

# Asset Allocation Insights

QUARTERLY REPORT: MARCH 2024 | USD EDITION

FOR PROFESSIONAL INVESTORS ONLY

**Risk rally broadens despite dispersion in macro backdrop and central bank caution on rate cuts. Equities and sovereign bonds decouple, with parallels to Goldilocks. Valuation risks grow in pockets of equities and corporate credit.**

## Dispersion remains a key macro theme

Diverging growth prospects provide the macro backdrop for markets. Disinflation has continued in North America and Europe though the road has been bumpy, leading to recalibrations in expected rate cuts. Japanese inflation held up and China tried to ward off deflation. Different policy priorities have region-specific implications for markets.

## Global risk rally broadens

Risk assets rallied even as bonds moderated and long yields climbed YTD. In a turnaround from 2023, markets are probably associating higher rates more positively as a sign of resilient growth. Global ex-US equities rerated relative to the US over 3M. Japanese equities and global cyclicals shone. High yield outperformed investment grade, with Emerging HY and IG credits leading over 3M.

## US markets in throwback to 1990s Goldilocks era

US markets enjoy structural tailwinds from the promise of AI and investments from an accommodative fiscal stance (even as monetary policy has been tight).

## Key investment themes

Rates have room to fall, but expected to remain higher than in GFC-to-Covid era. Locking into current levels insures against re-investment risk, with yields near 15 year highs. Sovereign bonds offer better valuation than corporates. Diversification is more appealing as markets outside the US had competitive returns, and the valuation premium for US equity has started to compress. DM equity investors may get diversification from commodities, sovereign bonds, and EM equities.

## Emerging markets – a changed asset class?

The Emerging equity index is more diversified now with the pullback in Chinese equities and robust performance of those in India, Brazil and Mexico. EM equity volatility is in line with DM's and EM credit risk has been lower in recent years (narrower EM sovereign spreads).

## Alternate assets remain attractive

In listed real estate, sector breadth has improved globally alongside structural shifts, indicating the worst may be over cyclically. The asset class remains sensitive to short-term rate change expectations. Listed infrastructure gained over 3M and 12M, with Emerging infrastructure outperforming Developed on the back of faster economic growth.

## Downside risks remain in the medium term

While US recession risk appears to have abated, delayed effects of tighter liquidity, a bumpy last leg of disinflation, and early signs of weakness in labor markets, all complicate the medium-term outlook. Corporate credit, (notably US High Yield and EM Investment Grade) & pockets of equities (especially US) face risks from high valuation.

Chart 1: The rally has strengthened and broadened in the last 3M (positive returns in all industries). Not only Tech anymore!

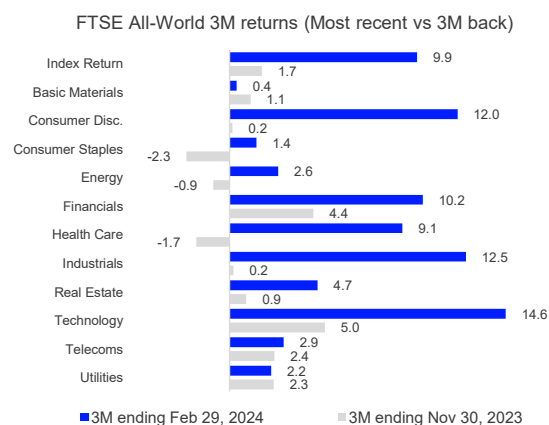
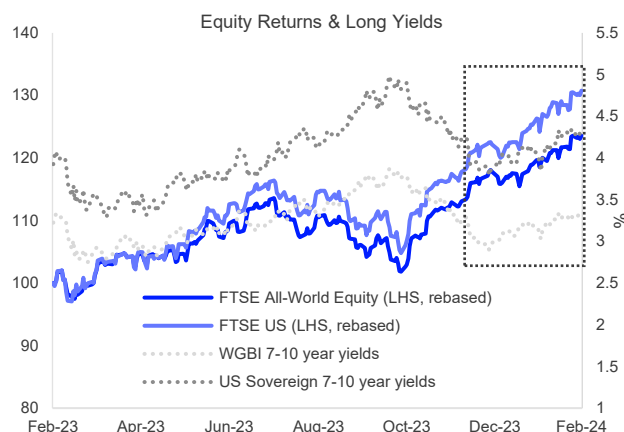


Chart 2: Stocks and bonds have decoupled. Stocks rallied even as yields increased. Back to Goldilocks?



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# Financial Markets Overview & Key Investment Themes

**Dispersion:** Slowing growth, alongside dispersion in policy stances and growth momentum, is a key macro story. Fiscal stimulus is offsetting monetary tightening in the US, leading to strong growth. Dispersion in macro indicators (growth, inflation, rates) across regions is leading to dispersion in financial markets. Industry performance dispersion widened as cyclical industries led YTD. Large differences in the correlation of Developed equities with EM vs with EM ex China indicate dispersion within EM.

**Broadening rally:** Like the GFC-to-Covid era, US remained the best performing equity market over the last 3M & 12M. What has changed? Other markets have provided returns competitive to that of the US; Japan was just 0.3% behind US equities over 3M and shared YTD leadership with the US. In credit, European investment grade & high yield outperformed their US counterparts over 12M.

**Changed market sentiment since November 2023:** Fund flows indicate the risk-on stance that began in November 2023 continues. Inflows into credit and high yield picked up, along with flows back into equities (especially in US equities). While money market flows indicate lingering caution, their high balances could provide further tailwind for risk assets should they get deployed elsewhere.

**Emerging markets have changed.** The growth model in China might be changing, with less dependence on real estate & exports. Its high equity risk premium might point to opportunities. Could its February equity rally continue? Faster growth in EM countries like India, Mexico, Brazil (helped by structural reforms & changing supply chains) is leading to a more diversified EM equity index. EM sovereign spreads narrowed during DM central banks' rate hikes. EM equity volatility in the last 3yrs has been in-line with DM.

**Valuation & return indicators in risk assets:** Euro bond valuations remain attractive relative to the richly priced US & EM (particularly EM IG). Very tight US HY spreads indicate the possibility of much lower forward returns. Sovereign bonds offer better valuation than corporate. An uptick in forecast earnings growth (more marked so in Japan) and broader valuation rerating underpin the equity rally over the last 3M. Earnings revisions have stabilized. The US remains the most expensive market, and the US & Japan are trading at forward valuations greater than their 10Y mean. The US valuation premium (vs rest of the world) has started reducing, and could indicate a turning point in financial markets.

**Are commodities in a new super-cycle relative to equities?** The forward curve for oil and currency markets indicate expectations for healthy commodity returns. Oil prices are expected to stay higher than in pre-Covid era. Geopolitical risk is supporting oil and gold.

**Listed real estate & infrastructure:** Improving breadth in sector performance in listed real estate points to a potential bottom for real estate. The best performing sectors over the last 3M include Lodging, Industrials, Retail (signs of cyclical recovery) and Data Centers, Self-Storage (indicating structural shifts). Global infrastructure is a direct play on economic growth with more than 50% weight in railroads and electricity and performed well in the last 12 M on the back of resilient growth, more so in EM.

**US dollar:** The US dollar remains stronger than tightening yield differentials might suggest. Mean reversion and rate differentials indicate the potential for US dollar to weaken.

**Key changes impacting portfolio construction:** Since 2022, rate hikes have made fixed income yields competitive, and given bonds' low volatility, has affected the relative appeal of other assets. With inflation in focus, real rates, more than nominal rates, have driven equities in the last 3Y. US markets have been impacted more by global rates, than US rates. For investors in DM equities, significant diversification comes from commodities, and also sovereign bonds and EM equities. Stocks & bonds have decoupled YTD.

**Wealth management & income investing:** The often-used 4% withdrawal rate for retirement portfolios is now well-supported by the income yield in fixed income, listed real estate and infrastructure, and high dividend yield in select equity markets.

**Risks:** Risks remain from tightening liquidity and a bumpy last leg of disinflation. Slower global growth implies the possibility for rates to fall and credit spreads to widen, along with correction risk in equities (especially in US). Uncertainty (including several elections) & small cap implied volatility have started to rise and could be an early warning indicator. Credit market returns have remained resilient in last 3 & 12M, with the ongoing spread compression, even while improvements in credit composition have stalled since Nov. 2023.

**Structural tailwinds could mitigate the cyclical risks.** Despite falling inflation and expected rate cuts, an upside bias to long run neutral rates could support long yields to remain closer to the pre-GFC Goldilocks range. A higher price for capital (higher-for-longer compared to the GFC-to-Covid era) and AI potential could lead to better capital allocations, which in turn could be reflected in improving (US) productivity growth. This may be supportive of risk assets like equities and high yield.

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# Macroeconomic Backdrop

Slowing growth, alongside dispersion from differing policy stances, is a key macro story. Risks remain from tighter liquidity and a bumpy last leg of disinflation.

Even as the IMF backed the idea of a “global soft landing” in January, it highlighted regional differences, revising up growth estimates for the US, China and EM, and down for the Euro area and Canada (Chart 2). It projects GDP growth will slow in 2024 and 2025 in the US, China and Japan – 3 of the 4 largest economies (Chart 1).

US growth had positive momentum from fiscal stimulus-led investment (Chart 3). However, liquidity indicators point to tighter financial conditions – YoY growth in US money supply (M2) has been negative since end-2022 (Chart 4), and US banks’ use of the Fed’s overnight reverse repo facility to park excess liquidity was at a 2.5-year low at end-Feb. While the US, UK and EU have seen sharp disinflation since 2022 peaks, inflation is still projected above 2% targets by end-2024 (Chart 5). Central banks contend with potential price pressures from Red Sea shipping disruptions and still tight labor markets, indicating the last leg of disinflation could be bumpy.

Chart 1: Growth is projected to slow in 2024 & 2025 in the US, China & Japan, and rise from low bases in the UK & Eurozone.

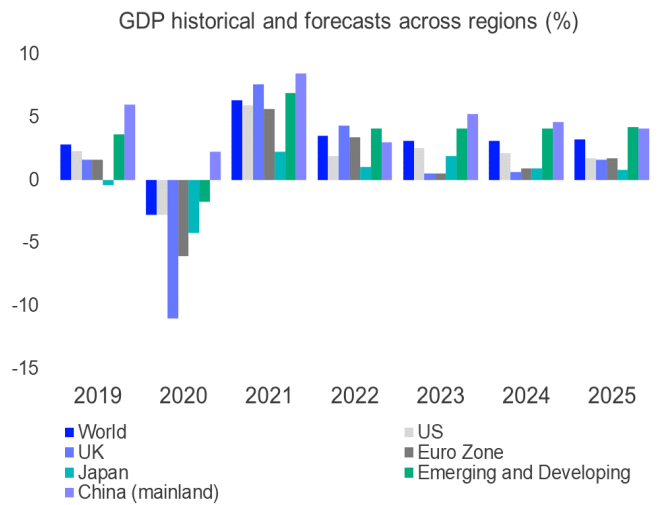


Chart 2: Dispersion-the IMF upgraded growth estimates in the US (significantly), China & EM, downgraded in the Euro area & Canada.

Chart 3: Supportive US policies have led to increased investment spending since end-2022, bolstering growth.

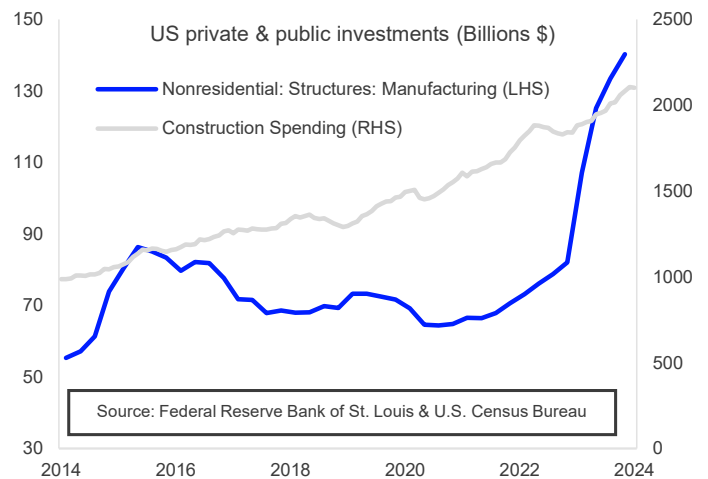
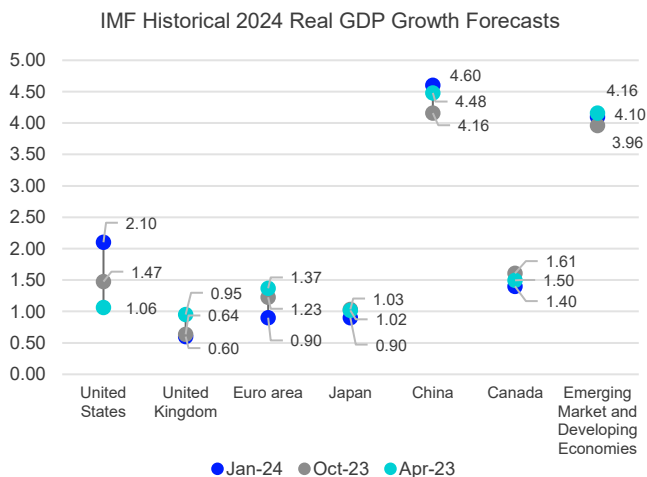
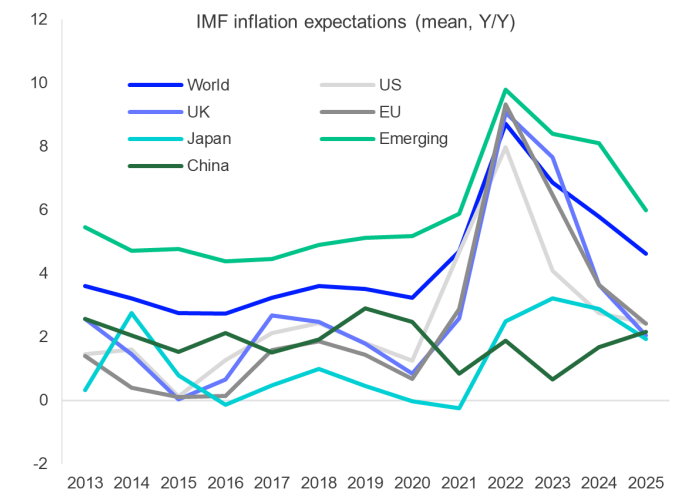
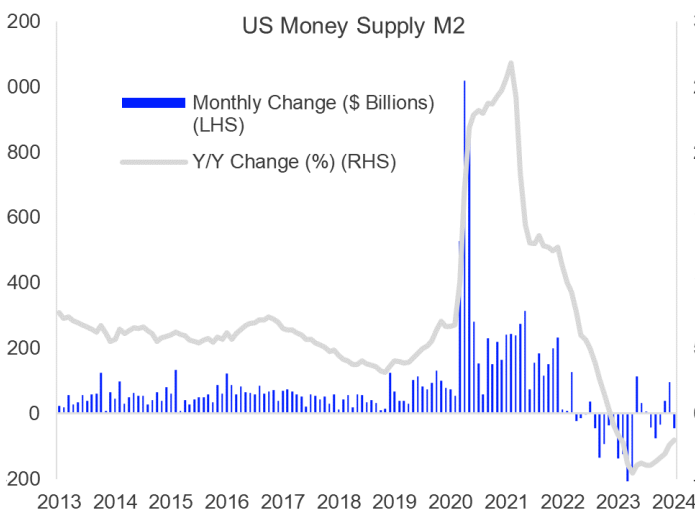


Chart 4: US M2 YoY growth has been negative since end-2022, (alongside rate hikes to 5.5%), though the trend has bottomed.

