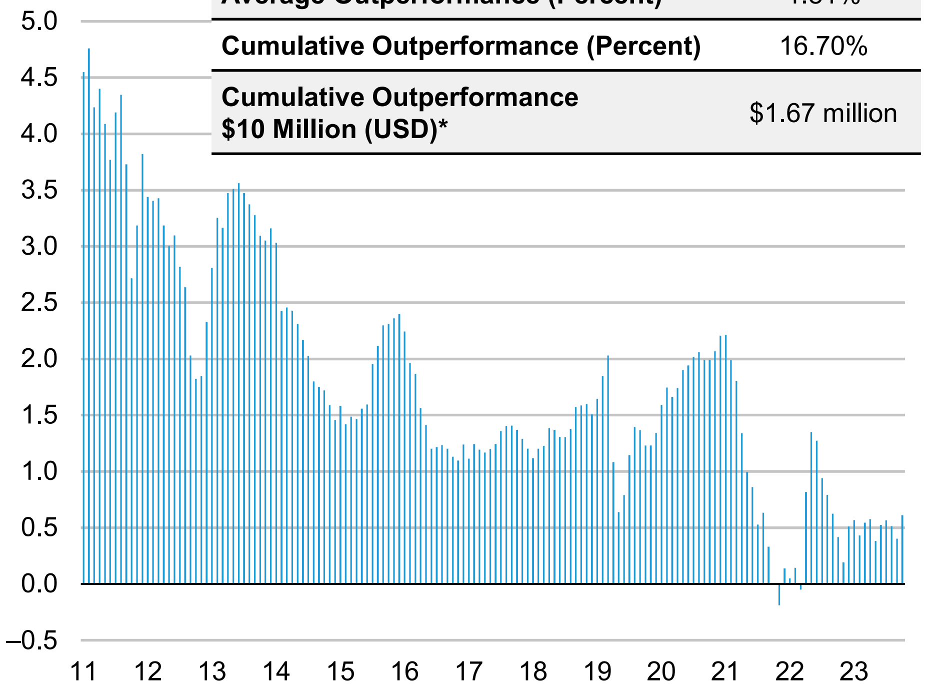
Source: Bloomberg and AB

Active Outperformance Is Not Just a “One and Done”

Excess volatility and market dislocations create opportunities for active management

Active Outperforms Passive 98% of the Time over Three-Year Rolling Periods (Percent Outperformance)

Average Outperformance (Percent)*	1.81%
Cumulative Outperformance (Percent)	16.70%
Cumulative Outperformance $10 Million (USD)*	$1.67 million



With Better Upside/Downside Capture and Better Risk-Adjusted Returns

10-Year	Active Average	Passive Average
Return	2.31	1.94
Sharpe Ratio	0.14	0.06
Standard Deviation	4.22	4.05
Up Capture	84%	81%
Down Capture	79%	80%

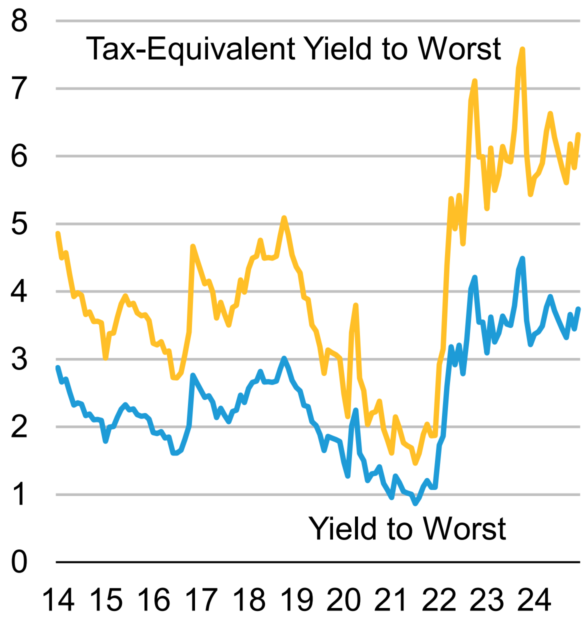
Historical analysis does not guarantee future results.

*Over three-year rolling periods. Cumulative outperformance (USD and percent) is based on an initial investment of $10 million on January 1, 2009. Active average is the average of all actively managed strategies in the Morningstar intermediate separate account peer group. Passive uses the same categorization but is the average of all ladder strategies. As of September 30, 2024. Source: J.P. Morgan, Morningstar, Municipal Market Data and AB

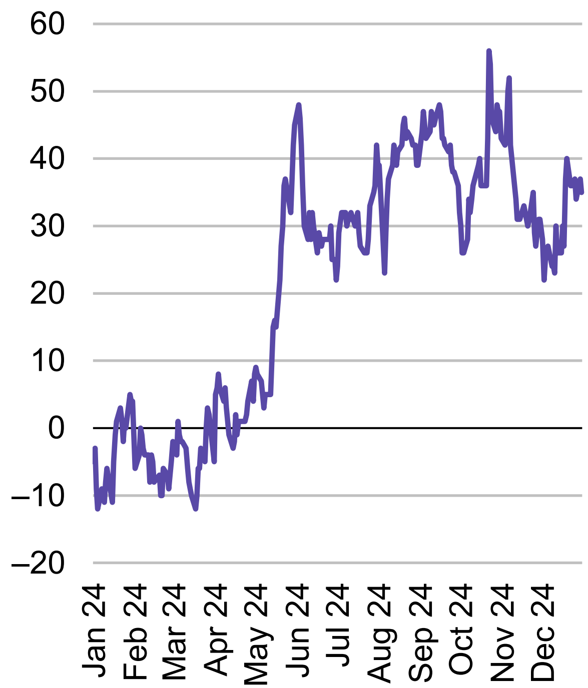
2025 Starting Point Is Attractive from Yield and Valuation Standpoints

Market technicals expected to be weaker due to forecast heavy new issuance

Yields Are High Relative to History
Bloomberg Municipal Bond Index yield to worst (percent)



Relative Valuations Have Improved
10-year AAA muni/UST after-tax spreads (basis points)



2025 Tax-Exempt Supply Forecast

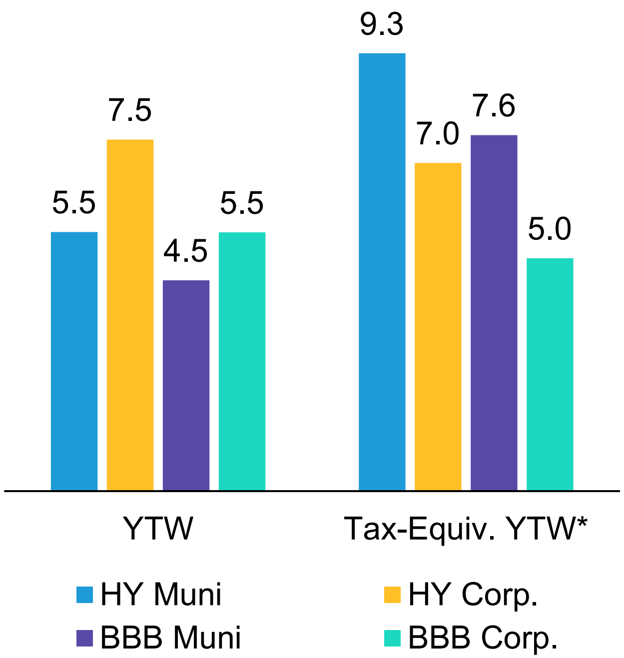
	2024	2025
Gross Supply	464 billion	450 billion
Coupons & Redemptions	442 billion	405 billion
Net Supply	**+22 billion**	**+45 billion**

Current analysis and forecasts do not guarantee future results.
P/E: price to earnings; UST: US Treasury
Tax-rate assumptions using a 40.8% tax rate
Through December 31, 2024
Source: Bloomberg, J.P. Morgan, Municipal Market Data and AB

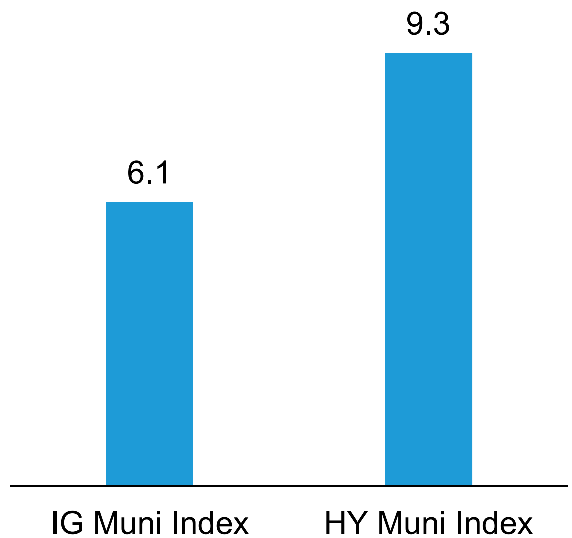
Strong Returns Are Possible Without Spreads Tightening

Income and duration are likely the biggest drivers of credit returns going forward

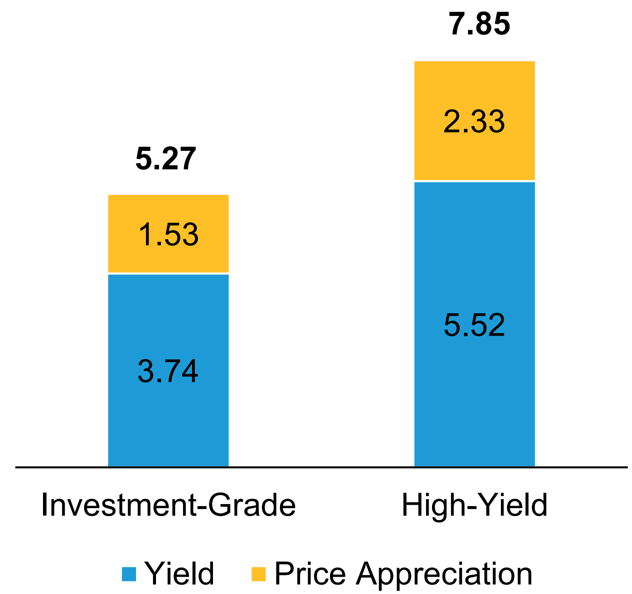
Muni Credit Offers Attractive Income…
Yield to worst (percent)



…and Is Generally Longer Duration
Duration (years)



12-Month Hypothetical Returns in Falling Interest-Rate Environment*
Percent



Current analysis does not guarantee future results. There is no guarantee any investment objective will be achieved.

HY: high-yield; IG: investment-grade; YTW: yield to worst. *Hypothetical returns assume municipal market yields fall 25 basis points over the next 12 months. Investment-grade is represented by the Bloomberg Municipal Bond Index; high-yield is represented by the Bloomberg Municipal Bond High Yield Index. Simulated or hypothetical performance results have certain inherent limitations. Simulated or hypothetical trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve returns or a volatility profile similar to those being shown.

