

EQUITIES



Developed Markets Equities

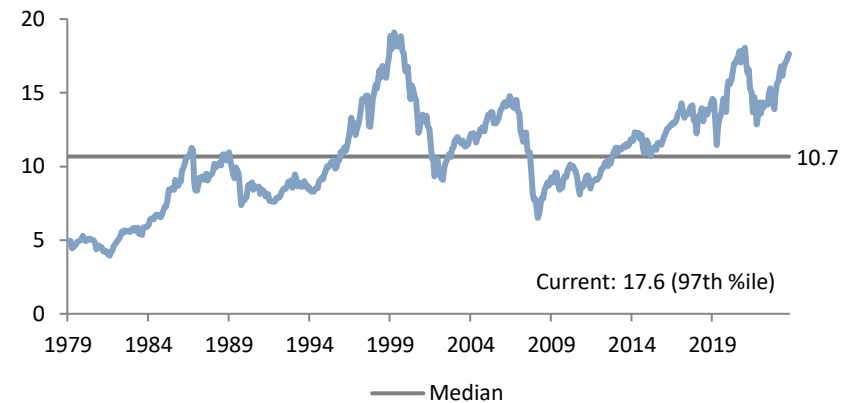
Facts & Figures Third Quarter 2024

DM equities returned 6.4% in 3Q and 32.4% in the last 4 quarters for USD investors. The strong performance across the last 4 quarters was driven by better-than-expected economic activity data, expectations for central bank policy rate cuts, and continued excitement for companies linked to artificial intelligence. Among major markets, the US (35.6%) has returned the most in the last 4 quarters.

- The bloc trades at 17.6x cyclically adjusted cash earnings, which ranks higher than 97% of historical data dating back to 1979. The high valuation level masks dispersion across major DM blocs, with the US trading at levels higher than DM ex US. In particular, the UK's large exposure to cyclical companies has left its equities trading low relative to history.
- The global economy is expected to grow by 3.1% in 2024, according to analysts surveyed by Bloomberg in September. Developed economies, which tend to grow at a slower rate than emerging economies, are expected to collectively grow by 1.8%. While low, the 2024 growth expectation is higher than the expectation in December when analysts expected 2024 growth to be 1.2%. Among major developed countries, growth expectations are highest for the US (2.6%), followed by the UK (1.1%), euro area (0.7%), and Japan (0.0%).
- DM corporate earnings are expected to grow by 7.3% in 2024, which is more than the 1.3% pace earnings are expected to have grown in 2023. Roughly 60% of this year's earning growth is expected to come from profit margin expansion, with the remainder from sales growth. Among major markets, US earnings are expected to grow at levels above DM as a bloc, with the euro area, Japan, and UK below.
- Expectations for policy interest rates is a key risk for equities. Major DM central banks increased policy rates by considerable amounts in 2022 and 2023. While the market expects many key central banks will cut rates, inflation rates may not moderate as expected. This could force central banks to not cut interest rates in line with market expectations.

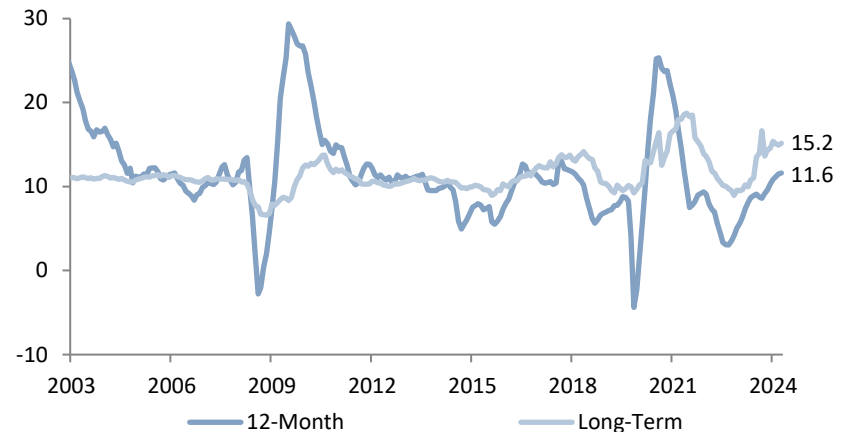
CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS

Dec 31, 1979 – Sep 30, 2024



CORPORATE EARNINGS GROWTH EXPECTATIONS

Jun 30, 2003 – Sep 30, 2024 • Percent (%)



Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Data are based on the MSCI World Index.

US Equities

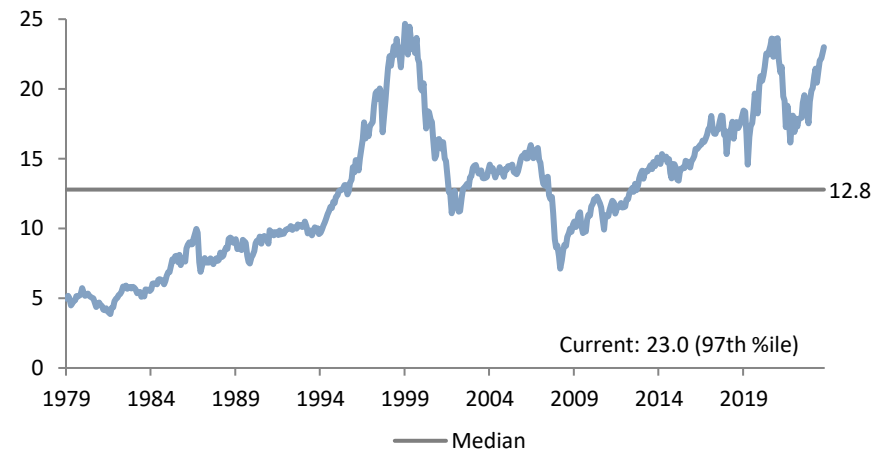
Facts & Figures Third Quarter 2024

US equities outperformed global equities in 3Q 2024, however, lagged in USD terms as the currency suffered its steepest quarterly decline since the GFC. Equities rallied and the currency sold off on growing consensus during the quarter that the Fed would begin easing, culminating with a larger-than-expected cut of 50 bps in September to kick-off the easing cycle. Investors positioned for the cut by rotating out of growth sectors, such as technology, in favor of rate-sensitive sensitive sectors like utilities and real estate.

- US equities' cyclically adjusted price-to-cash earnings multiple edged even higher in 3Q to 23x, reaching the 97th percentile of historical data dating back to 1979, approaching the recent high of nearly 24x in 2021. Relative valuation with DM ex US (10.7x) is now at par with its peak of 2.15x from November 2021. The gap in equity valuations remains stark even after adjusting for sector differences.
- Latest estimates show that 2Q 2024 GDP grew at 3% annualized, almost double the rate of 1Q. Bloomberg consensus GDP estimates for 2024 now point to slightly higher growth than 2023 (2.5%) at 2.6%, with the 2025 estimate of 1.8% unchanged. US GDP growth exceeds projections for DM in both 2024 and 2025.
- Analysts slightly adjusted near-term earnings growth expectations, with the September forecast for 2024 adjusting down by 80 bps to 9.8%, while 2025 estimates increased by 40 bps to 15.2% versus June. Expectations improved due to ongoing economic resilience and heightened growth from AI-related activity and are the highest rates across major developed economies.
- The risk of a recession and pace of monetary policy tightening are key risks for equities. Solid improvement in inflation, with some signs of softening in the labor market, prompted the Fed to announce its intent to ease monetary policy earlier in 3Q. At its September meeting, the Fed cut rates by 50 bps and forecast another 200 bps of cuts through 2026. Indeed, late in the quarter, the Fed's preferred measure of inflation moderated to 2.2%. Now that easing in the US has begun, the difference between its policy rate and the rest of the world's became smaller, weakening the US dollar.

CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS

Dec 31, 1979 – Sep 30, 2024



CORPORATE EARNINGS GROWTH EXPECTATIONS

Jun 30, 2003 – Sep 30, 2024 • Percent (%)



Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Data are based on the MSCI US Index.