Chart 5: US, EU & UK inflation is expected at just >2% target by 2025. Japan’s inflation has stayed >2% for 21M as of February.



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# Macroeconomic Backdrop (Continued)

**Slower growth implies the possibility for rates to fall & credit spreads to increase, along with correction risk in equities. Uncertainty and small cap implied volatility have started to rise. Structural tailwinds could mitigate the cyclical risks.**

The Copper/Gold ratio & oil prices usually have a positive correlation with sovereign rates. Chart 1 & 3 show that rates, while well off their October 2023 highs, may still have room to fall.

The historical relationship between growth & risk assets indicates that credit spreads are much tighter than economic conditions might warrant (Chart 5), and downside risk in equities remains (Chart 2). The short-term risks in high yield and equities is reiterated by the implied volatility in small caps rising from August 2023 lows to now exceeding its 10-year average (Chart 4).

The cyclical risks to risk assets might be mitigated by structural tailwinds from AI and a manufacturing boom (due to the Infrastructure Bill, CHIPS & Science Act, Inflation Reduction Act). The 2.7% US productivity growth in 2023, which over the last two quarters has been more than 2x the 2005-2019 rate (BLS, February 2024) could be indicating these structural tailwinds.

Chart 1: The historic relationship between Copper-Gold (growth indicator) and rates indicate rates have further room to fall.

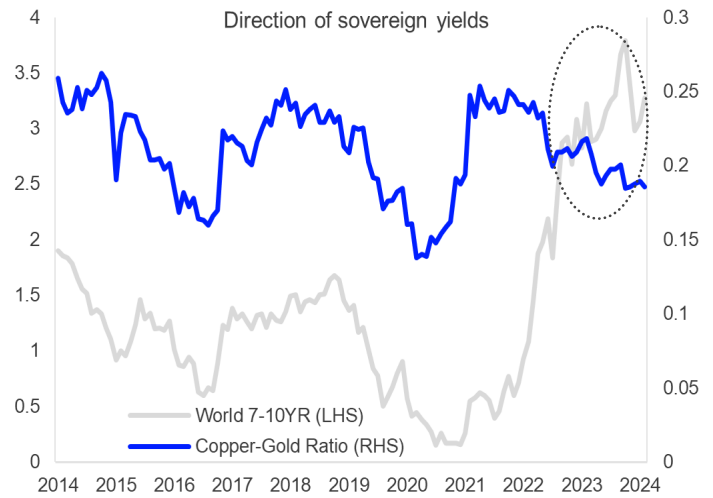


Chart 2: US equities historically had a (+) correlation to US growth. Data indicates equities now might be more optimistic than justified.

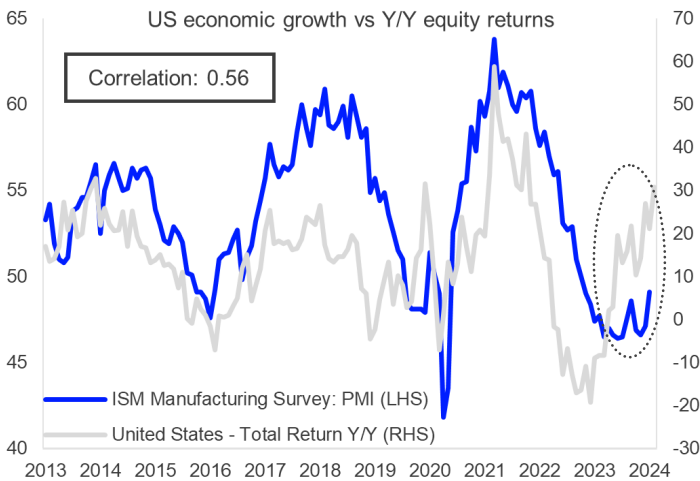


Chart 3: Recent decrease in oil prices imply sovereign rates may have more room to fall due to slowing growth.

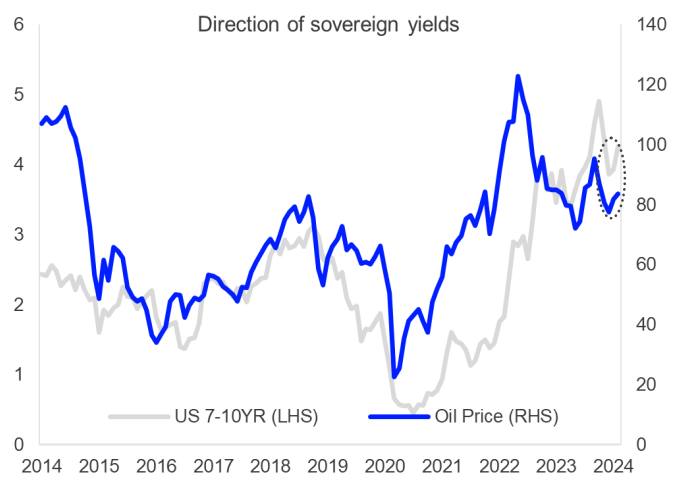


Chart 4: US economic uncertainty & implied volatility in small caps are closely linked, and both have risen from recent lows.

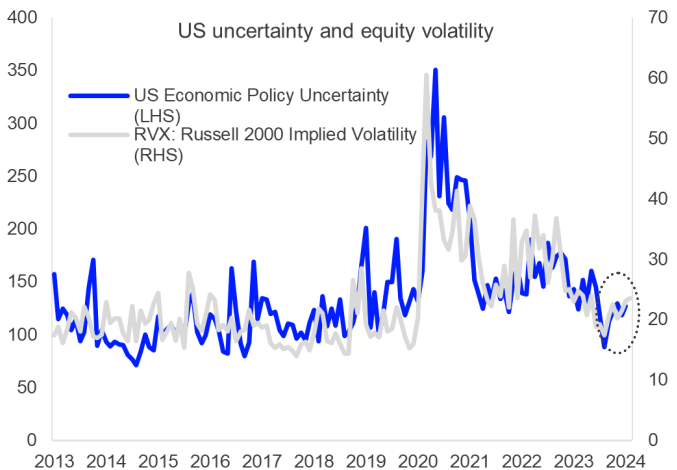
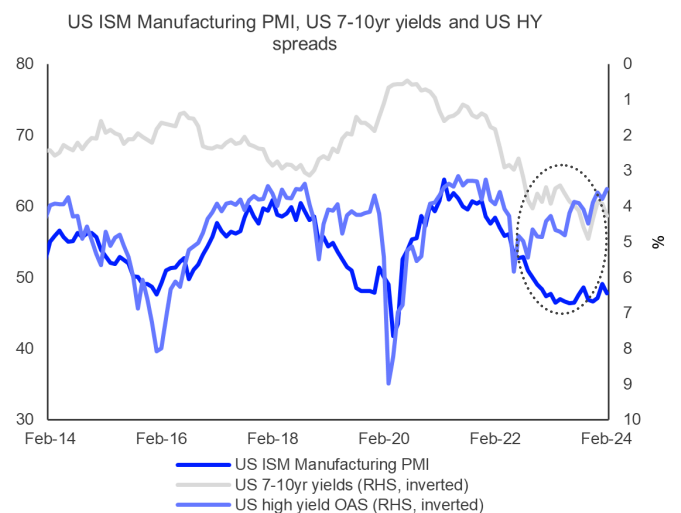


Chart 5: US economic growth expectations make a case for significantly higher HY credit spreads (~200 bps higher).



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# Sovereign Yield Curves

Falling real rates, alongside an upside bias to long-run neutral rates, could cause long yields to remain closer to the pre-GFC Goldilocks range.

Yield curve inversion deepened in Germany over 3M, but was little changed in the US, after a modest dis-inversion in January (Chart 1). Inverted yield curves alongside rallying equities would normally indicate irrational exuberance. Could the US fiscal stimulus be neutralizing monetary policy and signals from the yield curve? Chart 3 shows 7-10-year nominal yields generally edged lower, helped by a December rally in G7 bonds (except in Japan due to the curve control). Decreases in nominal yields were driven by lower real yields in North America and the UK, and thus supported the equity rally in the last 3M.

Where do rates go from here? The US Fed, major DM central banks and many from EM have indicated the possibility for rate cuts in 2H 2024. Taking a longer view, it is important to note that while the FOMC projection of median LT neutral Fed Funds rate remains 2.5%, the upper and lower bands have moved up, indicating an upward bias. The upper band of the LR neutral rate is close to what the CME futures imply about 4% (Charts 4 & 6). A trending-higher term premium vs during 2016-21 (Chart 5), combined with an expectation of short rates staying higher than the GFC-COVID era, may cause the 10yr rate to be in the pre-GFC Goldilocks range.

Chart 1: Key yield curves continue to be inverted, even as equities price in a soft landing. Disconnect between rates & equities?

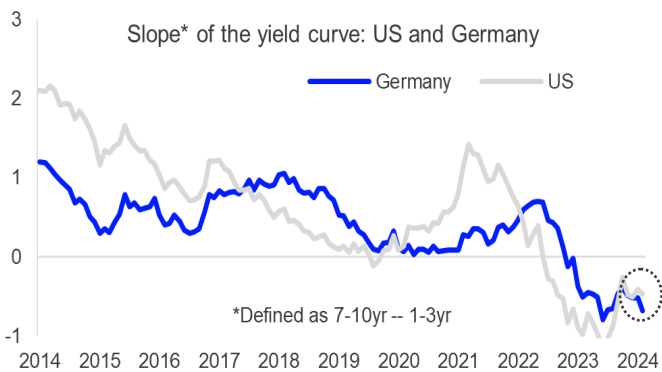


Chart 2: US yields have stayed flat in the last 3M, albeit with high M-M gyrations. Falling real rates have boosted risk assets.

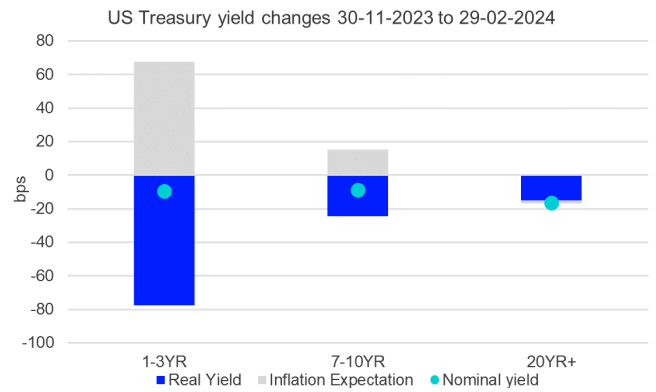


Chart 3: G7 yields (ex Japan) declined in the last 3M, though their drivers showed regional dispersion.

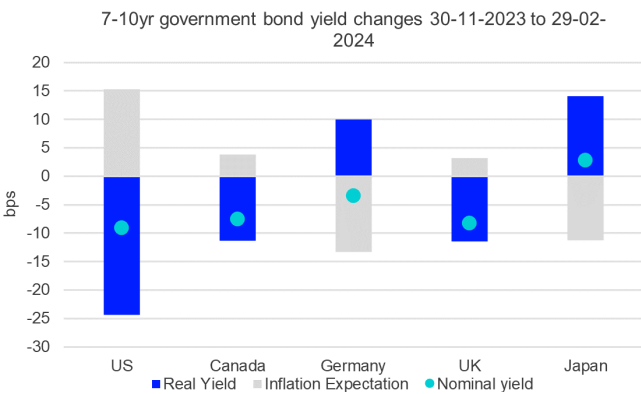


Chart 4: Long run neutral Fed funds rate median remains 2.5%, but their range shows an upward bias (relative to 2008-21).

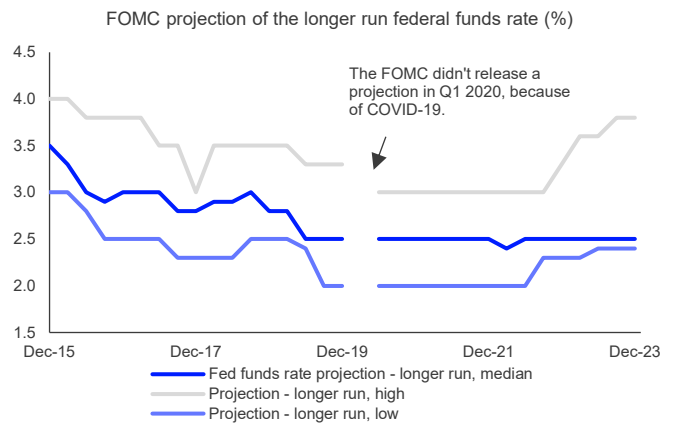


Chart 5: The US 10-year term premium might have structurally increased relative to 2016-21, putting a higher floor to long rates.

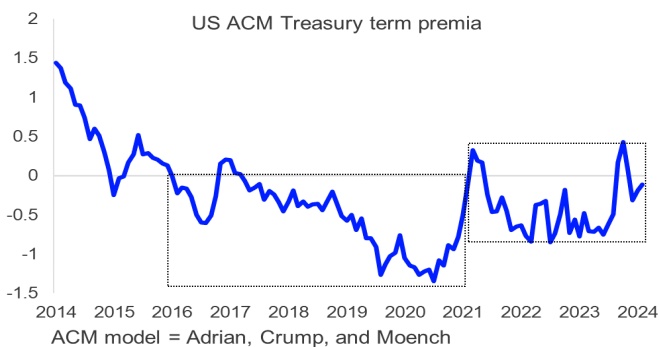
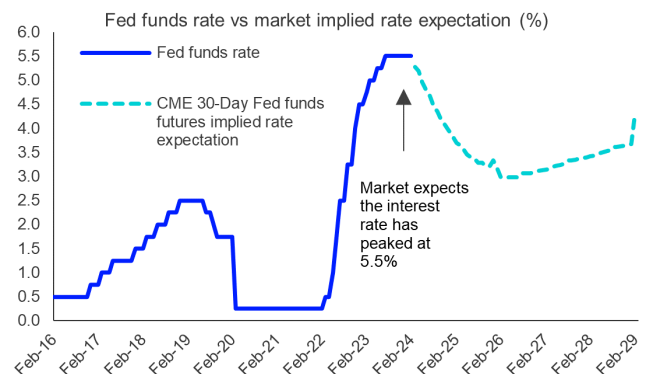


Chart 6: Market expects significant rate cuts from mid-2024 (priced in), posing downside risks if cuts don't materialize.



