

Asset Allocation Insights

QUARTERLY REPORT | **SEPTEMBER 2024**

USD EDITION

Multi-asset rally is driven by lower rates and the focus shifts from inflation to growth. The outperformance by gold and rate sensitive sectors may signal a regime change. Volatility may continue due to diverging monetary policies and uncertainty.

Central banks and markets shifted focus from inflation to growth

Delayed effects of rate hikes and tightening emerge. The US was the strongest growth outlier and softening in the US labour market and weak oil prices point to global growth concerns.

Central banks ease as growth slows, resulting in bull steepening yield curves

Most DM central banks ease, except the BoJ, helped by lower inflation expectations. Short and long-term yields declined, with US real yields falling at the long end. Markets expect a 3% Fed rate trough (close to Fed estimated neutral rate), a higher level than post-GFC.

Growth disparities drive divergence in monetary easing cycles

US had been an outlier in growth, outperforming Eurozone and the UK in recent years. This has prompted BoC, ECB and BoE to cut rates ahead of the Fed—a rare role reversal.

Equities rise, but recent shifts in performance signal a potential regime change

The risk-on rally persisted despite August volatility. Equities rose in the last 3M, still led by the US. Markets saw a rotation in equities; rate-sensitive and defensive industries led over 3M, while (US) small caps outperformed large caps in July and August.

Another layer of uncertainty that could hold volatility higher: US Elections

Markets typically experience heightened volatility and subdued returns in the months leading up to a US election. The good news: volatility typically drops and returns improve post-election.

Unusual (to recent history) asset class performance points to need to stay diversified

Amid a risk rally, Gold was the best performing asset class over last 1Y & 3Y. UK equities made a comeback (3Y annualized returns only 30 bps lower than US large caps). Over 1Y, Infrastructure did well (20.3% vs All-World equity 23.9%) and was a better play on EM growth than equities. Despite recent weakness, commodities offered diversification to equities & FI.

Emerging Markets' macro growth outpace developed economies, but selectivity is key

EM equity valuations improved and spreads for EM HY credit narrowed. India and Taiwan equities outperformed Developed Markets (even while overall EM underperformed DM).

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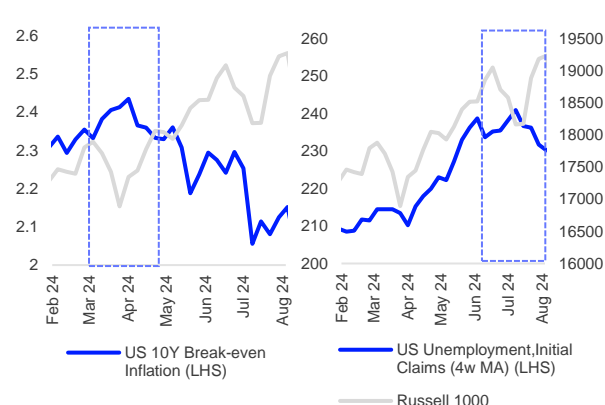
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Chart 1: After more than two years of inverted yield curve and gradual disinversion, US 10s/2s curve has a flat slope. Recessions historically started just around this time (when the Treasury curve has fully dis-inverted).



Chart 2: In April 2024, US equities dipped as inflation expectations rose. In contrast, in August 2024, markets responded to rising US unemployment figures, reflecting a shift in market focus from inflation to growth.



Source: FTSE Russell/LSEG. All data as of August 31, 2024. Past performance is no guarantee of future results. This report should not be considered "research" for the purposes of MIFID II. Please see the end for important legal disclosures. Results in this report are for research / illustrative purposes and do not represent the official performance of the indices.

Financial Markets Overview

From Inflation to Growth concerns, a new macro backdrop: Central banks and markets have transitioned their focus from inflation to growth as the effects of monetary and quantitative tightening become evident. Headline inflation is lower but remains above target with elevated core and services inflation. YTD, US was a (high) growth outlier, while growth slowed in the Eurozone, Canada & China but now its labor market & lower end consumer are showing signs of weakness. Weak oil prices reflect global growth concerns.

Central banks ease as growth slows and yield curves bull steepen: Over the last 3M, global 7-10-year nominal yields have declined, primarily by lower real yields in the US and Canada. US long yields have fallen since early Q2 (short end fell since early Q3) as markets front-ran the Fed. However, market expectations and Fed dot plot are pointing to around 3% rate trough or neutral rate, suggesting that, while long yields are likely to fall, they will remain above levels observed during the GFC-to-Covid period.

Dispersion & divergence continues: The IMF projects slower growth for the US and China in 2025, contrasting a rebound in the Eurozone, UK, and Japan. The BoC, ECB and BoE have cut rates ahead of the Fed, a first for the Fed which historically has led policy moves. Most DMs are in a rate easing cycle, while the BoJ is in a hold-hike mode. Despite strong equity returns in the last 1Y, gold (a risk-off asset) outperformed equities. A laggard since Brexit, UK returns YTD are almost in-line with All-World.

Global equities rise despite recent turbulence, US continues to lead: Global equities posted positive returns in Q3, with the US outperforming. Except Developed APAC ex Japan and China, most regions had above 10% returns YTD. Gains in emerging markets were mainly due to Asian markets, and in the UK, from Q2 growth. Falling rates increased the equity risk premium in last 3M.

Tone of the markets show change – point of inflection? Industry leadership changed in the last 3M as rate-sensitive and defensive industries outperformed. (Listed) Real estate outperformed infrastructure in the last 3M. Large caps led small caps in H1 2024 (US data), while the reverse happened in July and August.

Valuation and return in risk assets: Credit markets posted strong returns in the last 3M, with HY spreads tightening in Euro and EM, but stabilizing in the US. IG spreads widened slightly. IG valuations remain below HY, with sovereign and corporate valuations converging. Euro bonds appear attractive compared to expensive EM and US bonds. Within equities, US equities are valued higher than the FTSE All-World, are above the 10yr average, and its premium to global markets has increased in Q3. EM equity valuations vs DM has improved in Q3 and YTD. IBES forecast earnings growth fell in Q3 in most regions, including the US, reflecting growth concerns, and equity valuations remain higher than what the underlying macro backdrop might suggest.

Fund investors tread carefully amid uncertainty: With investor caution and high short rates, money markets have steadily attracted inflows over 12M. Inflows in bond funds has slowed, but within bonds, US government, high yield and investment grade credits have seen a recent positive shift in demand. Despite recent market turbulence, equity inflows have been resilient since April. North American and European equities have recently attracted increased interest, though EM flows still lead on a 12-month basis.

EM – higher growth and improving risk valuations: EM growth continues to surpass that of DM by a higher margin than historically. Foreign investors show interest in Chinese and Indian bonds (inclusion in EM indices). YTD, equities in India and Taiwan have outperformed those in DMs. EM HY spreads have fallen sharply, and EM equity valuations have improved relative to DMs. However, EM currencies like the peso and real have depreciated against the US dollar YTD.

Commodities continue to offer diversification benefit but fears loom on the horizon: Forward markets signal lower commodity prices due to weakening growth, geopolitical stress, and economic fragmentation. The broad commodity index is up 4.8% YTD and slightly negative over 3M. Copper is outperforming oil due to its role in the green transition. Gold, driven by EM central bank purchases, has outperformed growth commodities, and is now the best performing asset class over 1Y and 3Y.

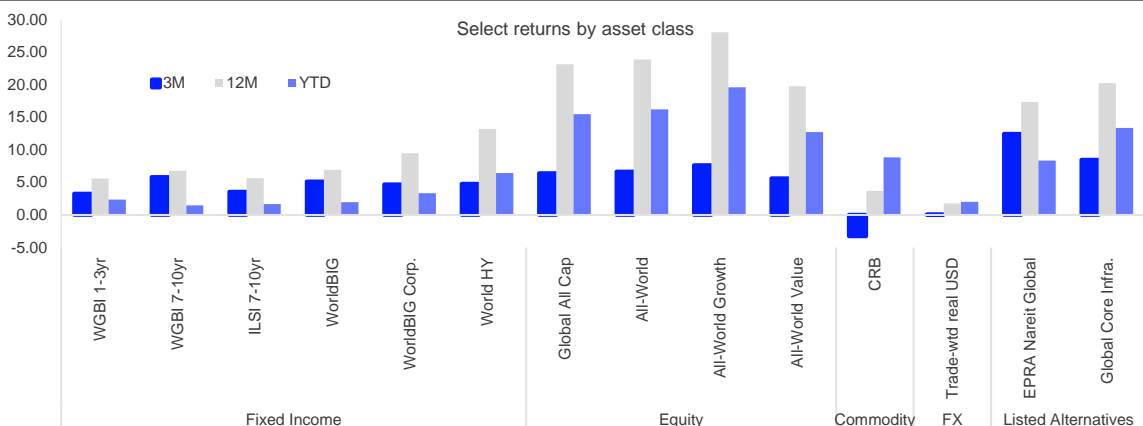
(Listed) Alternatives remain attractive: Infrastructure has continued to deliver robust returns, while real estate has turned positive over the past 3M, benefiting from declining yields. Infrastructure has been a better way than equities to play the EM growth story.

Currencies: Over 3M, anticipated Fed rate cuts have driven FX gains against the US dollar, led by the yen. Currencies of commodity importers have outperformed exporters reflecting expectations of slower growth and weaker commodity prices.

Portfolio Construction – some unusual patterns: In the risk-on rally over 12M when equities did so well, it is notable that gold did even better. Next best were US large caps, while the UK outperformed the Europe. HY outperformed IG, and IG valuations are lower than HY. Infrastructure had high returns, modestly behind global equities. Commodities provided diversification to both FI & equities.

US Elections: US equity returns tend to be higher post-election. Volatility tends to be higher before elections with a drop immediately thereafter. The first year of a presidential term typically sees stronger returns, driven by decreased uncertainty & new policies' impact.

Chart 1: 3M cross-asset performance differed from YTD & 12M. 3M: listed real estate did best, followed by listed infrastructure. Longer duration & sovereigns did best in FI, while commodities posted losses. YTD & 12M were similar – equities (esp. Growth) and Infrastructure did best. (USD returns.)



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Macroeconomic Backdrop

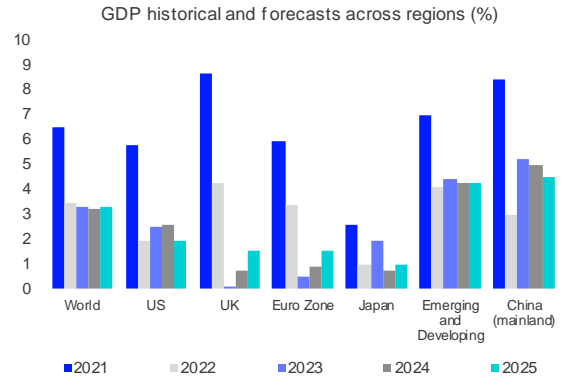
Focus shifts from inflation to growth concerns. Delayed impact of rate hikes & lower liquidity now showing.

Inflation in most DMs has fallen steadily but remains above the 2% target, with the core & service inflation being worse than headline inflation. Long breakevens (inflation expectations) fell further over 3M (Chart 4), easing inflation worries.

IMF growth estimates for 2025 show slower growth in the US and China, and a pick-up in the Eurozone, UK and Japan (Chart 1). The forward-looking ISM manufacturing and new orders have contracted since late 2022, with further deterioration in the last 3M (chart 2). The US labor market has been showing signs of weakness: reductions in quit rate and steady rise in unemployment rates (Chart 3). Falling regional Fed surveys & signs of stress in lower end consumer point to downside risks, leading to growth concerns.

US monetary tightening was significantly countered by expansionary fiscal policies (Infrastructure, Inflation Reduction & CHIPS act), and for much of 2024, the US remained a (strong) growth outlier. But the delayed impact of rate hikes and negative M2 money supply are finally showing up, even in the US. Growth had slowed earlier in the Eurozone, Canada, and now in the US, shifting the focus to growth and the rate easing cycle.

Chart 1: Global growth is projected to be stable in 2024. The trend for 2025 shows regional variations: The UK & Eurozone growth is expected to pick up in 2025, it is expected to slow in the US and China.



Source: IMF

Chart 2: Service PMI remains expansionary, but manufacturing and new orders PMI further contracted in Q3. Especially worrisome is the recent dip in (forward looking) new orders.

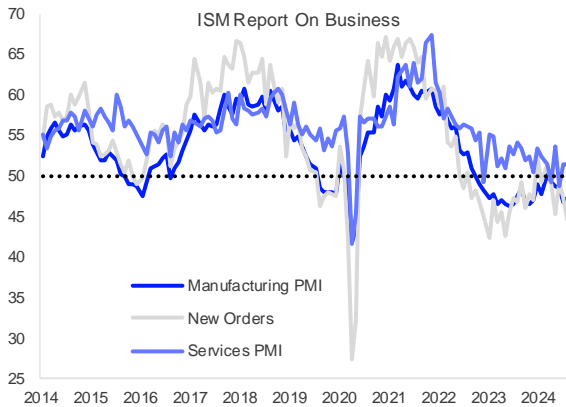


Chart 4: Long-term inflation expectations (7-10yr breakevens) fell more in Europe than in the US in the last 3M, giving central banks room to ease. Breakevens are higher than 3% only in the UK now.

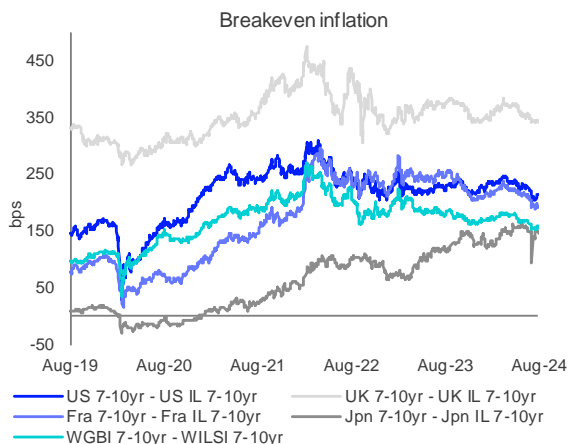


Chart 3: Employment is a lagging economic indicator. The steady rise in the US unemployment rate and fall in the Quits ratio (lower quits means lower labour confidence) indicate the US economy is finally slowing.