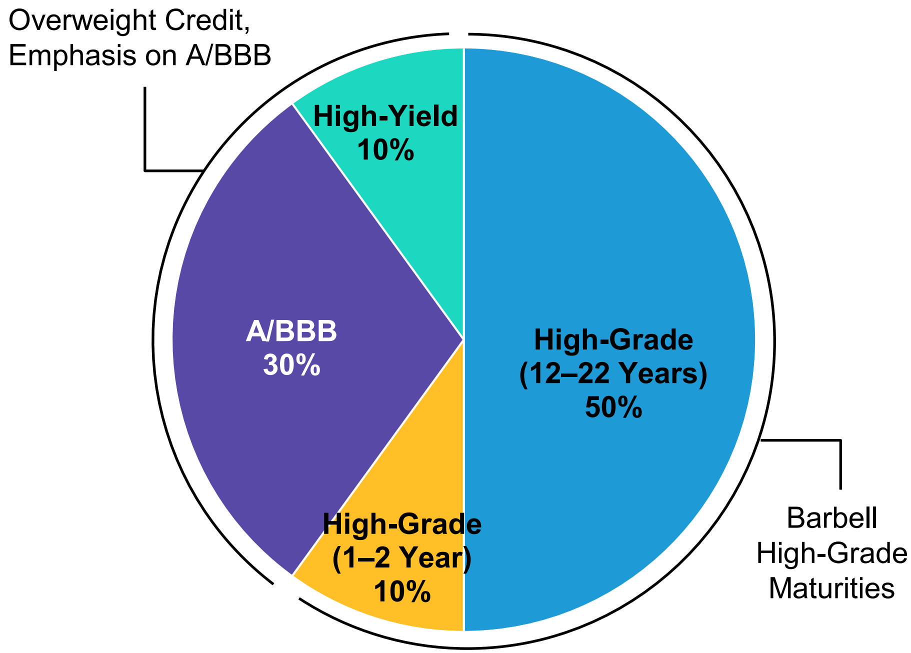
As of December 31, 2024

Source: Bloomberg and AB

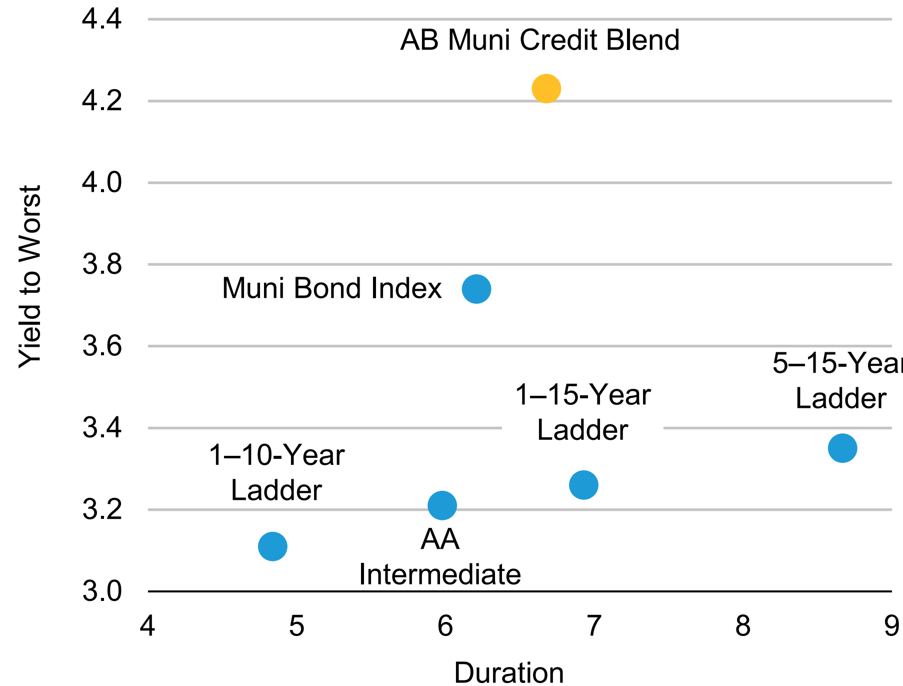
Portfolio Construction for Today's Environment

Overweight municipal credit, overweight duration via a barbelled maturity structure

AB Municipal Credit Blend



Active Is Better Positioned than Passive (Percent)



Current analysis does not guarantee future results. An investor cannot invest in an index. Index figures do not reflect the deduction of management fees and other expenses an investor would incur when investing in a fund or separately managed portfolio.

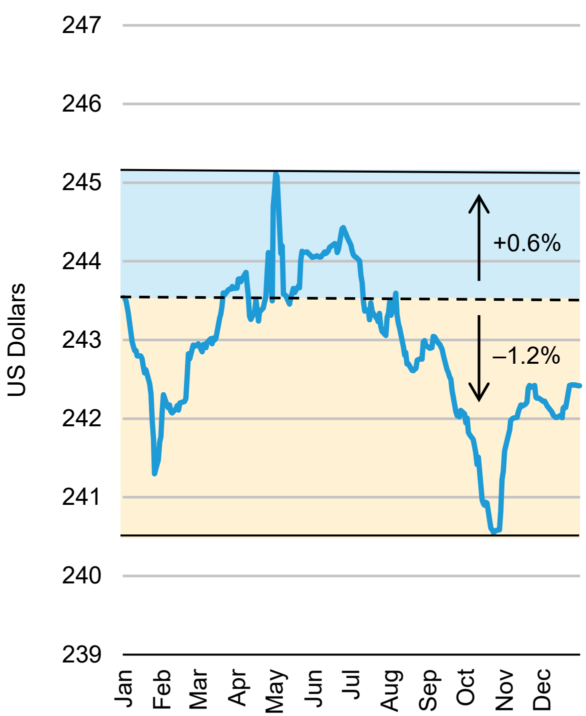
AB Muni Credit Blend is a blend of Bloomberg muni indices: 60% high-grade, 30% A/BBB and 10% high-yield.

As of December 31, 2024

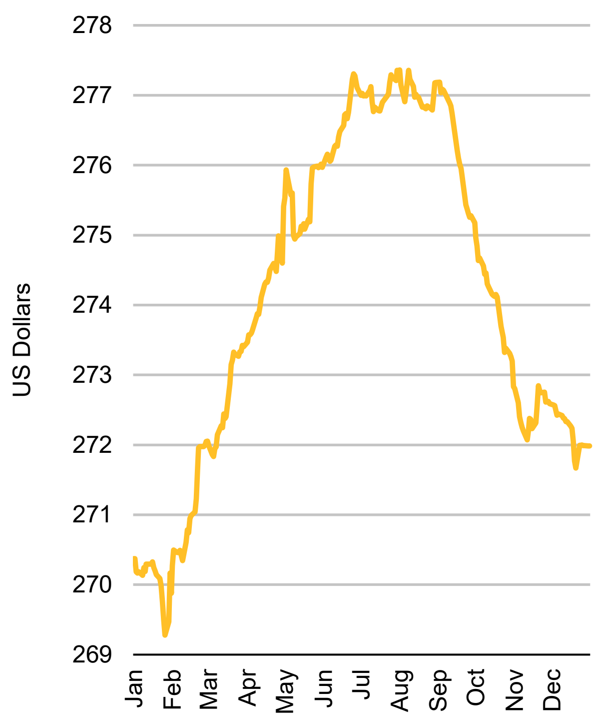
Source: Bloomberg and AB

S&P 500 Earnings: Expect Growth, but Keep an Eye on the Direction of Travel for Revisions

Initial 2024 Earnings Estimates Were Largely Accurate with Little Variability

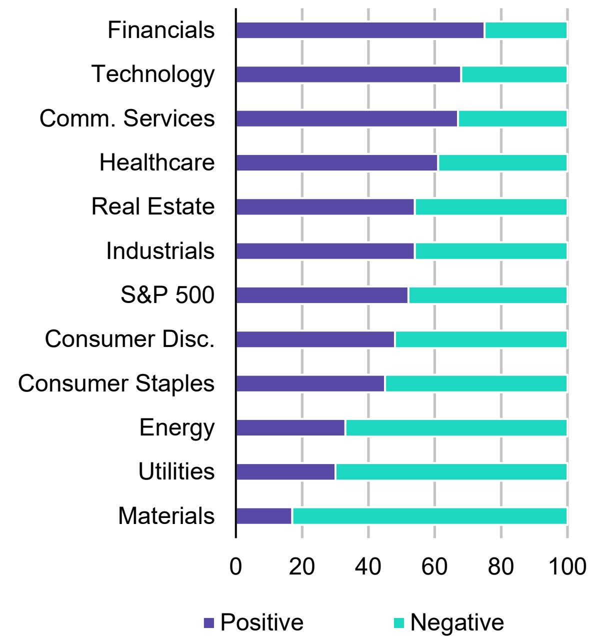


Earnings Estimates for 2025 Are Higher, but Its Revisions Are Trending Lower…



…So Keep a Close Eye on Guidance for Further Signs of Softening

S&P 500 companies with full-year positive and negative guidance (percent)



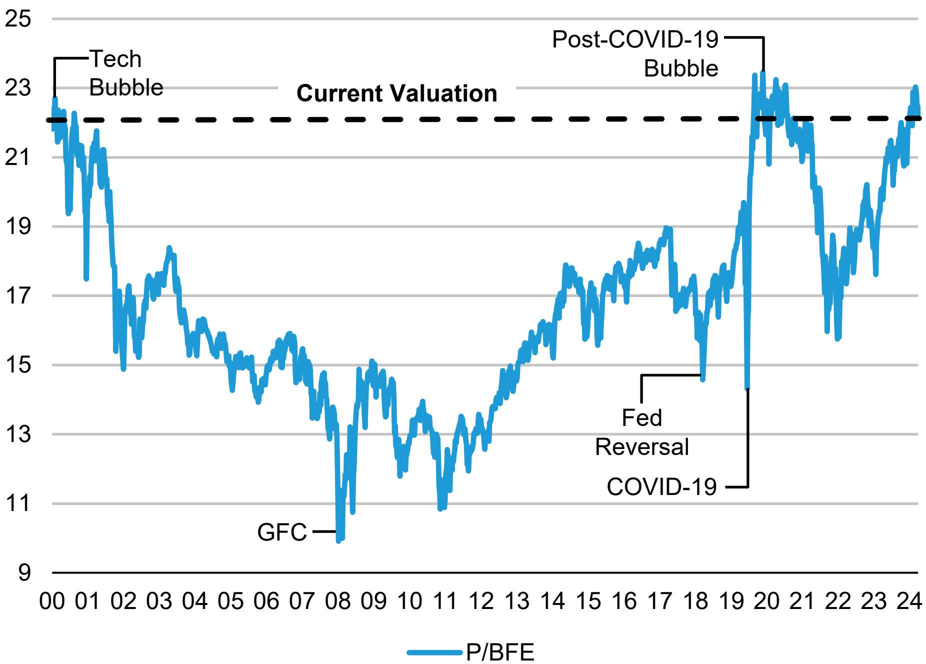
Historical analysis and current forecasts do not guarantee future results.

As of December 31, 2024

Source: Bloomberg, FactSet, S&P and AB

S&P 500 Valuations Continue to Gap Away from Earnings

S&P 500 Multiples



Time Period	P/E	P/BFE	P/FE$_2$
December 31, 2024	**24.6**	**21.6**	**19.3**
December 31, 2023	21.9	19.6	17.6
December 31, 2022	17.2	16.8	15.6
Pre-Pandemic*	20.3	19.0	17.7
10-Year Average	19.8	18.2	16.2
Pre-Pandemic Five-Year Average	18.3	17.0	15.1
January 2014–November 2016	17.0	16.2	14.3
Average Since 2000	18.4	16.3	14.4

Current analysis does not guarantee future results.

GFC: global financial crisis. Price/earnings (P/E) is for the trailing 12 months; price/blended forward earnings (P/BFE) is for the next 12 months; price/forward earnings two (P/FE$_2$) is for calendar year 2026.