Developed Markets excluding US Equities

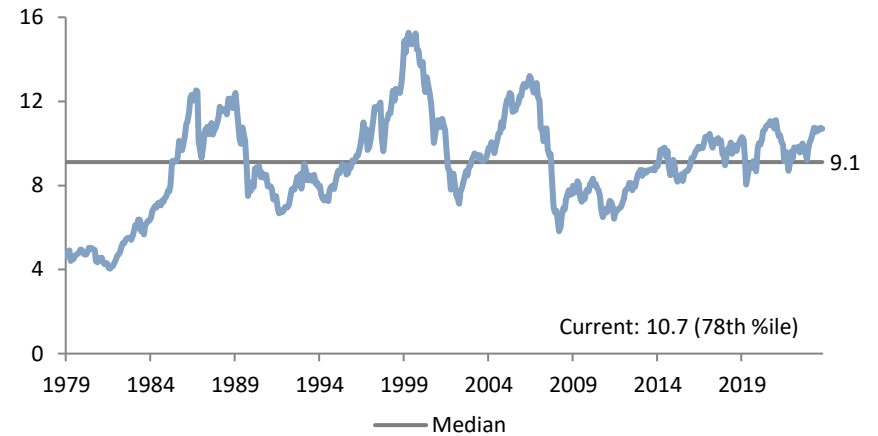
Facts & Figures Third Quarter 2024

DM ex US equities returned 1.8% in 3Q 2024 in LC terms, lagging the 4.7% return of broader DM. However, the weaker dollar resulted in outperformance in USD terms, with DM ex US equities returning 7.8% versus 6.4% for broader DM. Nonetheless, the bloc still trails broader DM by 5.8 ppts year-to-date. Equities broadly have been supported recently by rising earnings expectations, particularly for the tech sectors, and rising valuations. However, DM ex US equities have trailed those of the US on both these metrics.

- The bloc trades at 10.7x cyclically adjusted cash earnings. This is in the 78th percentile of historical data dating back to 1979, and above the long-term median of 9.1x. That valuation multiple remains well below the 17.6x CAPCE of broader DM equities, due to the 23.0x CAPCE enjoyed by US equities. This valuation gap has returned to the COVID-era highs, having re-widened in recent quarters. A material valuation gap remains after adjusting for sectoral differences.
- The global economy is expected to grow by 3.1% in 2024, broadly unchanged over the course of the quarter. The perceived odds of a soft landing for the economy have been increasing. Economic data have held up quite well, while a moderating inflation picture is allowing interest rates to be cut. The US is expected to continue to outperform the major components of this index. Consensus growth for 2024 is 2.6% for the US, in comparison to 1.1% for the UK, followed by 0.7% in the Eurozone and zero growth in Japan.
- Analysts expect corporate earnings to grow by 7.7% on a 12-month forward EPS basis. This would represent an undershoot of 1.8 ppts to its median long-term expected EPS growth rate. This consensus corporate earnings growth is expected to be driven more by profit margin expansion (from 9.7% to 10.2%) than by sales growth (2.6%). This would put the index's profit margin back close to the previous record high-level of 10.3% it reached in 3Q 2022, according to IBES data. But this margin would still be below the current level of the same metric for the US (12.2%).
- On a regional basis, Switzerland stands out with expected EPS growth of 10.5% in the coming 12 months, while growth of 8.8%, 8.6%, and 6.3% is expected in the EMU, Japan, and the UK, respectively.

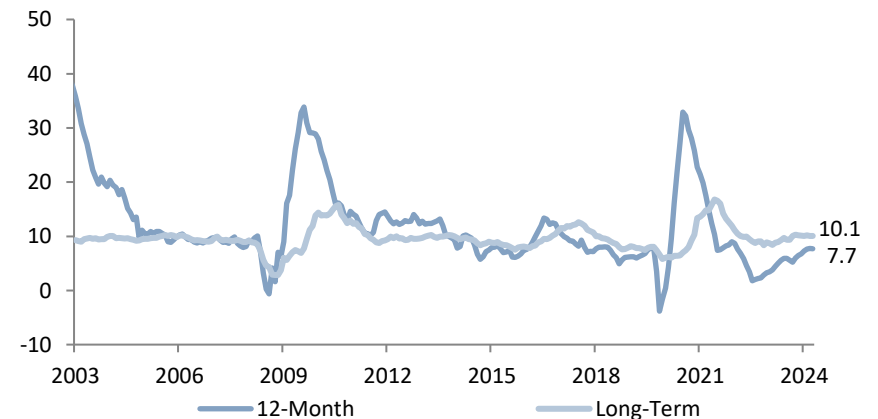
CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS

Dec 31, 1979 – Sep 30, 2024



CORPORATE EARNINGS GROWTH EXPECTATIONS

Jun 30, 2003 – Sep 30, 2024 • Percent (%)



Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Note: Data are based on the MSCI World ex US Index.

UK Equities

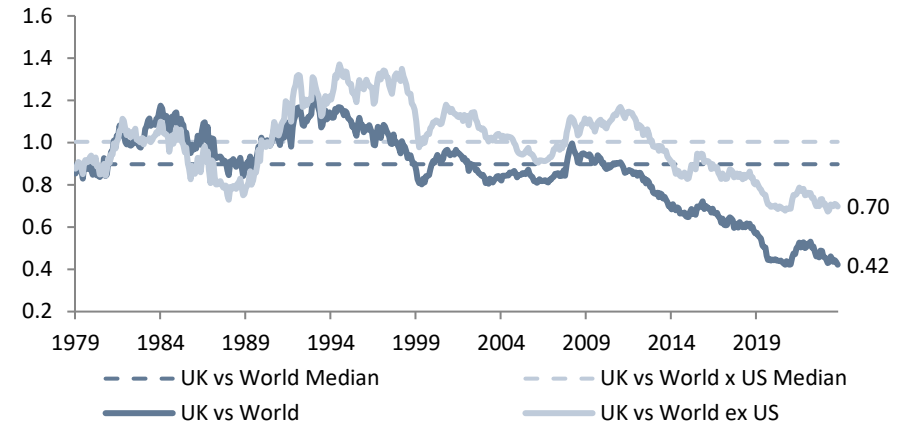
Facts & Figures Third Quarter 2024

UK equities returned 1.7% in 3Q 2024 in LC terms, underperforming the 4.7% returned by broader developed markets. However, a weaker dollar resulted in outperformance in USD terms, with the UK returning 7.9% versus 6.4% for DM. The YTD return of 15.4% in USD still sees the UK lag DM by 3.5 ppts. Partially due to sectoral tilts, the long-term earnings growth of the UK has lagged its peers over a prolonged period and is expected to do so again in 2024 and 2025.

- The UK's cyclically adjusted price-to-cash earnings (CAPCE) ratio inched higher to 7.5, the 23rd percentile. The ratio of the UK's CAPCE to that of DM declined further to 0.42, in the 1st percentile of observations. When adjusting for the substantial sectoral differences between the indexes, the relative CAPCE stands at 0.60. However, when the weaker expected earnings are considered, i.e., by looking at forward PEs, the ratio of sector-neutral forward PEs stands at 0.78. Overall, the valuation of UK equities remains depressed versus peers.
- In general, the UK index has an underweight to growth stocks and an overweight to value stocks. This has been a significant drag on relative performance in recent years. It has proved a headwind once more during 2024, with two of the three top-performing sectors in DM equities during the quarter being the sectors where the UK has the largest relative underweight. In general, these tilts may help the UK in periods of accelerating global growth, particularly when the former are partially driven by rising commodity prices.
- UK EPS are forecast to underperform broader DM by 5.8 ppts over the course of the next 12 months (5.8% vs 11.6%). EPS growth is currently forecast to be relatively evenly split between sales growth (2.4%) and an expansion in profit margin (10.8% to 11.1%).
- As with EPS, UK GDP is expected to underperform most peers in 2024. The current consensus for real GDP in 2024 is 1.1% vs 1.8%. However, this represents an increase from the 0.7% figure forecast three months ago, as the UK outperformed peers in 1H 2024. Further gradual BOE rate cuts, after the first 25-bp cut in August, combined with positive real wage growth, should act as some measure of tailwind. The upcoming budget, the first under the new government, will likely drive some volatility. The most significant takeaway will be determining if funds can be secured for increased investment, either through raising CGT or IHT, or from other sources.