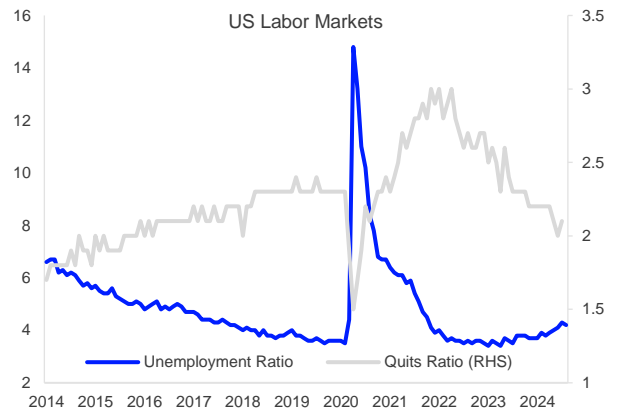
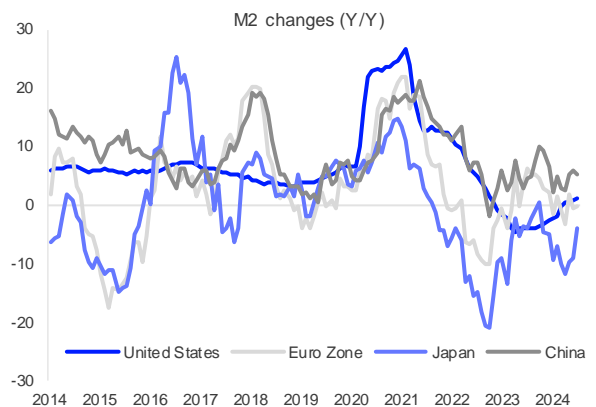


Chart 5: Y/Y changes in money supply is now flat, after being negative in 2022-23. M2 turning points were later for the US (than Eurozone). The impact of lower liquidity on equities in the US may still be playing out.



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Macroeconomic Backdrop (Continued)

Slowing growth leaves room for rates to fall further. Low equity risk premia, with a slight uptick over 3M as rates fell, indicate correction risks. High yield remains expensive and looks disconnected from the macro.

The growth indicators of the oil price and copper-gold ratio dipped lower in Q3, further away from their peaks, suggesting rates could fall further in this cycle, after the sharp falls over 3M given actual and expected further rate-easing.

Money supply growth and real yields point to equities being expensive over the last 12-18 months vs fundamentals. US equity valuations have rallied strongly since the mid-2023 trough, much quicker than the M2 growth as liquidity recovered (Chart 2). Forward valuations advanced further over 3M, as long-term sovereign real yields fell. But the historic inverse relationship between the two has not fully recovered to longer term trends (Chart 3).

Equity risk premia improved over 3M, particularly in Japan, helped by steep falls in sovereign yields. But they stay near historic lows due to buoyed equity valuations (Chart 4). US credit risk premium (high yield credit spreads) stabilized at levels significantly below the equilibrium value implied by a slower growth, which may widen the spreads by >200 bps.

Chart 1: The historic relationship between Copper-Gold ratio and the oil price (growth indicators are sharply off their peaks) and rates indicate long rates globally have further room to fall in this easing cycle.

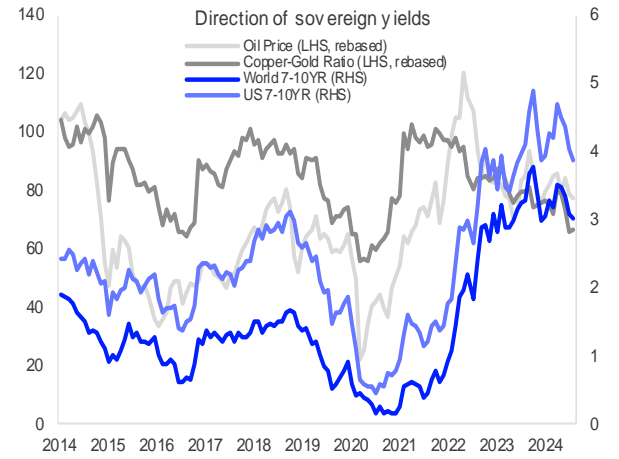


Chart 3: Forward valuation & real long yields have historically inversely tracked one another but have diverged since the late-2022 in the US; Valuations rose (> 10-year average) alongside rising real long yield.

Chart 2: Money supply (liquidity) has a positive correlation with equities. While Y/Y M2 in the US has turned positive again, equity returns have been far higher than the historical relationship would suggest.

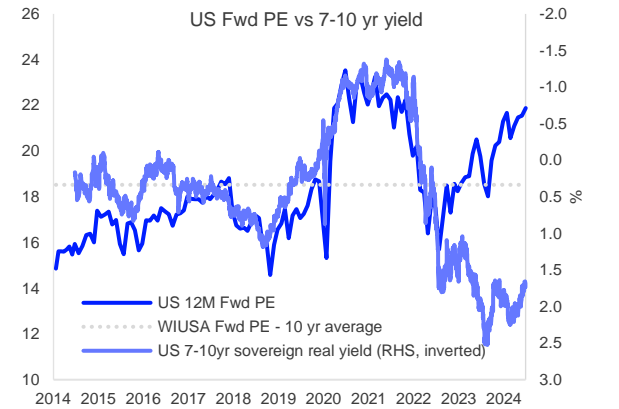
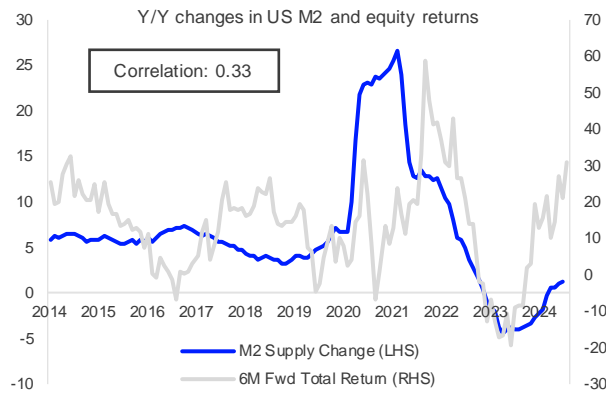
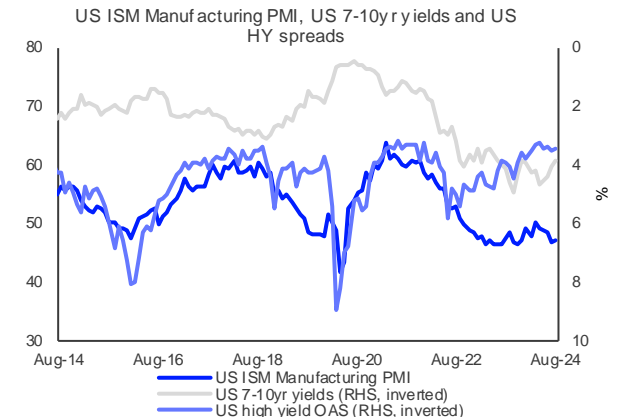
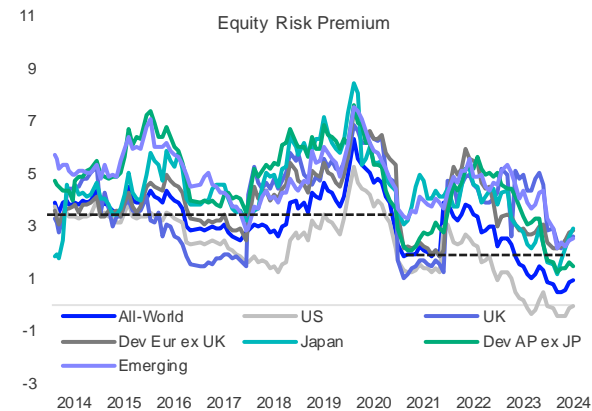


Chart 4: The equity risk premia (ERP) has declined globally to historic lows since Covid, with US ERP now negative. This indicates equities are relatively expensive. Falling rates have increased ERP recently.

Chart 5: The historical negative relationship between manufacturing PMI & high yield spreads have been broken for two years. History shows slower US growth may widen HY credit spreads by >200 bps.



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Sovereign Yield Curves

Markets and central banks shift from inflation concerns to slowing growth. The Fed joined peers globally with monetary easing. Yield curves bull steepened and dis-inverted. Yield dispersion across major economies could lead to continued volatility and divergence.

Global 7-10-year nominal yields fell over 3M, driven by both real yields (more so in the US & Canada) and prospects of lower inflation (more so in Germany & the UK). The yield curve dis-inverted globally over 3M, helped by sharper falls in 1-3-year yield and a bull steepening. This curve movement was led by the US, and less so in Germany. Movements in US 10-year yields since Q2 show the market front-running expected Fed rate cuts. JGB yields fell more in 7-10-year yields than in shorter and longer ends, resulting in 10s/2s curve flattening and 20s/10s curve steepening.

The US Fed started rate cuts with a 0.5% reduction in Sep, on account of the progress on inflation and the balance of risks to inflation and growth, lagging the BoC & ECB (very unusual for the US Fed not to be the first mover). The Fed Dot Plot shows deeper cuts, but Powell also signalled the easing process to evolve gradually and more as insurance. Market expects Fed Funds rate to ultimately drop to ~3%, a lower trough than the ~4% expected a few months back (Chart 5).

Chart 1: Across G7 countries, yield curves are dis-inverting as actual and expected rate cuts get priced in by bull steepening. Historically recessions happen just when the yield curve moves from inversion to a flat slope.

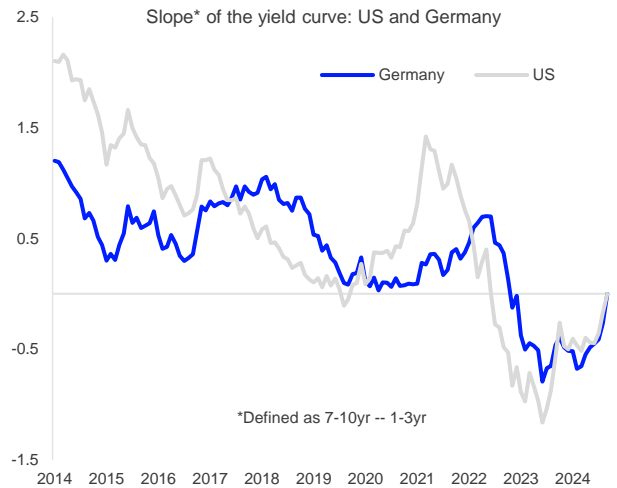


Chart 3: US easing cycle started in September with a deeper than usual 50 bps. The Dot Plot (as of Sep 18) shows deeper rate cuts for 2024, projected Fed funds rate of 4.4% at year-end (vs 5.1% projected in June).

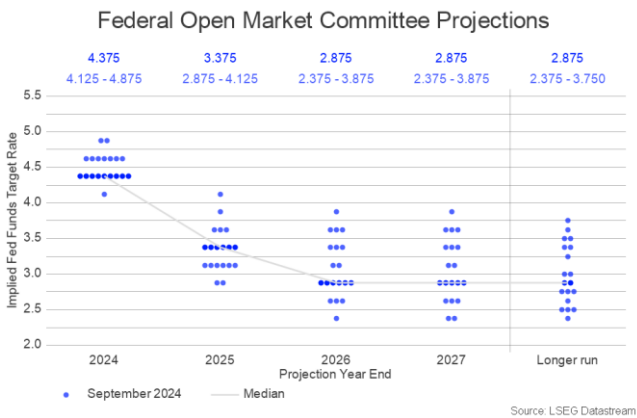


Chart 5: Market expectations price in rate cuts from September, alongside deeper rate cuts in total. The trough of rate trajectory is pulled lower to 3% (vs. 4% forecast in May) and is in-line with Fed neutral rate.

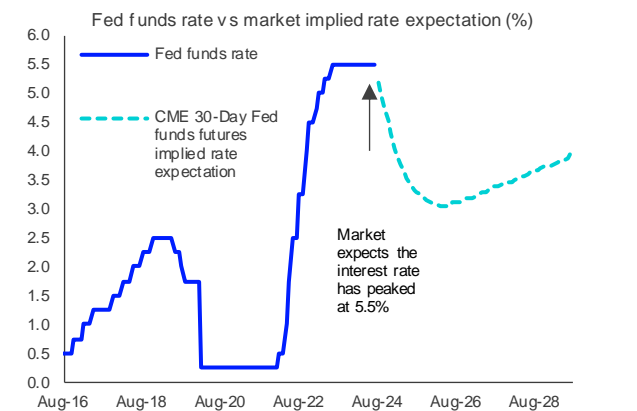


Chart 2: G7 7-10-year yields fell in the last 3M, led by the US, and including Japan. Yield decreases were driven more by real yield in North America, while more by inflation expectation in Europe.

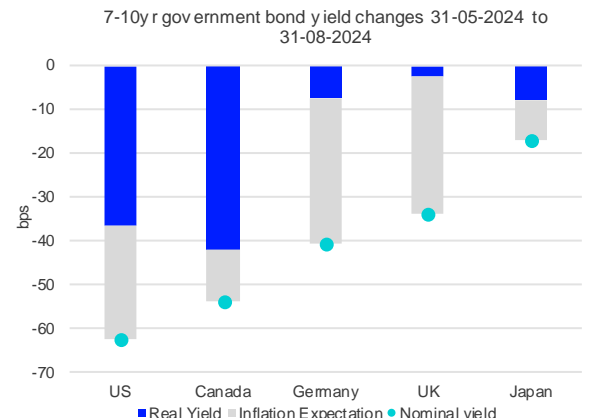
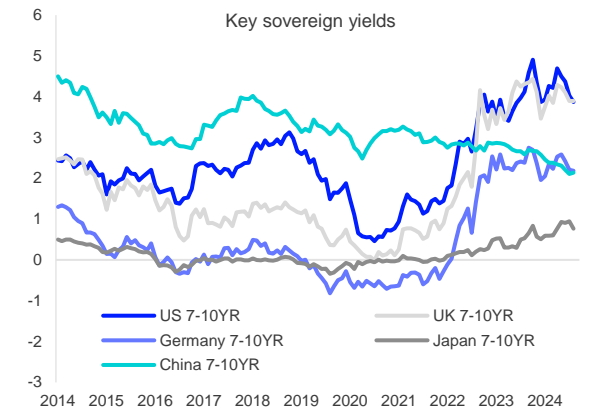


Chart 4: G7 yields are falling from 16-year highs as inflations falls & an easing cycle unfolds. China remains uncorrelated to DM & Japan is past the negative rate era. Divergence across major countries is noteworthy.