*February 21, 2020

As of December 31, 2024

Source: Bloomberg, S&P and AB

S&P 500 Scenario Chart: Using Earnings and Valuations to Form a Price Target Range

Choose Your Own Adventure

2025

	15	16	17	18	19	20	21	22	23	S&P Price Level	2025 Price Return*
245	3,675	3,920	4,165	4,410	4,655	4,900	5,145	5,390	5,635	5,300	–9.9%
250	3,750	4,000	4,250	4,500	4,750	5,000	5,250	5,500	5,750	5,400	–8.2
255	3,825	4,080	4,335	4,590	4,845	5,100	5,355	5,610	5,865	5,500	–6.5
260	3,900	4,160	4,420	4,680	4,940	5,200	5,460	5,720	5,980	5,600	–4.8
265	3,975	4,240	4,505	4,770	5,035	5,300	5,565	5,830	6,095	5,700	–3.1
270	4,050	4,320	4,590	4,860	5,130	5,400	5,670	**5,882**	6,210	**5,882**	0.0
275	4,125	4,400	4,675	4,950	5,225	5,500	5,775	6,050	6,325	6,000	2.0
280	4,200	4,480	4,760	5,040	5,320	5,600	5,880	6,160	6,440	6,150	4.6
285	4,275	4,560	4,845	5,130	5,415	5,700	5,985	6,270	6,555	6,300	7.1

2026

	12	13	14	15	16	17	18	19	20	S&P Price Level	2025–26 Price Return†
275	3,300	3,575	3,850	4,125	4,400	4,675	4,950	5,225	5,500	5,300	–5.1%
280	3,360	3,640	3,920	4,200	4,480	4,760	5,040	5,320	5,600	5,500	–3.3
285	3,420	3,705	3,990	4,275	4,560	4,845	5,130	5,415	5,700	5,700	–1.6
290	3,480	3,770	4,060	4,350	4,640	4,930	5,220	5,510	5,800	5,800	–0.7
295	3,540	3,835	4,130	4,425	4,720	5,015	5,310	5,605	5,900	**5,882**	0.0
300	3,600	3,900	4,200	4,500	4,800	5,100	5,400	5,700	6,000	6,000	1.0
305	3,660	3,965	4,270	4,575	4,880	5,185	5,490	**5,882**	6,100	6,200	2.7
310	3,720	4,030	4,340	4,650	4,960	5,270	5,580	5,890	6,200	6,400	4.3
315	3,780	4,095	4,410	4,725	5,040	5,355	5,670	5,985	6,300	6,600	5.9

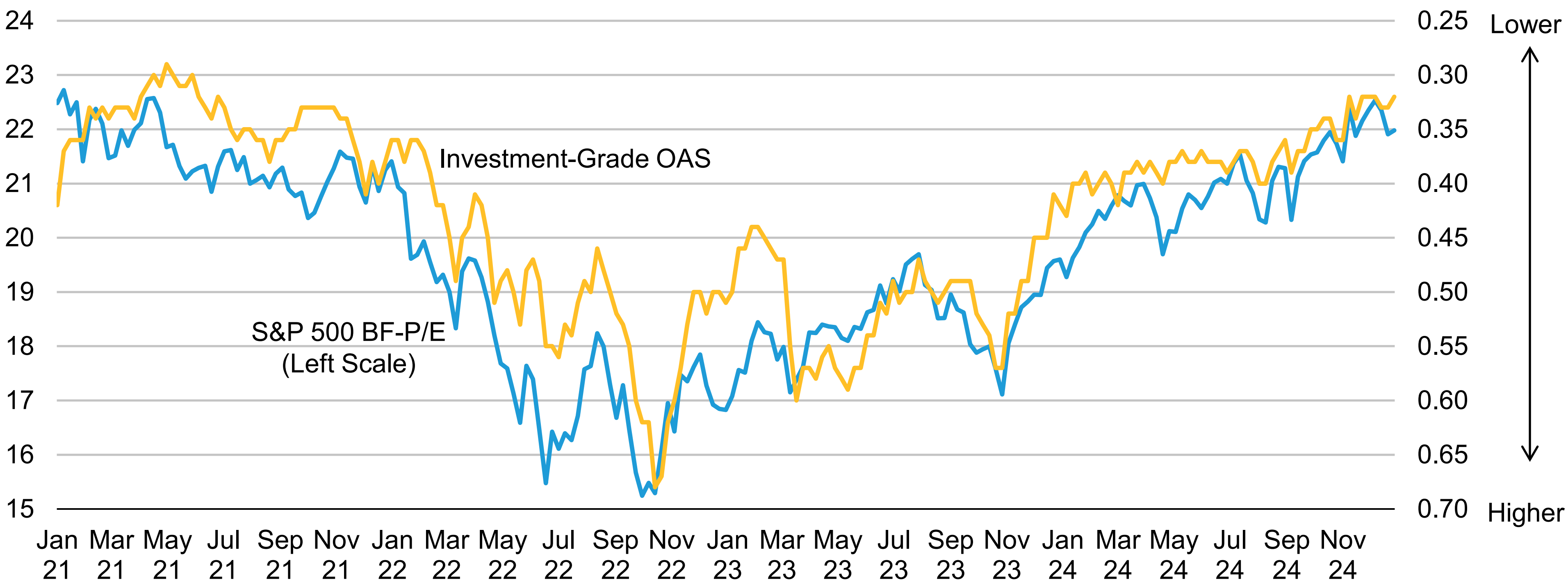
■ December 31, 2024 (What's Currently Priced In*) ■ AB's Most Likely Range of Future Outcomes

Historical analysis and current forecasts do not guarantee future results.
*Based on S&P 500's 4Q:24 closing price of 5882; horizontal axis contains forward price/earnings multiples; vertical axis contains forward earnings; numbers may not sum due to rounding; †Annualized
As of December 31, 2024
Source: Bloomberg, S&P and AB

P/E Multiples Are High, but Not Without Merit

Tight investment-grade bond spreads allude to economic and profit outlooks that remain healthy

S&P 500 Forward P/E vs. Investment-Grade Bond Spreads



Historical analysis and current forecasts do not guarantee future results.

P/E: price to earnings; OAS: option-adjusted spread; BF-P/E: blended forward price to earnings

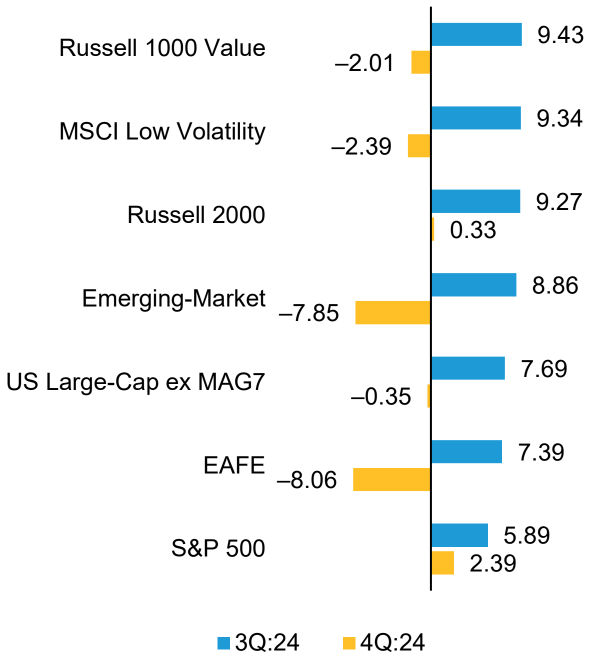
Through December 31, 2024

Source: Bloomberg and AB

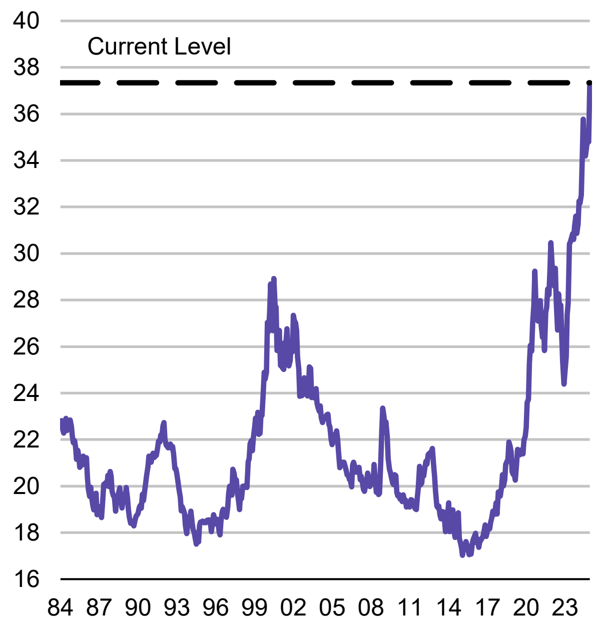
Akin to Last Year, 2024 Ultimately Was the Year of Mega-Caps

This backdrop enhances the potential reward for also owning other stocks when broadening occurs

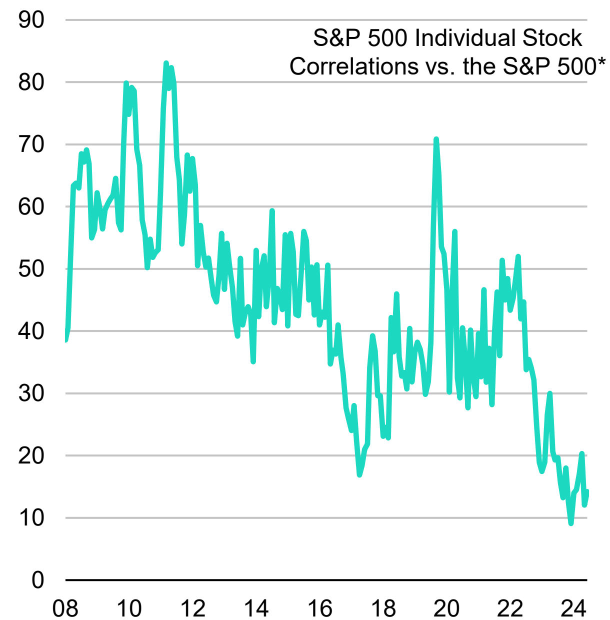
After a Notable Broadening Out During the Third Quarter, 4Q:24 Saw the Mega-Caps Reestablish Dominance…
Percent



…Leading to Even Greater Concentration Risk Within the S&P 500…
Top 10 combined weights (percent)



…and Lower Correlation Between the Index and Its Individual Constituents
Percent



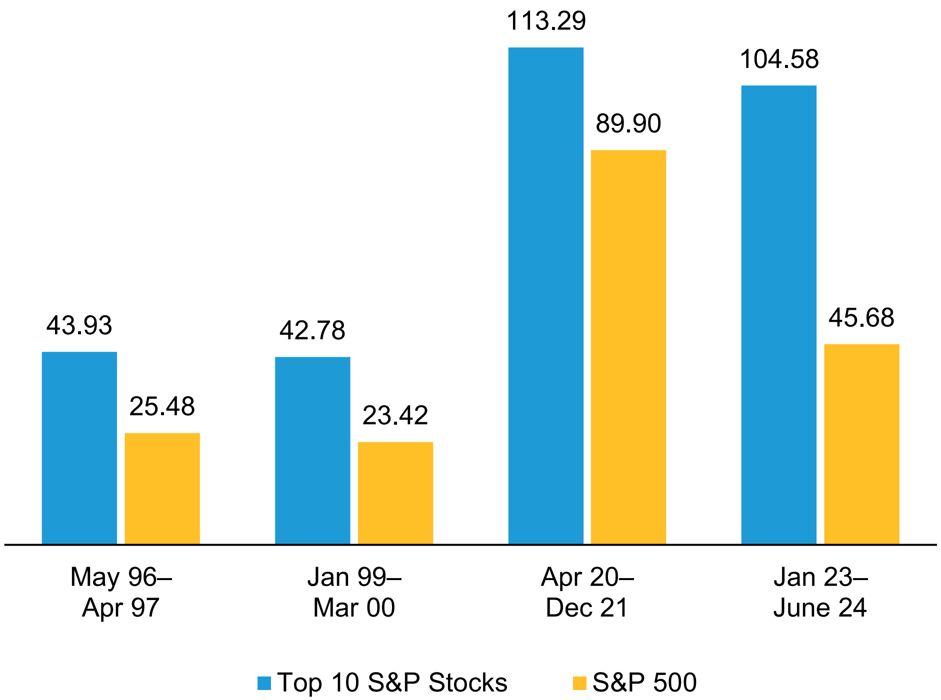
Past performance does not guarantee future results. Analysis is provided for illustrative purposes only and is subject to revision.