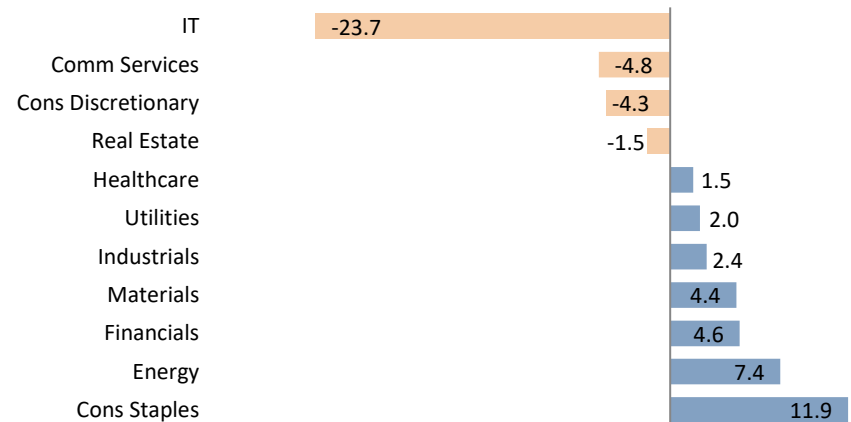
RELATIVE CAPCE: MSCI UK VS WORLD

Dec 31, 1979 – Sep 30, 2024



RELATIVE SECTOR WEIGHTS: UK MINUS WORLD

As of Sep 30, 2024 • Percentage Points



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

Europe ex UK Equities

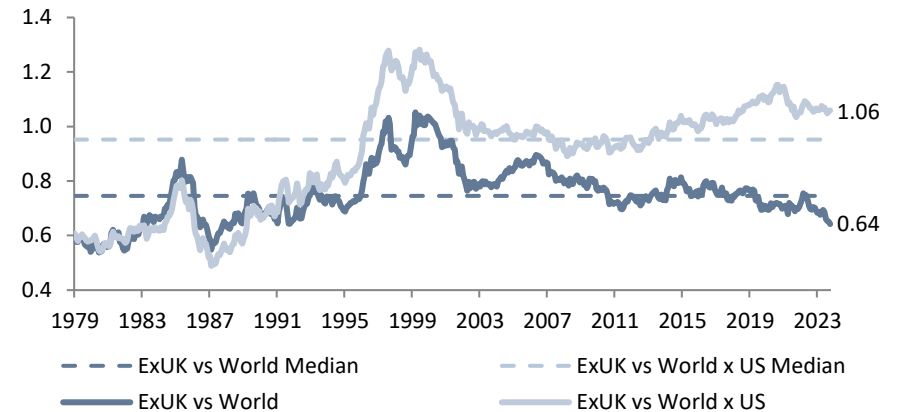
Facts & Figures Third Quarter 2024

Europe ex UK equities returned 1.5% in 3Q 2024 in local currency terms, trailing the 4.7% return of DM equities. However, the weakening of the dollar resulted in comparable returns in USD terms (6.2% versus 6.4%). Year-to-date, the region has lagged broader DM by 6.9 ppts. The underperformance of the region has been driven both by sectoral tilts, as well as idiosyncratic underperformance. Earnings have lagged in the regions and looking forward, earnings growth is expected to continue to lag that of broad DM in the next year.

- The region's CAPCE increased slightly to 11.3 during the quarter, standing at the 83rd percentile of its history. Its CAPCE relative to DM edged slightly lower to 0.64, moving further below the long-term median level of 0.74. A large portion of this relative cheapness is due to the comparative richness of the US market, however. The region's CAPCE relative to that of DM ex US was unchanged at 1.06, in the 80th percentile.
- The longer-term underperformance of the Europe ex UK region versus DM more broadly is down to a lower underlying profitability. The return on equity (ROE) for the region has been below that of broader DM for the last decade and the ratio of their ROEs stands at 0.89, albeit that has improved over the past two years and is now just above the long-term median. This is partly due to the region's lower exposures to some of the higher ROE sectors, notably tech. However, sectoral ROEs are lower in nine of the 11 GICS sectors, showing that it's a broader issue. Nevertheless, the region's ROE is greater than that of DM ex US.
- Earnings growth in Europe ex UK is expected to be 8.8% over the coming 12 months, trailing the 11.6% expected of broader developed markets. Sales growth over this period is expected to be 3.2%, while profit margins are expected to expand from 9.7% to 10.2%.
- Consensus estimates of Eurozone GDP growth for 2024 have remained steady at 0.7% over the past quarter. Growth in the Eurozone picked up moderately in 1H after two years of meager outcomes, however this still lags the 1.8% growth expected in developed markets more broadly. Germany is facing a number of headwinds to growth, partially offset by relatively stronger peripheral performance. The ECB cut interest rates for the second time in September and may be inclined to cut more quickly in the face of softening data.

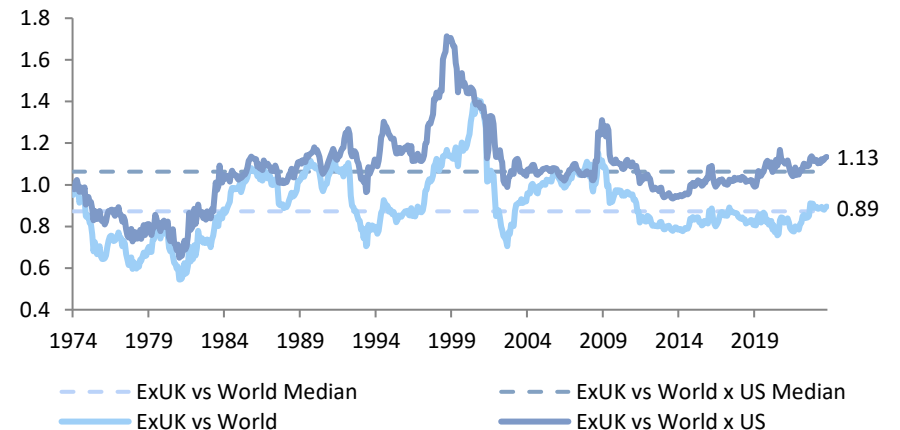
RELATIVE CAPCE: MSCI EUROPE EX UK VS WORLD AND WORLD EX US

Dec 31, 1979 – Sep 30, 2024



ROE: MSCI EUROPE EX UK VS WORLD AND WORLD EX US

Dec 31, 1974 – Sep 30, 2024 • Percent (%)



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

Japanese Equities

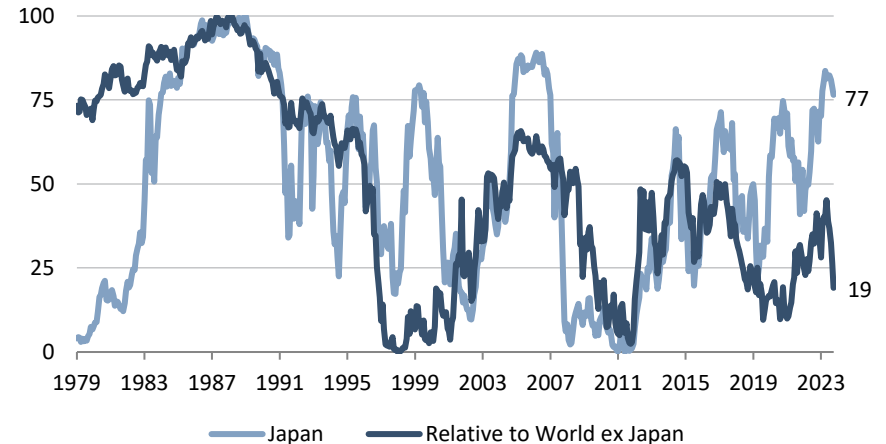
Facts & Figures Third Quarter 2024

Japanese equities underperformed their developed markets peers in 3Q 2024 and YTD. Valuations are elevated in absolute terms but are low relative to other developed markets. Improving corporate governance and a focus on shareholder returns should help to serve as tailwinds for the market.

