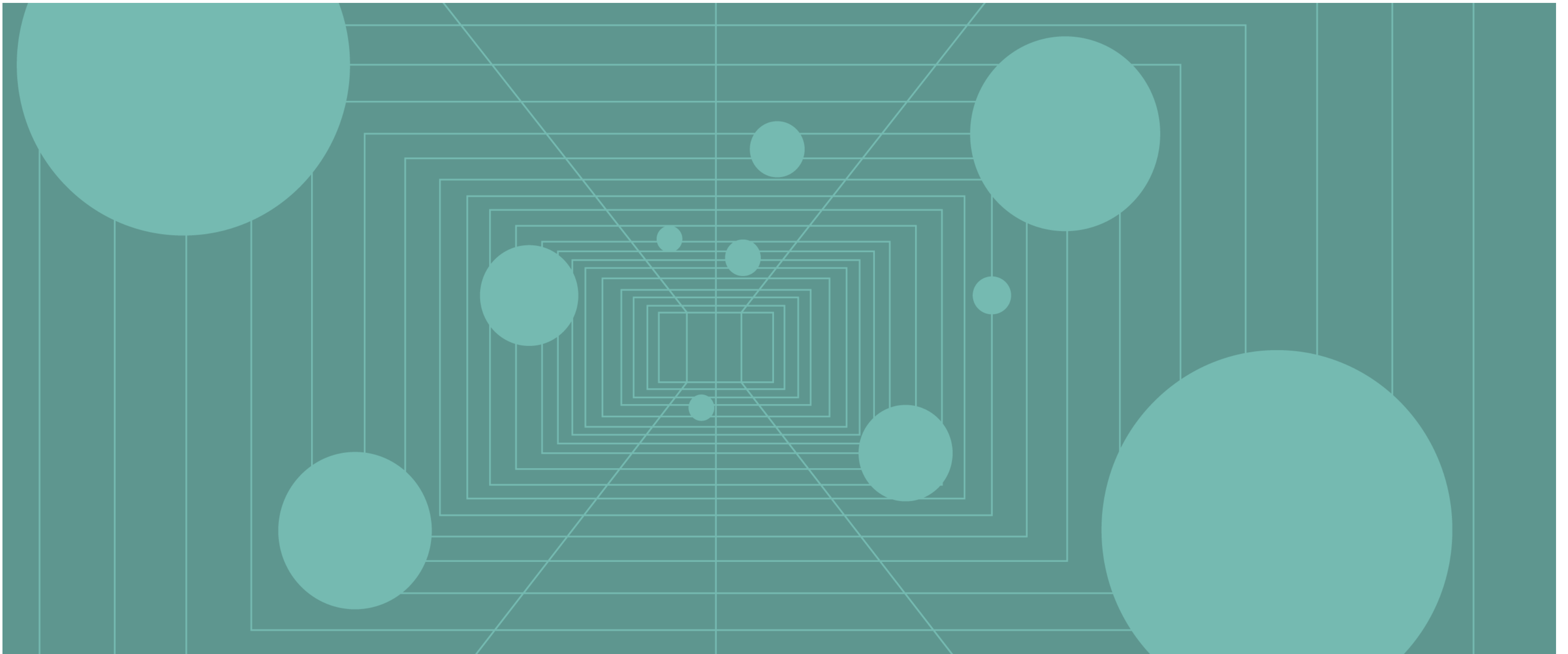
TACTICAL CA HOUSE VIEWS



CAMBRIDGE ASSOCIATES

JANUARY 2025

Overview of Tactical CA House Views

December 31, 2024

Our house views are intended to generate excess returns over a three- to five-year horizon. Sizing of tactical positions should reflect an investor's risk tolerance, liquidity needs, and other holdings.