EAFE: Europe, Australasia and the Far East; ex MAG7: excluding Magnificent Seven
*Cboe S&P 500 3-Month Implied Correlation Index
As of December 31, 2024
Source: Bloomberg, Cboe Global Markets, FactSet, FTSE Russell, MSCI, Piper Sandler, S&P and AB

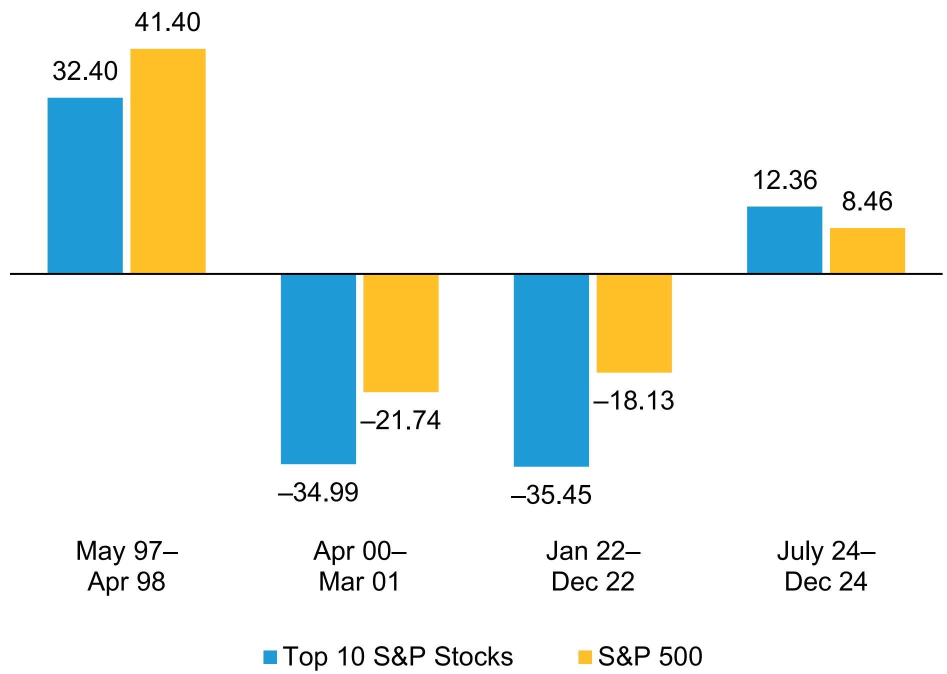
What Happens After Mega-Caps Outperform?

While no one knows that day and hour, we expect that history will again rhyme

Greatest Examples of Outperformance by the Top-Weighted Names in the S&P 500
Percent



However, 12-Month Subsequent Performance Periods Suggest Potential Underperformance Ahead
Percent



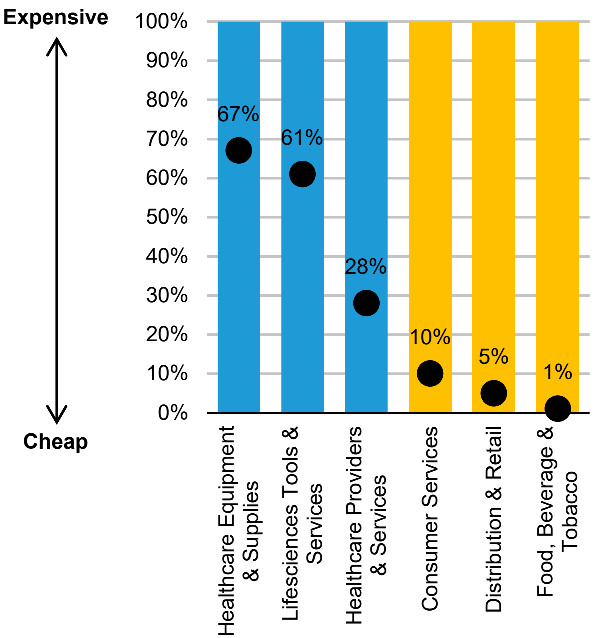
Past performance does not guarantee future results.
Performance periods show cumulative returns.
As of December 31, 2024
Source: Bloomberg, S&P and AB

Growth Equities: Finding Gems Beyond the Popular Sectors

Many consumer and healthcare stocks with solid earnings have been left behind or unduly punished

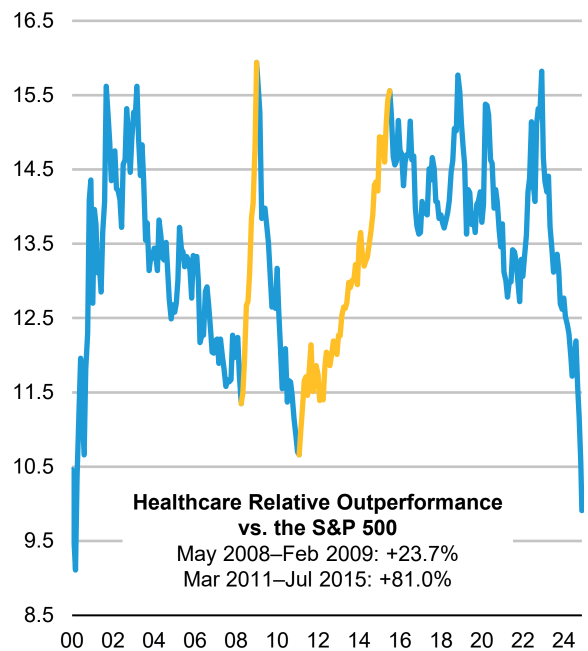
Price/Earnings Valuations vs. the S&P 500

Percentile rankings (2014–2024)*



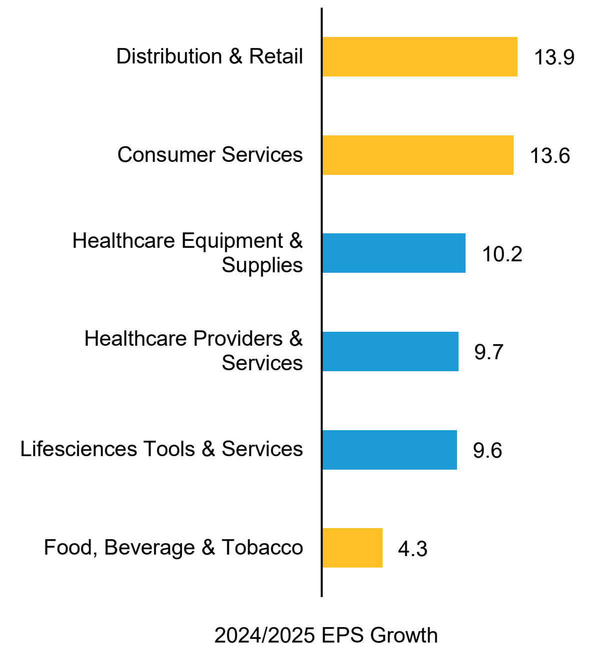
Healthcare: Past S&P 500 Weight Lows Have Led to Rewarding Returns

Percent†



Favorable Earnings Growth Along with Valuation Support

Earnings forecast (percent)‡



Current analysis does not guarantee future results.

EPS: earnings per share. Displays show six industry groups within the S&P 500 and MSCI World Health Care indices.

*Percentile ranking of monthly observations of the price/earnings ratio, based on earnings for the next 12 months, for each industry group

†The healthcare sector weight in the S&P 500; outperformance periods are cumulative from trough to peak weightings

‡Earnings-growth forecasts are based on consensus estimates.

Left and right displays as of December 31, 2024; middle display through December 16, 2024

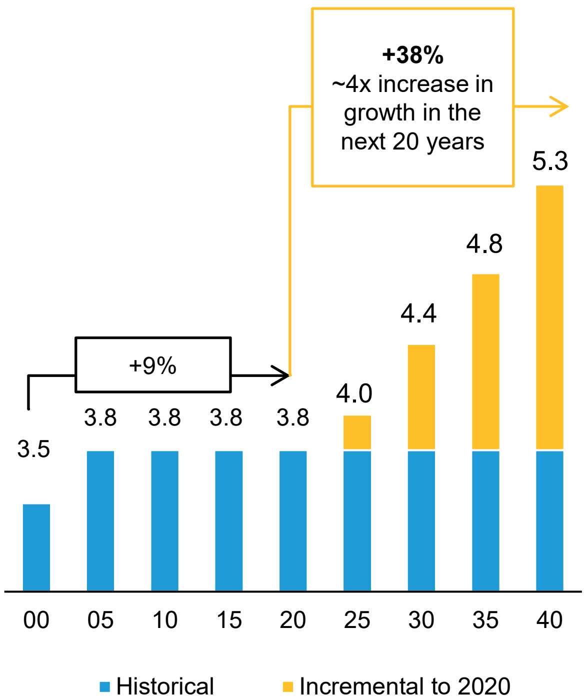
Source: FactSet, MSCI, S&P and AB

Thematic Equities: Seeking Solutions for Power-Supply Imbalance

Solving for this may accrue to the benefit of a diverse set of companies

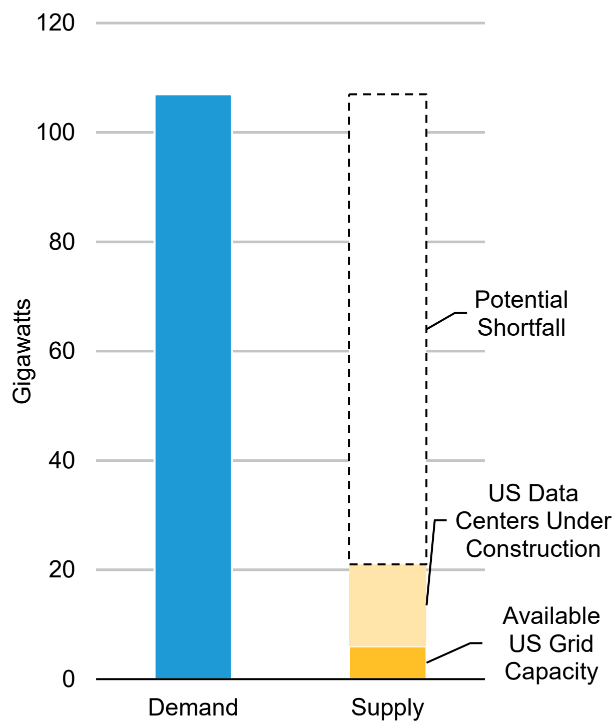
US Power Demand Is Expected to Grow ~38% over the Next Two Decades

US power demand, thousand TWh*



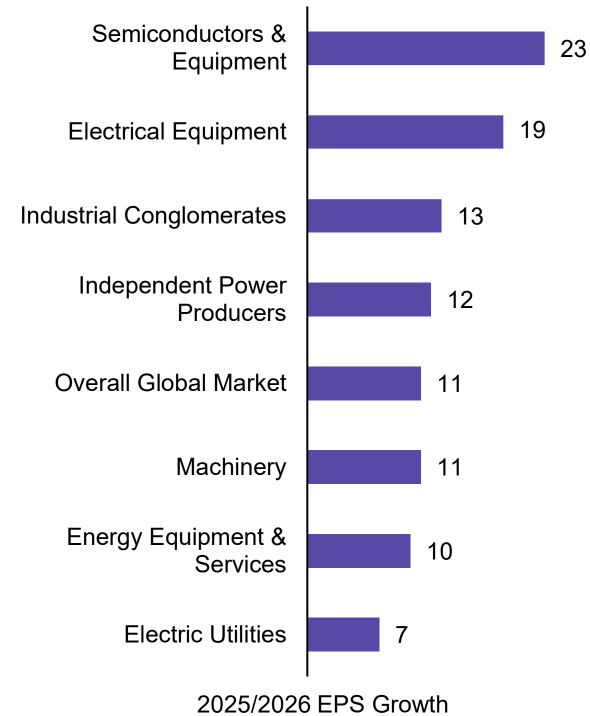
Power-Supply/Demand Imbalance for US Data Centers

Projection for 2025–2030



Favorable Earnings Growth for Power Electrification Industries

Earnings forecast (percent)†



Current analysis does not guarantee future results.

EPS: earnings per share; TWh: terawatt hour. *McKinsey & Company Global Energy Perspective 2023; Energy Information Administration Annual Energy Outlook 2023. †Earnings-growth forecasts are based on consensus estimates.