- The MSCI Japan Index returned -6.0% in local currency terms and 5.7% in USD terms in 3Q 2024, underperforming DM equities which returned 4.7% and 6.4%, respectively. Year-to-date, Japanese equities returned 14.0% in local currency terms and 12.4% in USD terms, underperforming DM equities by 4.8 pts and 6.5 pts, respectively.
- The market trades at 11.7x cyclically adjusted cash earnings, which ranks as the 77th percentile of historical observations since 1979. Relative to other developed markets, Japanese equities are at the 19th percentile of historical observations.
- Japanese equities sold off sharply in early August as the yen surged following the BOJ's move to tighten policy rates by 15 bps to 0.25%. While Japanese equities subsequently rebounded, the market still underperformed their DM peers in the quarter as the yen strengthened 12.5% over 3Q. Guidance from the BOJ indicates the central bank remains committed to normalizing monetary policy but at a gradual pace given soft domestic economic data. Although monetary policy in Japan is expected to remain looser than elsewhere in the near term, analysts' forecasts show 12-month forward corporate earnings growth in Japan (4.8%) is expected to trail that of their DM counterparts (11.6%).
- The ROE on Japanese equities currently stands at 9.5%, which is slightly above the historical median. Although Japan's ROE has historically been lower than that of its DM counterparts, an increased focus on corporate governance and shareholder returns in Japan may see this improve.
- As of the end of September, the MSCI Japan Index trailing dividend yield was 2.2%, above the 1.7% historical median. Japanese companies retain significant cash balances and have increased shareholder payouts (dividends plus buybacks) in recent years, which may continue to serve as a tailwind for Japanese equities.

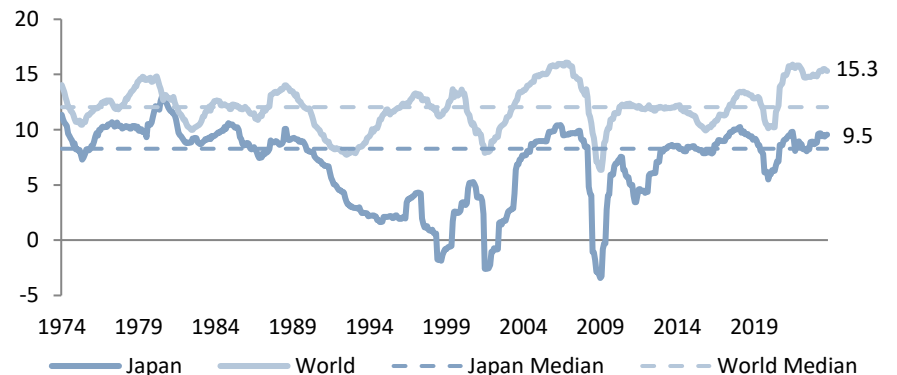
CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS

Dec 31, 1979 – Sep 30, 2024 • Percentile (%)



ROE: MSCI JAPAN VS WORLD

Dec 31, 1974 – Sep 30, 2024 • Percent (%)



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

Emerging Markets Equities

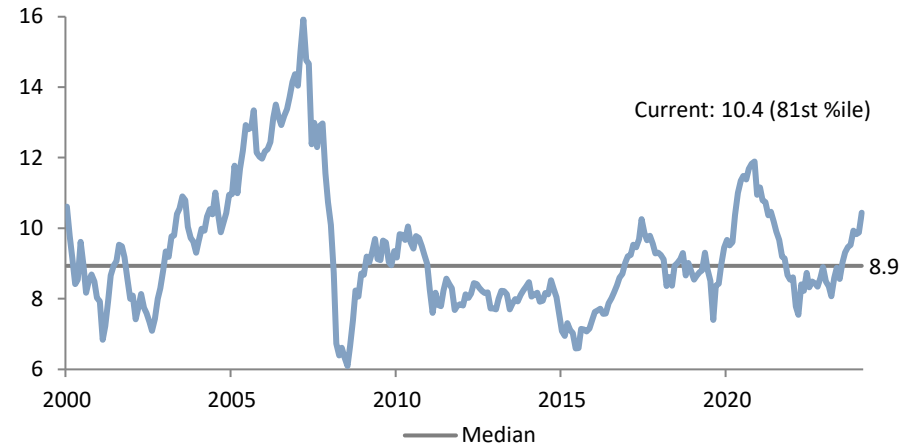
Facts & Figures Third Quarter 2024

EM equities returned 8.7% in USD terms in 3Q, bringing YTD performance to 16.9%. EM outperformed DM for a second straight quarter amid a broader rotation highlighted by new Chinese stimulus, Fed rate cuts, and a declining US dollar. Indeed, China (23.5%) accounted for nearly two-thirds of the broader index gain.

- The Chinese equity rally and a broader rotation among global stock markets lifted other countries within EM Asia (9.5%), including ASEAN members Thailand (28.9%), Philippines (21.7%), Malaysia (20.5%), and Indonesia (15.3%). Chinese stimulus typically supports trade for the broader region, suggesting an improved outlook for Asian EPS growth. The rotation buffeted tech-heavy Korea (-5.6%) and Taiwan (0.5%), along with concerns of oversupply in the semiconductor sector.
- LatAm (3.7%) lagged in 3Q. Mexico (-3.4%) continued to be plagued by political concerns, whereas Brazil (7.1%) lifted the broader region. Reflecting heightened political risks, the Mexican peso has depreciated nearly 15% versus the USD this year. Value-oriented EMEA (7.1%) posted a solid gain, propelled by South Africa (16.1%) and Saudi Arabia (5.3%).
- Despite recent outperformance, EM has lagged DM by nearly 9 pts annualized on a trailing 3Y basis, building on a longer-term trend since 2010. This extended period coincided with USD appreciation, subpar earnings growth, and a narrowing economic growth differential, which are keys to the outlook for EM performance vis-à-vis DM.
- EM valuations have expanded rapidly YTD but exhibit wide dispersion. Indian and Taiwanese equity valuations look elevated relative to their 20-year medians, whereas Brazilian and Mexican valuations are relatively low. Broad EM stocks trade at a nearly 40% discount to DM, among the widest on record since 2000.
- The EM equity outlook apparently improved in 3Q. Expected 2025 EPS (16%) and GDP (4.3%) growth looks set to outperform DM, China has expanded stimulus measures, and the Fed is now cutting interest rates. However, US economic outperformance may limit the scope of this Fed easing cycle, suggesting potentially limited benefits from further USD weakening. In general, EM equities typically bear the brunt of broader risk aversion permeating global stock markets, particularly in today's macro and geopolitical environment.

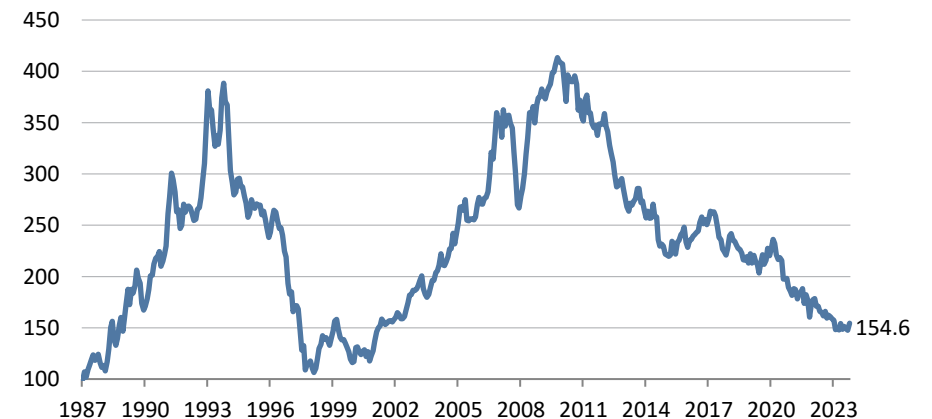
CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS: MSCI EM

Aug 31, 2000 – Sep 30, 2024



EM/DM EQUITY RELATIVE CUMULATIVE WEALTH

Dec 31, 1987 – Sep 30, 2024 • US Dollars



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

Notes: EM CAPCE based on five-year average real cash earnings. Total returns are gross of dividend taxes prior to January 2001 and net thereafter. EM and DM equities based on the MSCI Emerging Markets Index and MSCI World Index, respectively.