CURRENT POSITIONS

OVERWEIGHT	UNDERWEIGHT	RECOMMENDED SINCE
California Carbon Allowances	Global Equities	10/31/2021
Developed Markets ex US Small-Cap Equities	Developed Markets ex US Equities	9/30/2023
US Small-Cap Equities	US Equities	4/30/2022
Developed Markets Value Equities	Developed Markets Equities	6/30/2020

Overweight California Carbon Allowances vs Global Equities

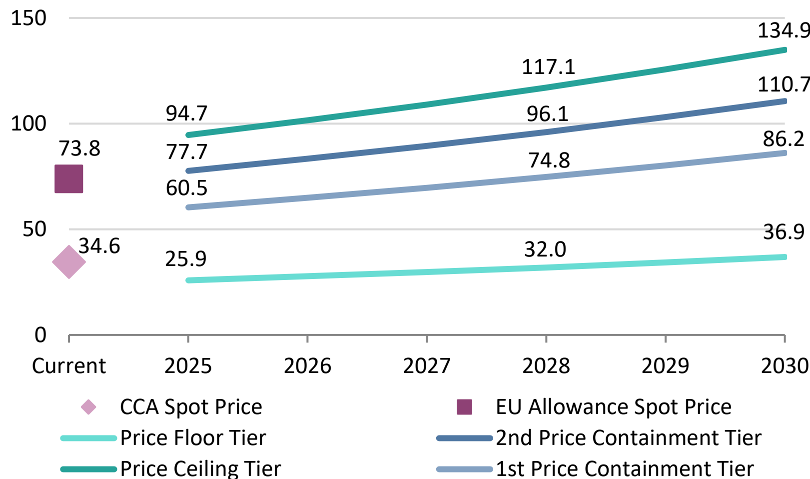
Recommended Since October 31, 2021

INVESTMENT THESIS: We expect California Carbon Allowances (CCAs) will outperform global equities, given our expectation that supply/demand fundamentals are likely to help narrow the gap in prices between CCAs and the EU carbon allowance program. We prefer owning physical allowances over futures implementation. Regulated entities are allotted free allowances for a portion of their emissions and must purchase additional credits to satisfy remaining obligations.

- **KEY SUPPORT #1:** California projects that its cap-and-trade program will be needed to meet its emissions targets. Accordingly, the state must reduce CCA supply relative to demand. The California Air Resources Board (CARB) has provided more clarity on anticipated changes to tighten supply of allowances and is exploring allowance budgets beyond 2030 through 2045. These changes will increase expected CCA deficits, which in more mature carbon markets have typically led to price increases. Implementation is now expected to be about a year later (2026) than initially anticipated but will proceed.
- **KEY SUPPORT #2:** CCAs trade at a discount to EU carbon prices. We expect CCAs will increase toward current EU price levels. We anticipate that relative to equities, CCAs downside is lesser, while the upside is much greater. The CCA price will receive an additional boost as the CARB targets a 48% reduction in emissions by 2030, requiring a 180 million reduction in CCAs between 2026 and 2030.
- **KEY RISKS:** Regulatory changes present the biggest risk to CCAs, although the program is well established and provides significant revenue to the state of California. Further, demand for carbon credits will decrease in a recession putting downward pressure on carbon prices, potentially more than equities. CCAs can experience short-term volatility related to technical issues in the options and futures markets. Finally, global equity performance may exceed our expectations. From an implementation perspective, rolling futures cost an estimated 3%-5% annually, while options for owning physical allowances are limited.

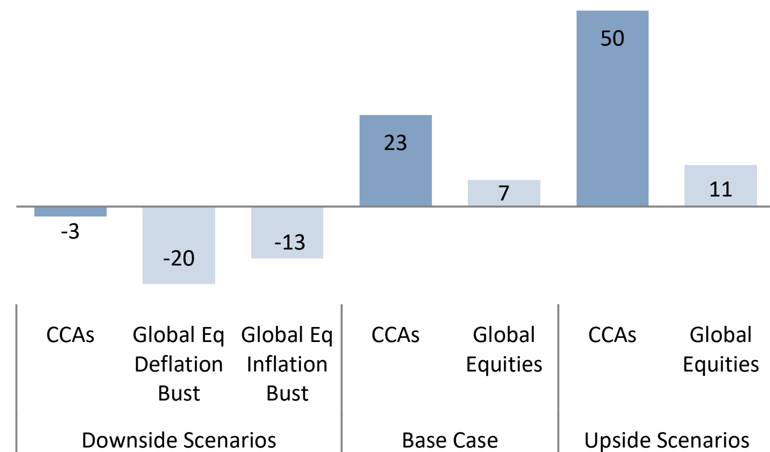
CCA PRICE COMPARED TO EU AND PRICE CONTAINMENT TIERS