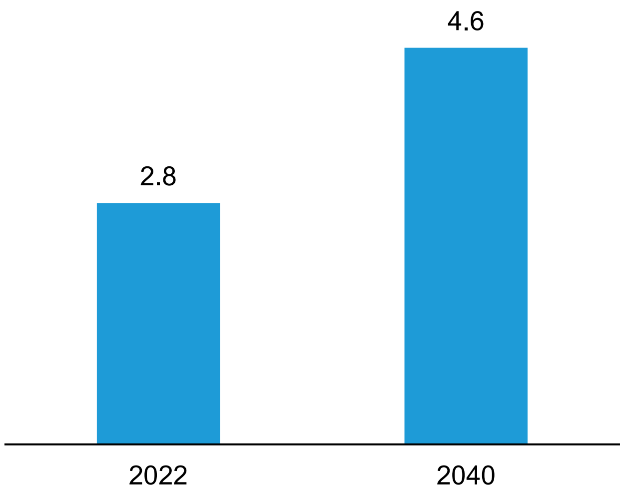
Left and middle displays as of September 30, 2024; right display as of December 31, 2024

Source: Bloomberg, Electric Reliability Council of Texas, Energy Information Administration, McKinsey, Morgan Stanley, NextEra Energy and AB

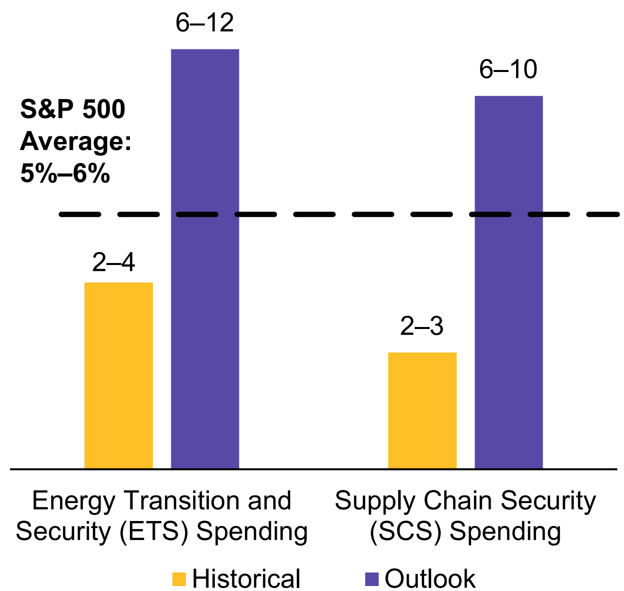
Value Equities: Current Opportunities Are Not Your Grandparents’ Value

The massive need to upgrade infrastructure is one way to find growth in value stocks

Many Economies Have Underinvested in Infrastructure to Meet New Demands
Annual infrastructure spending (USD trillions)



We Believe Demand for These Themes Will Grow Faster than for the S&P*
Expected growth rates (percent)



Classic Quality Value Factors Remain Attractively Priced†

Past performance does not guarantee future results.

*ETS historical spending based on 3% compound annual growth rate (CAGR) for clean energy investment from 2015–2020 per Infrastructure and Energy Alternatives (IEA), with growth based on “announced pledges scenario” forecast; SCS historical spending based on 2.5% industrial capex CAGR 2010–2019 per Bank of America, with growth based on Bank of America forecast for 2019–2025 CAGR. S&P average based on sales/share growth, eight-year history through 2023 and consensus three-year forecast for index.

†Percentile rankings are based on monthly valuations (i.e., relative price to earnings of 1Q for each factor vs. Russell 1000) from 1990. Dividend yield: last 12 months’ (LTM) dividends per share divided by current share price. Price to free cash flow: current share price divided by LTM free cash flow per share.

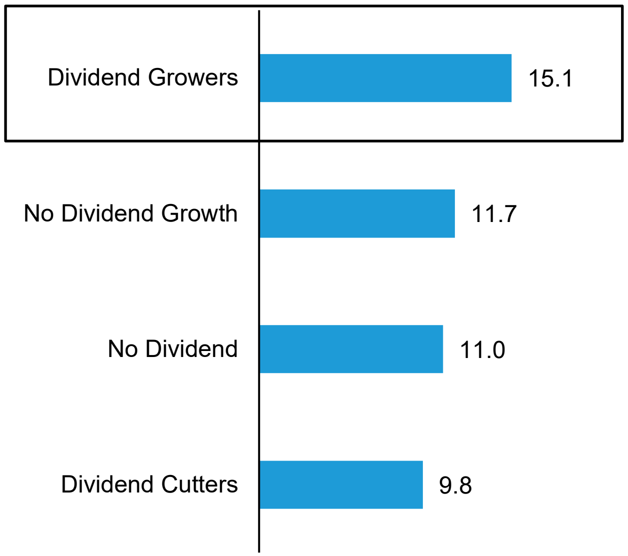
Left display as of March 31, 2024; middle display as of December 31, 2024; right display as of November 30, 2024

Source: Bank of America, Bernstein Research, FTSE Russell, IEA, S&P, Strategas Research Partners, UBS, World Health Organization and AB

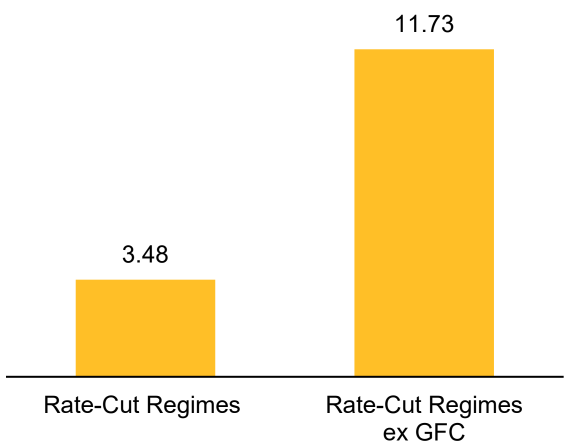
Dividend Equities: Dividend Growth Has Been the Most Fertile Ground

Rising income growth potential could prove timely as the Fed continues its rate-cutting cycle

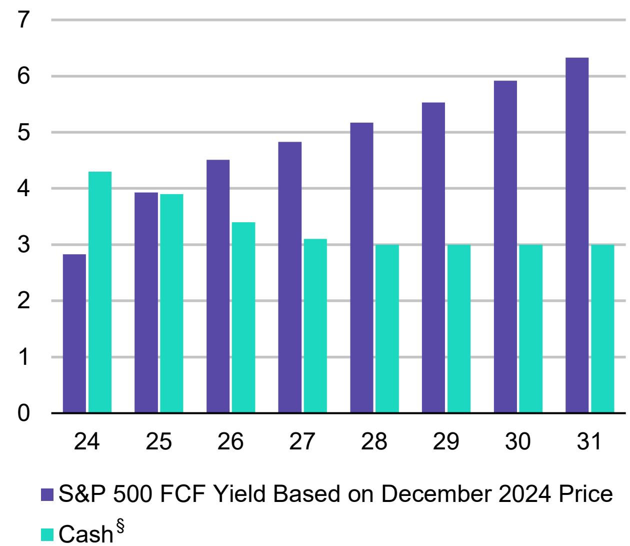
Dividend Growers Have Historically Provided Superior Returns*
1980–2024 (percent)



Dividend Stocks Have Delivered When the Fed Has Cut Rates
Average annualized monthly excess returns of the highest dividend payers vs. the S&P 500 (percent)†



Bond Yields Don't Grow, but Equity "Yield" Does
S&P 500 FCF yield vs. Bloomberg US Aggregate yield-to-worst trend



Current analysis does not guarantee future results.

FCF: free-cash-flow; ex GFC: excluding global financial crisis

*Methodology: Russell 1000 companies formed into groups, cap-weighted, recalculated quarterly. †Top tercile of dividend payers, cap-weighted, recalculated monthly returns vs. the S&P 500 over six distinct Fed cutting regimes, starting from 1998, where a regime is defined to be at least three months of consecutive rate cuts. ‡Using consensus FCF forecast for 2025 and 2026, while assuming FCF grows at 7% annually afterward. Data extend out to 2031, as the average maturity year of the Bloomberg US Aggregate is eight years. §Using fed funds rate as proxy; future cash rates are based on Fed dot plot (2025, 2026, 2027 and long-run) forecasts.

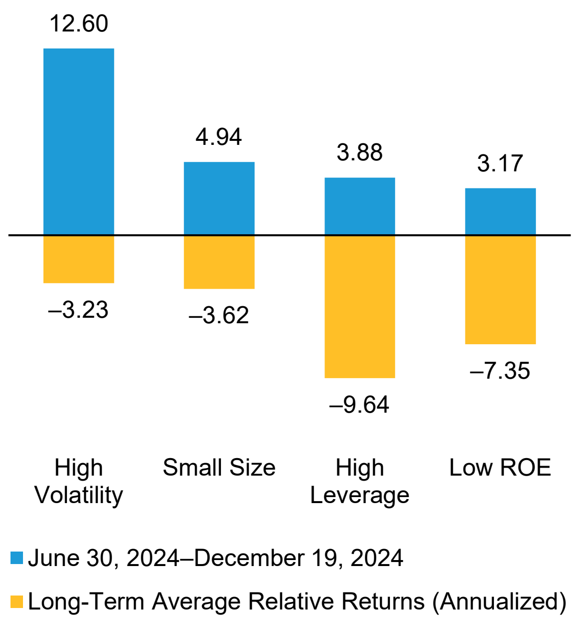
As of December 31, 2024

Source: Bloomberg, FTSE Russell, MSCI, S&P, Strategas Research Partners, US Federal Reserve and AB

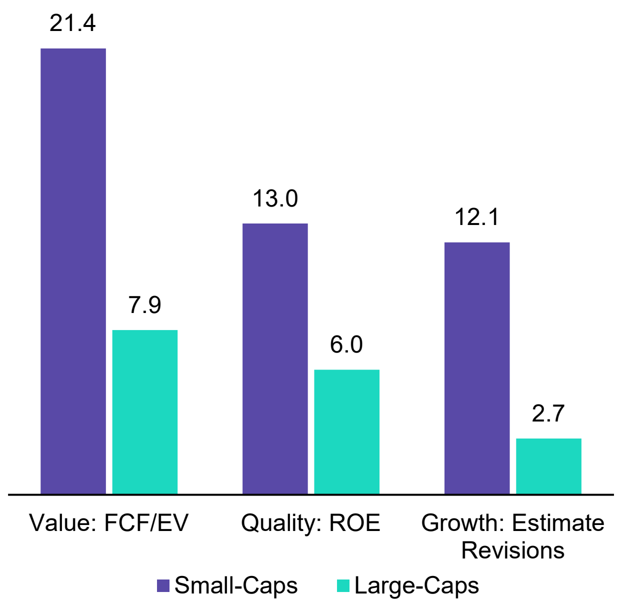
Small-Cap Equities: Recent Surge Has Been of a Lower-Quality Variety

It pays to be active in higher quality over time in this space

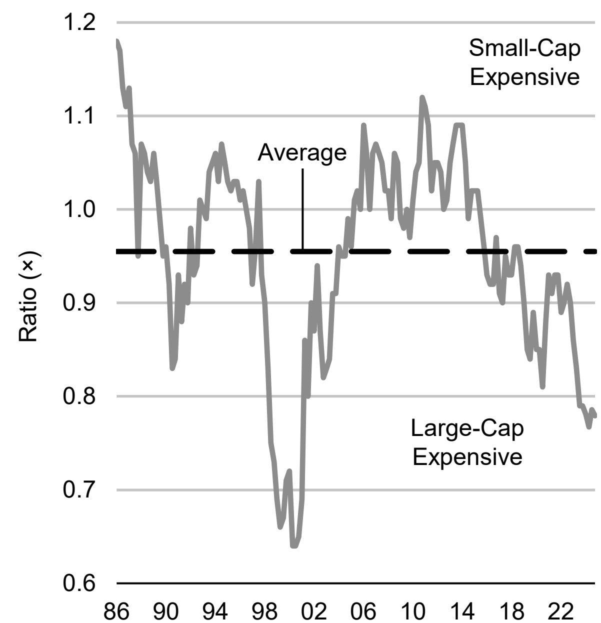
Low-Quality Factor Returns Relative to the Russell 2000 vs. Long-Term Average
Percent



Reminder: More Alpha Opportunity in Quality Small-Caps vs. Large-Caps*
Percent



Rebalancing Opportunity Remains
Russell 2000 vs. Russell 1000 price/forward earnings



Past performance does not guarantee future results.

FCF/EV: free cash flow to enterprise value; ROE: return on equity. Estimate revisions: the difference between the Institutional Brokers' Estimate System (I/B/E/S) fiscal year one earnings-per-share estimate divided by the absolute value of the I/B/E/S fiscal year earnings-per-share estimate as of three months ago.