Asia ex Japan Equities

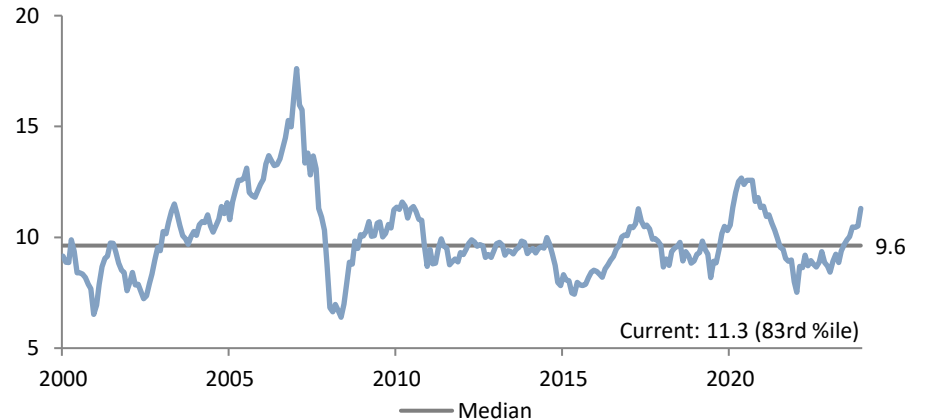
Facts & Figures Third Quarter 2024

Asia ex Japan equities outperformed global equities in 3Q 2024 and on a YTD basis, in part, due to the strong rally in China in late September. Valuations for the region have risen to elevated levels, largely driven by India and Taiwan.

- Asia ex Japan equities returned 10.4% in USD terms in 3Q 2024, compared to global equities which returned 4.9%. YTD, Asia ex Japan equities returned 21.2%, outperforming global equities which returned 18.7%.
- Over 3Q, performance was driven by a rebound in Chinese (23.5%) and Hong Kong (24.4%) equities, which rallied sharply in late September following a series of stimulus measures by China. Southeast Asian equities in aggregate (19.8%) also posted strong returns in 3Q, as the start of Fed rate cuts and a decline in global interest rates led to a broad market rotation toward cyclical and high-yielding stocks. In contrast, tech-oriented Taiwan (0.5%) and South Korea (-5.6%) underperformed the broad index, as did India (7.3%) to a lesser extent.
- Asia ex Japan valuations have risen from their October 2022 lows to elevated levels. The index's CAPCE metric trades at 11.3x, which is the 83rd percentile of historical observations. Relative to DM equities, however, Asia ex Japan trades lower at the 16th percentile of historical observations.
- There is dispersion among Asia ex Japan country valuations. Most markets trade near or below historical median valuations, except for Taiwan and India where valuations are very elevated.
- Analysts' expectations of forward 12M EPS growth for Asia ex Japan remains strong at 17.4%, which tops that of their global counterparts (12.4%). Earnings expectations for the region may improve if China follows through with more fiscal stimulus measures and if these trigger a recovery in economic activity in both China and the region.
- Yet, key risks to these estimates are a further market rotation from global technology stocks and cooler demand for semiconductor chips, given the sector exposures in Taiwan and Korea, and a weakening in developed markets growth and trade volume growth, given the export-oriented and cyclically sensitive nature of most Asia ex Japan markets.

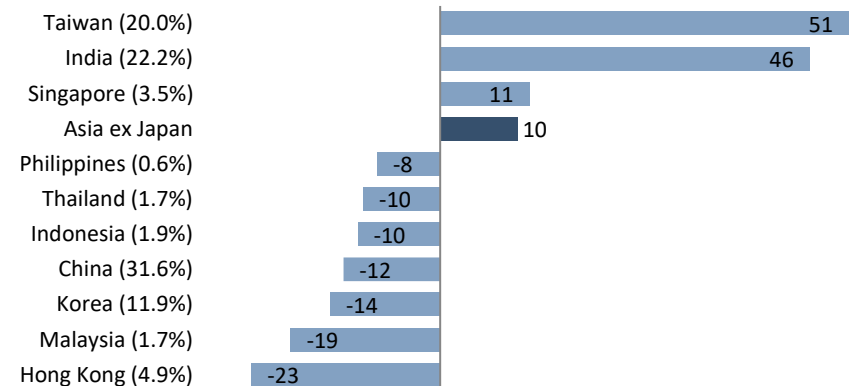
CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS: MSCI ALL COUNTRY ASIA EX JAPAN

Oct 31, 2000 – Sep 30, 2024



COUNTRY P/B % DEV FROM HIST MEDIAN: MSCI AC ASIA EX JAPAN

As of Sep 30, 2024 • Index Weight in Parentheses



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

Notes: CAPCE based on five-year average real cash earnings. Totals may not sum to 100% due to rounding.

Chinese Equities

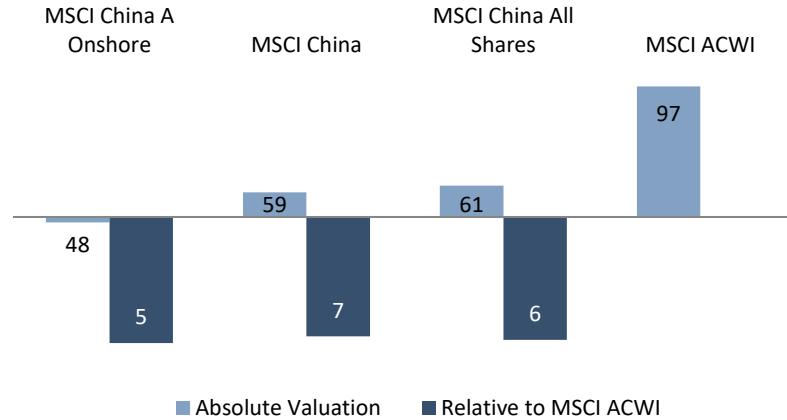
Facts & Figures Third Quarter 2024

Chinese equities rallied sharply in late September on expectations of more aggressive stimulus. As a result, Chinese equities have now outperformed global equities YTD. Valuations for Chinese equities have rebounded from depressed levels to fair value but remain very low relative to global equities.

- Chinese equities consist of mainland China-listed A-shares, Hong Kong-listed Chinese companies, and US-listed Chinese companies. The MSCI China All Shares Index combines both onshore and offshore markets and is composed of 49% Hong Kong-listed equities, 5% US-listed equities, and 47% A-Shares.
- The MSCI China All Shares Index returned 20.0% in 3Q 2024 and 24.2% YTD in LC terms, outperforming global equities, which returned 4.9% and 18.7%, respectively.
- The rally was concentrated in the last week of September, triggered by a series of policy measures and pledges of further fiscal stimulus. While details around fiscal stimulus remain uncertain, guidance from the September Politburo meeting shows a shift in the government's focus towards preventing further weakness in the property market and in stimulating domestic consumption.
- With the recent rally, Chinese equities are back to index levels seen in early 2023 following the pivot from zero-COVID, and momentum indicators are approaching stretched levels. Valuations have also rebounded from previously depressed levels. The composite P/E ratio for the MSCI China All Shares Index has risen above fair value, although relative to global equities, Chinese equity valuations remain very low.
- Active China-dedicated managers have historically demonstrated an ability to add value over the A-share index, given the retail-driven nature of the market. However, the A-share market is underweight the technology sector, with most Chinese tech companies listed offshore in Hong Kong or the US. Managers with flexible "All China" mandates can offer exposure across the China equity universe.