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Credit

Credit posted strong returns in the last 3M, alongside sovereigns. HY credit spreads tightened in Euro & EM but stabilized in the US. The risk rally over last 12M seen in the compression in EM HY & BB - BBB spreads.

BB vs BBB spreads have fallen back close to pre-Covid lows, suggesting high risk appetite. Spread of CCC vs BB has narrowed from the peak in November 2022, indicating default risk concerns remain low, although higher than 2021 lows.

EM HY led broad credit gains YTD & over 12M. All parts of Credit had strong performances in the last 3M (4.3-4.9%). World HY continued to outperform World IG over 12M & YTD, though the return gap narrowed over 3M. In Q3, spreads in World IG widened (8bps), in HY narrowed (7bps). Marginal spread movement differences, alongside higher duration and country composition (currency effects) in IG led to similar 3M USD measured performance across IG & HY. Stronger returns in HY relative to IG in 12M reflects the 2023-24 risk rally.

Recent trend of tighter credit spread has stalled in the IG universe across the globe, with spreads widening modestly in last 3M. But spreads continued to narrow in Euro HY & EM HY, while US HY spreads changed little. EM credit spreads are approaching global peers quickly, more so in HY than IG.

Chart 1: Credit spread between BB and BBB has narrowed to its lowest level since Covid, implying increased risk appetite. Spread between CCC and BB has also tightened modestly since the November 2022 peak.

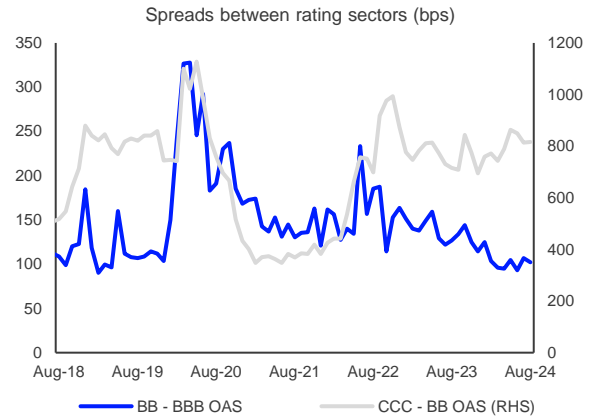


Chart 2: Credit spread narrowing stalled in the IG space globally over 3M. But it continued within Euro HY and Emerging HY.

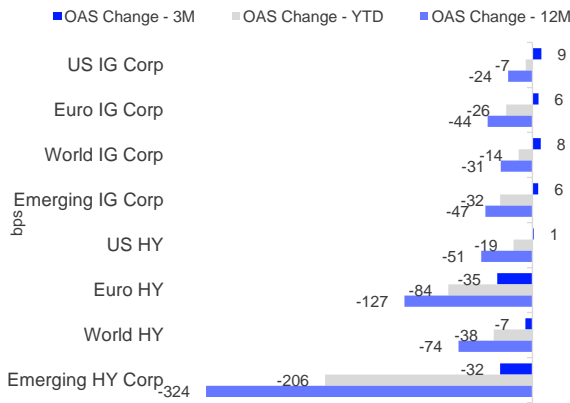


Chart 3: Credit returns of 4+% were seen across IG and HY corporates in the last 3M, boosting 12M returns, which reflect the risk-on rally.

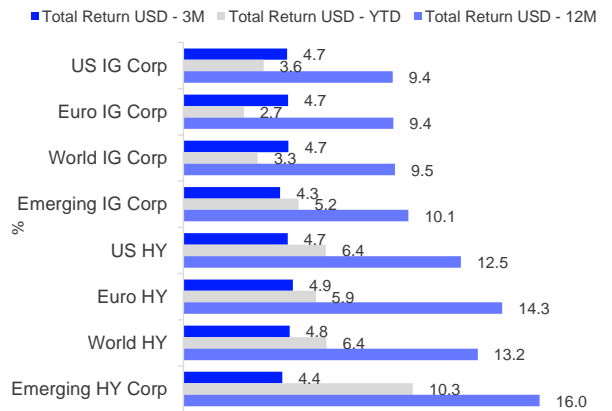


Chart 4: IG corporate spreads widened very modestly over 3M, with US IG spreads (97bps) just back to pre-Covid lows (98bps). Emerging IG spreads tightened most YTD (by 32bps), closer to World IG spreads.

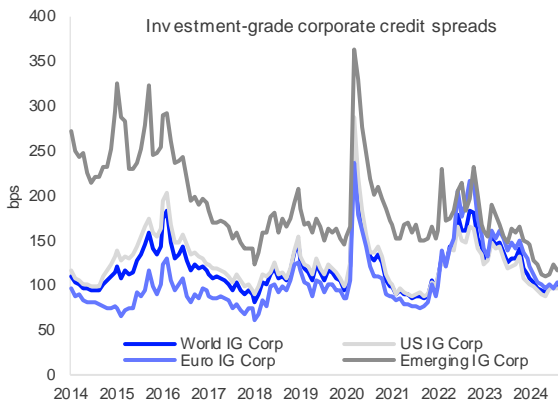
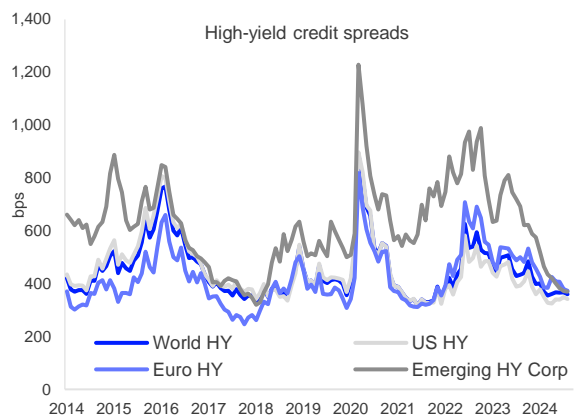


Chart 5: EM HY corporate spreads have narrowed much more than peers YTD (206bps), now even lower than Euro HY spreads (tightened by 84bps YTD). Spreads barely moved in the US HY over 3M.



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Credit (Continued)

IG valuations are lower than HY, while sovereign and corporate (within IG) valuations converge. Euro valuations remain attractive relative to richly priced EM and US.

Valuation spread percentiles indicate Euro bonds continue to have the lowest valuation in both IG & HY (Chart 2), although the valuation has become cheaper for IG but more expensive for HY, vs 3M ago. Cheaper valuations has historically led to higher returns (Chart 1), boding well for Euro bond returns. EM corporates show the highest pricing in the last 10 years.

Spread percentile (10-year history) for World IG corporates (23rd percentile), World HY (17), World IG (23): indicate similar valuation in sovereigns & corporates within IG, and better in IG than HY. Duration risk-adjusted yields remain higher for EM and Euro bonds than for US (Chart 3). However, considering the credit risk, Euro bonds currently offer the highest risk-adjusted returns.

NY Fed's Corporate Bond Market Distress Index (CMDI) eased YTD, driven by IG. But the sub-index of HY increased in August, reaching a YTD high (early sign of distress?). CMDI levels are at similar (low) levels for both IG and HY, suggesting still healthy corporate bond market functioning,

Chart 1: US HY 1Y forward return by spread quintiles (since 2001) indicate lower valuation led to higher returns. Spreads have stabilized at quintile 1 in 2024, during risk-on phase, suggesting lower future returns.

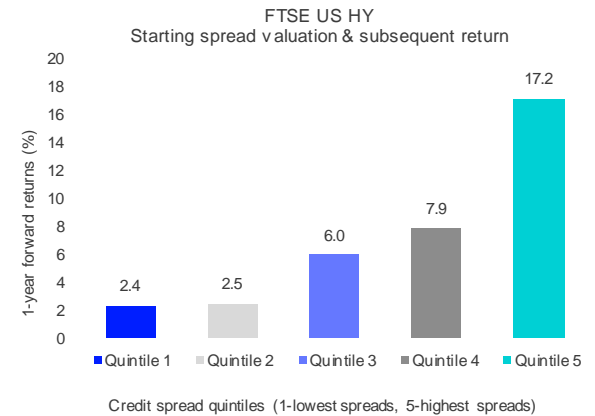


Chart 2: Euro corporate bonds have more attractive valuations than peers in both IG & HY (relative to peers, Euro IG cheapened further in last 3M). EM corporates are most richly priced, followed by the US.

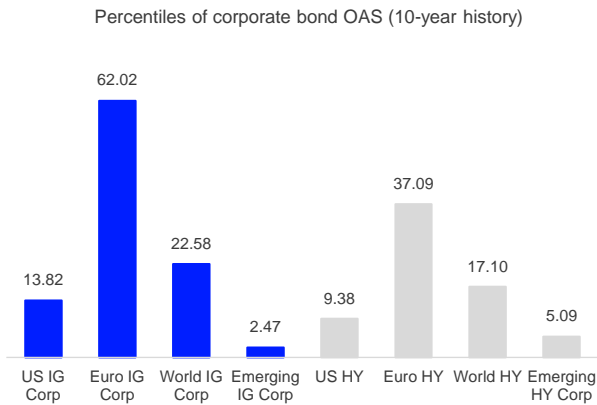


Chart 3: Return per unit of duration risk is highest in emerging markets (for both IG & HY) & slightly higher in Europe than in the US. This risk-return ratio has decreased for all corporates, compared to 3M ago.

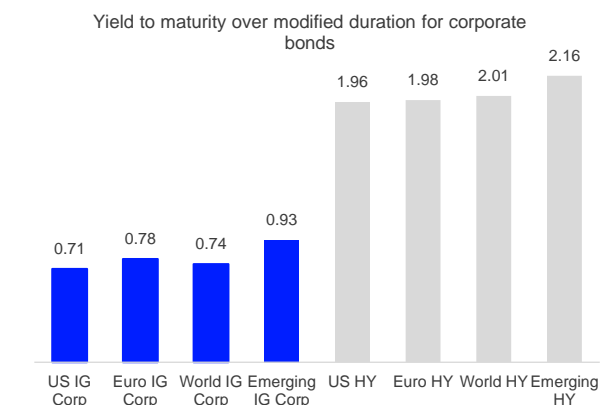


Chart 4: Market CMDI bounced back to 0.14 in August, from 0.09 in May, mainly driven by HY (reaching a 2024 high of 0.15). IG index is now on par with HY, after almost three years of being higher than HY.

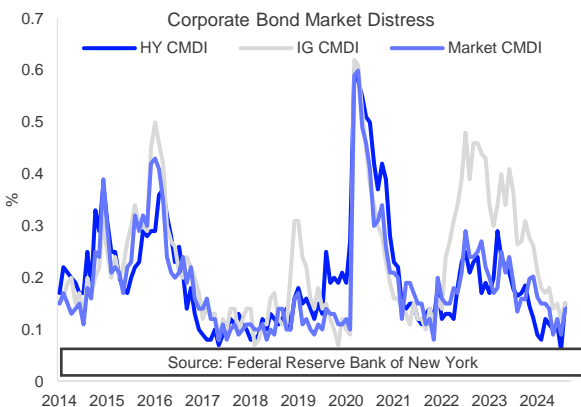
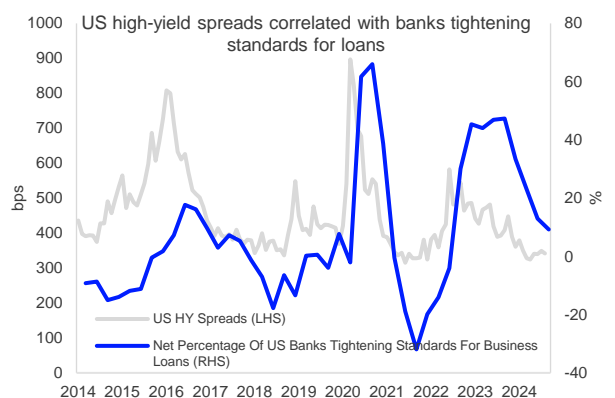


Chart 5: US lending conditions have continued to ease into Q3 2024, while US HY spreads stabilized at ~340bps, tighter than liquidity would argue for. YTD downward trend is consistent between the two though.



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Equities

US equities continue to outperform, while improved growth in the UK supported returns. China has underperformed. There are important shifts hidden by headline returns.

Global equities yielded positive returns in the last 3M despite market turbulence around growth fears. The US has outperformed peers, while Developed Europe ex-UK & China have underperformed. YTD & 12M, US equities have sustained their lead (Chart 1). EM posted positive returns largely on the back of the rally in Asian markets, and UK equities were boosted by improved growth in Q2. Chinese equities performed the worst, with losses in both 3M & 12M.

Realized equity volatility declined over 3M & YTD (Chart 2). Realized 2024 volatility in China was 1.8x that of other regions.

The excess valuation of US equities relative to World ex US fell, while Emerging Markets saw improved valuations relative to Developed, since early 2024. (Chart 3).

The outperformance of Developed Growth over Value was more pronounced than that of Large Caps over Small Caps in the past decade, a trend that has persisted into 2024 (Chart 4).

Some notable recent shifts belie the headlines; cyclical fell vs defensive industries over the last 3M (Page 9), while the large cap outperformance reversed in July-August (Chart 5).

Chart 1: Over 3M, US equities led performance and maintained their year-to-date and 12-month leadership. Meanwhile, China experienced a pullback, and Developed Europe ex-UK underperformed.

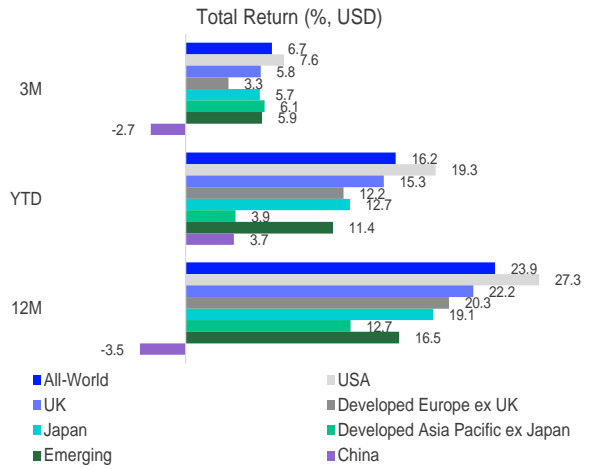


Chart 3: Since early 2024: US equities are more attractively valued relative to the FTSE All World ex US, while Emerging Markets have seen improved valuations (relative to Developed).