*Average annualized top-quintile minus bottom-quintile performance spreads for Russell 2000 Index (small) vs. Russell 1000 Index (large). Value, quality and growth factors from December 31,1988, to April 30, 2024

Left display as of December 19, 2024; middle display as of April 30, 2024; right display as of November 30, 2024

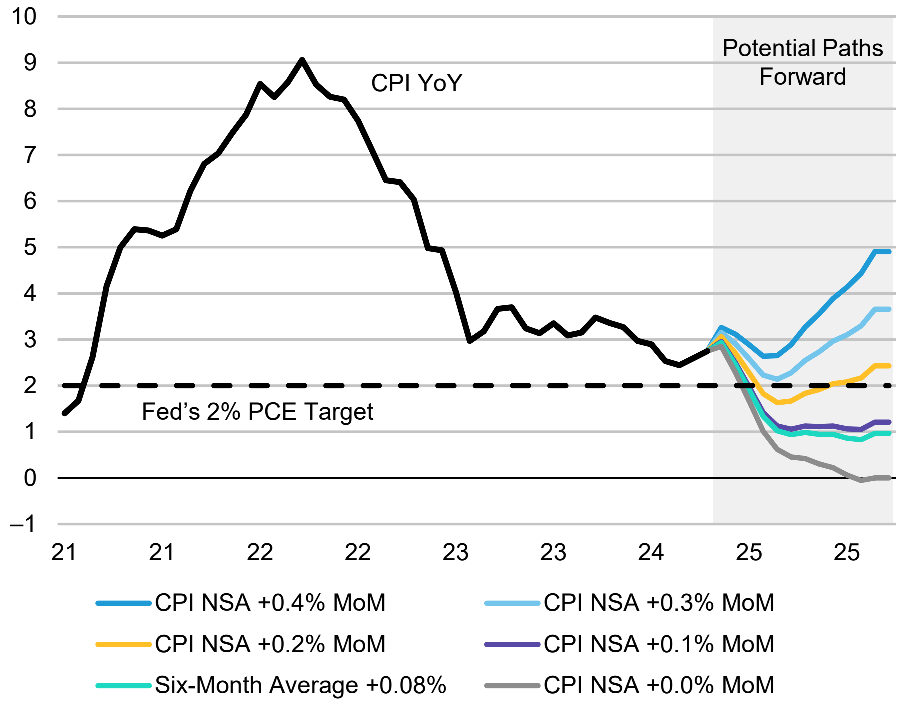
Source: BofA Merrill Lynch Small Cap Research, FactSet, FTSE Russell and AB

Appendix

Inflation's Path Forward

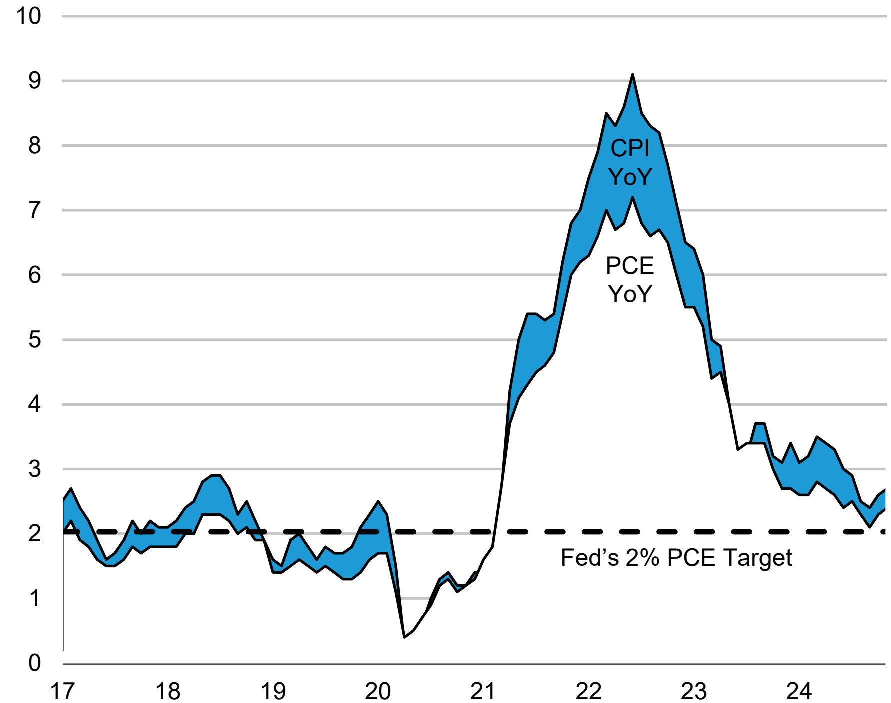
Choose your own adventure: headline CPI edition

Don't Panic, Most Paths Forward Suggest Lower Inflation in 2025…but Beware the 1Q Data Seasonality (Percent)



Headline CPI vs. Headline PCE

PCE—the Fed's preferred measure—trails CPI by ~40 basis points on average (percent)



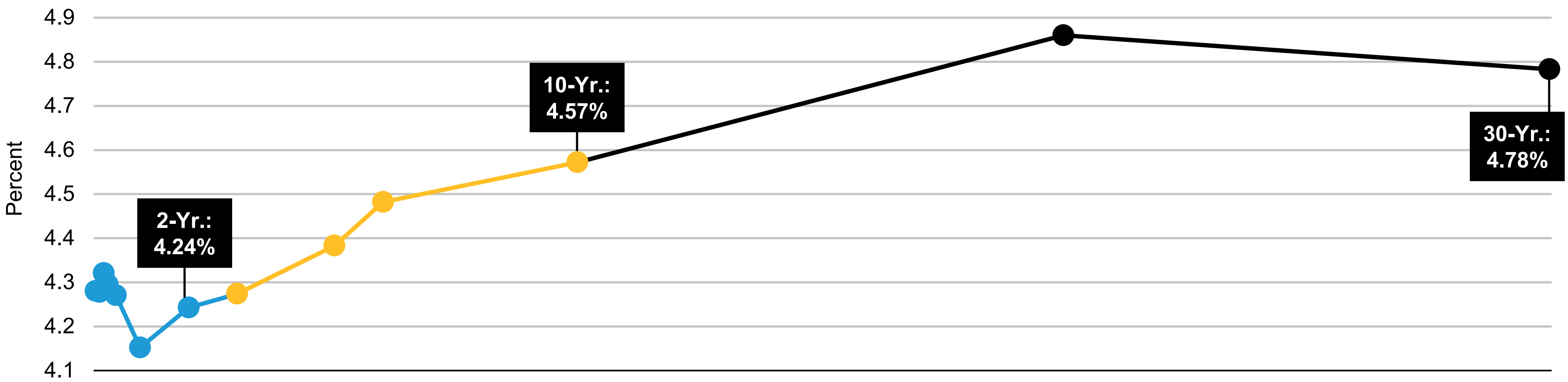
Historical analysis and current forecasts do not guarantee future results.

1Q: first quarter; MoM: month over month; NSA: not seasonally adjusted; PCE: Personal Consumption Expenditures Price Index; YoY: year over year

Through December 31, 2024

Source: Bloomberg, US Bureau of Labor Statistics and AB

US Treasury Yield Curve



Three-Month	Six-Month	One-Year	Two-Year	Three-Year	Five-Year	Seven-Year	10-Year	20-Year	30-Year
4.32	4.27	4.15	4.24	4.27	4.38	4.48	4.57	4.86	4.78

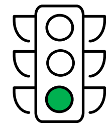
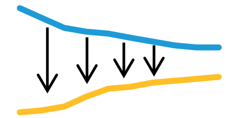
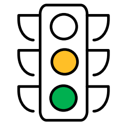
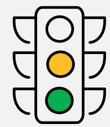
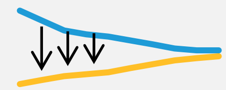
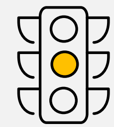
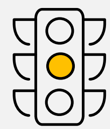
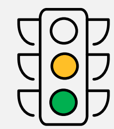
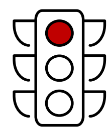
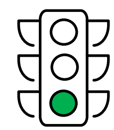
Fed Policy	Economic Growth	Long-Term Fundamentals
• Inflation target • Labor market • Policy rate	• Recession risk • Growth forecast • Risk-on, risk-off	• Will inflation be structurally higher or lower? • How will technology and population changes impact long-term growth? • Will the US debt remain the risk-free asset? • Should R* be higher in the future?

Current analysis and forecasts do not guarantee future results.

As of December 31, 2024

Source: Bloomberg, US Federal Reserve and AB

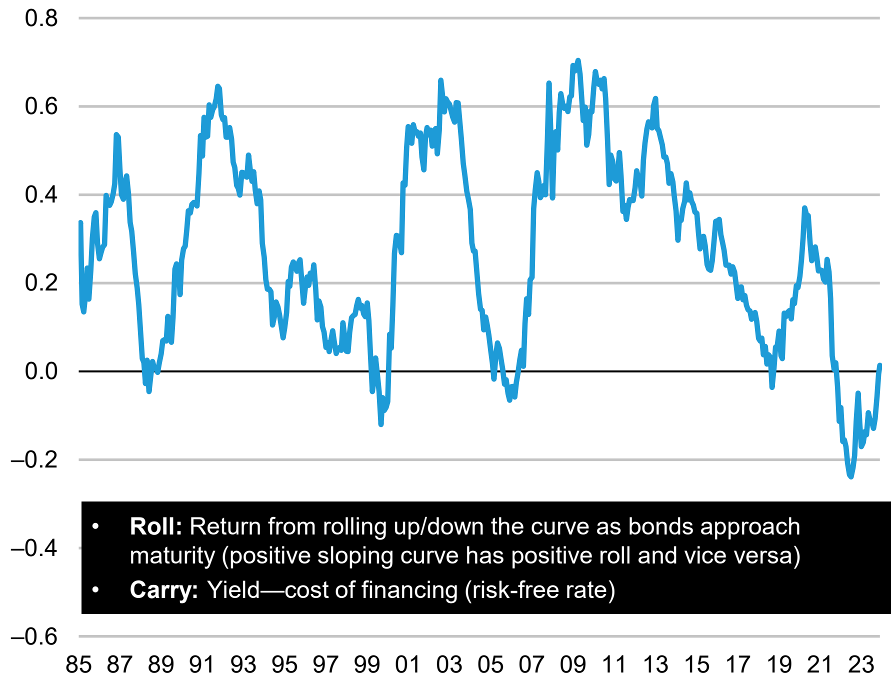
2025 Outlook: Potential Economic Outcomes and Impacts

	Probability	Description	Duration	Curve	US Dollar
Hard Landing	20%	• External shock or rapid business-cycle decline • Fed cuts aggressively to below neutral by 2H:25			
Soft Landing	**30%**	• **Growth slows and labor market weakens** • **Central banks gradually cut rates to neutral by end of 2025**			
Rebalancing	**35%**	• **Inflation and growth trend toward target very slowly** • **Fed cuts at a slower pace, keeping rates restrictive well into 2025**			
No Landing	15%	• Inflation significantly reaccelerates • Central banks stop cutting and hold (some may hike rates to more restrictive territory)			

Current analysis and forecasts do not guarantee future results.
As of December 31, 2024
Source: AB