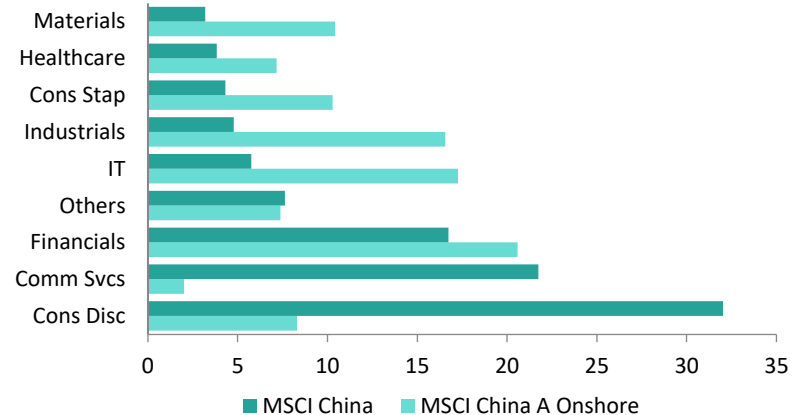
COMPOSITE P/E: PERCENTILE

Feb 28, 2010 – Sep 30, 2024



SECTOR WEIGHTS

As of Sep 30, 2024 • Percent (%)



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

Notes: Composite P/E reflects the harmonic average of the 5-year cyclically-adjusted P/CE, forward P/E, and ROE-adjusted P/E ratios. Sector weight for "Others" consists of Real Estate, Utilities, and Energy. Totals may not sum to 100% due to rounding.

US Small-Cap Equities

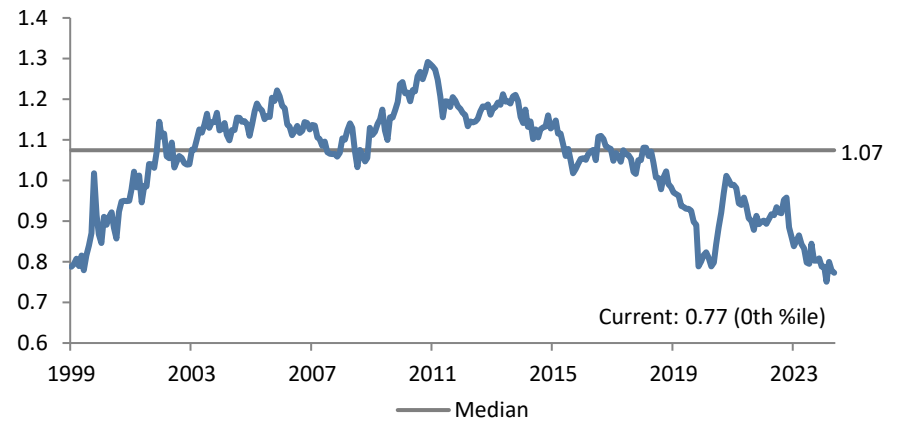
Facts & Figures Third Quarter 2024

US small-cap equities reversed their losing streak for the past two quarters, besting large-cap stocks in 3Q by nearly 3 ppts. Most of this outperformance came in July when the Fed announced its intention to begin easing its monetary policy. Small caps lagged in August and September and have underperformed YTD by 10 ppts.

- Energy was the only sector in both small- and large-cap indexes to decline in 3Q. The highest returns-sectors in small caps were real estate and financials, while utilities and real estate led in large caps.
- The key headwind for small caps this year has been the repricing of rate cut expectations. Higher interest rates can provide a difficult backdrop for their profitability, given that small caps often rely more heavily on floating-rate debt than their large-cap counterparts. Thus, small caps rebounded when the Fed announced that policy rate cuts were afoot.
- Relative valuations between small caps and mid- to large-cap peers are sharply discounted; in fact, they have never been cheaper based on a normalized price-to-cash earnings metric dating back to 1999. During this period, small caps have typically traded at a 7% premium versus large caps, as opposed to the 23% discount they are trading at today.
- The US small-cap segment is overweight cyclical sectors and underweight technology compared to the mid-/large-cap universe. As such, small caps tend to be more sensitive to the economic cycle and have a better track record during economy recovery phases.
- Recent US government initiatives, such as the Infrastructure Act, the CHIPS Act, and the Inflation Reduction Act, could provide incentives for some reshoring of supply chains that would benefit certain sectors overweight in small-cap stock indexes. Namely, the industrials and materials sectors could benefit from greater spending on infrastructure projects, both of which are held in relatively higher weights in the small-cap index versus large caps. Support for these regulations may change with a change in US administration.

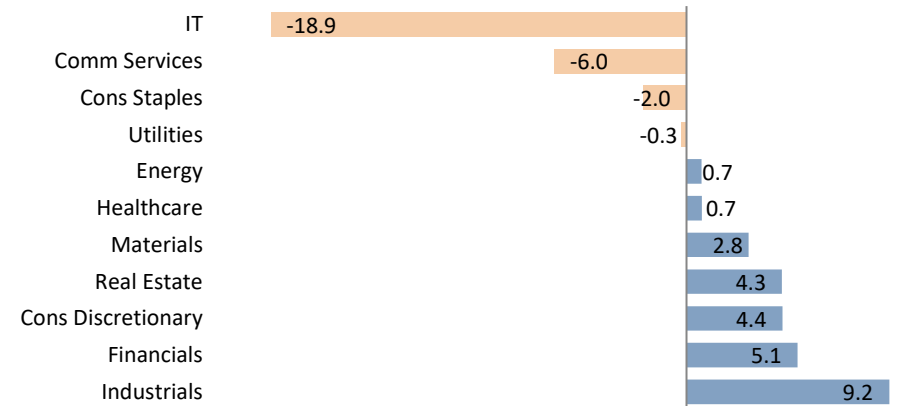
RELATIVE 5-YR CAPCE: MSCI US SC VS US LC/MC

May 31, 1999 – Sep 30, 2024



RELATIVE SECTOR WEIGHTS: US SC MINUS US LC/MC

As of Sep 30, 2024 • Percentage Points



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

Note: CAPCE ratios based on five-year average inflation-adjusted earnings.

Developed ex US Small-Cap Equities

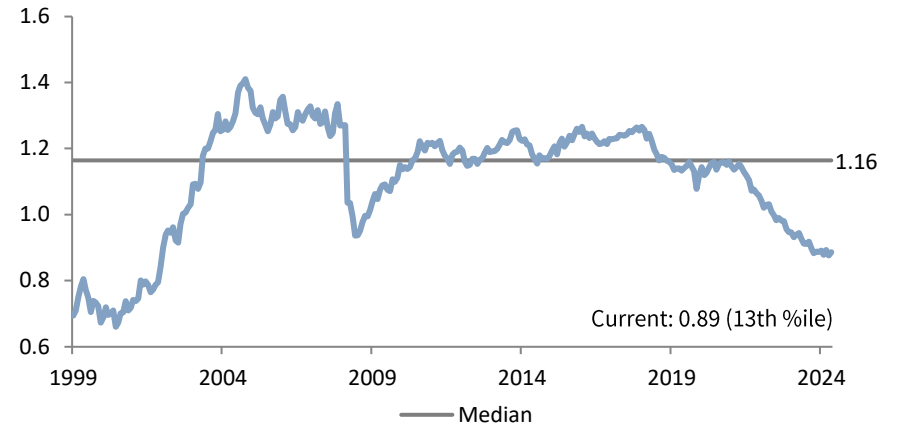
Facts & Figures Third Quarter 2024

Developed ex US small caps returned 3.6% in 3Q in local currency terms, beating their mid- to large-cap peers by 181 bps. The weakness of the dollar meant that the USD return on the quarter was a strong 10.4%. Year-to-date, small caps have modestly trailed mid- to large caps, by 125 bps in LC terms and by 157 bps in USD terms.