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# Credit

**Credit market returns remained resilient in the last 3M & 12M. Euro bond outperformance stalled in last 3M, dragged lower by YTD returns. Credit composition enhancement has stalled since November 2023.**

Credit spread tightening remains a feature across the world, particularly in riskier high-yield and EM markets. As a result, EM led 3M gains in IG & HY. Euro corporate bonds lagged over 3M, due to a YTD drag in both IG (-2.9%) and HY (-0.5%), but they outperformed both US and EM over 12M.

Overall, European HY has a better credit composition than US HY. Credit composition in the HY indices (Chart 1) shows a reduced share in BB since Covid, but to a lesser extent in Europe vs US. Within IG, European credit quality, after the 2023 advancement, did not improve further 2024 YTD. US IG quality changes was mixed since end-2022, with the A-rated weight increase (from 38.6% in December 2022 to 40.7% in February 2024), offset by changes in other sectors.

NY Fed's Corporate Bond Market Distress Index (CMDI) fell further in February, driven by HY CMDI dipping to a level last seen in early 2018. US corporate bond markets remain healthy, despite the deteriorating credit quality of the US IG & HY indices. Credit spreads across regions are quite similar now.

Chart 1: The HY credit mix is better in Europe than in US. YTD, Credit composition has improved in Europe, deteriorated in US.

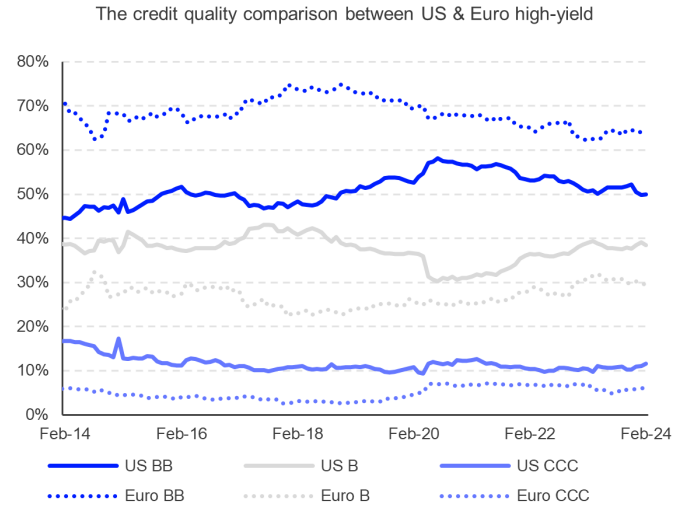


Chart 2: Consistent spread narrowing in the last 12M, and acute tightening in the last 3M in Euro & EM HY.

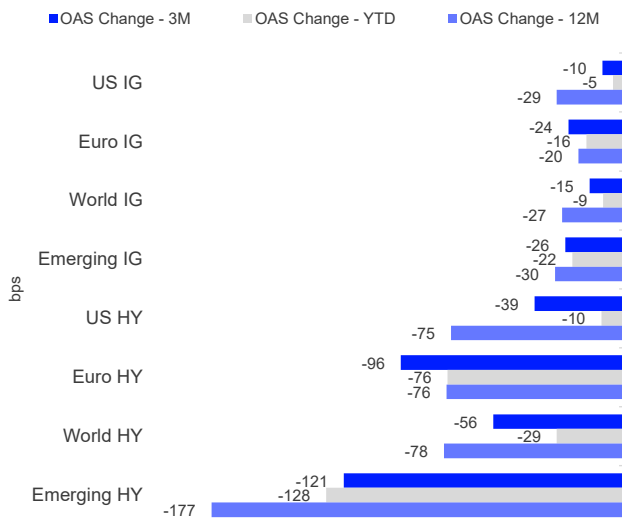


Chart 3: Positive credit returns in the last 3M & 12M. Over 3M, HY outperformed IG (risk-on rally), EM did the best (in IG & HY).

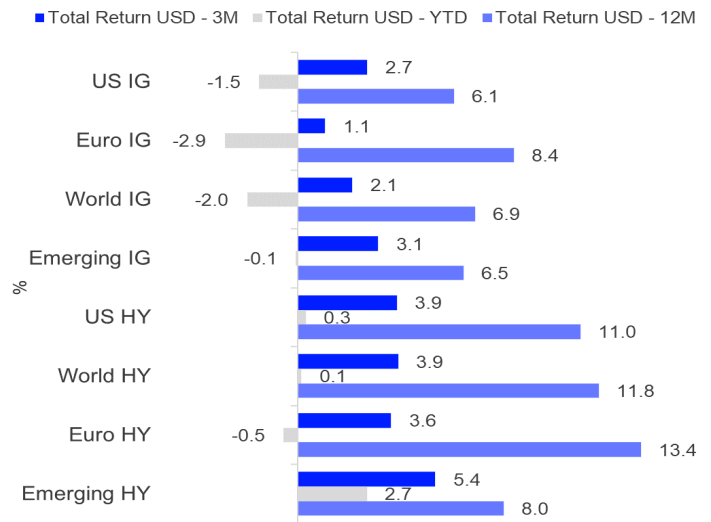


Chart 4: IG corporate spreads tightened YTD (9 bps in World). Similar spreads across regions (EM >Euro >US by ~13 bps each).

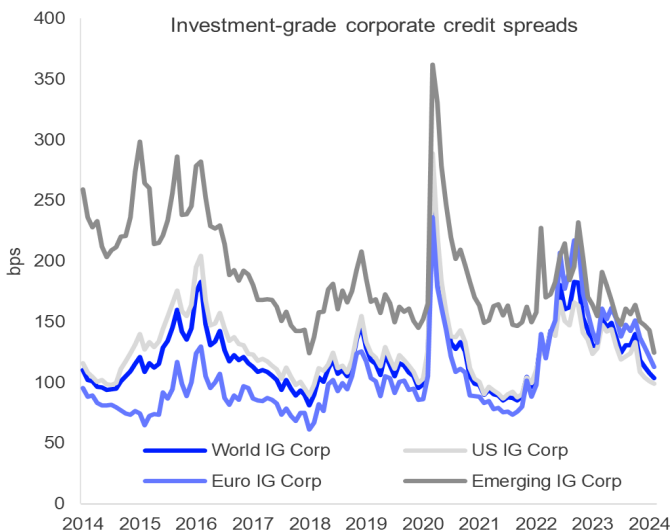
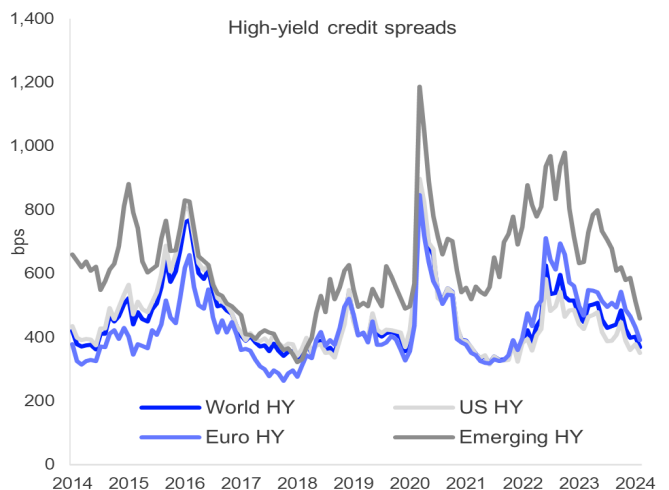


Chart 5: HY spreads globally have narrowed YTD, and much more in EM (128 bps) & Europe (76 bps) than in US (10 bps).



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## Credit (Continued)

**Euro bond valuations remain attractive relative to the richly priced US & EM (particularly EM IG). Very tight US HY spreads indicate the possibility of much lower forward returns. Sovereign bonds show better valuation than corporate.**

Valuation spread percentiles indicate Euro bonds continue to have the lowest valuation in both IG & HY (Chart 2). EM IG bonds are now near the most expensive pricing in last 10 year. Historically, cheaper valuations has led to better returns (Chart 1). These could imply more opportunities in European bonds. Duration risk-adjusted yields remain higher for Euro and EM bonds than for US (Chart 3), but their premia over the US has shrunk. Considering credit risk, Euro bonds currently offer highest risk-adjusted returns.

IG corporates are more richly priced than IG overall, indicating better valuation in sovereigns than corporates (With 10-year OAS history, World IG corporate & World IG are 29<sup>th</sup> & 52<sup>nd</sup> percentile resp., US IG corporate & US IG are 13<sup>th</sup> & 35<sup>th</sup> percentile resp.)

Upgrade-downgrades and US liquidity conditions (proxied by bank lending standards) have recently improved. In-line with these, the 12-month default risk (CDS implied probability) has fallen to 1.5% and is far lower than the 5.3% in January 2023. Even with easing liquidity, US HY spreads remain tighter than liquidity might imply (Chart 5) and are in quintile 1 of their more than 20-year history, suggesting lower future returns (Chart 1).

Chart 1: US HY 1Y forward return by spread quintiles (since 2001) indicate lower valuation led to higher returns.

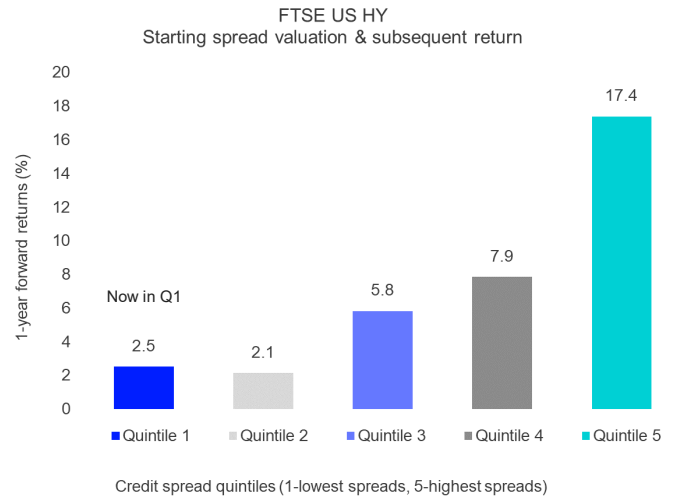


Chart 2: Euro corporate bonds have the most attractive valuations in both IG & HY. US bonds & EM IG corporates are richly priced.

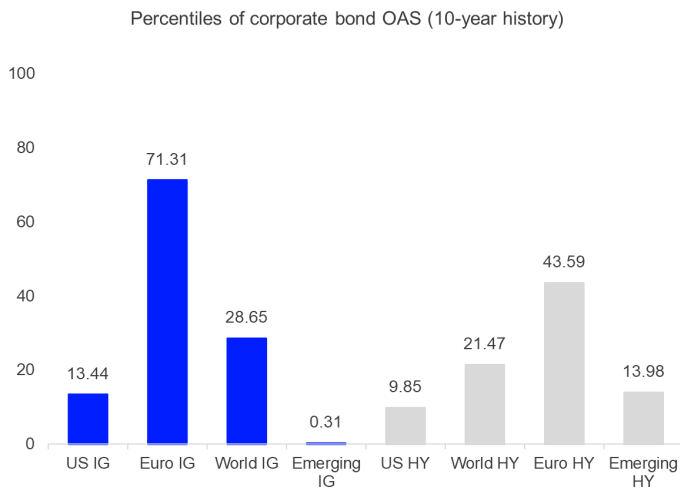


Chart 3: Return per unit of duration risk is highest in emerging markets (for both IG & HY) & higher in Europe than in the US.

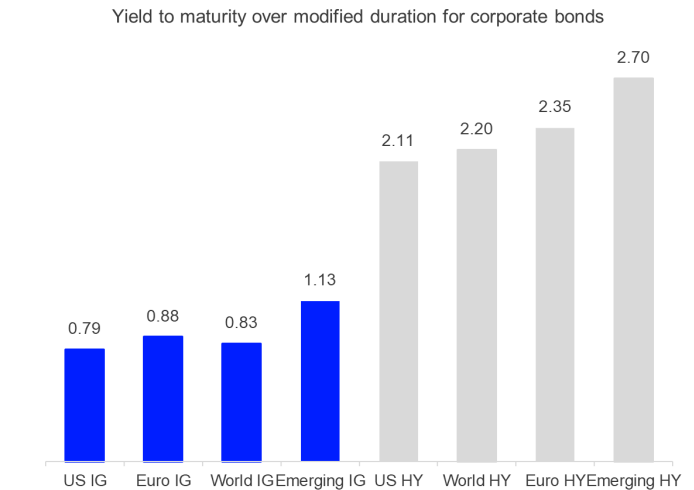


Chart 4: Upgrade/downgrades improved YTD. This is in-line with fall in CDS implied 1-year default probability in February.

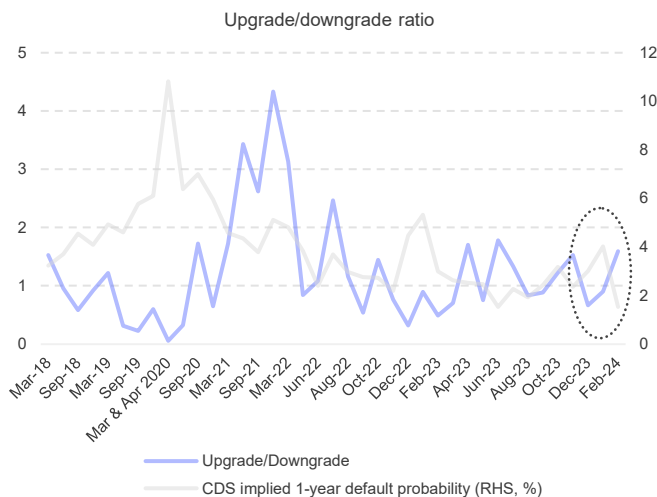
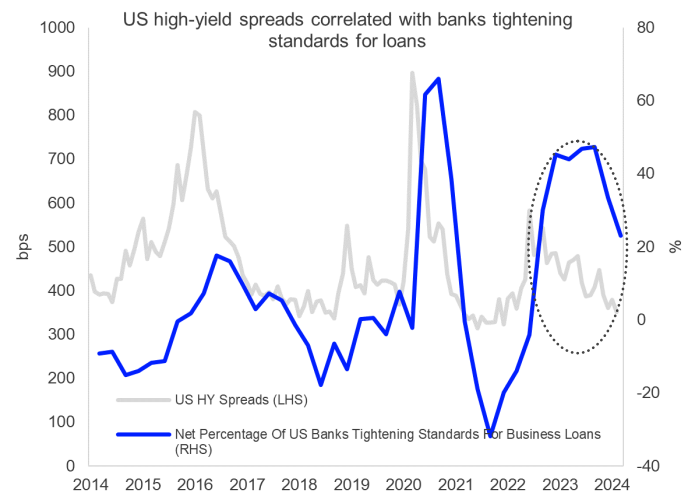


Chart 5: US lending conditions eased in late 2023, but US HY spreads remain ~200bps lower than liquidity would argue for.