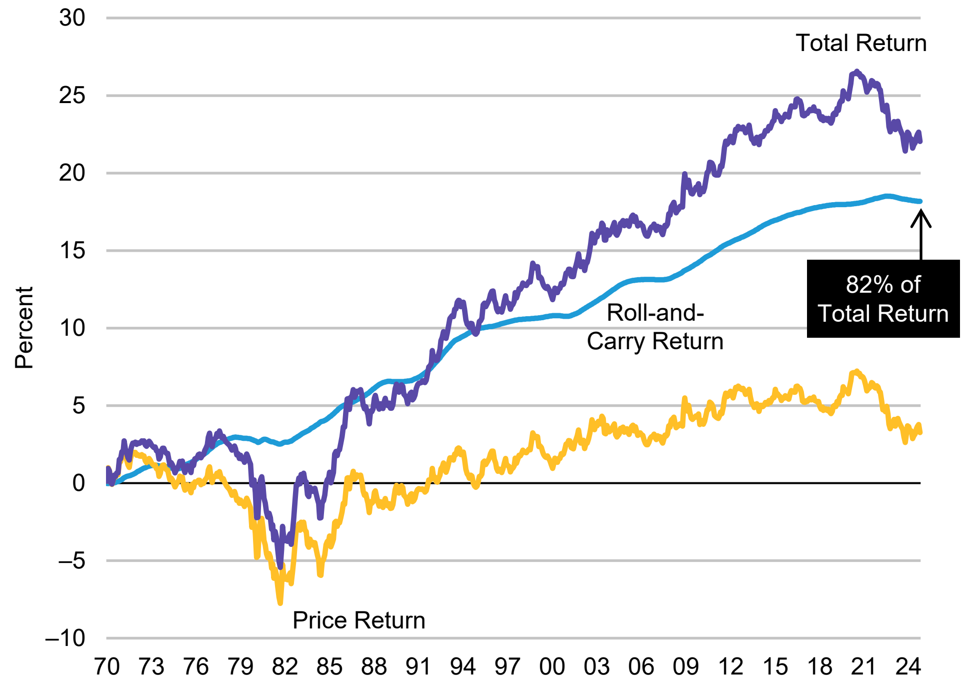
As the Fed Cuts, Roll and Carry Should Become More Attractive on Treasuries

Roll and Carry Have Turned Positive for the First Time Since 2022
10-year roll and carry



- **Roll:** Return from rolling up/down the curve as bonds approach maturity (positive sloping curve has positive roll and vice versa)
- **Carry:** Yield—cost of financing (risk-free rate)

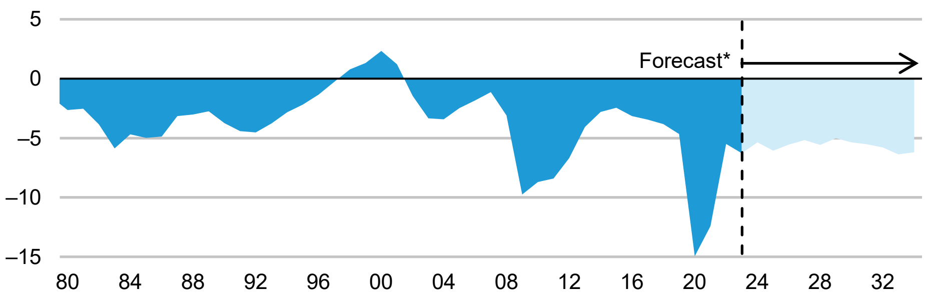
Roll and Carry Have Accounted for the Majority of Returns
Cumulative returns over cash: 10-year US Treasury bond



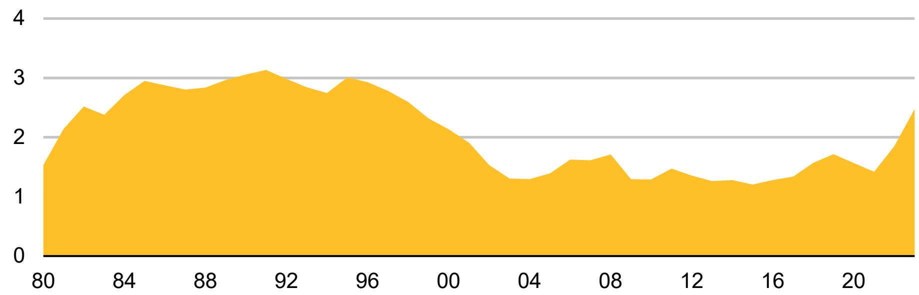
Current analysis and forecasts do not guarantee future results.
Left display as of November 30, 2024; right display as of October 31, 2024
Source: Bloomberg and AB

Elevated Deficit Can Impact Longer-Term Growth Prospects, but Increased Treasury Supply Should Be Well Absorbed

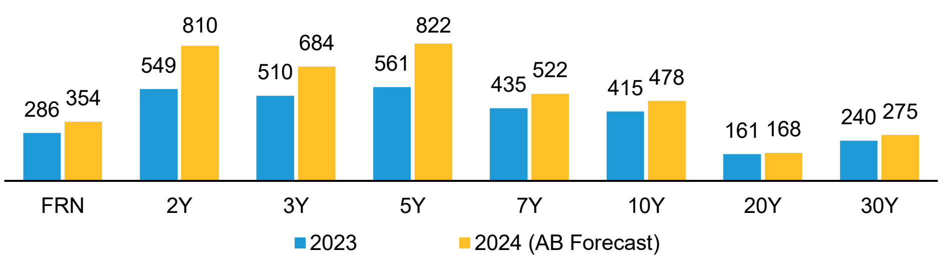
Elevated Deficit…
Percent of GDP surplus/deficit



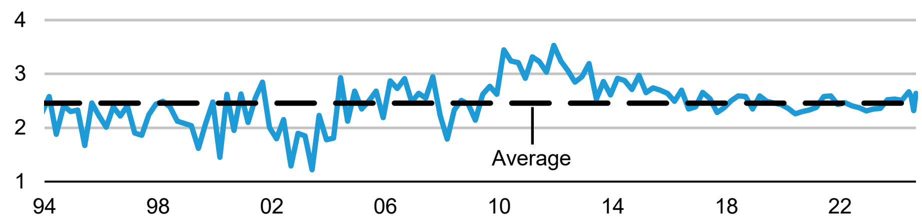
…and High Cost of Debt Servicing Are Likely to Slow Growth
US government debt service ratio†



Treasury Supply Should Mostly Increase for Maturities Where Demand Is Higher
Treasury supply (USD billions)



The New Treasury Supply Is Still Being Digested by the Markets
10-year bid-to-cover ratio



Current analysis and forecasts do not guarantee future results.
FRN: floating-rate note
*Congressional Budget Office (CBO) budget projections
†Interest payment divided by nominal GDP
As of September 30, 2024
Source: Bloomberg, CBO, London Stock Exchange, US Federal Reserve and AB

Post-Election Credit Update

Valuations	Technicals	Fundamentals	Conclusion
• Yields remain elevated and provide an attractive entry point for total return investors • Spreads are very tight versus history • In HY: Single-B credit is most expensive. CCCs went from cheap to now modestly expensive • In IG: Long-end spreads look expensive, whereas the intermediate part of the curve looks the most attractive. Financials look attractively valued versus nonfinancials	• IG inflows have continued as investors move from cash to higher-quality credit. Issuance has also remained elevated, but net supply is still manageable • HY flows have been more positive as investors have tilted more into risk assets post-election. Gross supply has grown but net supply remains subdued, leading to a shrinking market	• Corporate fundamentals are very modestly weakening but remain strong versus history. We do see dispersion across sectors and ratings • Ratings momentum remains positive, with upgrades and rising stars outnumbering downgrades and fallen angels • M&A activity remains low and financing has been well digested. Under new administration we could see more M&A transactions	• We prefer US over Europe due to growth divergence and potential tariffs • Spreads remain challenged. Yields are still attractive, which should point to attractive longer-term returns • We like BBBs, as valuations are attractive to tighter-trading BBs

Historical analysis and current estimates do not guarantee future results.

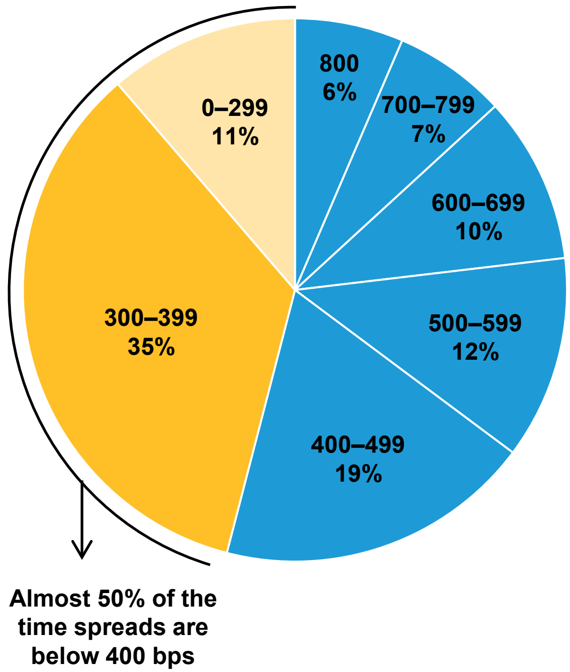
HY: high-yield; IG: investment-grade; M&A: mergers and acquisitions

As of December 31, 2024

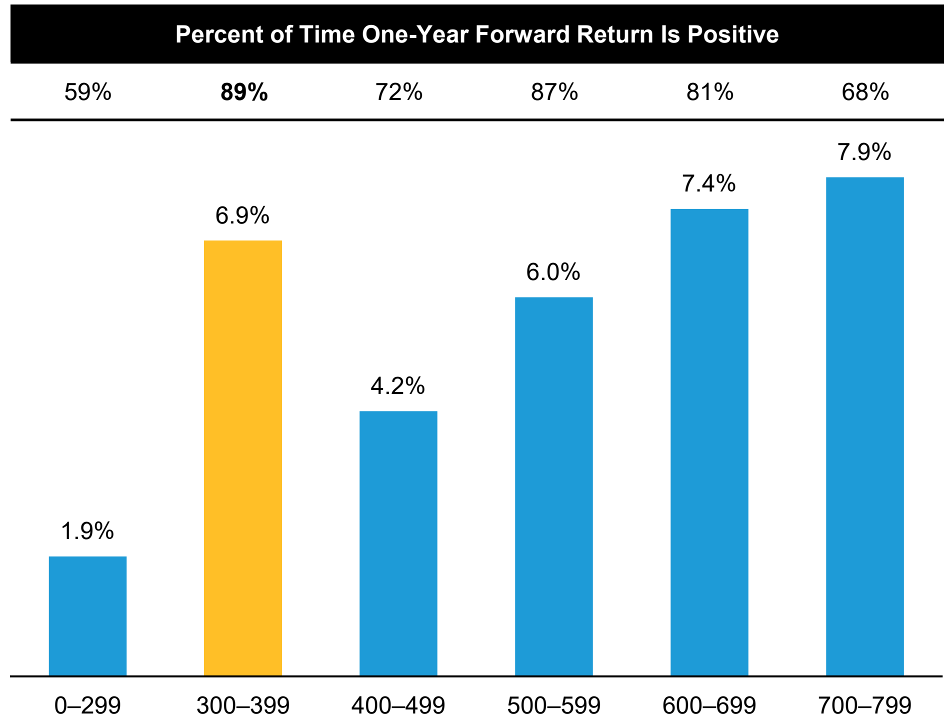
Source: AB

Today's Spread Levels Potentially Point to Attractive Forward Returns

Spreads Are Below 400 bps Almost 50% of the Time
Percent of time spreads are in range (OAS, basis points)



Average One-Year Forward Return by Spread Buckets
Average return when spreads are in range (OAS, basis points)

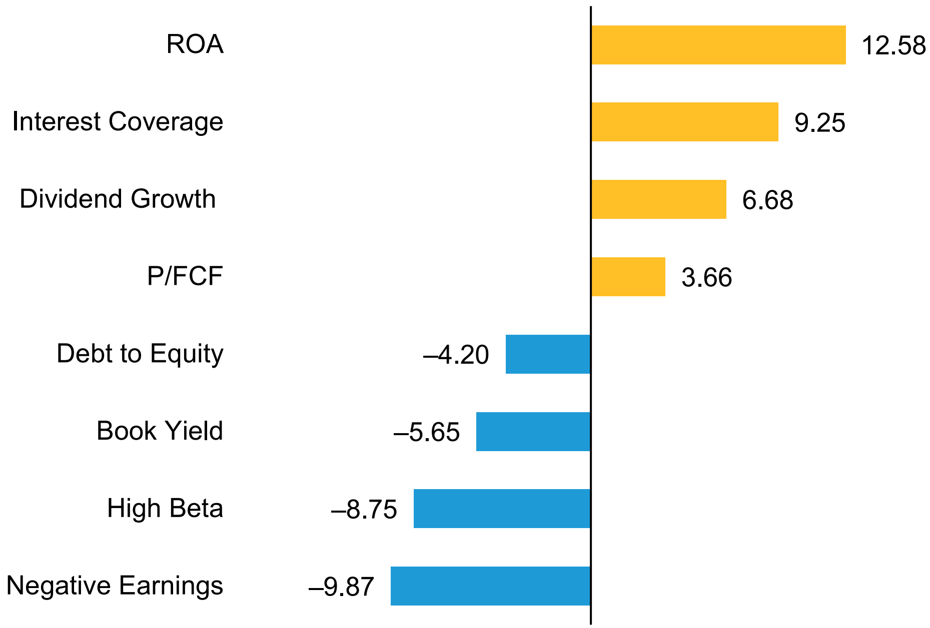


Past performance and historical analysis do not guarantee future results.
OAS: option-adjusted spread; bps: basis points. US High Yield is represented by Bloomberg US Corporate High-Yield. Data are since January 1994.
As of December 31, 2024
Source: Bloomberg and AB