As of December 31, 2024 • US Dollars



RETURN PROJECTION SCENARIOS: CCAs VS GLOBAL EQUITIES

As of December 31, 2024 • 3-Yr Annualized Average Compound Return (%)



Sources: Bloomberg L.P., MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: For the left-hand side chart, spot prices are based on near month futures contract prices. Price tiers increase by 5% plus inflation per year, which is assumed to equal US TIPS 10-year breakeven inflation. Price containment tiers are thresholds at which additional allowances are made available as a hedge against higher costs. For the right-hand side chart, for CCAs, the downside scenario assumes prices decline to the 2028 price floor; the base case assumes prices increase to $65, converging toward current EU ETS carbon prices; and the upside scenario assumes prices increase to the 2028 price ceiling. For global equities, the deflation bust downside scenario assumes that normalized P/E ratios decline by 50% and the nominal normalized earnings growth rate averages -2% year-over-year. The inflation bust downside scenario assumes the same P/E contraction with an average growth rate of 2.5%. The base case for global equities assumes today's normalized P/E is unchanged during the period and the growth rate reflects recent averages. The upside scenario assumes that normalized P/E increases by a decile (or to the all-time max if current P/E ratios are already above the 90th percentile) and an average growth rate of 6%.

Overweight Developed Markets ex US Small Caps vs Developed Markets ex US Equities

Recommended Since September 30, 2023

INVESTMENT THESIS: We expect developed markets (DM) ex US small-cap equities will outperform their mid-/large-cap counterparts, given their low relative valuations, rebounding performance momentum, and favorable economic and earnings growth outlook. DM ex US small caps perform best during economic upswings, where non-US economic growth is expected to rebound in the coming years after slowing in 2024.

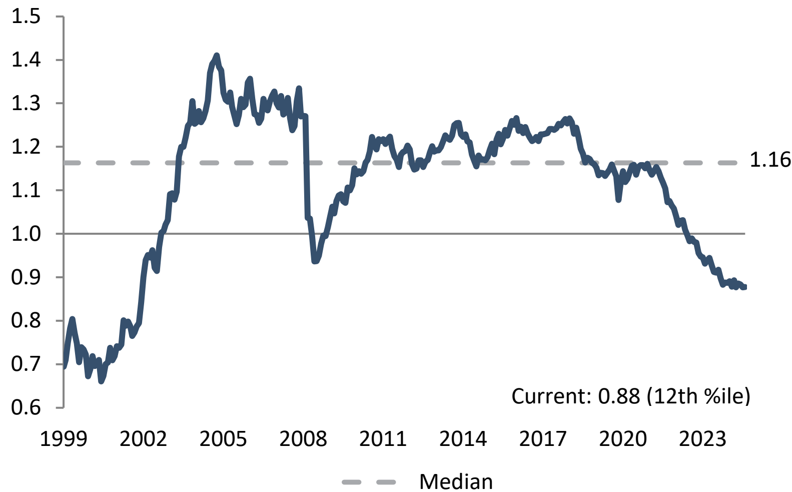
- **KEY SUPPORT #1:** DM ex US small-cap equities trade at a 12% *discount* to their mid-/large-cap peers, according to our preferred normalized earnings multiple, compared to their typical 16% *premium*. Historically, small caps consistently outperformed mid-/large caps over subsequent three-year periods when starting valuations traded at a discount. Small caps are more than adequately priced for an economic downturn scenario and now trade at cheaper relative valuations than during the Global Financial Crisis. These valuation levels are particularly attractive as they appear to be disconnected from underlying fundamentals.