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# Equities

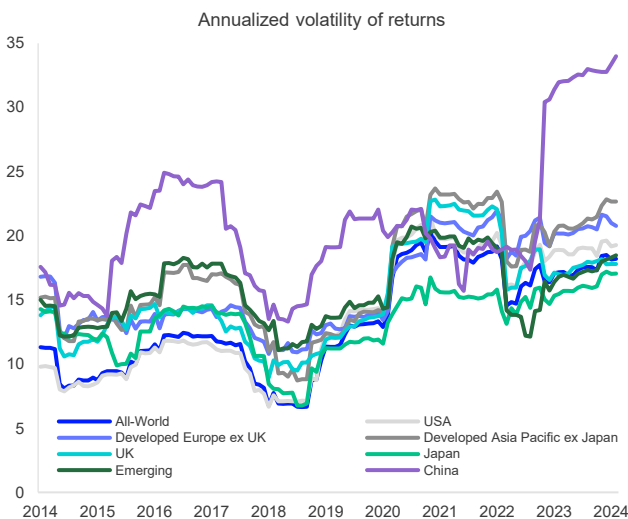
**Sustained AI optimism, strong Q4 2023 US earnings, and a Chinese equity rebound drove equity performance. Strong performance in Japan indicates ‘things are changing?’**

US led over 3M & 12M followed by Japan (Chart 1) as the promise of AI lifted chip-makers globally. US’ strong Q4 2023 earnings, underpinned by robust growth also helped. Japanese equities remain bolstered by ultra-loose monetary policy and structural tailwinds. Helped by policy support, Chinese equities rebounded briefly in February to post a better YTD return than over 3M & 12M. DMs continued to outpace Emerging equities (Chart 4), less so if excluding China’s drag on EM’s performance.

Realized volatility declined modestly over 3M in the US, Europe & the UK, with Japan still having the lowest (Chart 2). Alongside its high USD return in the last 12M (26%), despite a weaker yen (-9%), it indicates an attractive return/risk profile.

Partly riding the tech wave, US Growth continued to starkly outperform Value over 3M, as Dynamic (cyclical) equities’ outperformance of Defensives picked up. Large-caps retained their edge over small caps in DM (Chart 5), as access to liquidity remained important under tighter monetary conditions.

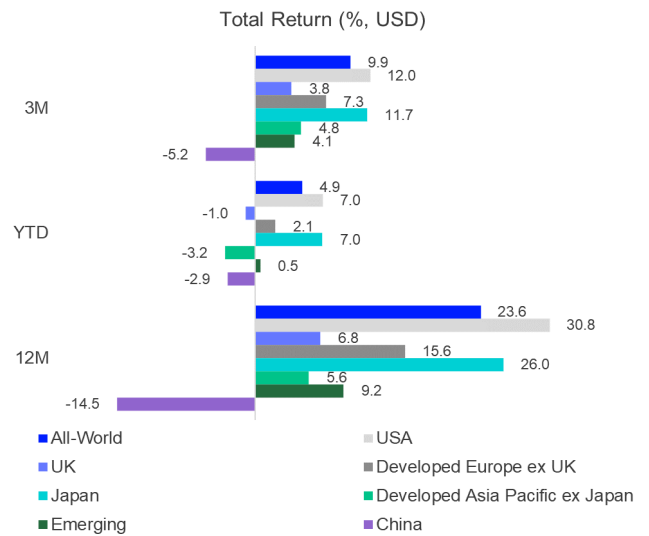
**Chart 2:** After a spike in 2023, the last 3M volatility declined in the US, Europe & UK. Japan is still the lowest & China highest.



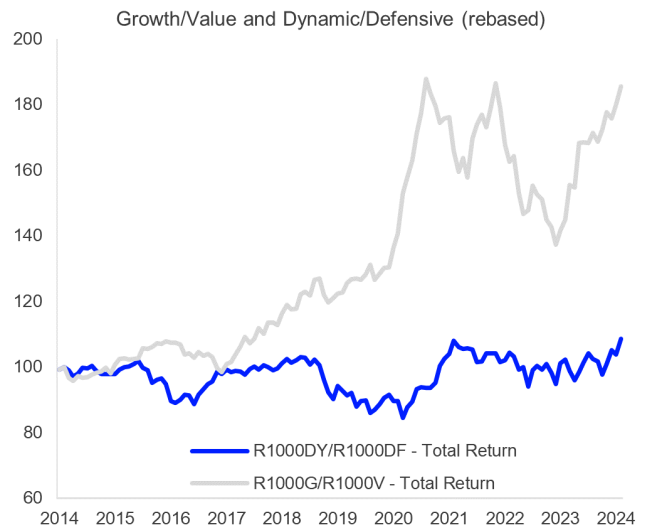
**Chart 4:** DMs continued to outperform the Emerging region, but less so if excluding China’s drag on Emerging’s performance.



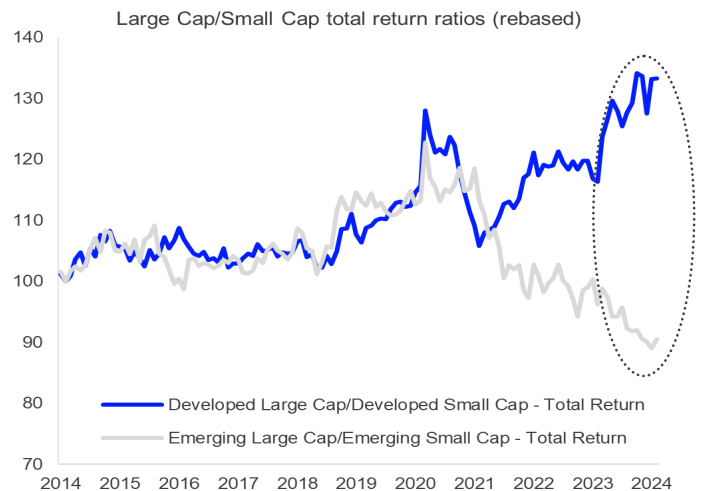
**Chart 1:** US led equity performance over 3M and 12M, followed by Japan. YTD, US and Japan share leadership.



**Chart 3:** Last 12M, 3M & YTD, Growth has outperformed Value and Cyclical have outperformed Defensives.



**Chart 5:** The steep DM rotation into large caps since early-2023 was sustained by their advantage in tight liquidity conditions.



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## Equities (continued)

An uptick in forecast earnings growth and broader valuation rerating underpins the equity rally over the last 3M. Industry performance dispersion widened as cyclical industries led YTD. US valuation premium (to rest of world) started reducing.

Over 3M, cyclicals led industry returns in the All-World and across regions, on average, reflecting a risk-on market sentiment (Chart 1). However, spreads between best and worst-performing industries have increased for the All-World to 14.2% at end-February vs. 7.3% at end-November, suggesting the rally has narrowed since the broad-based gains of Q4 2023. The rise in long rates since year-end puts pressure on rate-sensitive industries like real estate. Different industry weights also led to different macro sensitivities (Chart 2), with US and Japanese indices' performance helped by heavy weights in cyclicals such as tech, discretionary and industrials.

Forecast 2-year earnings growth picked up in the last 3M in the US (8.8%) and broader Developed (9.1%) and Emerging (17.0%) regions (Chart 3). 12M forward EPS estimate revisions have been slightly negative in major developed markets (except in Japan), but hovered close to zero (Chart 4). The All-World ex US re-rated relative to the US since year-end, as has the Emerging region relative to Developed markets but to a lesser extent (Chart 5). The ratio of US to All-World ex US PE stood at 1.62x (compared to 1.85x at end-November). Still, on a forward basis, US equities remain the most expensive, indicating potential derating risk (Chart 6). The US and Japan are trading above their 10Y average 12M-fwd PEs, while the UK is at a notable discount to its 10Y mean.

Chart 1: Tech, Industrials & Discretionary gained most in the All-World over 3M. Industry dispersion was highest in the UK.

3M Regional Industry Returns (TR, USD)							
	All-World	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging
Index Return	9.9	12.0	3.8	7.3	11.7	4.8	4.1
Basic Materials	0.4	5.3	-10.5	2.8	9.6	-4.8	-2.0
Consumer Disc.	12.0	13.1	11.7	13.3	11.9	13.5	2.8
Consumer Staples	1.4	3.3	0.2	-4.1	4.1	1.0	-0.3
Energy	2.6	2.4	-2.9	-5.3	6.3	-1.4	13.9
Financials	10.2	13.1	4.0	7.5	16.5	8.3	5.5
Health Care	9.1	10.9	4.7	6.5	7.2	10.0	-5.4
Industrials	12.5	13.3	18.8	12.8	12.1	1.6	6.6
Real Estate	4.7	6.2	2.1	-1.3	0.6	7.6	-1.7
Technology	14.6	15.6	8.1	18.0	17.9	8.6	4.1
Telecoms	2.9	3.8	-6.9	-0.3	12.9	-0.7	1.5
Utilities	2.2	2.5	-4.5	-7.9	4.5	8.5	12.9
<b>Range</b>	<b>14.2</b>	<b>13.3</b>	<b>39.3</b>	<b>25.9</b>	<b>17.3</b>	<b>18.2</b>	<b>19.3</b>

Chart 2: Industry weights led to different macro sensitivities. The US is concentrated; Europe, Japan and EM are more diversified.

Regional Industry Exposures (%)							
	All-World	US	UK	Dev Eur ex UK	Japan	Dev AP ex JP	Emerging
Basic Materials	3.4	1.6	7.1	4.4	5.1	11.2	6.3
Consumer Disc.	14.2	14.4	12.0	13.9	23.4	9.2	12.1
Consumer Staples	5.4	4.6	15.5	7.6	5.9	3.3	6.0
Energy	4.5	3.8	12.1	3.8	0.8	3.3	7.1
Financials	14.3	10.3	17.9	17.8	12.2	27.9	23.1
Health Care	10.9	12.0	12.6	16.0	7.6	6.7	3.6
Industrials	13.2	11.9	15.6	18.5	24.5	10.9	8.2
Real Estate	2.3	2.3	1.3	1.0	3.2	6.9	2.2
Technology	26.3	34.6	1.0	10.7	12.0	5.8	23.7
Telecoms	2.8	2.1	1.1	2.8	4.0	11.8	4.0
Utilities	2.7	2.4	3.8	3.5	1.3	2.9	3.8

Chart 3: Earnings growth (IBES) forecasts (%) have increased over 3M in the US and broader Developed & Emerging markets.

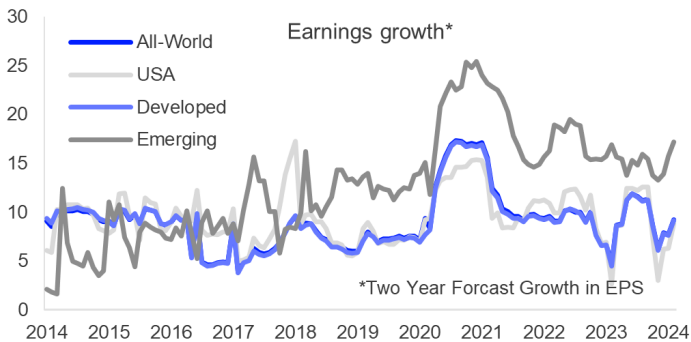


Chart 4: 12M forward EPS estimate revisions have hovered around zero and were slightly negative except in Japan.

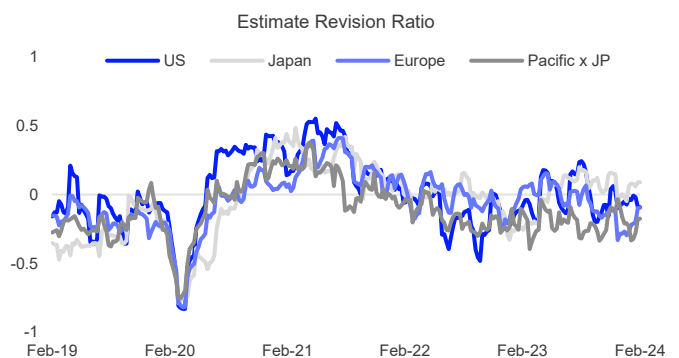


Chart 5: Over 3M, All-World ex US valuations perked up relative to the US. EM valuation discount to DM moderated slightly.

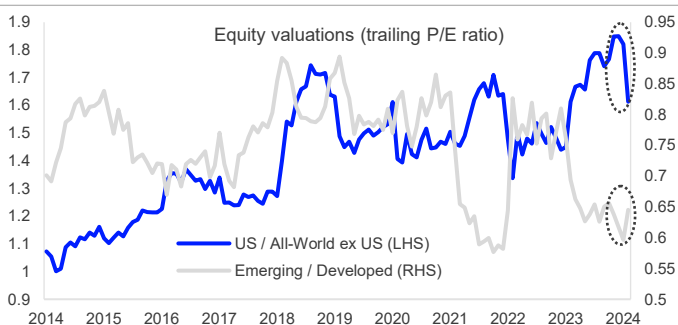
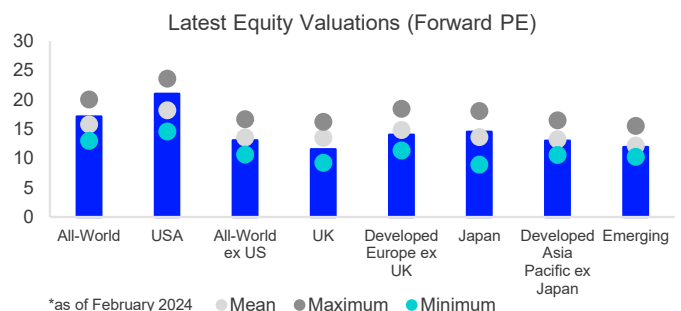


Chart 6: US & Japan are trading at forward valuations > their 10Y mean. The UK is trading at a notable discount to its 10Y average.



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# Emerging Markets

Emerging markets have evolved significantly. The growth model in China might be changing structurally, and its high equity risk premium could point to opportunities. EM equities are becoming less concentrated with fast growth in many countries. EM sovereign spreads narrowed during DM central banks rate hikes, while equity volatility is in-line with that of DM.