Quality Exposures: Still a Friendly Neighborhood

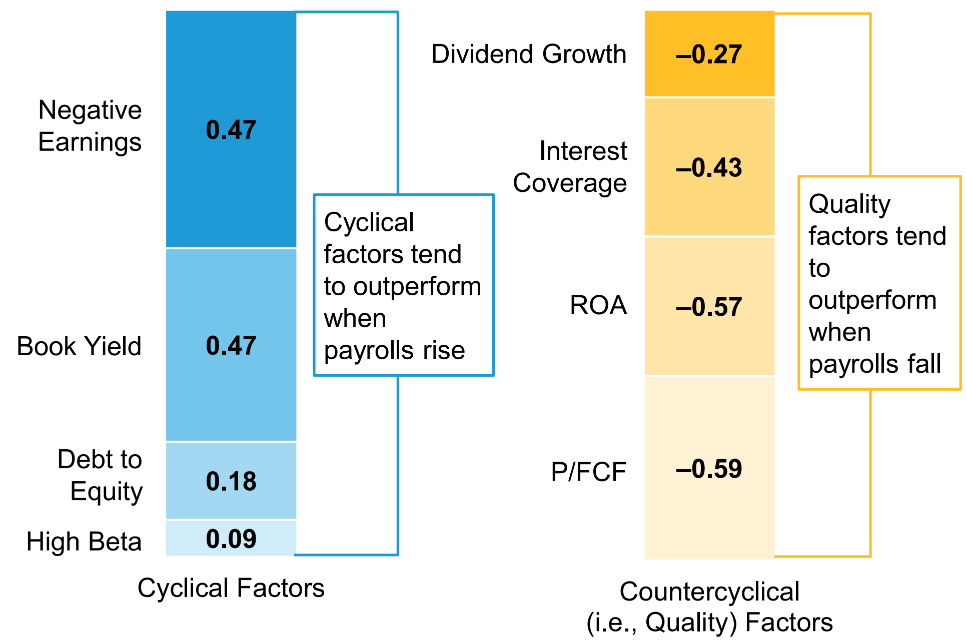
We expect this trend to endure as the economy continues to normalize and the Fed eases

Quality Factors Have Performed Well vs. Lower-Quality Exposures 12 Months After Initial Fed Rate Cuts* (Percent)



Stick with Them as Things Continue to Moderate

Five-year factor correlations to payrolls



Past performance does not guarantee future results. Book yield: book value per share divided by current share price. Debt to equity: total debt divided by total shareholder equity. Dividend growth: year-over-year change in last 12 months' (LTM) dividends per share. High beta: the regression between the monthly stock return and the monthly market return over the last five years. Interest coverage: LTM earnings before interest and taxes divided by LTM interest expense on debt plus interest capitalized. Negative earnings: performance of stocks with negative earnings. Price to free cash flow (P/FCF): current share price divided by LTM free cash flow per share. ROA (return on assets): LTM net income divided by LTM average total assets. *Factor returns are calculated by the relative performance of the top-quintile cohort vs. the bottom-quintile cohort within the S&P 500 following initial fed funds rate cuts from June 1989 through July 2019.

Left display as of December 31, 2024; right display as of November 30, 2024

Source: Piper Sandler, S&P and AB

Disclosures and Important Information

Hypothetical, back-tested or simulated performance has many inherent limitations, only some of which are described herein. The hypothetical performance shown herein has been constructed with the benefit of hindsight and does not reflect the impact that certain economic and market factors might have had on the decision-making process. No hypothetical, back-tested or simulated performance can completely account for the impact of financial risk in actual performance. Therefore, it will invariably show better rates of return. The hypothetical performance results herein may not be realized in the actual management of accounts. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in constructing the hypothetical returns have been stated or fully considered. Assumption changes may have a material impact on the returns presented. This material is not representative of any particular client's experience. Investors should not assume that they will have an investment experience similar to the hypothetical, back-tested or simulated performance shown. There are frequently material differences between hypothetical, back-tested or simulated performance results and actual results subsequently achieved by any investment strategy. Prospective investors are encouraged to contact the representatives of the investment manager to discuss the methodologies (and assumptions) used to calculate the hypothetical performance shown herein.

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Important Risk Information Related to Investing in Equity and Short Strategies

All investments involve risk. Equity securities may rise and decline in value due to both real and perceived market and economic factors as well as general industry conditions.

A short strategy may not always be able to close out a short position on favorable terms. Short sales involve the risk of loss by subsequently buying a security at a higher price than the price at which it sold the security short. The amount of such loss is theoretically unlimited (since it is limited only by the increase in value of the security sold short). In contrast, the risk of loss from a long position is limited to the investment in the long position, since its value cannot fall below zero. Short selling is a form of leverage. To mitigate leverage risk, a strategy will always hold liquid assets (including its long positions) at least equal to its short position exposure, marked to market daily.

Important Risk Information Related to Investing in Emerging Markets and Foreign Currencies

Investing in emerging-market debt poses risks, including those generally associated with fixed-income investments. Fixed-income securities may lose value due to market fluctuations or changes in interest rates. Longer-maturity bonds are more vulnerable to rising interest rates. A bond issuer's credit rating may be lowered due to deteriorating financial condition; this may result in losses and potentially default, or failure to meet payment obligations. The default probability is higher in bonds with lower, noninvestment-grade ratings (commonly known as "junk bonds").

There are other potential risks when investing in emerging-market debt. Non-US securities may be more volatile because of the associated political, regulatory, market and economic uncertainties; these risks can be magnified in emerging-market securities. Emerging-market bonds may also be exposed to fluctuating currency values. If a bond's currency weakens against the US dollar, this can negatively affect its value when translated back into US-dollar terms.

Bond Ratings Definition

A measure of the quality and safety of a bond or portfolio, the bond rating is based on the issuer's financial condition, and not based on the financial condition of the fund itself. AAA is highest (best) and D is lowest (worst). Ratings are subject to change. Investment-grade securities are those rated BBB and above. If applicable, the Pre-Refunded category includes bonds that are secured by US government securities and therefore are deemed high-quality investment-grade by the advisor.

Index Definitions

Following are definitions of the indices referred to in this presentation. It is important to recognize that all indices are unmanaged and do not reflect fees and expenses associated with the active management of a mutual fund portfolio. Investors cannot invest directly in an index, and its performance does not reflect the performance of any AB mutual fund.

- **Bloomberg CMBS IG BBB Index:** Measures the market of US Agency and US Non-Agency conduit and fusion CMBS deals with a minimum current deal size of $300 million
- **Bloomberg EM Local Currency Government High Yield Index:** Measures the performance of local-currency emerging-markets debt
- **Bloomberg EM USD Corp + Quasi Sovereign High Yield Index:** Measures fixed and floating-rate US dollar–denominated debt issued from sovereign, quasi-sovereign and corporate EM issuers. Country eligibility and classification as Emerging Markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund (IMF) country classifications
- **Bloomberg EM USD Sovereign High Yield Index:** Measures US dollar–denominated debt issued by emerging market sovereigns, government guaranteed, and 100% government owned emerging market issuers. Country eligibility and classification as emerging markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund (IMF) country classifications
- **Bloomberg Global Aggregate Corporate Bond Index:** Tracks the performance of investment-grade corporate bonds publicly issued in the global market and found in the Global Aggregate. (Represents global corporate on slide 3)
- **Bloomberg Global High-Yield Bond Index:** Provides a broad-based measure of the global high-yield fixed-income markets. It represents the union of the US high-yield, pan-European high-yield, US emerging-markets high-yield, commercial mortgage-backed security high-yield and pan-European emerging-markets high-yield indices
- **Bloomberg Global Treasury—Euro Bond Index:** Includes fixed-rate, local-currency sovereign debt that makes up the euro-area treasury sector of the Global Aggregate Bond Index. (Represents euro-area government bonds on slide 3)
- **Bloomberg Global Treasury—Japan Bond Index:** Includes fixed-rate, local-currency sovereign debt that makes up the Japanese treasury sector of the Global Aggregate Bond Index. (Represents Japan government bonds on slide 3)
- **Bloomberg Municipal Bond Index:** A rules-based, market value–weighted index engineered for the long-term tax-exempt bond market. (Represents municipals on slide 3)
- **Bloomberg Pan-European High Yield Index:** Measures the market of noninvestment-grade, fixed-rate corporate bonds denominated in the following currencies: euro, Danish krone, Norwegian krone, pound sterling, Swedish krona and Swiss franc. Inclusion is based on the currency of issue, and not the domicile of the issuer. The index excludes emerging-market debt

Index Definitions (cont.)

- **Bloomberg US Aggregate Bond Index:** A broad-based benchmark that measures the investment-grade, US dollar–denominated, fixed-rate, taxable bond market, including US Treasuries, government-related and corporate securities, mortgage-backed securities (agency fixed-rate and hybrid adjustable rate mortgage pass-throughs), asset-backed securities and commercial mortgage-backed securities
- **Bloomberg US Corporate BAA Index:** Measures the Baa-rated, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by US and non-US industrial, utility and financial issuers
- **Bloomberg US Corporate High-Yield Bond Index:** Represents the corporate component of the Bloomberg US High-Yield Index. (Represents US high yield on slide 3)
- **Bloomberg US High Yield Index:** Covers the universe of fixed-rate, non-investment-grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-emerging-market growth countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included
- **Bloomberg US Treasury Index:** Includes fixed-rate, local-currency sovereign debt that makes up the US Treasury sector of the Global Aggregate Index. (Represents US government bonds on slide 3)
- **Bloomberg US Large Cap ex Magnificent 7 Total Return Index:** A float-adjusted market cap–weighted benchmark designed to measure the most highly capitalized US companies, excluding members of the Bloomberg Magnificent 7 Index (Alphabet Inc., Amazon, Apple, Meta Platforms, Microsoft, NVIDIA, Tesla)
- **J.P. Morgan Emerging Market Bond Index Global:** A benchmark index for measuring the total return performance of government bonds issued by emerging-market countries that are considered sovereign (issued in something other than local currency) and that meet specific liquidity and structural requirements. In order to qualify for index membership, the debt must be more than one year to maturity, have more than $500 million outstanding, and meet stringent trading guidelines to ensure that pricing inefficiencies don't affect the index. (Represents emerging-market debt on slide 3)
- **MSCI EAFE Index:** A free float–adjusted, market capitalization–weighted index designed to measure developed-market equity performance, excluding the US and Canada. It consists of 22 developed-market country indices. (Represents EAFE on slide 3)
- **MSCI Emerging Markets Index:** A free float–adjusted, market capitalization–weighted index designed to measure equity market performance in the global emerging markets. It consists of 21 emerging-market country indices. (Represents emerging markets on slide 3)
- **MSCI Low Volatility Index:** Aims to reflect the performance characteristics of a minimum variance strategy applied to the MSCI large- and mid-cap equity universe across 23 developed-market countries
- **MSCI World Index:** A market capitalization–weighted index that measures the performance of stock markets in 24 countries
- **Russell 1000 Index**: A stock market index that represents the highest-ranking 1,000 stocks in the Russell 3000 Index, representing about 90% of the total market capitalization of that index

Index Definitions (cont.)

- **Russell 2000 Index:** Measures the performance of the small-cap segment of the US equity universe. It is a subset of the Russell 3000 Index, representing approximately 8% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. (Represents US small-cap on slide 3)

- **S&P 500:** Includes a representative sample of 500 leading companies in leading industries of the US economy. (Represents US large-cap on slide 3)

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