- Non-US small caps snapped a run of three consecutive quarters of underperformance in 3Q. Outperformance occurred, in part, due to sectoral tilts but primarily due to underlying outperformance. Relative outperformance was particularly strong in consumer discretionary and healthcare, while strong absolute performance in real estate and industrials contributed the most to absolute returns.
- Developed ex US small-cap valuations rose slightly in 3Q but remain steeply discounted relative to their large-cap peers. As of September 30, developed ex US small-cap valuations were trading at a 9.4x cyclically adjusted price-to-cash earnings (CAPCE) ratio, in the 37th percentile of historical observations. On a relative basis, small-cap valuations are in the 13th percentile versus their large-/mid-cap counterparts, at a ratio of 0.89.
- From a relative sector exposure standpoint, the developed ex US small-cap segment is overweight cyclicals—particularly real estate and industrials—vis-à-vis its large-/mid-cap counterpart, though this is partially offset by a large underweight to financials. However, the defensive and higher-quality consumer staples and healthcare sectors are meaningfully underrepresented in the small-cap universe.
- Superior long-term earnings growth has helped developed ex US small caps outperform their large-/mid-cap counterparts over time. Over the last 15 years, world ex US small caps normalized real cash earnings per share grew by 3.1% per annum, while real EPS for large-/mid-caps has been flat.
- The developed ex US small-cap universe is arguably less efficient than the larger-cap space. Therefore, the former may provide more opportunities for active managers to add value over time.

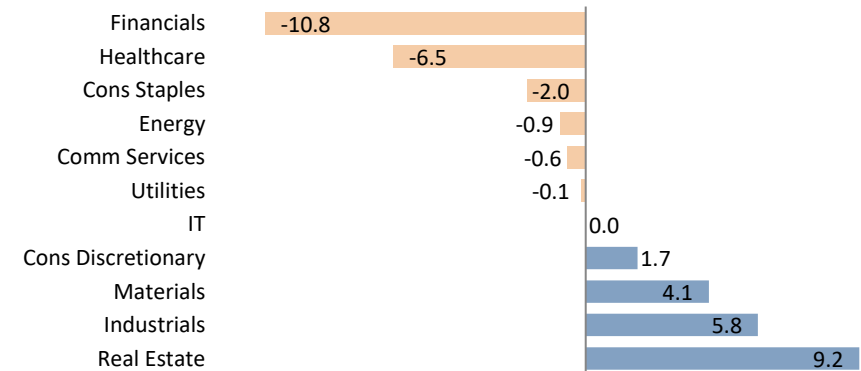
RELATIVE 5-YR CAPCE: MSCI WORLD EX US SC VS LC/MC

May 31, 1999 – Sep 30, 2024



RELATIVE SECTOR WEIGHTS: MSCI WORLD EX US SC MINUS WORLD EX US LC/MC

As of Sep 30, 2024 • Percentage Points



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

Note: CAPCE ratios based on five-year average inflation-adjusted cash earnings.

US Growth and Value Equities

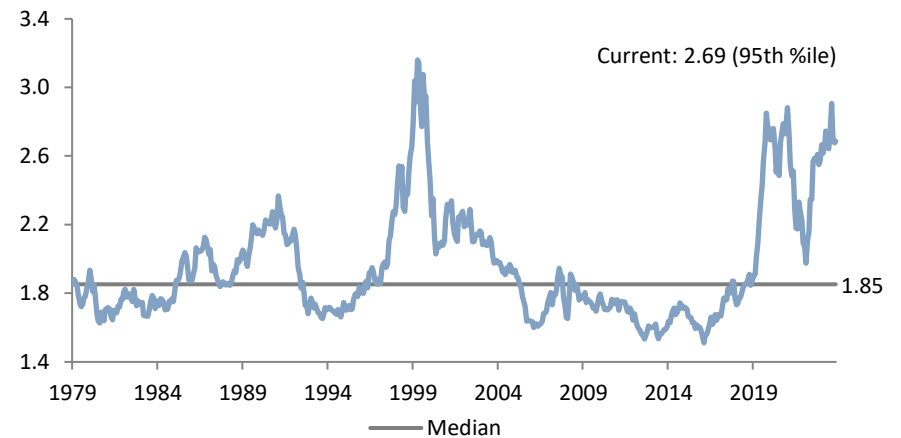
Facts & Figures Third Quarter 2024

US growth stocks gained 3% in 3Q, trailing value stocks by nearly 7 ppts, reversing their three-quarter winning streak. Still, YTD growth has bested value by nearly 8 ppts, driven by a surge in technology stocks. During the quarter, investors began to rotate in favor of value stocks once the Fed announced its intention to begin monetary easing.

- Growth stocks added another impressive quarter to their track record of recent dominance versus value stocks. Performance was boosted by the surge in a subset of large-cap tech companies, which have enjoyed a torrid pace of price appreciation in the past year. Indeed, the information technology sector now accounts for the highest weighting in the MSCI US Growth Index (~50%) since the dot-com stock boom in 2000.
- Based on the cyclically adjusted price-to-cash earnings (CAPCE) ratio, the MSCI US Growth Index moderated slightly, trading at 2.7 times the valuation of the MSCI US Value Index. That relative ratio is in the 95th percentile of historical observations. Investors have demonstrated a willingness to assign a higher multiple to expected earnings for growth-oriented stocks compared to value stocks. The price-to-forward earnings multiple for the MSCI US Growth Index trades at 30x, which is 1.8 times higher than that for value stocks. This ratio is 33% higher than the median ratio of 1.35 that has been observed over the past 20 years.
- Growth stocks have traditionally generated higher return on equity (ROE) than value counterparts. Today's wide ROE spread is partly driven by differences in sector exposures—technology and financials most prominently—and helps to explain the current valuation disparity between the growth and value indexes.
- Technology stocks have largely driven the US market's profitability, growth, and price performance over the past decade. Today the IT sector plus just two other stocks (Amazon and Alphabet) make up more than 60% of the growth index. In comparison, IT is just 13% of the value index. However, the value index has a much higher weighting to the financials sector, which could see an increase in profitability if rates rise and the slope of the yield curve steepens. The two-year, ten-year curve inflected positive during 3Q.

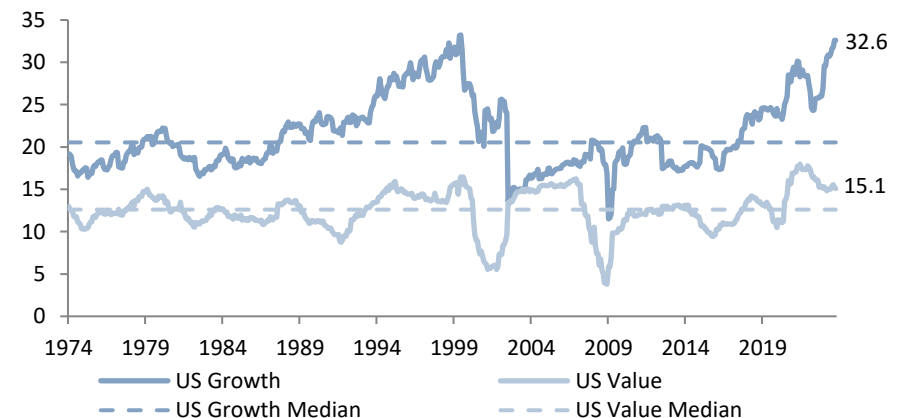
RELATIVE 5-YR CAPCE: MSCI US GROWTH VS US VALUE

Nov 30, 1979 – Sep 30, 2024



ROE: MSCI US GROWTH VS US VALUE

Dec 31, 1974 – Sep 30, 2024 • Percent (%)



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

Developed Markets Equity Factors

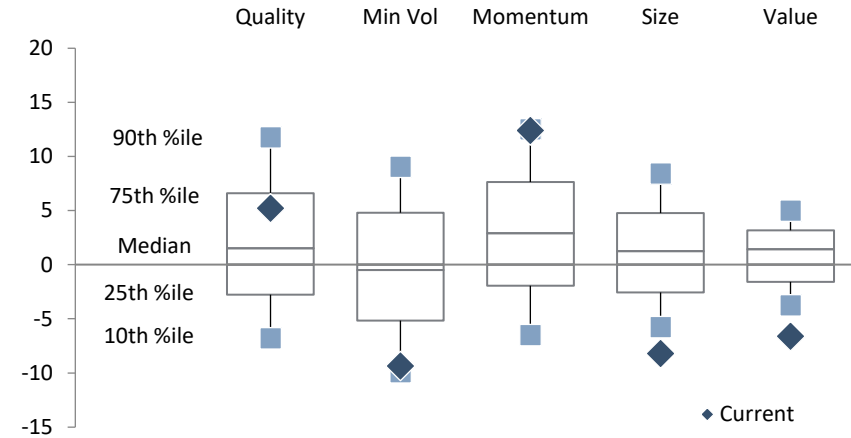
Facts & Figures Third Quarter 2024

Minimum volatility (7.8%) and size (6.4%) were the top-performing major equity market factors in 2Q, besting the MSCI World Index (4.7%). All other factors trailed the broader index, with value (4.5%) just marginally lagging, while quality (2.4%) and momentum (0.5%) underperformed more markedly. Nonetheless, over the past 12 months momentum (42.8%) has surged at a pace that ranked in the 96th percentile of its 12-month returns in the past 50 years. Quality (35.7%) is the only other factor that is outperforming the broader index (30.4%) over the trailing one year.