China's growth has decelerated over the two decades (Chart 1), from above 10% to 4-5%, driven by the weaker property sector, lower net exports and a maturing economy. A structural shift is reflected by a lower investment weight (Chart 2) and sharp decline in loans to the real estate sector since December 2016 (Chart 3), when the policy of "houses are for living in, not speculation" began.

China's equity risk premium reached a decade high in January and remains much higher than other EM. Chinese equities (and so EM equities broadly) rebounded strongly in February, helped by positive market reaction to the PBoC's large cuts to the 5-year LPR.

EM credit risk has decreased significantly in recent years, as indicated by (a) narrower EM sovereign spreads vs G7 (Chart 4) and (b) EM's 5-year annualized equity volatility is in line with DM's (17.8% for EM and 17.5% for All-World).

Fast growth in countries like India, Brazil, Mexico have made the EM equity index more diversified. The top weights in FTSE EM are China 28.3% & India 21.6% (was 47.6% & 10.3% resp. in October 2020). EM-DM equity correlations vary across countries (Chart 6).

Chart 1: After a high growth period post joining WTO, economic growth in China has moderated as the economy matures.



Chart 2: Changing composition of China's economy – greater focus on consumption & less on exports and investments.

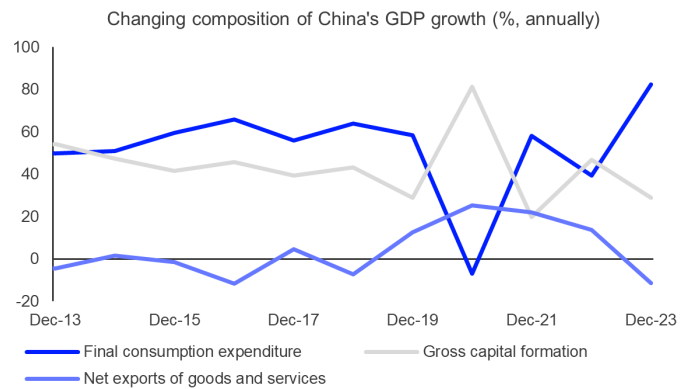


Chart 3: The changing loan composition in China reflects sharply reduced planned reliance on real estate for future GDP growth.

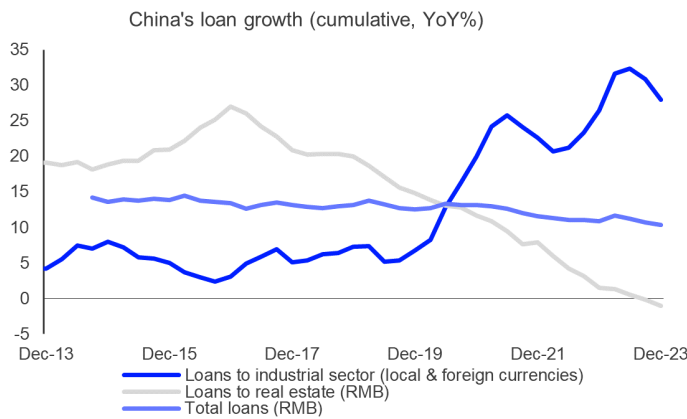


Chart 4: EM sovereign bonds have been extremely resilient in the sharply rising rate environment of 2022-23.

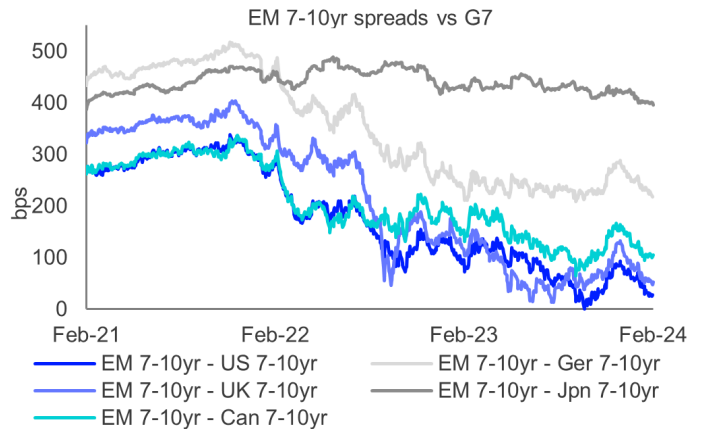


Chart 5: The equity risk premium in China far exceeds that of EM overall. Is it a pricing of risk or opportunity from valuation?

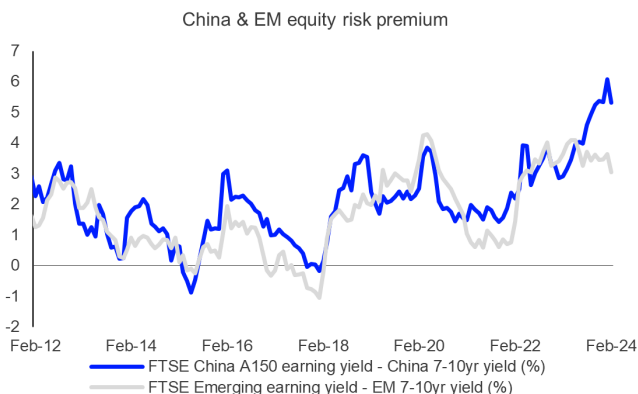
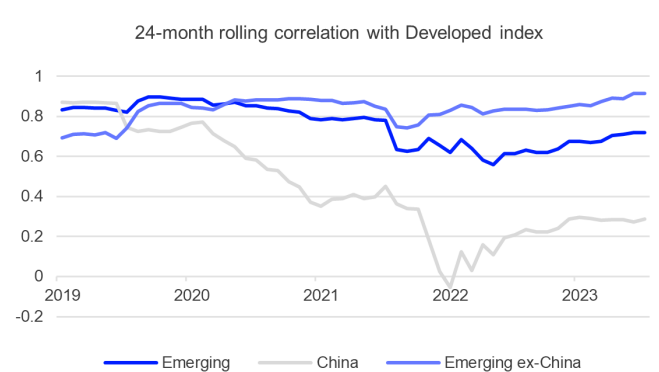


Chart 6: Lower DM-EM equity correlations have been driven mainly by US-China polarization, and seems to have bottomed.



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# Commodities

## Forward & currency markets indicate positive expectations for commodity returns; geopolitical risks support oil & gold.

Commodities are heterogenous in terms of their beta to growth & risk-on, or risk-off, sentiment. Oil & copper usually have a positive beta to global growth, with oil also reflecting geopolitical risks. The shift upward in the oil forwards curve is contrary to copper being flat, and the broad commodity index being in the red in the last 3M indicates slowing growth, but rising geopolitical risk.

More signs of geopolitical risks being priced in are: (a) Gold was flat in the last 3M and up 11.8% in last 12M, even in the midst of rising real yields, supported by large gold purchases by EM central banks (World Gold Council); (b) The historically negative correlation between commodity prices and the US dollar has broken down since end-2021 (Chart 3), possibly reflecting a larger share of commodity trades in currencies other than the US dollar.

Currency moves relative to the US dollar over 3M (large & liquid forex markets price in market expectations) show currencies of commodity exporters outperformed those of commodity importers, an expectation that broad commodity prices remain high (Chart 5). Could commodities continue to outperform equities? (Chart 4)

Chart 1: Forward curve indicates an upward movement in last 3M in expected oil prices. WTI expected to remain ~\$70/ barrel.

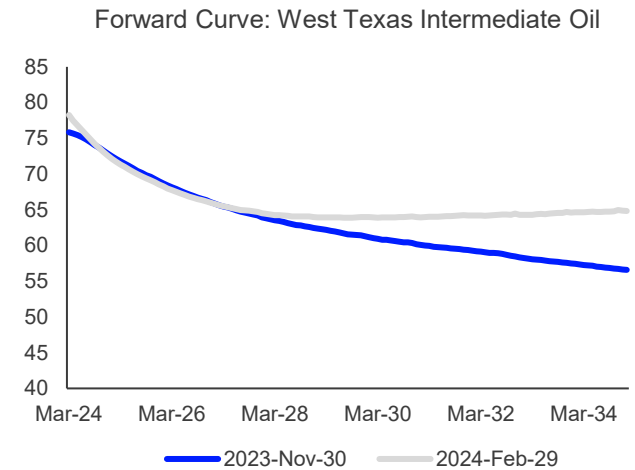


Chart 2: The diversified Commodity Index has been in the red in the last 3M, while oil is up. Geopolitical risks getting priced in?

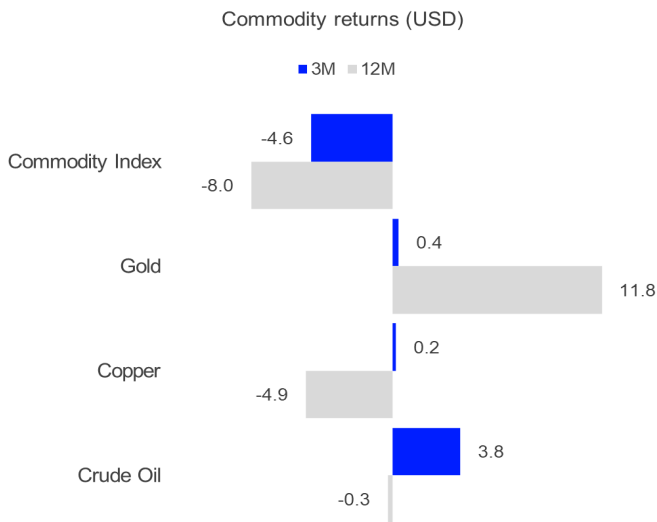


Chart 3: A breakdown in the historically negative correlation between commodities & dollar since the Russian/Ukraine war.

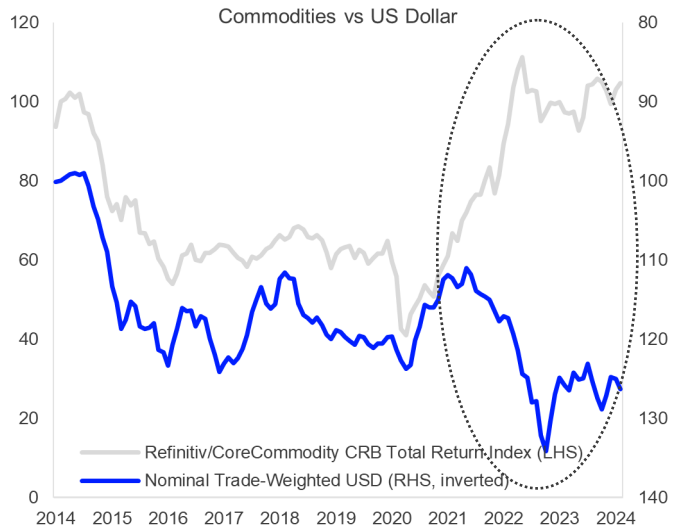


Chart 4: Commodities' returns vs equities have recovered from the long term trough in 2020. New LT cycle for commodities?

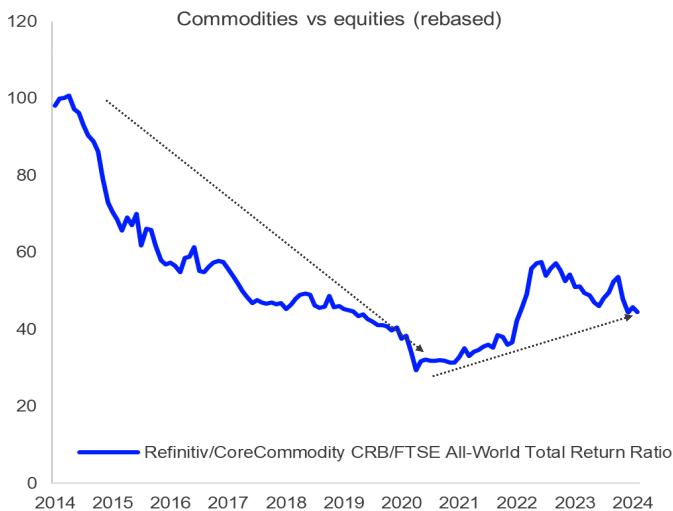
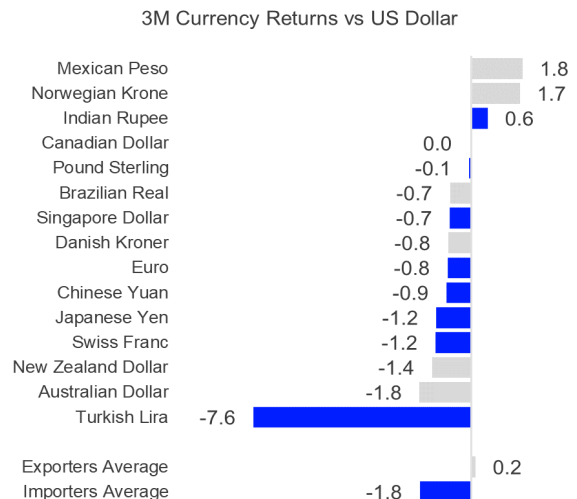


Chart 5: Currencies of commodity exporters outperformed vs importers in last 3M: investor belief in rising commodity prices.



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# Real Assets: Listed Real Estate and Infrastructure

**Sector performance in listed real estate points to a potential bottom for real estate, alongside structural economic shifts. Infrastructure performed well on the back of resilient growth, more so in EM.**

Nine sectors within listed real estate had positive returns in the last 3M, compared to five in last 12M, indicating a broadening recovery in listed real estate. The best performing sectors over 3M include Lodging, Industrials, Retail (cyclical recovery) and Data Centers, Self-Storage (structural shifts). Listed real estate performance is usually a leading indicator for Real Estate as an asset class, and its 4.7% return in 3M relative to 1.5% in last 12M indicates real estate may have turned the corner.

Regionally, in the last 3M, listed real estate did best in the US & Developed APAC ex Japan, but across regions they underperformed broad equities, hurt by sensitivity to rising rates.

Listed infrastructure had strong returns in both 3M & 12M, doing best in (high growth) emerging markets. This is in-line with the global infrastructure index having >50% weight in railroads & electricity with their strong beta to economic growth.

Chart 1: 9 of the 11 real estate sectors had positive returns in the last 3M vs 5 in the last 12M, indicating the worst may be over.

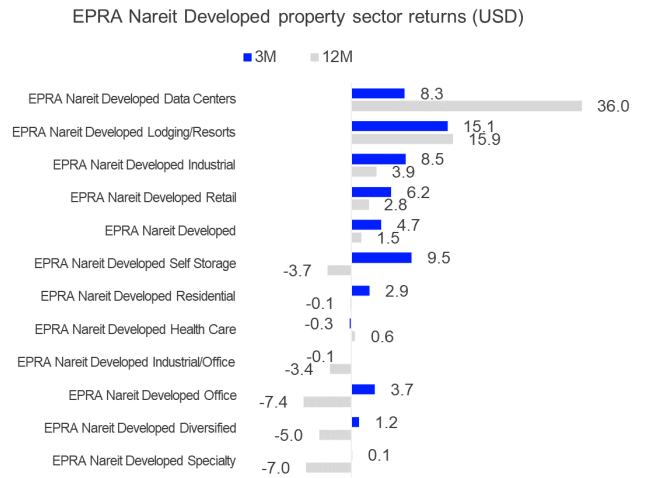


Chart 2: Listed real estate did the best in the US in the last 3M & 12M. Developed APAC x Japan had a turnaround in last 3M.