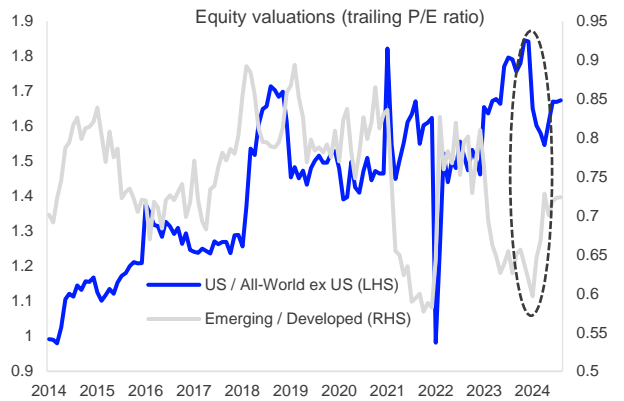


Chart 5: Large caps have been outperforming small caps consistently for some time (Chart 4). However, in a shift in tenor in recent months, US large caps have underperformed US small caps in July-August

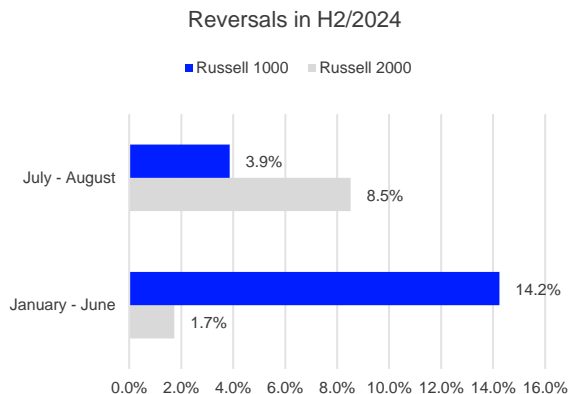


Chart 2: After a spike in 2023, realized volatility has declined in 2024, including in the last 3M. China has the highest volatility across regions. Average volatility in China in 2024 is 1.8x the average for other regions.

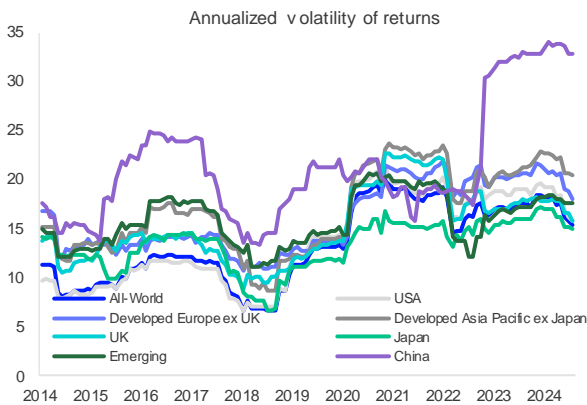
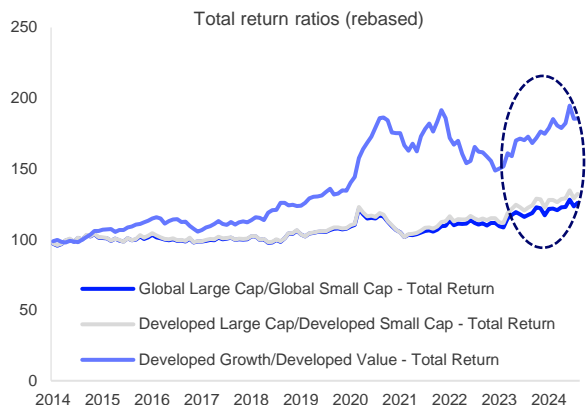


Chart 4: Developed Growth stocks have outperformed Value stocks more than Large Caps have outperformed Small Caps, a trend continuing into 2024.



Source: FTSE Russell/LSEG. All data as of August 31, 2024. Past performance is no guarantee of future results. This report should not be considered "research" for the purposes of MIFID II. Please see the end for important legal disclosures. Results in this report are for research / illustrative purposes and do not represent the official performance of the indices.

Equities (continued)

Amid growth uncertainty and monetary easing, rate-sensitive and defensive industries outperformed in Q3. US, Japan & EM forward valuations now exceed 10-year averages, while earnings growth has slowed and earnings revisions turned negative for Europe and parts of Asia.

Real Estate and Health Care were the best performing All-World industries over 3M. Basic Materials and Energy have underperformed (Chart 1). Technology stocks enjoyed favorable valuations across most regions, while Energy and Financials valuations lagged (Chart 2).

In Q3, two-year forecast earnings growth has declined in the US and the broader Developed and Emerging regions, resulting in lower year-to-date figures, except in Emerging Markets (Chart 3). Also, 12-month forward EPS estimate revisions have turned negative in Europe and APAC ex-Japan, and are now trending lower in Japan, following an increase within the last three months (Chart 4). US equities continue to trade at forward valuations distinctly exceeding their 10-year averages, in contrast to other regions, which have reverted to valuations broadly in line with their historical norms (Chart 5).

Chart 2: Technology have higher valuations across most regions, while Energy and Financials ranked lower.

	All-World	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging
	17.8	21.9	13.0	14.4	14.3	12.5	12.5
Basic Materials	14.8	20.6	10.9	16.1	12.4	14.2	10.7
Consumer Disc.	19.5	26.4	18.7	13.8	11.7	9.9	13.8
Consumer Staples	17.9	18.0	18.1	17.3	18.8	14.3	19.0
Energy	11.0	12.7	8.4	8.3	8.4	10.7	9.8
Financials	11.7	15.8	8.5	9.1	11.1	11.8	8.5
Health Care	20.5	20.4	16.3	19.7	28.8	35.5	23.5
Industrials	19.0	21.9	19.0	17.4	15.1	13.9	14.8
Real Estate	22.6	38.0	17.9	14.3	13.7	15.1	9.6
Technology	25.5	27.6	24.6	25.5	20.7	9.5	16.9
Telecoms	13.3	12.5	9.4	15.2	17.7	10.4	18.8
Utilities	15.6	18.4	13.0	12.7	7.9	13.8	13.4

Chart 4: 12M forward EPS estimate revisions turned negative for Europe and APAC ex-Japan. They fell substantially for Japan but remain slightly positive in both the US and Japan.

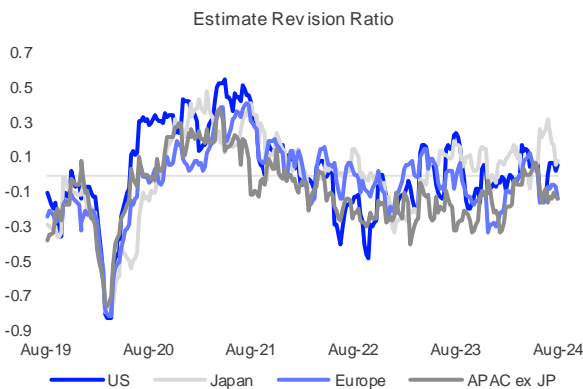


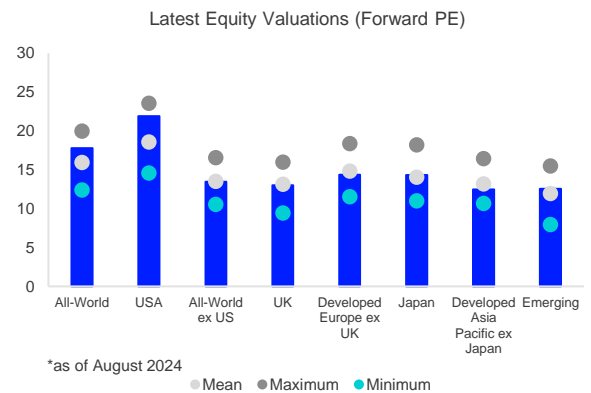
Chart 1: In the last 3M, rate-sensitive and defensive have outperformed amid growth uncertainty and expectations of central bank cuts. Developed APAC ex Japan & the UK had the highest dispersion among industries.

	All-World	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging
Index Return	6.7	7.6	5.8	3.3	5.7	6.1	5.9
Basic Materials	-1.0	3.0	-9.4	-1.0	8.3	-9.5	-4.2
Consumer Disc.	4.1	5.9	7.4	-3.3	1.6	3.7	2.8
Consumer Staples	6.6	6.9	13.3	2.0	9.1	9.4	3.1
Energy	-0.1	-0.4	-2.9	-3.4	3.8	-2.0	3.5
Financials	8.6	10.6	6.1	3.6	2.2	10.3	9.6
Health Care	11.7	10.8	10.0	12.7	20.1	17.7	11.5
Industrials	5.8	7.7	6.0	1.4	5.3	9.2	0.9
Real Estate	12.3	15.7	2.2	7.4	11.6	9.1	0.4
Technology	6.9	7.0	4.8	1.3	4.4	-0.7	9.1
Telecoms	9.3	9.2	9.0	12.2	11.7	6.5	10.4
Utilities	5.9	5.7	15.3	6.0	-2.7	8.6	3.0
Range	11.4	16.0	24.8	16.2	22.7	27.2	15.6

Chart 3: (IBES) 2Y earnings growth forecasts (%) declined over 3M in the US and in the broader Developed & Emerging markets. Slower earnings growth is in line with slowing macro growth.



Chart 5: US, Japan and Emerging are trading at forward valuations greater than their 10Y mean. Developed Asia Pacific, Europe and the UK are trading at a slight discount to their 10Y averages.



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Market Impact of US Elections

US elections hold significant global importance as the US equities holds the largest influence in the FTSE All-World Index (62.7% weight), and the US dollar remains the primary reserve currency for central banks. US large-cap returns are typically higher in 3M post-election than pre-election (Chart 1). Meanwhile pre-election volatility is more pronounced and typically dips post election (Chart 2). The first year of a presidency tends to yield stronger returns compared to other years, driven by reduced uncertainty and increased policy impact. These data points imply optimism for equity markets once the US elections are over in November 2024.

Macro indicators and market returns, on average, exhibit differences between parties in presidential power (Chart 3,4,5,6) though returns are significantly impacted by monetary policies, which are independent of Presidential elections.

Chart 1: 3M prior to US elections have seen lower annualized returns compared to 3M post-election periods. The first years after elections have generated the best returns on average since 1980.

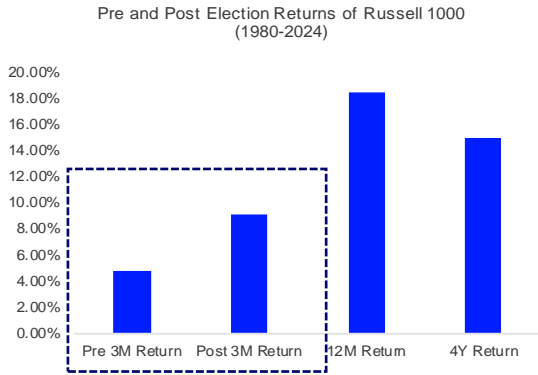


Chart 3: US Large-caps have mostly outperformed small-caps since 1981. Equities (large & small) have outperformed, on avg, under Democratic presidents, and the outperformance was more pronounced for large caps.

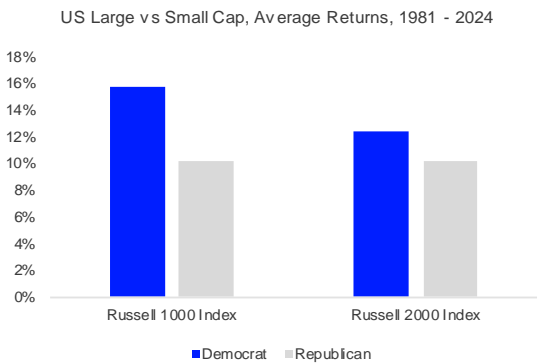


Chart 5: Real GDP growth was marginally (approximately 35bp) higher on average under Democratic administrations, and the US dollar has shown stronger performance under Democratic administrations.

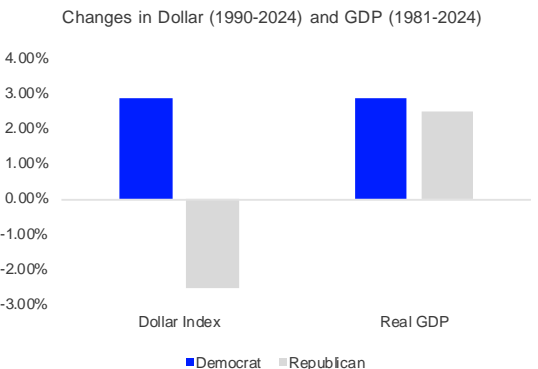


Chart 2: In a sign of decreased uncertainty post-elections, the RVX (small cap implied volatility), has edged lower on average, following the last three elections (2012, 2016, and 2020).

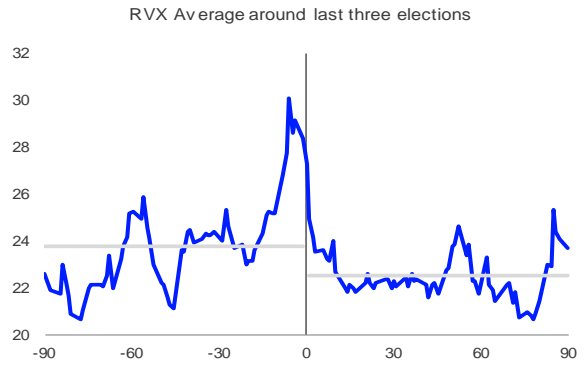


Chart 4: Emerging Markets have performed better during Republican administrations, while Developed markets have outperformed during Democratic administrations.

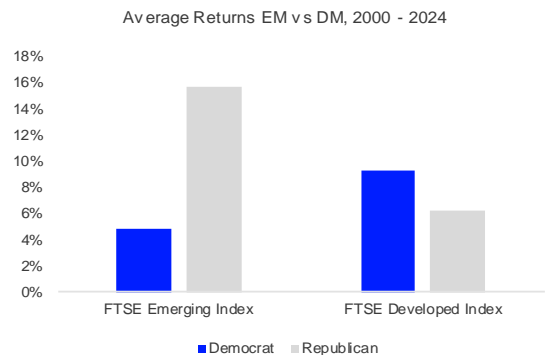
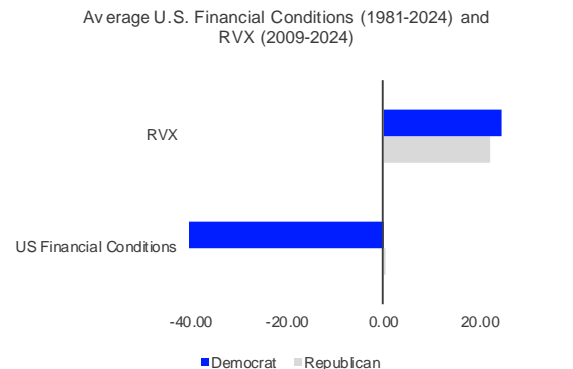


Chart 6: US financial conditions (NFCI, Chicago FED) have been looser under Democratic administrations since 1980. However, since 2009, RVX has been higher on average during Democratic administrations.