- **KEY SUPPORT #2:** Rebounding momentum and an improving fundamental outlook suggest that DM ex US small caps are primed to outperform. Near-term momentum has improved at the margin but suggests further room to run. Indeed, small-cap price levels remain 13% below their three-year peak, whereas large caps recovered more quickly. Analysts expect EPS growth of 14% in the next 12 months, compared to 7% for the mid- and large-cap universe. The expected earnings outperformance is broadly based across geographies and sectors.

- **KEY RISKS:** Small caps have higher leverage, lower profitability, and are prone to larger drawdowns in a risk-off scenario. Indeed, small caps lagged during the August global equity sell-off, which was exacerbated by an unwind of extended short positioning against the Japanese yen. The currency had appreciated sharply due in part to Bank of Japan policy normalization, which is expected to continue in the coming months. Still, yen appreciation has been associated with small-cap outperformance due to pressure on large/mid-caps.

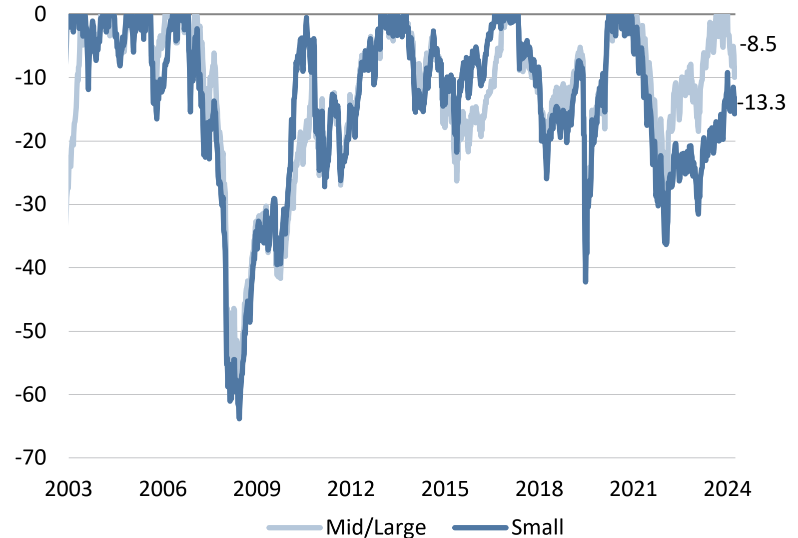
RELATIVE NORMALIZED VALUATIONS: DM EX US SC VS LARGE/MID CAP

May 31, 1999 – December 31, 2024



DRAWDOWN FROM ROLLING 3-YR HIGH: DM EX US EQUITY

January 1, 1993 – December 31, 2024 • US Dollars • Percent (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Relative normalized P/E data are monthly and are based on an adjusted price-to-cash earnings ratio. The cyclically adjusted price-to–cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing five-year average inflation–adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies and therefore excludes these two industry groups from index-level cash earnings. Drawdown data are weekly and based on index price levels.

Overweight US Small-Cap Equities vs US Equities

Recommended Since April 30, 2022

INVESTMENT THESIS: We expect small-cap equities will outperform their mid- to large-cap counterparts in the United States, given their valuation discount and strong profitability. We like the relative diversifying benefit from their sector exposures. Small-cap equities have historically tended to perform best in the recovery stage of business cycles, and investors could see significant benefit as fundamentals rebound.