FTSE EPRA Nareit Global Real Estate returns (USD)

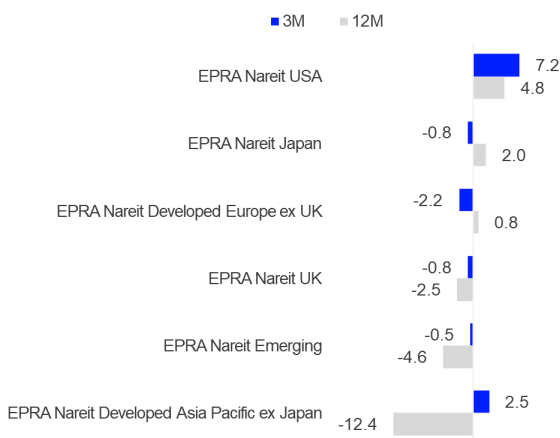


Chart 3: Listed real estate broadly underperformed equity in the last 3M & 12M (negative premium relative to equities).

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

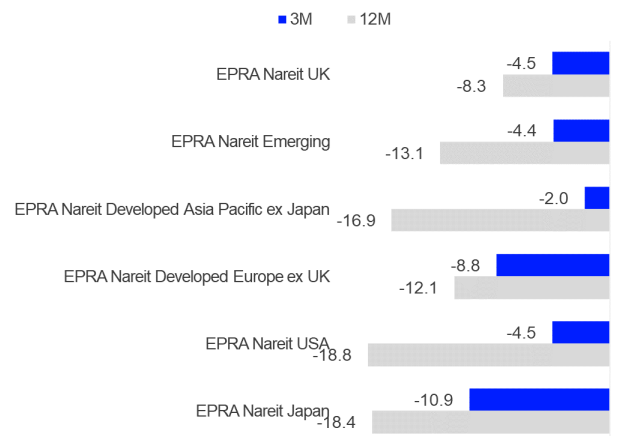


Chart 4: Infrastructure posted gains in the last 3M & 12M. It did best in emerging markets (benefiting from fast growth in EM).

FTSE Core Infrastructure returns (USD)

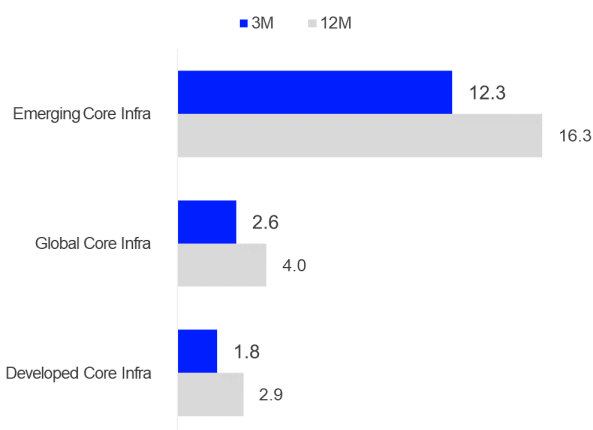
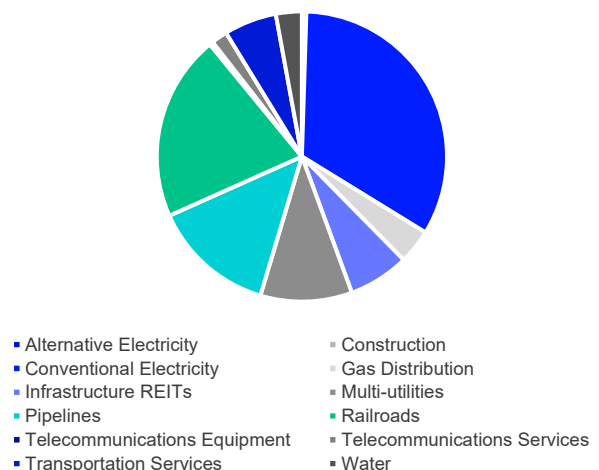


Chart 5: Railroads & Electricity are >50% of the Global Core Infrastructure. Infrastructure is a pure play on economic growth.

Weights (%) of FTSE Global Core Infrastructure



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# Currencies

The US dollar remains stronger than tightening yield differentials might suggest. The yen and Australian dollar led YTD losses, as their rate differentials widened. The Canadian dollar, Euro, and sterling also weakened YTD, despite narrowed or stable rate differentials. Mean reversion and rate differentials indicate potential for US dollar to weaken.

With its steep rise over the last decade (Chart 1), the trade-weighted US dollar reached extreme over-valuation in Q4 22 (> two standard deviations from its 10-year mean). It remains ~8% higher than its 10-year average, helped by a February rally on the potential for delayed Fed easing on the back of stronger economic data. Both the long-term mean-reversion and narrowing rate differentials suggest the US dollar has further room to fall, which then could boost the earnings of US large cap equities, which derive almost 40% of their earnings from international markets..

Short-term interest rate differentials are a key determinant of currency values (Charts 2-6). The yen weakened significantly YTD, alongside rate differential widening, and the value of yen much depends on the BoJ's policy direction. The Australian dollar also fell YTD (-5%), on wider rate differentials. The Euro and sterling fell further away from their 10-year averages, after their YTD downward moves, although rate differentials narrowed vs the end of 2023 (unlike the widening in Japan and Australia).

Chart 1: The trade-weighted US dollar peaked in Oct 22. LT patterns & declining rate differentials suggest it may fall further.

Chart 2: YTD, the Euro weakened vs USD even as rate differentials narrowed. It is also 5% below its 10-year average.

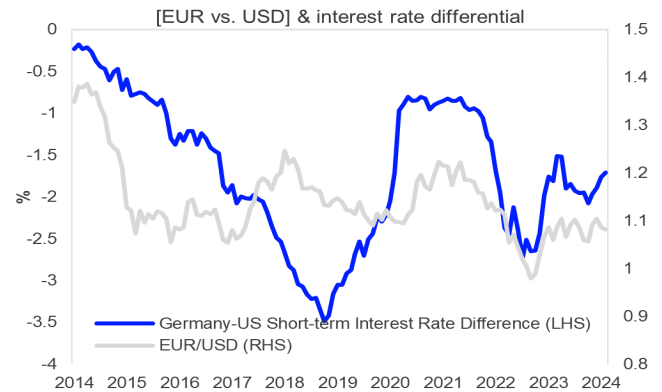
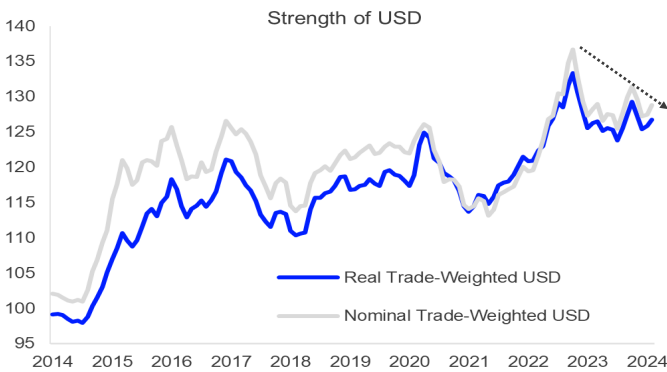


Chart 3: YTD GBP fell vs USD even as rate differentials narrowed significantly, seems below fair value, 7% below 10-year average.

Chart 4: On the back of widening rate differential, the Yen has weakened sharply YTD and is just above the critical 150 value.

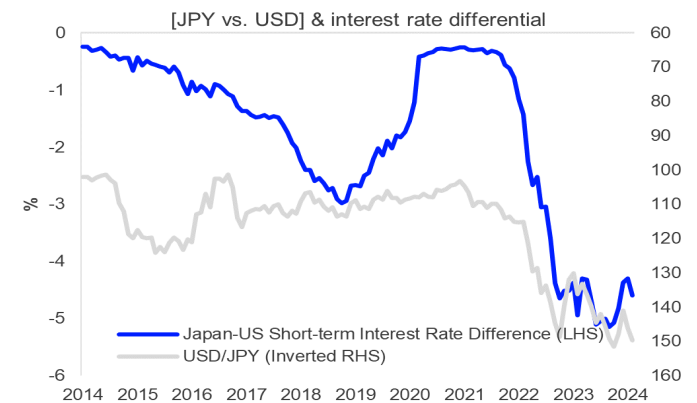
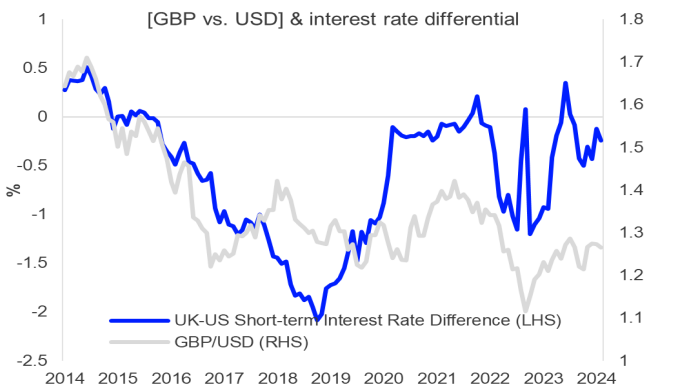
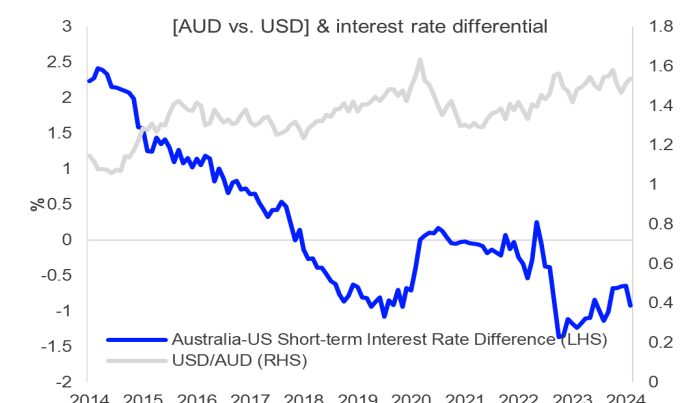
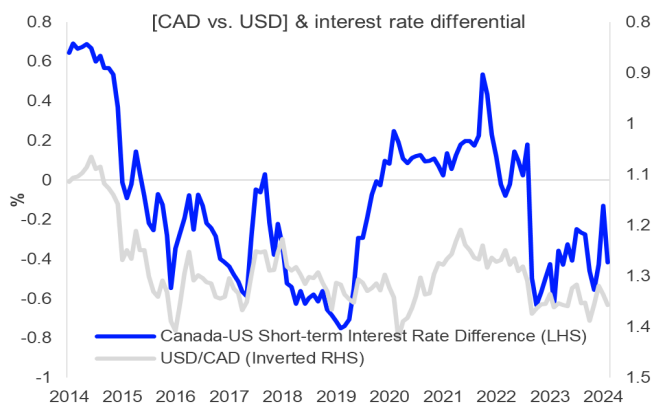


Chart 5: The CAD weakened vs USD YTD, even while rate differentials remained flat, and is 5% below its 10-year average.

Chart 6: YTD, AUD has weakened 5% relative to the USD, not surprising given the significantly higher rate differential in 2024.



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# Capital Flows

**Fund flows indicate the risk-on stance that began in November 2023 continues. Money market flows signal lingering caution, and their high balances indicate more potential tailwind for risk assets should they get deployed elsewhere.**

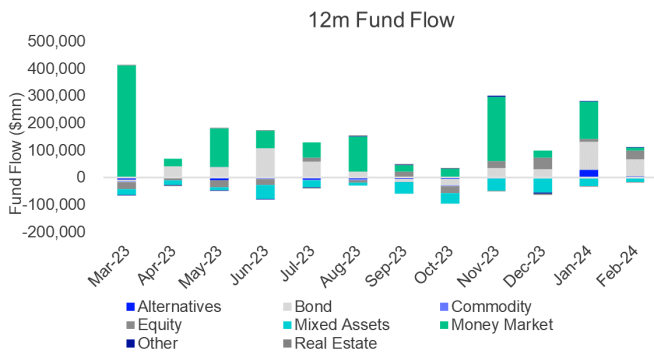
Global fund flow has turned strongly positive in the last four months. Flows turned more positive from November 2023, as investors turned more positive on interest rates, and that trend has continued since. Fund flows in equities, which had been negative for most of 2023, have seen a positive run since November, as the equity market performance has also been positive.

Bond flows were also strong over the last four months, picking up as yields went down in late 2023, but remaining strong as yields increased in early 2024. Money Market flows were also strong in November and January, and their large balances could provide further tailwind to risk assets.

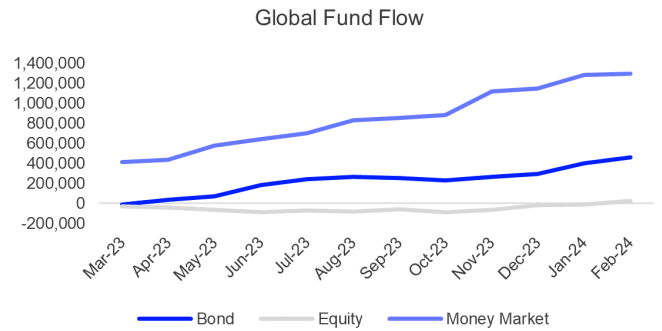
Regionally bond flows have picked up in the US and Europe and remained strong in EM. Equity flows have increased in the US, remaining weak in Europe and strong in Japan and EM.

These flows confirm the "risk-on" narrative adopted across the market since November (with the exception of strong money market inflows), despite more subdued expectations around interest rates cuts since early 2024.