Source: FTSE Russell and LSEG. All data as of August 31, 2024. Past performance is no guarantee of future results. This report should not be considered 'research' for the purposes of MIFID II. Please see the end of the report for important legal disclosures. Bond market data is derived from FTSE Fixed Income Indices. See Appendix for list of indices used for each market.

Emerging Markets

Emerging Markets are expected to outgrow DM by wider margin. Wide divergence in equity returns within EM, with India & Taiwan outperforming DMs in 3M & YTD. Capital is flowing back into China and Yuan appreciating.

EM macro growth continues to outpace DM, and the economic growth gap between EM and DM is expected to widen in 2024, boosted by growth forecasts for China and India. Capital flows into Chinese government bonds showed some signs of foreign interest recovery in last 12M with China-US yield differentials expected to narrow (Chart 2). Indian bonds have become attractive for international investors due to growth prospects, relatively high yields, and bond inclusion events. In equities, India posted stronger returns than peers over 3M, although Taiwan led YTD returns on tech gains. Chinese equities underperformed.

EM currencies have shown mixed trends. Rate differential again proved a vital driver of currency movement, as both Mexican peso and Brazilian real lost ~14% YTD, as their central banks cut rates in advance of the Fed. Other factors such as unwinding of carry trades after an increase in yen funding costs and political shock also weighed on the peso. Chinese yuan recovered moderately over 3M, with rate differential on track to revert.

Chart 2: Foreign holdings of CGBs had been rising when Chinese yields were higher than the US (2019 - Jan 2022), and vice versa. Monthly inflows over 12M turned positive as yield differentials narrowed.

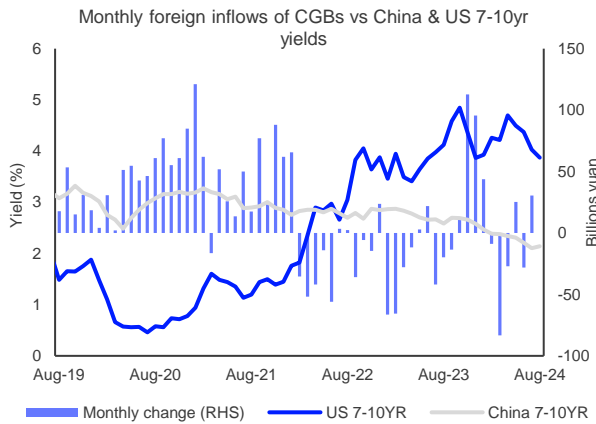


Chart 4: Chinese spreads vs the US backed up due to lower US yields, starting to move in favour of a lower USD/CNY exchange rate. Chinese yuan strengthened by 2% against the US dollar in August.

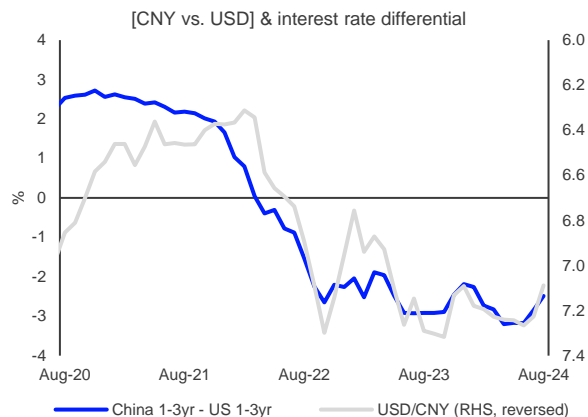


Chart 1: EMs have been growing faster than DMs, and the IMF's 2024 growth forecast for EMs was revised upward to 4.3% in July, led by India and China, vs no change for DMs at 1.7%.

GDP Growth	EM	China	India	Brazil	Mexico	DM
5-year annualized (2019-2023)	3.3	4.9	4.1	1.7	0.7	1.4
2024 forecast as of July	4.3	5.0	7.0	2.1	2.2	1.7

Chart 3: India & Taiwan (combined 44% of EM's market cap) have significantly outperformed DM over 3M and YTD. Top-weighted China (27%) posted losses over 3M, driving EM underperformance vs DM.

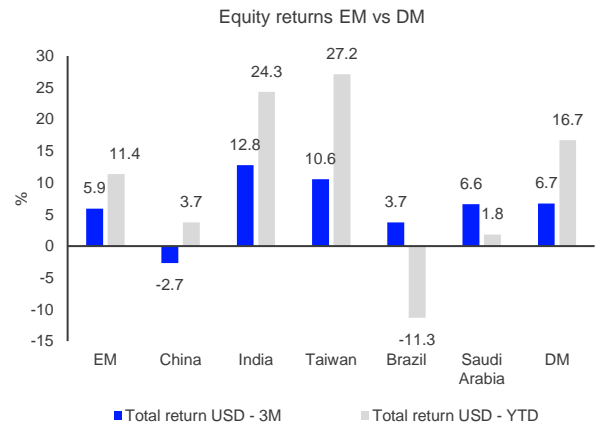
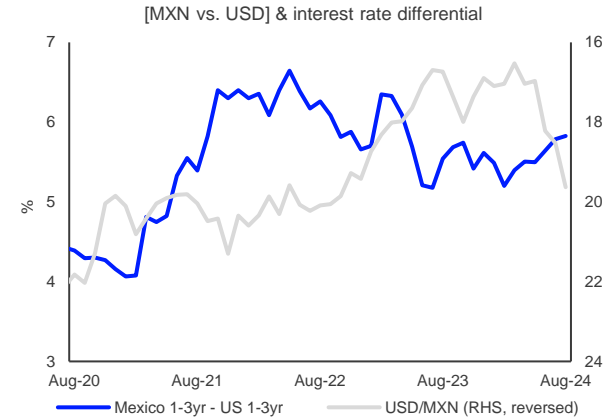


Chart 5: The Mexican peso depreciated by 13% vs the US dollar over 3M due to weaker growth outlook, interest rate cut, political uncertainty, and the unwinding of carry trade.



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Commodities

Forward & forex markets indicate expectations of lower commodity prices, weaker economic growth, and heightened geopolitical stress & economic fragmentation.

The broad commodity index is up 4.8% YTD. YTD, oil (+1.5%) and copper (+7%) returns have diverged with copper doing better since it is a structural play on green transition (Chart 2).

In Q3, the overall commodity index, copper & oil are all down (-1.5%,-8.8%,-3.6% resp.). Crude forward curve indicates oil is expected to settle in the mid 60's/barrel, down sharply from prices in recent years (Chart 1). Currencies of commodity exporters in Q3 have underperformed those of importers, a sharp reversal from trends earlier in the year (Chart 5). Together, they indicate expectations of slowing growth.

Expectations of slower economic growth & weaker commodity prices are reflected in the relative performance of commodities vs equities, which has been losing momentum since the late 2023.

Gold is a clear winner YTD, last 12M (Chart 2) & up 7.6% in 3M. Record EM central bank gold purchases since 2022 (World Gold Council, Chart 3), recent lower interest rates, geopolitics, de-dollarization and economic fragmentation have contributed to drive gold prices to new highs.

Chart 1: WTI forward curve has moved down in 2024, and the price/barrel is now expected to stabilize to ~USD mid 60's by end-2024 plus. Lower oil price expectations indicate expected slower growth.

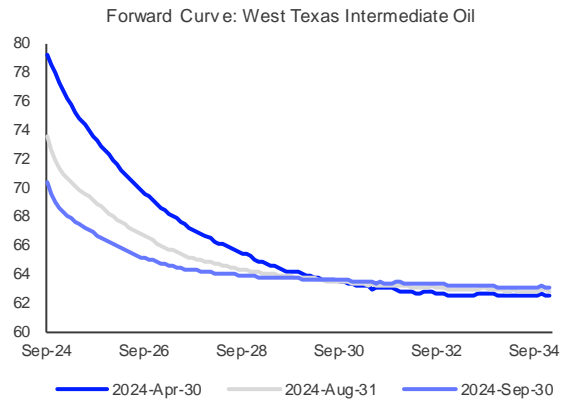


Chart 3: The sharp increase in gold purchases by many central banks, notably in EM, has underpinned the gold price increases, reflecting geopolitical stresses, de-dollarization and economic fragmentation.

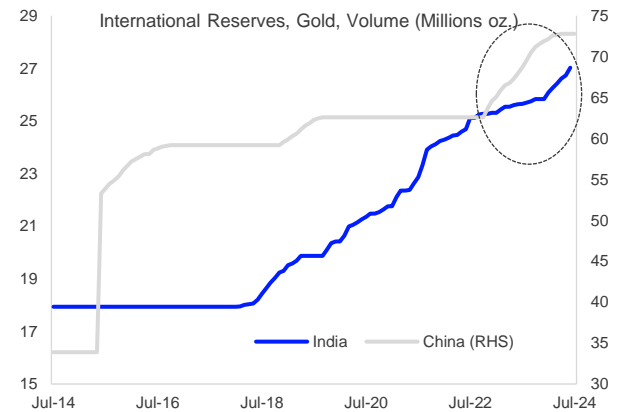


Chart 5: Currencies of commodity exporters have underperformed vs importers (relative to US dollar) in the last 3M. YTD saw a similar trend. This was a reversal of the trend in most of 2023 and earlier in 2024.

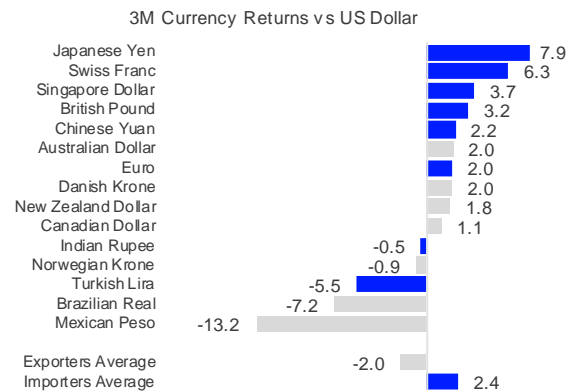


Chart 2: The diversified Commodity Index is up 4.8%, copper 7%, and crude by 1.5% YTD. Copper benefits from structural trend of green transition, while oil is a cyclical story. The real winner is Gold, up 21.4%.

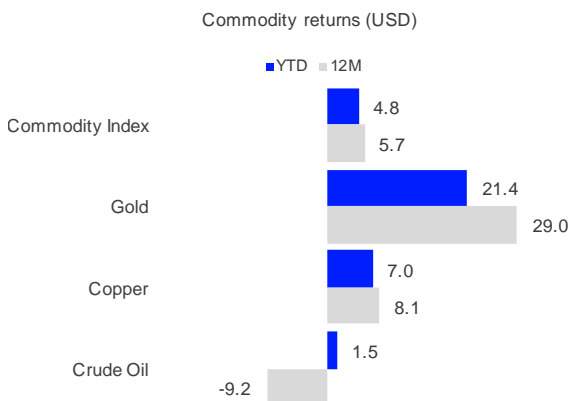
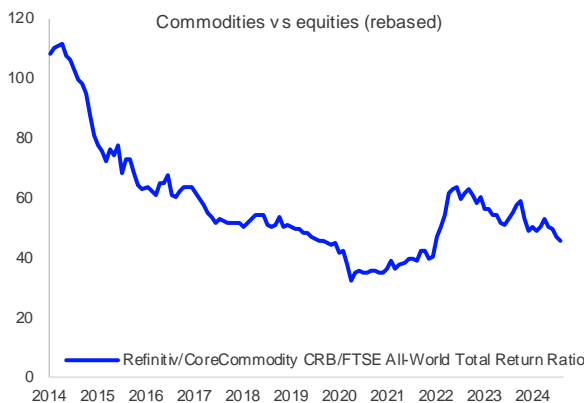


Chart 4: The commodities vs equities returns are higher than the Covid lows (reversing a long-term trough). But they have underperformed equities since end 2022, and sharply so since Q4 2023.



Source: FTSE Russell/LSEG. All data as of August 31, 2024 (Gold purchase data as of July 2024). Past performance is no guarantee of future results. This report should not be considered "research" for the purposes of MIFID II. Please see the end for important legal disclosures. Results in this report are for research / illustrative purposes and do not represent the official performance of the indices.

Real Assets: Listed Real Estate and Infrastructure

Returns for real estate turned positive in Q3, benefiting from falling yields, while returns in infrastructure remained strong. Infrastructure has been better to capitalize on the faster EM macro growth than equities.

The rate sensitive listed real estate (LRE) was up strongly in the last 3M (13.4% in DM), benefiting from monetary easing and falling long yields in most DMs. As a result, the LRE return (13.4%) was higher than listed infrastructure (8.9%) in Q3 (Charts 1 & 4), and outperformed equities in most markets (Chart 3). All sectors of LRE were positive, notably Self Storage (Chart 1). These Q3 trends contrast those seen earlier in the year, and could indicate a turning point for real estate in this business cycle. Listed infrastructure continued to do well with healthy returns in last 3M & 12M. In a reversal of recent trends, infrastructure did better in DM than EM in the last 3M. Given the heavy weight of US in the DM index, the large spending under (US) Infrastructure Act may be having an effect.

With >50% weight of the global index being in Railroads & Electricity, global infrastructure is a play on underlying economic growth. Infrastructure might be a better asset class than equities to capitalize on the faster economic growth in EM (Chart 5).

Chart 1: Falling yields in Q3 have helped the rate-sensitive listed real estate. The Developed market index was up 13.4% and all sector returns were positive. Self Storage & Speciality did the best.