- Momentum's strength on a one-year horizon owes to the ongoing outperformance of a subset of IT stocks. Momentum strategies emphasize stocks that have performed well in the recent past, so sustained upward price trends are catalysts for outperformance. The weaker performance of the IT sector last quarter (0.9%)—the second worst-performing sector—helps explain the softer performance of momentum in 3Q. For example, NVIDIA, which is the largest component of the MSCI World Momentum Index, had seen seven consecutive quarters of gains prior to 3Q, during which time it has gained 917%, though it declined by 1.7% in the last quarter.
- Valuations of momentum and quality declined in 3Q, with the other three factors seeing a rising valuation. Quality still commands the richest valuations among major factors, based on three different multiples. Value is trading at the lowest multiples, while valuations for size and minimum volatility are also generally more moderate.
- The P/B ratio tends to have the strongest relationship to subsequent five-year returns across factors, but the strength of the relationship varies by factor. For instance, the relationship between starting valuation and subsequent returns is weak for the momentum factor, which overweights recent outperformers and typically has a very high turnover ratio.
- Because the excess returns across several strategies have low or negative correlations with each other, combining these factors can add a diversification benefit. For example, value and momentum had strongly negative correlations over the trailing five-year period, suggesting that certain combinations of factors may work together to smooth out the overall pattern of portfolio outperformance over time.
- Quality, minimum volatility, momentum, size, and value are five factors primarily cited in academic research. These factors represent market premiums that have all shown superior risk/return characteristics compared to broad-market benchmarks.

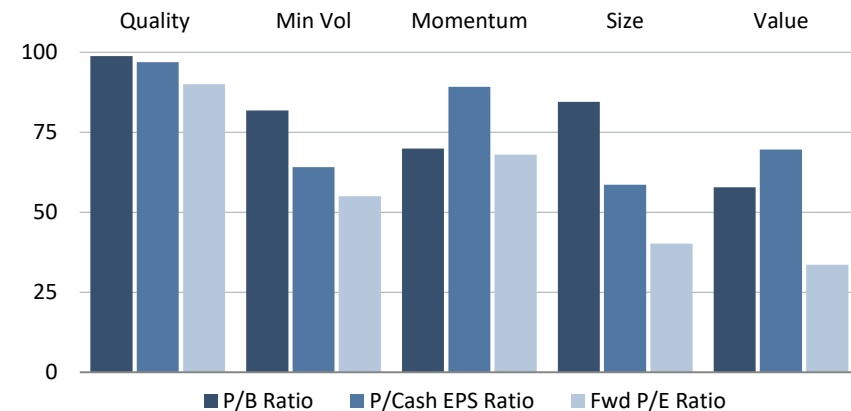
FACTOR RETURNS IN EXCESS OF DEVELOPED MARKETS EQUITIES

As of Sep 30, 2024 • Rolling 12M • Percent (%)



CURRENT VALUATION PERCENTILE RANKING BY FACTOR

As of Sep 30, 2024



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

Hedge Funds

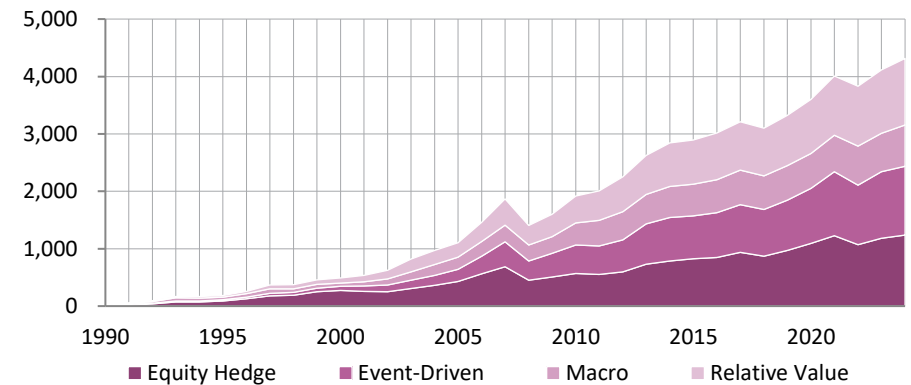
Facts & Figures Third Quarter 2024

Fundamental hedge fund strategies continued to grind out positive performance in the 3Q, while navigating volatility across asset classes precipitated by expectations of central bank activity that eventually came to pass, while quantitative funds struggled.

- Relative value (RV) hedge funds continued to post steady gains, with the HFRI Relative Value (Total) Index up 2.4% in 3Q—the varying pace of central bank rate cutting and uncertainty around inflation continued to create arbitrage opportunities for RV managers. Macro funds were down, with the HFRI Macro (Total) Index returning -0.8%, although there was meaningful dispersion within macro strategies, especially in August, as Japan-led market volatility caught certain funds offside while others profited. Quantitative strategies also struggled, with the HFRI Macro Systematic Diversified Index returning -3.6%. Trend following strategies had another difficult quarter due primarily to sharp reversals in equity markets in August.
- Long/short equity funds generated gains in 3Q as the HFRI Equity Hedge (Total) Index returned 3.8%, bringing YTD results to 10.3%. Funds with exposure to cyclicals and inflation-sensitive sectors (e.g., industrials, financials, and utilities) benefited from renewed optimism on the expectation and eventual occurrence of central bank easing. Meanwhile, TMT-focused funds experienced choppiness during 3Q as volatility in July and early August—especially among mega-cap tech leaders—eventually gave way to more constructive positioning. Elsewhere, healthcare-focused strategies have experienced diverging returns driven primarily by idiosyncratic moves in underlying portfolio holdings.
- The HFRI Event-Driven (Total) Index returned 4.8% in 3Q, bolstering YTD results (7.8%). While traditional multi-strategy managers are reporting enhanced performance in the higher interest rate environment, those with more meaningful equity allocations have generally experienced commensurately higher returns. Notably, some of the larger funds have also benefited from investments in FTX claims as the company’s reorganization plan recently received court approval. As previously noted, managers believe that an elevated, multi-year restructuring environment may be emerging. In addition to traditional in-court restructurings, they are already observing out-of-court restructurings, recapitalizations, and other liability management exercises. However, they caution that certain exchanges may be “can-kicking” in nature with some companies ultimately having to file for bankruptcy.

HFRI HISTORICAL ASSET GROWTH BREAKOUT

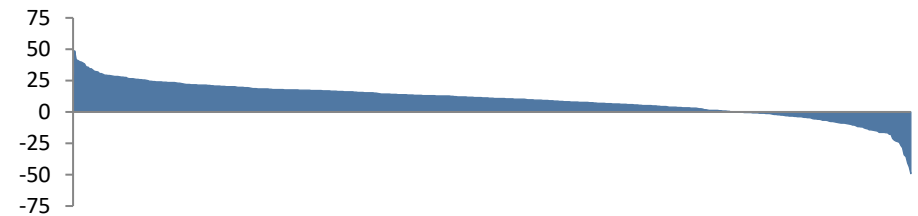
1990–2024 (Jun) • US\$B



EQUITY DISPERSION: TOTAL RETURNS FOR THE S&P 500 CONSTITUENTS

As of Sept 30, 2024

Trailing 3-Month Returns (%)



Trailing 12-Month Returns (%)



Sources: Hedge Fund Research, Inc., FactSet Research Systems, and Standard & Poor's.