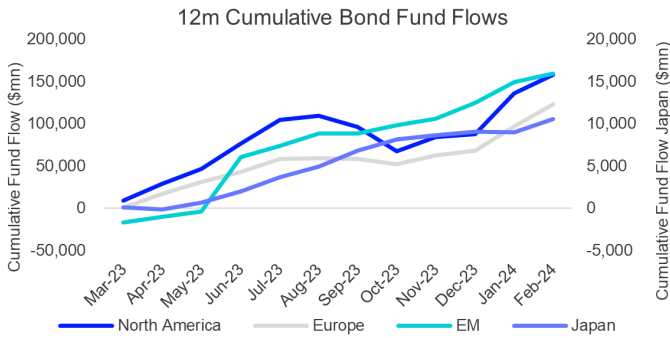
**Chart 1: Recent months have seen inflows into money market, bonds & equities.**



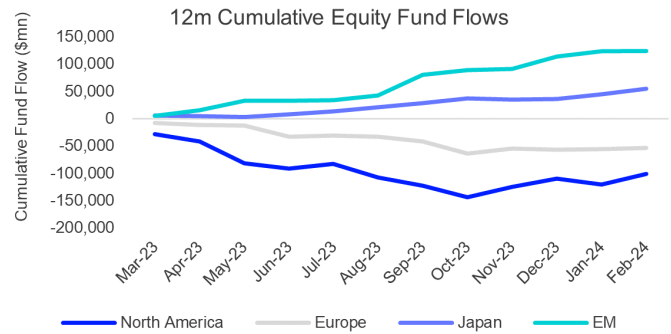
**Chart 2: Strong flows into money market indicate continuing caution, with more risk-on flows into equity since November.**



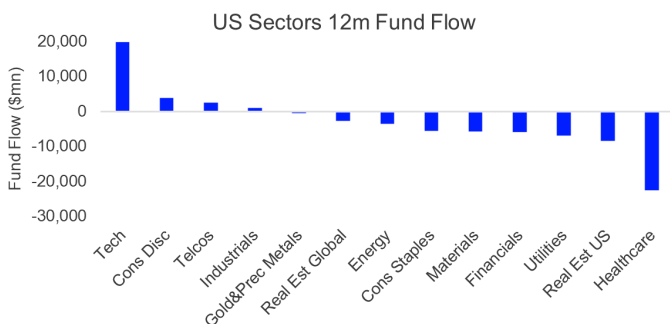
**Chart 3: Positive 12M bond flows in all regions, with a sharp pick-up in flows into US bonds since November.**



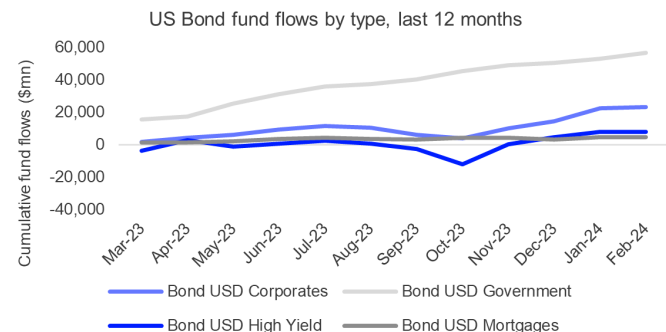
**Chart 4: The last 12M equity flows reflect higher investor interest in EM & Japan and strong inflows into US since November.**



**Chart 5: In the last 12M, US equity flows have been strongest in Tech, and weakest in rate-sensitive & defensive industries.**



**Chart 6: Still cautious (flows into rates) but more risk-on positioning, with inflows into credit & high yields since October.**



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# Cross-Asset: Equities and Fixed Income

**Macro trends indicate rates might fall, while equities (especially in the US) have correction risk. The recent increase in US small cap implied volatility could be an early warning. Stocks and bonds decouple YTD.**

After falling in August-October, the stock/bond ratio rose with the risk rally since late-2023, reaching a new high (1.48x) compared to that in March 2022 (1.41x), before the start of rate hikes. This, along with the disconnect with PMI, indicates yields could fall, while equities may have rallied too far (Chart 2). The stock-bond decoupling (Chart 3) is, however, bringing back the viability of a 60:40 portfolio. Will this decrease in 12M correlations continue as we move closer to rate cuts, or will it stabilize at fairly high levels, reminiscent of the pre-mid-90's normal?

Total stock capitalization/GDP ratio (macro measure of PE) remain 16% & 24% above the 10-year average for the All-World and the US respectively (Chart 1). The equity risk premium is now lower than that of HY (Chart 4), despite of the continuing spread compression. Charts 1, 2 & 4 indicate that equities remain overvalued, more so in the US. The rising small cap implied volatility could be an early warning indicator for equities.

Chart 1: Market cap relative to the real economy is 15% higher than its 10-year average globally, and 24% higher in the US.

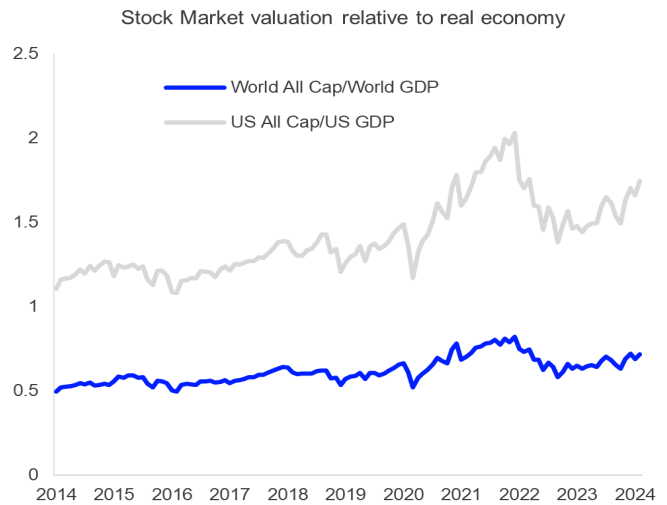


Chart 2: Relative stock/bond valuations remain higher than macro data might point to; disconnect widening since 4Q 2022.

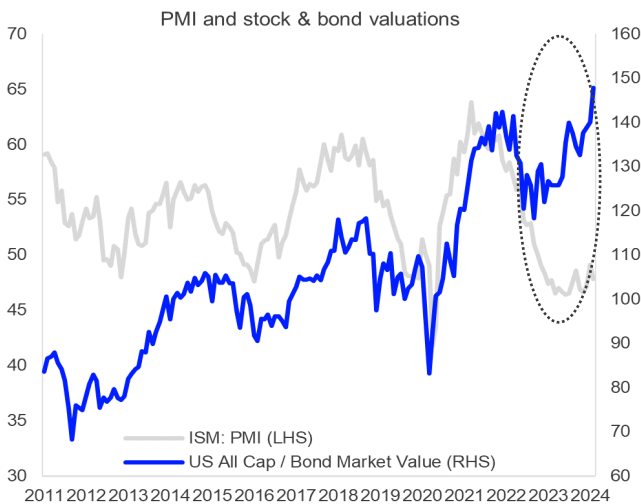


Chart 3: 12M rolling stock/bond correlation has fallen YTD (0.85 to 0.75). End of rate hikes may bring back diversification benefits.

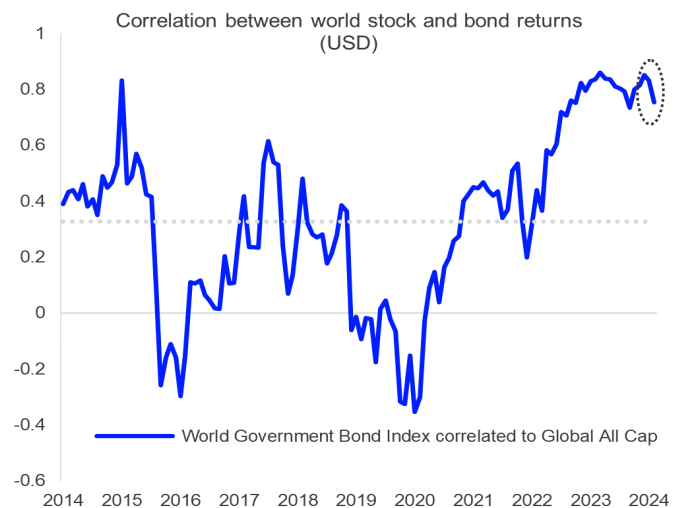


Chart 4: The equity risk premium remains low relative to HY credit spreads, suggesting downside risk for equities.

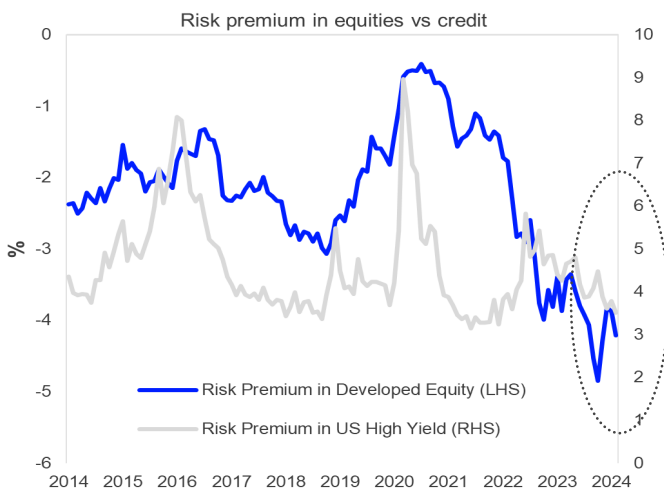
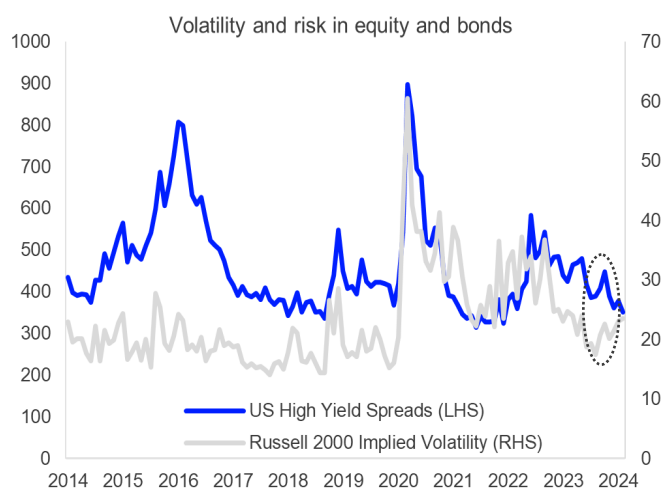


Chart 5: Small cap equity risk (implied vol) has increased since late 2023, while HY spreads have kept compressing.



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# Cross Asset: Return and Risk

Asset allocation depends on investor goals and (changing) risk-return of asset classes. The rate hikes since 2022 have made Fixed Income yields & return competitive, and given its low volatility, has affected the relative appeal of other assets. Income investing is back, and the often-quoted 4% withdrawal rate for retirement portfolios is now well-supported.

Based on the last 1 year data (when rates stabilized) for the broadest FTSE Russell indices in equities, fixed income, commodities, real estate & infrastructure; equities were the clear outperformer (Chart 1). Fixed income was a significant volatility dampener, along with yields in line with that of listed real estate & infrastructure. The changing dynamics of previous 24 months have vastly increased opportunities for income investing, with listed real estate, infrastructure and fixed income providing healthy income yields in the range of 3.6-4.4%.

Reflecting sharp changes in valuation, the earnings yield (EY) is sharply down in real estate & (less so) in equities. EY in infrastructure is slightly higher than in FI.

The income or dividend yield (DY) in equities varies significantly among regions. DY in Developed x US is more than twice that of US, and highest in Developed Europe and Emerging. The income yield in Developed Europe and EM equities was not too far below that of listed real estate and infrastructure (Chart 2 & 1).

Income from equities (2.0%) is higher than sovereign rates (0.6%) in Japan (Chart 4), and less so in Developed Asia ex Japan (DY of 3.5% vs 7-10 years yields at 3.3%). Given home bias in investing, this is another tailwind for Japanese equities.

Chart 1: Equities for total return & return/ risk, FI & listed real assets for income, FI to lower portfolio volatility?

	1 Year	USD Total Return %	Income Yield %	Risk	Return/Risk
Equity		23.6	2.2	13.3	1.8
Fixed Income (FI)		3.7	4.1	8.6	0.4
Commodities		7.5	-	11.5	0.6
Real Estate		1.0	4.4	18.5	0.1
Infrastructure		4.0	3.6	13.7	0.3

Chart 2: Dividend yields are lowest in the US, highest in EM & Developed Europe, and 2.1x for Dev x US relative to US.

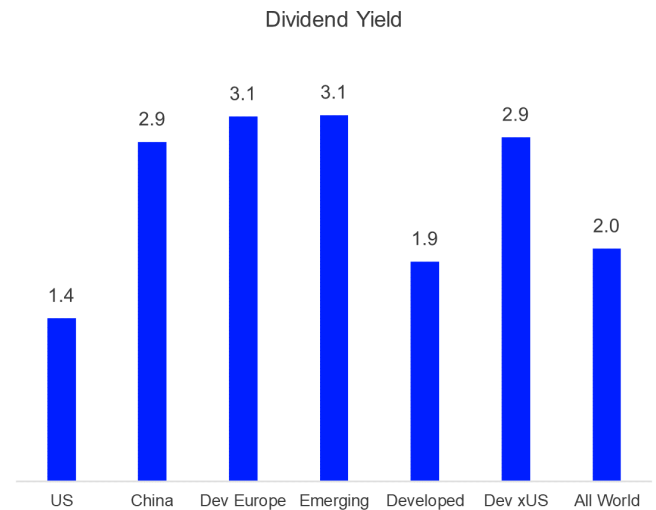


Chart 3: Earnings yield (=E/P) is sharply down in real estate & (less so) in equities. EY in infrastructure little higher than in FI.

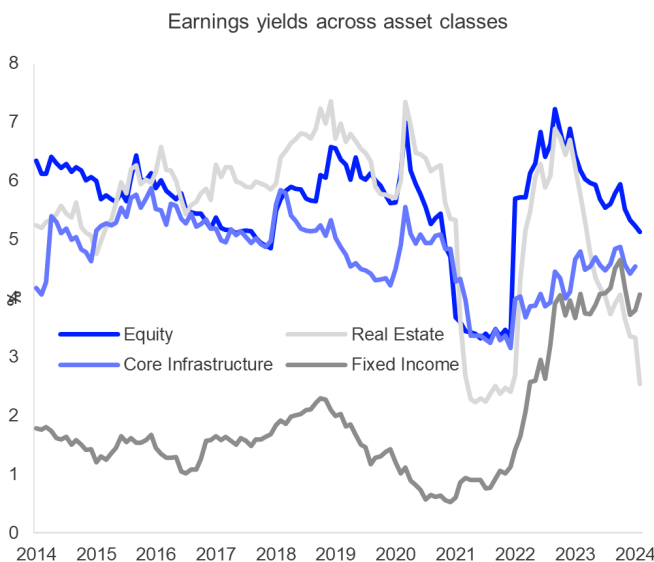
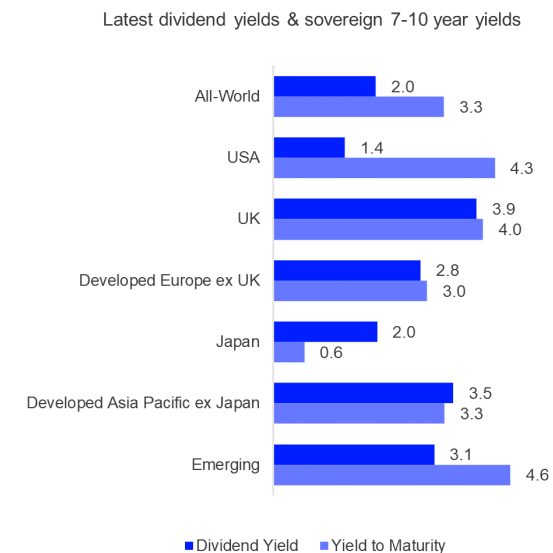


Chart 4: Income from equities relative to rates is highest in Japan and slightly positive in Asia Pacific ex Japan.