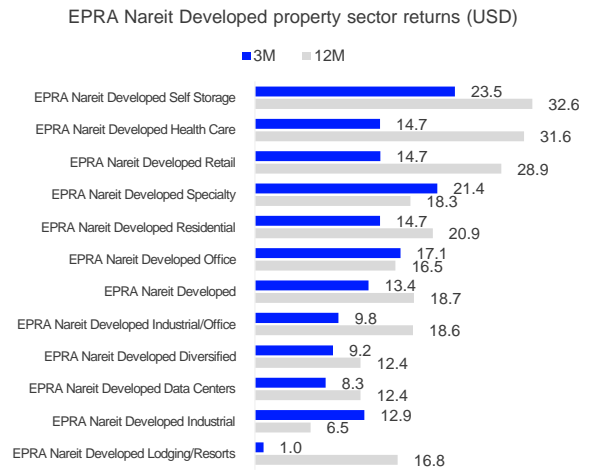


Chart 3: LRE outperformed equity in Q3 in most major markets (except UK & EM), while over 12M, it did so only in continental Europe, a shift in relative performance worth keeping an eye on.

Chart 2: US listed real estate outperformed in Q3, and in Europe over 12M. The performance was weakest in EM. In most markets, the annualized return in Q3 was > than the returns in the last 12M.

FTSE EPRA Nareit Global Real Estate returns (USD)

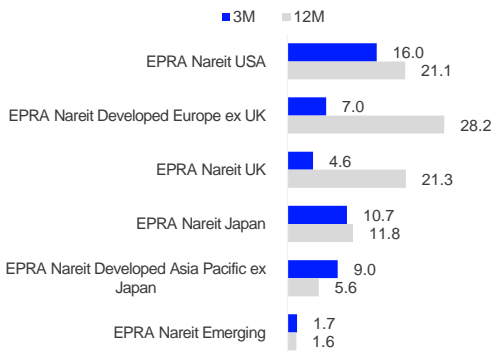


Chart 4: Infrastructure posted gains in the last 3M & 12M. It did better in EM over 12M and in DM over 3M. The US is heavily weighted in the DM and Global index, and its recent infrastructure spending is noteworthy.

FTSE EPRA Nareit Global Real Estate returns relative to equity (USD)

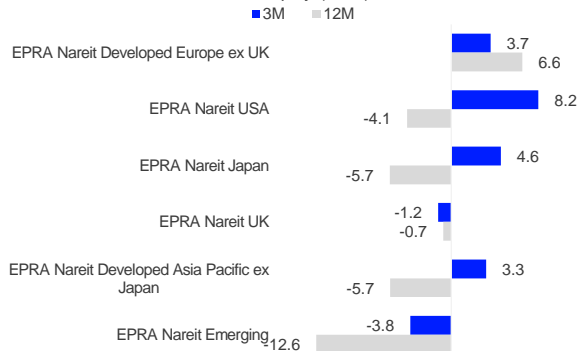
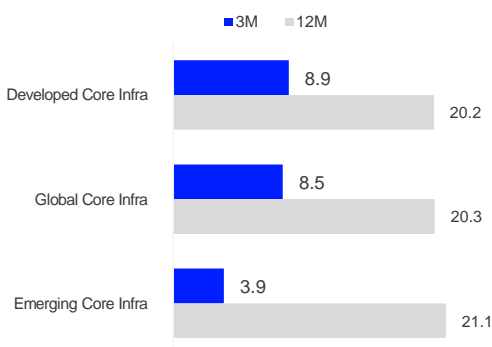
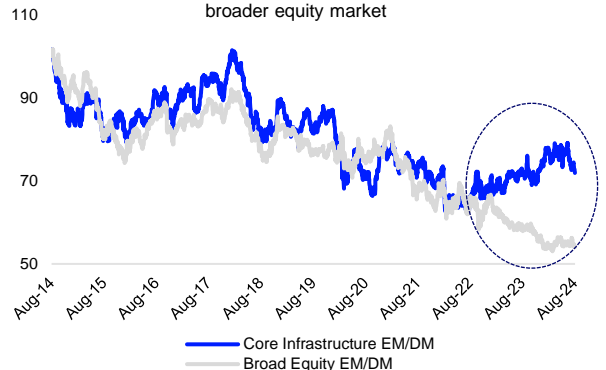


Chart 5: EM Infrastructure has outperformed DM since mid-2022. It is noteworthy that the performance of EM listed Infrastructure is flat, while it underperformed DM in equities.

FTSE Core Infrastructure returns (USD)



EM/DM performance ratio - core infrastructure vs broader equity market



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Currencies

FX moves over 3M were dominated by the expectation of Fed's rate cuts (which started only in September), with major currencies appreciating against the US dollar (led by the yen) as rate differentials vs the US ticked up.

The trade-weighted US dollar edged lower to 127 vs 130 3M ago, while staying ~4% higher than its 10-year average. The US dollar weakness was mainly due to the Fed policy pivot, as the focus shifted from controlling inflation to maximising employment, given the increase in unemployment rate and lower wage growth. The US dollar may fall further from here, as the Fed just joined G7 easing cycle, lagging the ECB, BoC, and the BoE. A weaker dollar is in line with the long-term mean-reversion, longer term de-dollarization trends and increased central bank gold purchases suggest.

Short-term interest rate differentials are a key determinant of currency values (Charts 2-5), particularly in periods of volatile interest rates, e.g., this easing cycle in 2024. The yen (+7.9%) gained more than sterling (+3.2%) and Euro (+2%) over 3M, as US-Japan rate differentials have been driven by expectations of widely divergent moves by central banks (Fed easing, while BoJ on hold or hiking). The Australian dollar strengthened by 2% vs the US dollar, given rate differentials moved in favor of a higher AUD (continuing inflation concerns in Australia).

Chart 2: The Euro appreciated by 2% over 3M, boosted by gains in August, paring its YTD loss. Germany-US rate differentials narrowed to -1.6%, leading the Euro to strengthen against the US dollar in Q3.

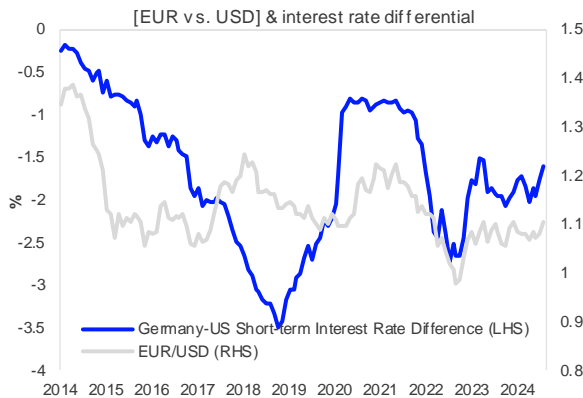


Chart 4: The yen recovered strongly over 3M, up by 7.9%, cutting its YTD loss to -3.2%. Japan-US rate differentials narrowed to -3.7%, on expectations of more rate hikes by the BoJ and rate cuts by the Fed.

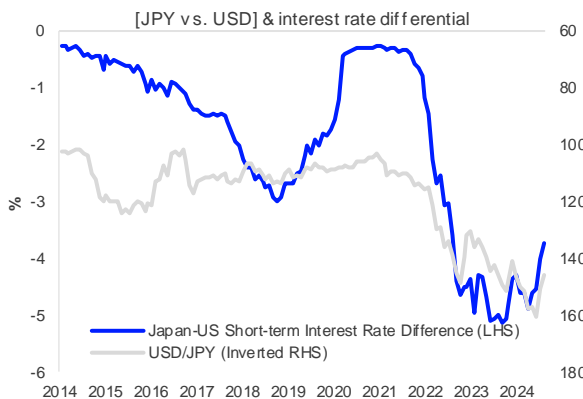


Chart 1: The trade-weighted US dollar weakened over 3M, despite a spike in June, as rate cut expectations firmed up in August on lower inflation data. It is now below the Oct 22 peak level, but slightly above the July 2023 low.

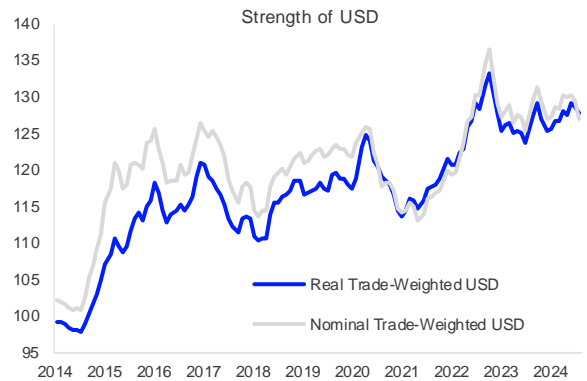


Chart 3: GBP strengthened by 3.2% vs USD over 3M, as UK-US rate differentials reversed from negative territory in August. 10yr trend suggests sterling has room to rise (notably if recent growth continues).

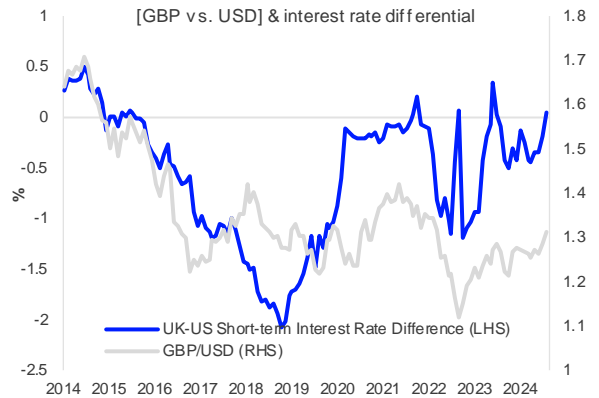
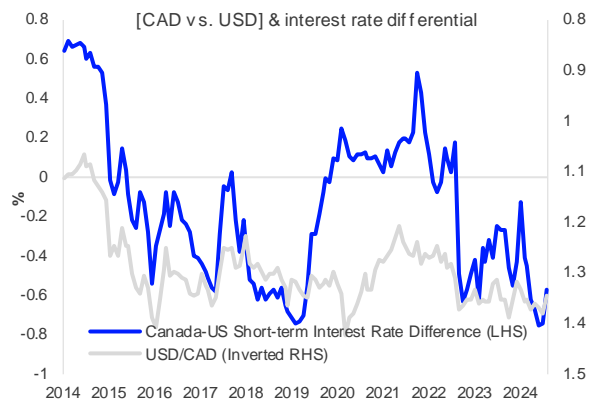


Chart 5: The CAD increased by 1.1% vs USD in 3M, boosted by August returns of 2.5%. Canada-US rate differentials also tightened over 3M, although the BoC started this easing cycle ahead of the Fed.



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Capital Flows

Fund Investors navigate uncertainty with caution

Since December, global fund flows have maintained strong positive momentum, driven by expectations of global rate cuts. Over the past 12M, money market funds have consistently attracted positive inflows, reflecting investor interest in high short-term rates. Bond funds have also experienced positive inflows, though the pace has recently slowed.

Investor preference for bond funds has been relatively balanced among Emerging Market, North American, and European funds over the last year. Recently, within the US, there has been a cautious shift towards US government, high yield and corporate bond funds.

Despite recent market turbulence, equity fund flows have remained resilient since April. North American and European equities have recently attracted increased interest, outpacing Emerging Markets in the short term. However, on a 12-month basis, Emerging Market fund flows still lead. Japan, too, continues to draw significant investor attention.

Within US sectors, Technology remains a standout investment option. Meanwhile, investors have been rotating out of sectors such as Healthcare, Consumer Staples, and Energy.

Chart 1: Over the past year, money market funds have consistently attracted positive inflows due to interest in higher short-term rates, while bond fund inflows have recently lost pace.

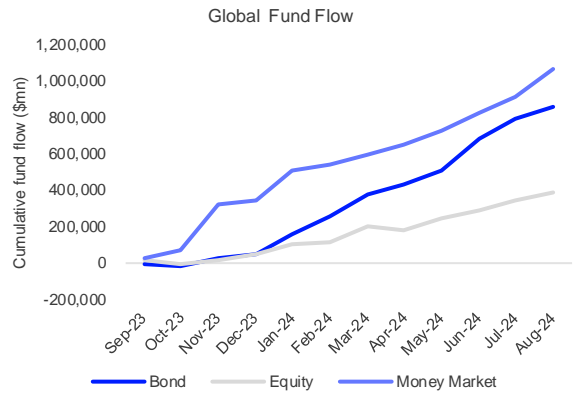


Chart 2: Positive 12M bond flows in all regions, with a sharp pick-up in flows into North America since November and into EM since May 2024.

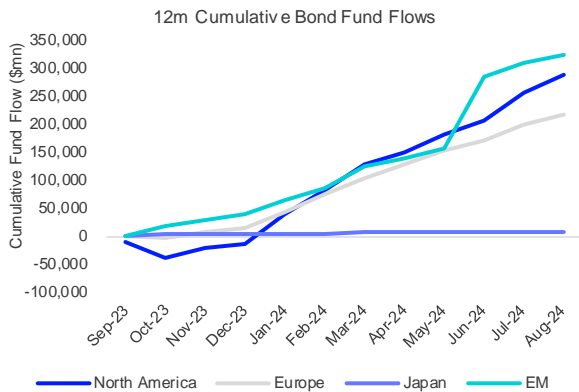


Chart 4: In the last 12M, US equity flows have been strongest in Tech, and weakest in rate-sensitive and defensive industries.

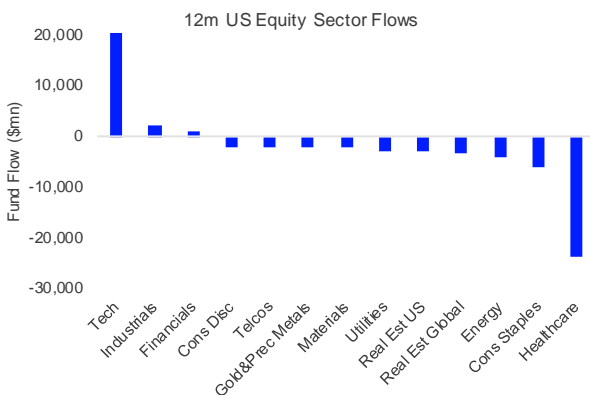


Chart 3: The last 12M equity flows reflect higher investor interest in EM and Japan, and strong inflows into US since November 2023.