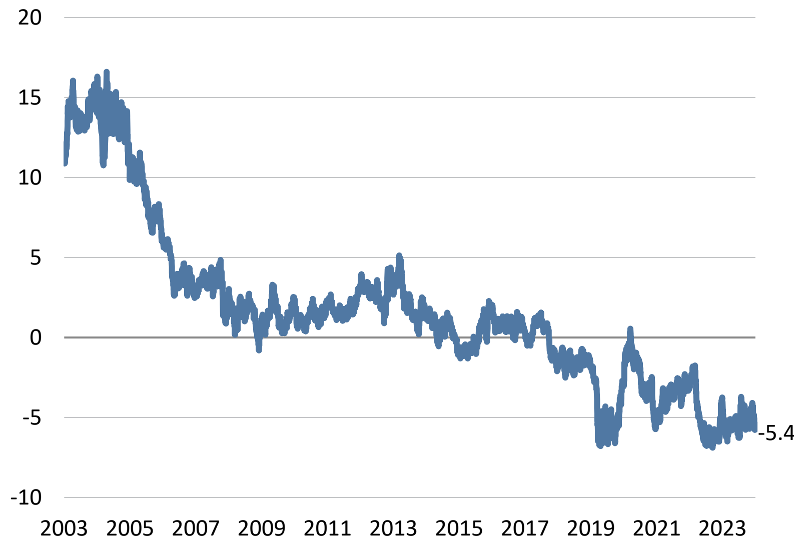
- **KEY SUPPORT #1:** US small-cap valuations are steeply discounted relative to US mid- to large-cap equities. The S&P 600® Index trades at a 54% discount to the MSCI US Index's 23.2x normalized price-to-cash earnings multiple, which is in the bottom decile on record based on history back to 2004. Investors have also assigned higher multiples to expected earnings for large-cap stocks relative to small caps. The price-to–forward earnings multiple for the MSCI US Index is 21.9x, 1.31 times higher than that for small-cap stocks. This is 47% higher than the observed median of 0.9 over the past 20 years. However, small-cap valuations have improved more than large caps since the central bank announced plans to begin monetary easing.

- **KEY SUPPORT #2:** US government initiatives under the Biden administration, such as the Infrastructure Act, the CHIPs Act, and the Inflation Reduction Act, have provided incentives for reshoring of supply chains that would benefit certain sectors overweight in small-cap indexes. Threats of tariffs under the Trump administration could also encourage higher domestic production, potentially boosting small-cap revenues. Although, they may also increase input costs. Moreover, potentially lower corporate taxes and higher deregulation under the new President could provide a tailwind for small-cap equities.

- **KEY RISKS:** Small-cap companies have lower margins and tend to be more cyclical than larger-cap stocks and thus are more vulnerable to an economic slowdown. Moreover, the recent boom in mega-cap tech stocks saw small caps lag substantially, and a continuation of that rally could further widen the performance gap. The change in the US administration may mean reduced support for the Biden-era government initiatives, negatively impacting growth projections.

5-YR EXCESS RETURN S&P 600® VS MSCI USA

December 31, 2003 – December 31, 2024 • Rolling 5-Yr Relative AACR (%)



RELATIVE NORMALIZED P/E RATIO: S&P 600® VS MSCI USA

December 31, 2003 – December 31, 2024

Sources: FactSet Research Systems, MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Excess return data are daily. The cyclically adjusted price-to–cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing ten-year average inflation–adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies and therefore excludes these two industry groups from index-level cash earnings. S&P does not calculate a cash earnings metric; cash flow is used as a proxy.

Overweight Developed Markets Value Equities vs Developed Markets Equities

Recommended Since June 30, 2020

INVESTMENT THESIS: We expect value equities to outperform broad equites in developed markets, given the style's attractive valuation multiples and our expectation that AI enthusiasm is largely priced into growth stocks at this point, which could open the door for value outperformance on a relative basis.