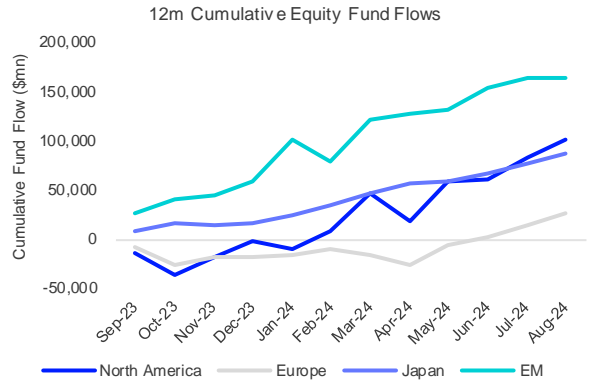
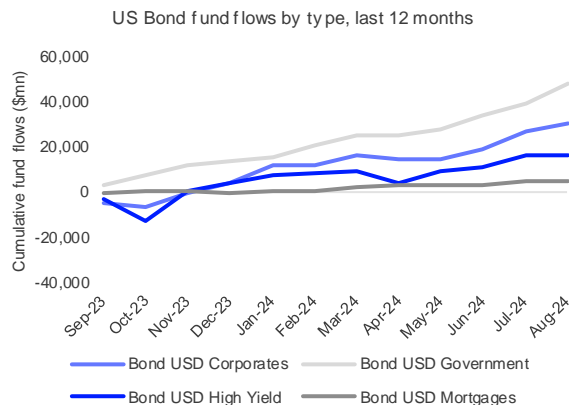


Chart 5: There has been a modest shift towards US government, high yield and corporate bond funds recently.



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Cross-Asset: Equities and Fixed Income

US bonds catching up with equities reduced the stock/bond ratio marginally, while stock valuation relative to the economy increased further in both the US and All-World. Below-50 PMI & compressed equity risk premium indicate correction risk for equities, especially in the US. Stock-bond correlation stays elevated post-Covid.

Stock valuation relative to the real economy showed the effects of US equity outperforming the world and US growth underperforming the world (mainly EM). The total stock capitalization/GDP ratio (macro measure of PE) rose further to 25%, above its 10-year average for the All-World and 31% for the US (Chart 1).

Stock valuation relative to bonds ended 3M modestly lower after a bout of risk-off in early August, including the bond rally. Lower PMI (47.2 in August vs 48.7 in May) and lower Fed's rate expectations indicate the potential for lower bond yields, and also implies downside risk to equities. The stock-bond correlation stayed above 0.8, but a growth slowdown and continuing lower inflation may lower the correlation and increase diversification benefit, as it did after the Covid shock.

The US equity risk premium hovered around zero in 2024, while HY spreads stabilized after falling (Chart 4). Charts 1, 2 & 4 indicate equities remain overvalued, more so in the US.

Chart 2: The widening gap between realized US stock/bond valuations & macro data stalled in Q3, as bond valuations caught up with equity on firmer lower rate expectation. While lower, the disconnect continues.

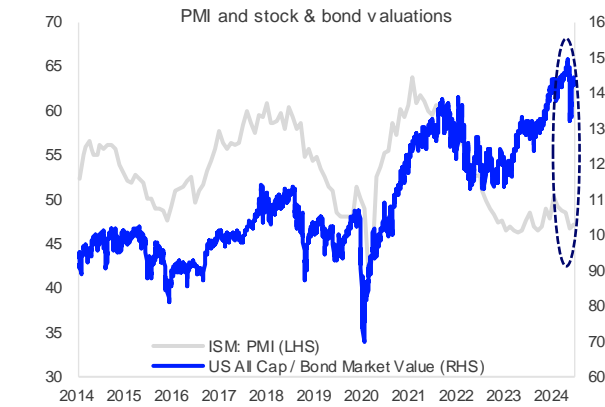


Chart 4: The US equity risk premium fluctuated between +/- 0.4% in 2024. US HY credit spreads tightened YTD with little move in Q3. The return from taking risk in US equities has fallen below that of US HY.

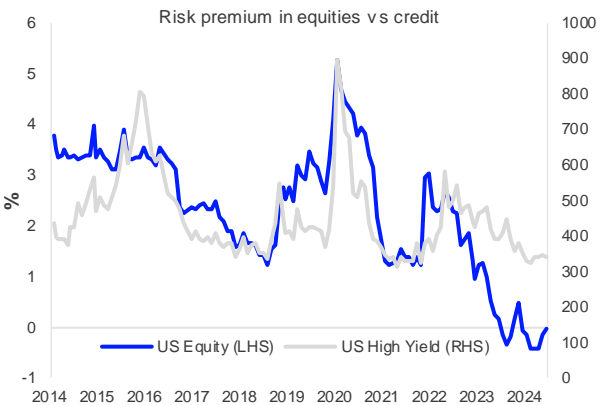


Chart 1: Market cap relative to the real economy continues to increase, with a steeper rise in the ratio for US than elsewhere, which is in line with the US equity outperformance vs the World YTD & over 12M.

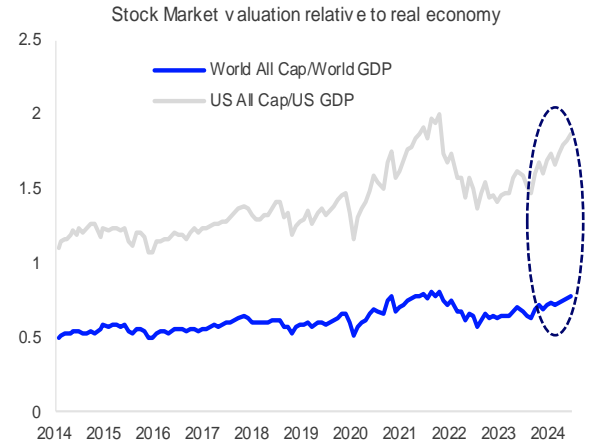


Chart 3: 12M rolling stock/bond correlation stayed at around 0.82, close to the cycle peak of 0.86 in March 2023. Expectation of bond rally and equity correction risks may reduce the correlation and help the 60:40 portfolio.

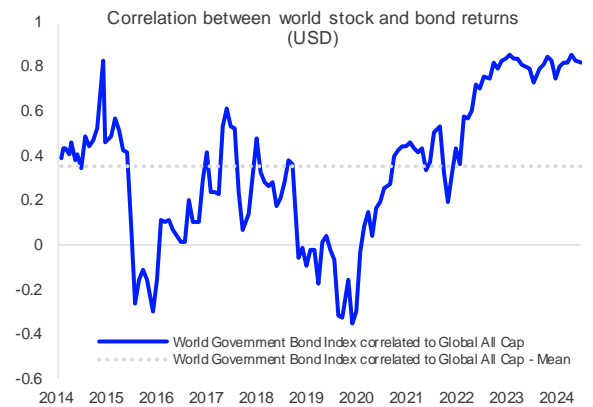
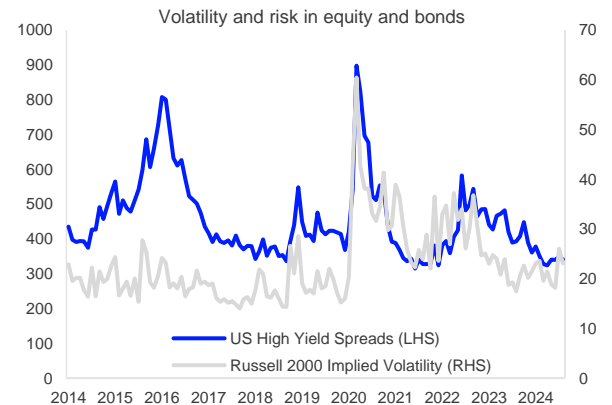


Chart 5: (US) HY spreads remains < 10-year avg, but (small cap implied) volatility has increased in recent months to LT avg. Rising volatility may portend an equity correction (vol & returns are inversely correlated).



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Cross Asset: Return and Risk (continued)

In the past three years, returns and risks have fluctuated with (actual & expected) changes in growth, inflation, and rates. In both 1 & 3Y: Gold has taken the lead as the best performing asset class, followed by US large caps over 1Y & 3Y. Also, the UK outperformed Developed Europe, HY outperformed IG and Infrastructure outperformed Real Estate (listed). UK equities made a strong comeback with 3Y returns, in-line with that of US large caps.

In the past year, the shift from consistent rate hikes to pauses or cuts has driven strong returns in risky assets. Still, across all asset classes, Gold led returns with 29%, reflecting rising uncertainty and geopolitical risks. US large cap led equities with Russell 1000 posting 26.6% of returns, ahead of the All-World 23.9%, and FTSE 100 rose 21.2% as another strong performer. In real assets, infrastructure (20.3%) outperformed real estate (17.3%).

Return per unit of risk over 1Y was high: 2.3 in Gold, 2.0 for the US High Yield and World High Yield and 1.9 for Russell 1000. FTSE 100 of UK had a return/risk of 1.88, in line with the All-World equity at 1.88. Large caps had a significantly superior return/risk profile both in the US & UK (Russell 1000 at 1.9 vs 0.8 for Russell 2000, FTSE 100 at 1.88 vs 1.09 for FTSE 250). Infrastructure outperformed real estate by a margin (1.5 vs 0.9).

In the last 3Y too (annualized returns), Gold took the lead with a return of 11.3% and US Large Caps returned 8.3%. In Fixed Income, only High Yield had positive returns, while Government Bonds, Investment Grade Corporates and Inflation-Linked all had negative returns, both in the US and globally. Infrastructure had positive returns (4.4%), while Real Estate was in the red (-2.1%). In terms of return/risk over the last 3Y, the best performers were Gold, US and UK large caps and US High Yield.

Chart 1: One-Year Risk-Return – In terms of return in the last 12M, the best performing asset classes were Gold (29%), US large cap Russell 1000 (26.6%). FTSE UK (22.2%) & Infrastructure (20.3%) did well. For the more important return per unit of risk, the leaders were Gold (2.3), US & World High Yield (2), UK FTSE 100 & US large cap Russell 1000 (~1.9), All-World equity (~1.9), followed by EM Equities (1.6) & Japanese equity (1.4)

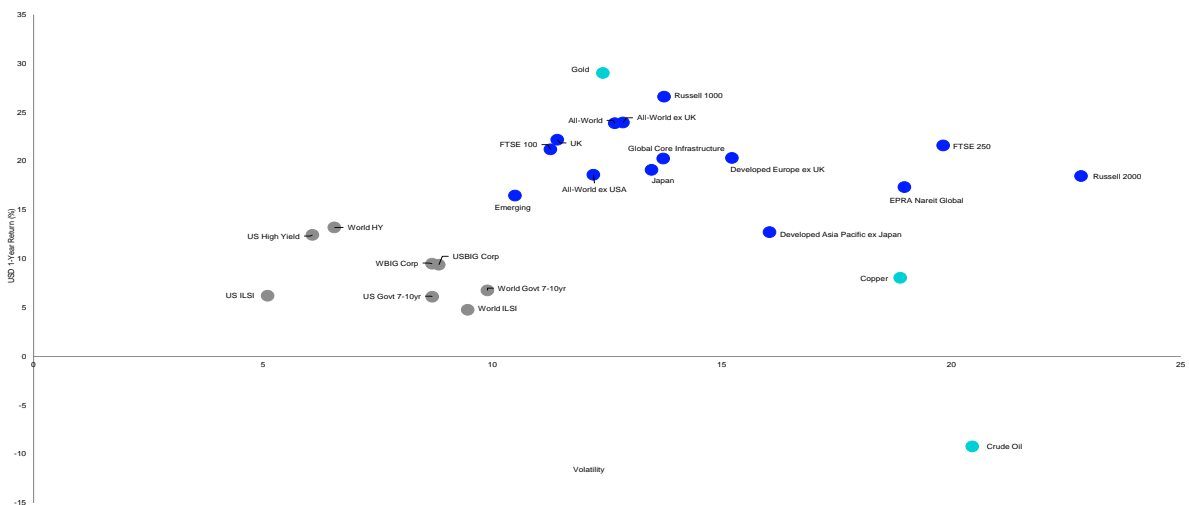
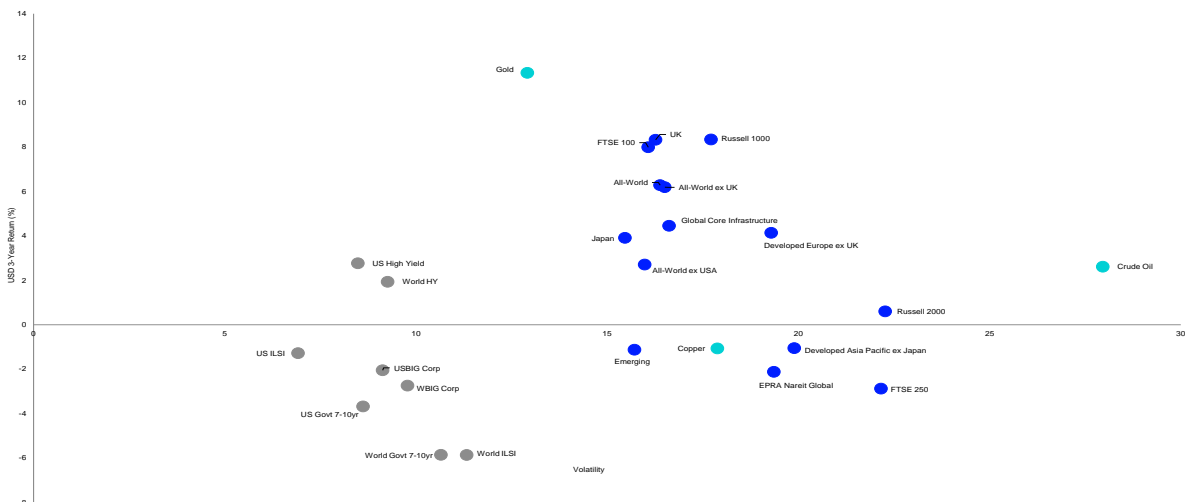


Chart 2: 3-Year Risk-Return – In the last 3Y, Gold had the highest annualized return (11.3%) followed by US Large Cap Russell 1000 (8.3%). UK large cap FTSE 100 (8.0%) was ahead of the All-World equity (6.3%). On return/ risk, high uncertainty & volatility in the last 3Y kept return/ risk below 1 for all major classes, with Gold (0.9) leading followed by Russell 1000 (0.5) and FTSE 100 (0.5), All-World equity (0.4) and Global Infrastructure (0.3).



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Cross Asset: Return and Risk & Correlations

Over the past 3Y, inflationary pressures led to real interest rates exerting a greater influence on equities than nominal rates. US equity markets were more affected by global interest rates than domestic rates alone. Emerging market equities exhibit a higher correlation with global investment grade bonds compared to high yield bonds. Commodities have been robust diversifiers for both equity and fixed income. High yield has shown a closer correlation with equities than with other segments of fixed income. Aside from the correlation impact in a portfolio, the asset classes differed significantly in total return, risk-adjusted return, income and earnings yield, implying different optimal asset allocation based on investor goals.

In the last 3Y: US large cap had a higher correlation with global 7-10-year bonds (0.72) than with US 7-10 year (0.65), a reflection of the open US economy & financial markets. Within equities, they are most correlated with Developed Europe ex UK (0.88), and least with EM (0.63). The 0.86 correlation between US Large Cap and both US and World High Yield suggests that high-yield bonds behave more like equities than investment-grade bonds. Global equities were more influenced by real rates (0.88) than nominal rates (0.79) and had high correlations with World High Yield (0.91) and investment-grade corporates (0.85). Commodities showed low correlations with global equities (0.41 for gold, a negligible 0.03 for crude oil) and various fixed income segments.

Equities and infrastructure led in absolute return and return-to-risk over 1Y, while commodities excelled over 3Y. Real estate provided the highest income yield for both periods and made a sharp comeback in returns over 1Y (Chart 2). Year-to-date, earnings yields fell sharply in real estate and moderately in equities but remained higher in infrastructure than in both equities and fixed income. Infrastructure was the only asset class where earnings yield increased YTD (Chart 3).

Chart 1: 3-Year Correlation – With rising rates, equities were driven more by real than nominal rates. US equities were driven more by global than US rates. Within equity, the correlation of US and All World was lowest with EM. Commodities, both the risk-on crude oil and risk-off gold, provided diversification to both equities and fixed income. Listed real assets, both real estate & infrastructure, remain highly correlated with equities.

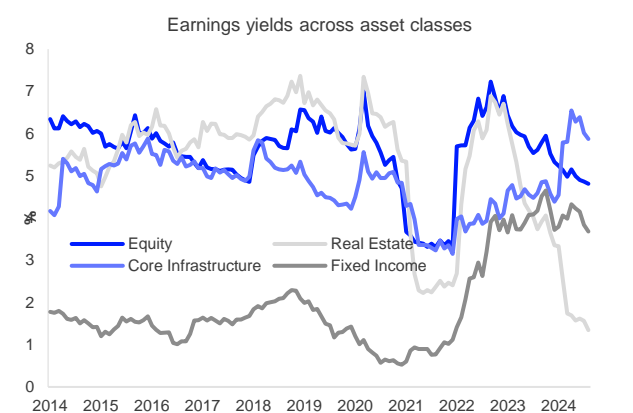
	Russell 1000	Russell 2000	All-World	All-World ex USA	UK	Dev Europe ex UK	Dev Asia Pac ex Japan	Emerging	US Govt 7-10yr	US ILSI	US High Yield	USBIG Corp	World Govt 7-10yr	World ILSI	World HY	WBIG Corp	Global Core Infrastructure	EPRA Nareit Global	Gold	Crude Oil	
Russell 1000	1.00	0.86	0.98	0.86	0.75	0.88	0.77	0.81	0.63	0.65	0.79	0.86	0.76	0.72	0.84	0.86	0.78	0.81	0.85	0.32	0.03
Russell 2000	0.86	1.00	0.85	0.78	0.72	0.77	0.74	0.77	0.54	0.58	0.70	0.82	0.68	0.64	0.74	0.80	0.69	0.73	0.83	0.23	0.03
All-World	0.98	0.85	1.00	0.94	0.83	0.94	0.84	0.89	0.75	0.70	0.81	0.88	0.82	0.79	0.88	0.90	0.85	0.85	0.90	0.41	0.04
All-World ex USA	0.86	0.78	0.94	1.00	0.92	0.95	0.87	0.95	0.87	0.71	0.76	0.83	0.85	0.83	0.86	0.90	0.89	0.85	0.90	0.51	0.05
UK	0.75	0.72	0.83	0.92	1.00	0.92	0.73	0.83	0.72	0.59	0.69	0.78	0.71	0.72	0.76	0.83	0.78	0.82	0.85	0.45	0.23
Developed Europe ex UK	0.88	0.77	0.94	0.95	0.92	1.00	0.80	0.87	0.72	0.68	0.75	0.84	0.81	0.80	0.84	0.90	0.86	0.84	0.89	0.47	0.02
Japan	0.77	0.74	0.84	0.87	0.73	0.80	1.00	0.81	0.72	0.74	0.76	0.83	0.85	0.81	0.79	0.87	0.87	0.70	0.74	0.41	-0.01
Dev Asia Pacific ex Japan	0.81	0.77	0.89	0.95	0.83	0.87	0.81	1.00	0.85	0.65	0.73	0.78	0.75	0.80	0.83	0.81	0.83	0.89	0.53	0.06	
Emerging	0.63	0.54	0.75	0.87	0.72	0.72	0.72	0.85	1.00	0.61	0.57	0.57	0.74	0.70	0.69	0.66	0.76	0.67	0.71	0.52	-0.01
US Govt 7-10yr	0.65	0.58	0.70	0.71	0.69	0.68	0.74	0.65	0.61	1.00	0.86	0.70	0.95	0.86	0.73	0.92	0.60	0.71	0.52	0.52	-0.24
US ILSI	0.79	0.70	0.81	0.76	0.69	0.75	0.76	0.73	0.57	0.86	1.00	0.83	0.85	0.86	0.93	0.83	0.85	0.74	0.79	0.48	-0.08
US High Yield	0.86	0.82	0.88	0.83	0.78	0.84	0.83	0.78	0.57	0.70	0.83	1.00	0.81	0.79	0.82	0.98	0.84	0.71	0.83	0.30	0.05
USBIG Corp	0.76	0.68	0.82	0.85	0.71	0.81	0.85	0.78	0.74	0.95	0.85	0.81	1.00	0.96	0.90	0.85	0.98	0.71	0.81	0.49	-0.21
World Govt 7-10yr	0.72	0.64	0.79	0.83	0.72	0.80	0.81	0.75	0.70	0.95	0.86	0.79	0.96	1.00	0.92	0.84	0.98	0.70	0.78	0.59	-0.16
World ILSI	0.84	0.74	0.88	0.86	0.76	0.84	0.79	0.80	0.69	0.86	0.93	0.82	0.90	0.92	1.00	0.85	0.92	0.79	0.86	0.58	-0.12
World HY	0.86	0.80	0.90	0.90	0.83	0.90	0.87	0.83	0.66	0.73	0.83	0.98	0.85	0.84	0.85	1.00	0.89	0.75	0.85	0.38	0.02
WBIG Corp	0.78	0.69	0.85	0.89	0.78	0.86	0.87	0.81	0.76	0.92	0.85	0.84	0.98	0.98	0.92	0.89	1.00	0.75	0.83	0.55	-0.15
Global Core Infrastructure	0.81	0.73	0.85	0.85	0.82	0.84	0.70	0.83	0.67	0.60	0.74	0.71	0.71	0.70	0.79	0.75	0.75	1.00	0.88	0.52	0.05
EPRA Nareit Global	0.85	0.83	0.90	0.90	0.85	0.89	0.74	0.89	0.71	0.71	0.79	0.83	0.81	0.78	0.86	0.85	0.83	0.88	1.00	0.46	0.00
Gold	0.32	0.23	0.41	0.51	0.45	0.47	0.41	0.53	0.52	0.52	0.48	0.30	0.49	0.59	0.58	0.38	0.55	0.52	0.46	1.00	-0.14
Crude Oil	0.03	0.03	0.04	0.05	0.23	0.02	-0.01	0.06	-0.01	-0.24	-0.08	0.05	-0.21	-0.16	-0.12	0.02	-0.15	0.05	0.00	-0.14	1.00

Chart 2: In the last 1Y, Equities & Infrastructure had the highest total return & return/risk. Real Estate provided the highest income yield over both 1Y and 3Y and made a strong comeback in last 1Y. Commodities had the highest return and return per unit of risk over the 3Y period.

1 Year	USD Total Return %	Income Yield %	Risk	Return /Risk
Equity	23.9	2.0	12.7	1.9
Fixed Income (FI)	7.0	4.1	8.7	0.8
Commodities	3.7	--	9.1	0.4
Real Estate	17.3	4.3	19.0	0.9
Infrastructure	20.3	3.6	13.7	1.5

3 Year Annualized	USD Total Return %	Income Yield %	Risk	Return /Risk
Equity	6.3	2.1	16.4	0.4
Fixed Income (FI)	-4.4	3.3	9.1	-0.5
Commodities	12.3	--	15.0	0.8
Real Estate	-2.1	4.0	19.4	-0.1
Infrastructure	4.5	3.3	16.6	0.3

Chart 3: YTD, earnings yield (=E/P) is sharply down in listed real estate & (less so) in equities, while it increased only in listed infrastructure. EY is highest in infrastructure (5.9), higher than both equities (4.8) and FI (3.7).



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Appendix 1: List of indices used in report

Name	Mnemonic/Code
World Government Bond Index 1-3yr	WGBI_1-3
World Government Bond Index 7-10yr	WGBI_7-10
World Inflation-Linked Securities Index 7-10yr	ILSI_7-10
US Treasury 1-3yr	US_TSY1-3
US Treasury 7-10yr	US_TSY7-10
Germany 1-3yr	DE_TSY1-3
Germany 7-10yr	DE_TSY7-10
World Broad Investment-Grade Bond Index Corporate	WBIG_CORP
US Broad Investment-Grade Bond Index Corporate	BIG_CORP
Euro Broad Investment-Grade Bond Index Corporate	EBIG_CORP
Emerging Markets US Dollar Broad Bond Index Corporate – Investment-Grade	EMBBI_CORP_IG
US High-Yield Market Index	HY_MKT_US
Pan-European High-Yield Bond Index - EUR	EUROPE_HYM_EUR
Emerging Markets US Dollar Broad Bond Index Corporate – High-Yield	EMBBI_CORP_HY
US Inflation-Linked Securities Index 10 yr+	ILSI_US_10+
FTSE World Broad Investment-Grade Bond Index (WorldBIG®)	WBIG
FTSE US Broad Investment-Grade Bond Index (USBIG®)	BIG
FTSE Euro Broad Investment-Grade Bond Index (EuroBIG®)	EBIG
FTSE World High-Yield Bond Index	WHYM
Russell 1000 Index	R1000
Russell 2000 Index	R2000
FTSE Global All Cap Index	GEISLMS
FTSE All-World Growth Index	AWORLDSG
FTSE All-World Value Index	AWORLDSV
Russell 1000 Growth Index	R1000G
Russell 1000 Value Index	R1000V
FTSE USA Index	WIUSA
FTSE UK Index	WIGBR
FTSE Developed Europe ex UK Index	AWDEXUKS
FTSE Japan Index	WIJPN
FTSE Developed Asia Pacific ex Japan Index	AWDPACXJ
FTSE China Index	WICHN
FTSE Emerging Index	AWALLE
FTSE All-World Index	AWORLDS
FTSE Global Core Infrastructure Index	FGCII
FTSE EPRA Nareit Global Index	ENHG
FTSE Europe ex UK Index	AWEXUKS
FTSE Asia Pacific ex Japan Index	AWPACXJA
FTSE USA All Cap Index	LMSUSA
FTSE Developed Index	AWD
FTSE All-World ex US Index	AWXUSAS
FTSE Global Large Cap Index	GEISLC
FTSE Global Small Cap Index	GEISSC
FTSE Developed Large Cap Index	LCD
FTSE Developed Small Cap Index	SCD
FTSE Developed Growth Index	DGWLD
FTSE Developed Value Index	DVWLD
Refinitiv Commodity Index	RTCI
Refinitiv Core/Commodity CRB® Index Total Return	TRCCRBTR
Russell 2000 Implied Volatility Index	RVX

Appendix 2: Methodology Reference Guide

Report calculations

- Unless noted otherwise, all performance calculations are in US dollar.
- Methodology for calculation of Upgrade-Downgrade ratio in credit markets: Fallen angels, corporate bonds downgraded from IG – a minimum rating of BBB- with S&P, Moody's or Fitch - to a HY credit rating of BB+ or below, are not included in the calculation of downgrade ratio, as they were not included in the high yield index.
- All credit spreads are with reference to the US 7-10 year Treasury bond index.
- Risk premium in equity is calculated as the earnings yield (E/P) of the All-World Developed index minus the yield of US Treasury 7-10 years. Risk premiums in high yield are their credit spreads relative to yield of US Treasury 7-10 years.
- Equity volatility is measured as rolling 24-month annualized volatility using monthly observations.
- Correlation matrix among asset classes is calculated using monthly returns over the time frame of analysis mentioned in the chart heading.
- Earnings yield is calculated as the inverse of PE ratios for the indices in these four asset classes - equity, fixed income, listed real estate, listed infrastructure.
- In currencies, Euro and GBP are quoted as number of US dollars per unit of foreign currency. Yen and CAD are quoted as number of units of foreign currency per unit of US dollar.
- Currency exporters and importers classification is based on the commodity exposure in the macroeconomy of the country.
- Fund flow to geographic markets based on domicile of fund as defined by Lipper. Rebased cumulative fund flow commencing at the beginning of the 12 month period (sign inverted in rebasing if initial month flow is negative). Rebasing figure is sensitive to the first month's flow. Figures subject to revision.
- Page 15 uses the Refinitiv/CC CRB Total Return index (US \$). Page 9 used the RFV Commodities Price index. The return for commodities is very dependent on the index used, given the huge return dispersion among different commodities and their differing weights in the indices
- For sustainable investment flows, the data used is the same as the Responsible Investment definition used by Lipper, a tighter definition than just the Ethical restriction.
- For US bond type flow data, the data used are the monthly bond fund flows in US domiciled USD bond funds, as defined by Lipper Global Fund Classification.
- In comparing equity dividend yields with sovereign 7-10 year yields, we are using the closest approximation. For Developed Europe ex UK that includes FTSE EMU Government Bond Index with 9 countries (DMs within Euro Area, namely Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands and Spain) and Developed APAC ex Japan is proxied by FTSE Asia Pacific Government Bond Index which apart from the 5 developed markets (Australia, NZ, Hong Kong, Korea and Singapore) also includes 5 EMs (China, Indonesia, Malaysia, Philippines, and Thailand).
- All data is as of August 31, 2024, with the exception of the most recent FOMC projections that was released September 18, 2024.

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