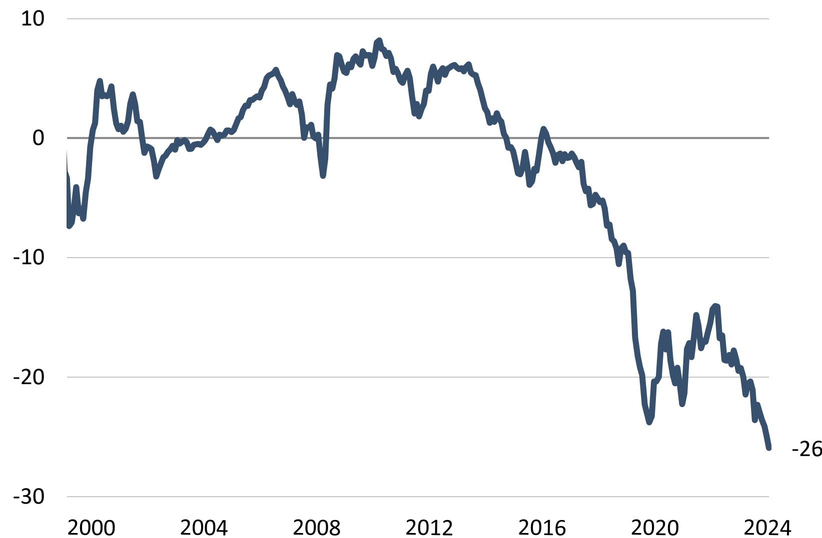
- **KEY SUPPORT #1:** Value equities trade at a discount relative to broad equities. Using the MSCI World Value Weighted Index and the MSCI World Index as our proxies, value equities trade at 9.2 times trailing five-year cyclically adjusted earnings, while broad equities trade at 16.4 times. That gap is much wider than the typical valuation gap between these two indexes. In fact, the relative valuation is now 26% below the long-term median discount, the widest discount on record. A closing of that valuation discount would support value equity outperformance.

- **KEY SUPPORT #2:** Large-cap growth stocks, driven by AI enthusiasm, have surged in recent years, with the "Magnificent 7" making up more than 40% of the MSCI World Growth Index. Throughout 2025, investors may adjust expectations due to sustainability concerns and uncertain AI-return timelines. This recalibration could benefit value stocks, as investors seek more undervalued opportunities relative to the broader index.

- **KEY RISKS:** Value tends to underperform in recessions, given its larger exposure to cyclical sectors. Downturns are also associated with reductions in costs of capital, which tend to be beneficial to sectors that value indexes often underweight, such as information technology. Moreover, the recent boom in artificial intelligence stocks could persist, which could keep growth stock valuations elevated.

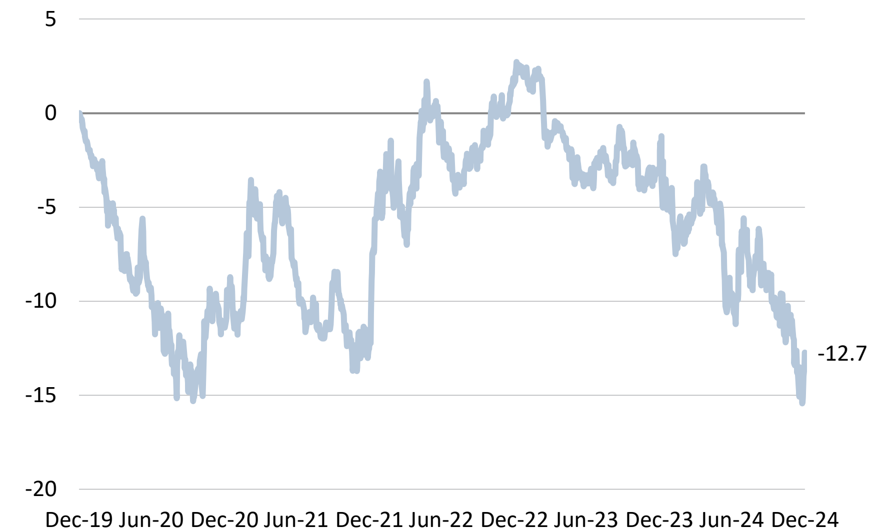
RELATIVE NORMALIZED P/E RATIO: PERCENT (%) FROM MEDIAN

January 31, 2000 – December 31, 2024



CUMULATIVE RELATIVE RETURN SINCE PRE-PANDEMIC LEVEL

December 31, 2019 – December 31, 2024 • Percent (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Relative normalized P/E ratio and relative returns are both based on the MSCI World Value Weighted Index versus the MSCI World Index. All data are in US Dollar terms. Relative normalized P/E data are monthly and are based on an adjusted price-to-cash earnings ratio. The cyclically adjusted price-to–cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing five-year average inflation–adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies and therefore excludes these two industry groups from index-level cash earnings. Performance data are daily and are based on total returns net of dividend withholding taxes.

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