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## Cross Asset: Return and Risk (continued)

Return leadership had varied as market conditions changed. Unlike the GFC-to-Covid era, other markets (e.g., Japan) are now competitive with US equities for return leadership. Lower duration (& low defaults) helped HY outperform IG.

The pause in rate hikes in 2023 led to reduced equity volatility (All-World volatility over 1 year was 13.3% vs 16.2% in 3 years). The highest returns in the last year were US large caps (29.8%), followed by Japanese equity (26%), and their return per unit of risk was equal, at 2.2. High Yield (return/risk of 1.8) had the next highest risk-adjusted return. Returns in double digits included Developed Europe ex UK (15.6%), Gold (11.8%), World High Yield (11.8%), US High Yield (11.0%) and US small caps (10.0%). Risk-free gold and risky HY having similar returns indicate the unusual and fast changing dynamics in financial markets.

In the 3-year period, US large caps had the highest annualized return (10.6%), followed by crude oil (8.2%), and FTSE UK & Developed Europe ex UK (both at 6.1%). US large caps also had the highest risk-adjusted return.

In the last 3Y, volatility in equities (15-22%) was double that of bonds (7-12%). Within FI, inflation uncertainty led to inflation linked bonds being the most volatile. Listed real assets volatility (16-19%) was slightly less than equities. Commodities had diverse volatility (28% for oil, 18% for copper). Contrary to common perception, EM equity volatility was equal to that of the All-World (both at 16.2%).

Chart 1: One-Year Risk-Return – US large cap & Japanese equity had the highest return in the last 12M (almost 30% & 26% resp). On return/risk, US large cap & Japanese equity were tied at the first spot (2.2), followed by All-world equity, US HY & Global HY (all at 1.8).

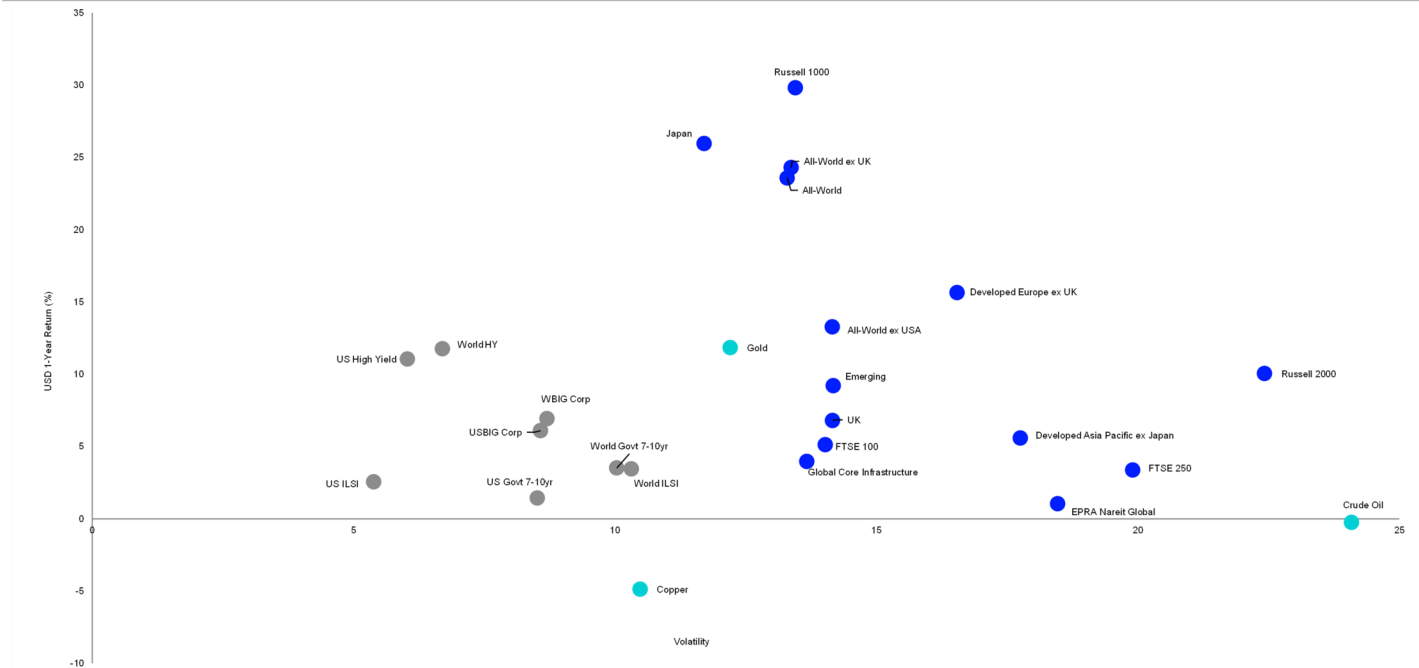
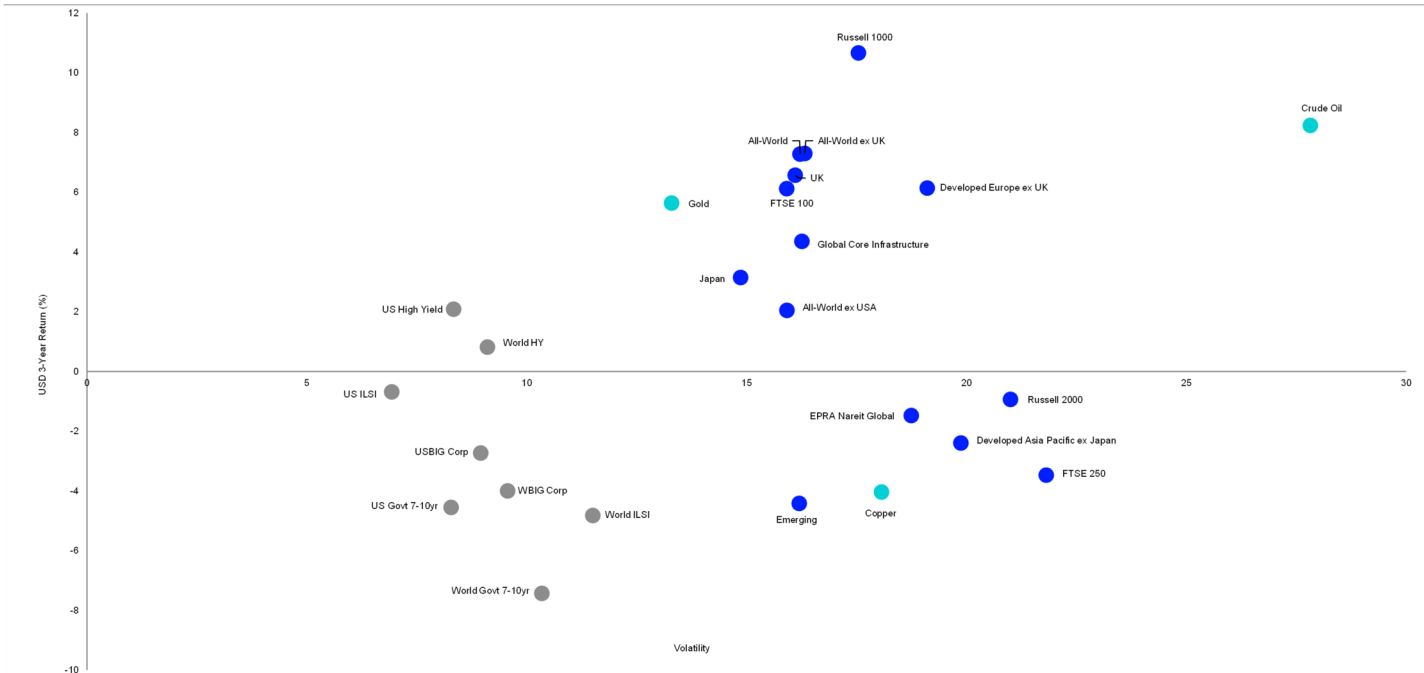


Chart 2: 3-Year Risk-Return – In the last 3Y, US large caps had the highest annualized return (10.6%) followed by oil (8.2%). On return/ risk, high uncertainty & volatility in last 3Y kept return/ risk below 1 for all major classes, with Russell 1000 leading at 0.6.



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# Cross Asset: Correlations

With inflation as a concern, real rates more than nominals, drove equities in the last 3Y. The data shows that US equity markets should look to global rates more than just what the Fed does. For investors in DM equities, significant diversification comes from commodities, and also from sovereign bonds and EM equities.

In the last 3Y: US large cap had a higher correlation with global 7-10 year bonds (0.69) than with US 7-10 year (0.60), a reflection of the open US economy & financial markets. They are most correlated with Developed Europe ex UK (0.88), and least with EM (0.62).

Global equities were driven more by real rates than nominal (0.83 correlation with global inflation-linked bonds vs 0.76 with World Govt. 7-10 years). Global equities had a very high correlation with World High Yield (0.90) and a fairly high (0.82) with Investment Grade corporates. Stock-bond diversification comes primarily from sovereign investment grade.

Irrespective of returns, commodities have a very low correlation to global equities (0.34 for gold & 0.08 with crude oil), and bring the benefit of volatility dampening in a diversified portfolio.

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 & All world was lowest with EM. Commodities provided diversification.

Name	Russell 1000	Russell 2000	All-World	All-World ex USA	UK	Dev Europe ex UK	Japan	Dev Asia Pacific 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	0.87	0.98	0.85	0.76	0.88	0.76	0.80	0.62	0.60	0.76	0.86	0.72	0.69	0.80	0.86	0.75	0.83	0.87	0.25	0.07
Russell 2000	0.87	1.00	0.86	0.78	0.71	0.76	0.71	0.80	0.59	0.47	0.80	0.82	0.81	0.57	0.84	0.80	0.83	0.67	0.82	0.08	0.14
All-World	0.98	0.86	1.00	0.94	0.85	0.94	0.83	0.89	0.74	0.65	0.77	0.88	0.76	0.76	0.83	0.90	0.82	0.86	0.91	0.34	0.08
All-World ex USA	0.85	0.78	0.94	1.00	0.92	0.95	0.87	0.95	0.88	0.66	0.71	0.82	0.80	0.79	0.80	0.89	0.86	0.83	0.89	0.45	0.09
UK	0.76	0.71	0.85	0.92	1.00	0.93	0.72	0.85	0.71	0.54	0.84	0.76	0.66	0.69	0.73	0.83	0.75	0.79	0.86	0.38	0.29
Dev Europe ex UK	0.88	0.76	0.94	0.95	0.93	1.00	0.79	0.87	0.71	0.65	0.73	0.84	0.76	0.78	0.82	0.90	0.85	0.83	0.89	0.44	0.08
Japan	0.76	0.71	0.83	0.87	0.72	0.79	1.00	0.81	0.75	0.66	0.89	0.82	0.80	0.76	0.72	0.86	0.82	0.66	0.70	0.32	0.01
Dev Asia Pacific ex Japan	0.80	0.80	0.89	0.95	0.85	0.87	0.81	1.00	0.85	0.60	0.88	0.77	0.74	0.73	0.75	0.83	0.79	0.84	0.89	0.47	0.08
Emerging	0.62	0.59	0.74	0.88	0.71	0.71	0.75	0.85	1.00	0.56	0.49	0.55	0.69	0.66	0.81	0.64	0.72	0.65	0.70	0.44	0.01
US Govt 7-10yr	0.60	0.47	0.65	0.66	0.54	0.65	0.66	0.60	0.58	1.00	0.85	0.67	0.95	0.94	0.85	0.70	0.91	0.52	0.63	0.49	-0.20
US ILSI	0.76	0.60	0.77	0.71	0.64	0.73	0.69	0.68	0.49	0.85	1.00	0.80	0.84	0.84	0.93	0.79	0.83	0.69	0.74	0.47	-0.06
US High Yield	0.86	0.82	0.88	0.82	0.76	0.84	0.82	0.77	0.55	0.67	0.80	1.00	0.79	0.78	0.78	0.98	0.82	0.68	0.81	0.22	0.09
USBIG Corp	0.72	0.61	0.78	0.80	0.66	0.78	0.80	0.74	0.69	0.95	0.84	0.79	1.00	0.95	0.87	0.83	0.98	0.63	0.75	0.43	-0.15
World Govt 7-10yr	0.69	0.57	0.76	0.79	0.69	0.78	0.78	0.73	0.66	0.94	0.84	0.78	0.95	1.00	0.91	0.82	0.97	0.63	0.72	0.60	-0.12
World ILSI	0.80	0.64	0.83	0.80	0.73	0.82	0.72	0.75	0.61	0.85	0.93	0.78	0.87	0.91	1.00	0.82	0.89	0.74	0.82	0.60	-0.10
World HY	0.86	0.80	0.90	0.89	0.83	0.90	0.86	0.83	0.64	0.70	0.79	0.98	0.83	0.82	0.82	1.00	0.86	0.71	0.84	0.33	0.07
WBIG Corp	0.75	0.63	0.82	0.86	0.75	0.85	0.82	0.79	0.72	0.91	0.83	0.82	0.98	0.97	0.89	0.88	1.00	0.67	0.79	0.52	-0.09
Global Core Infrastructure	0.83	0.67	0.86	0.83	0.79	0.83	0.66	0.84	0.65	0.52	0.69	0.68	0.83	0.63	0.74	0.71	0.67	1.00	0.85	0.42	0.07
EPRA Nareit Global	0.87	0.82	0.91	0.89	0.86	0.89	0.70	0.89	0.70	0.63	0.74	0.81	0.75	0.72	0.82	0.84	0.79	0.85	1.00	0.36	0.09
Gold	0.25	0.08	0.34	0.45	0.38	0.44	0.32	0.47	0.44	0.49	0.47	0.22	0.43	0.60	0.60	0.33	0.52	0.42	0.36	1.00	-0.20
Crude Oil	0.07	0.14	0.06	0.09	0.29	0.08	0.01	0.08	0.01	-0.20	-0.06	0.09	-0.15	-0.12	-0.10	0.07	-0.09	0.07	0.09	-0.20	1.00

Chart 2: Equity Market Correlations – US equities are most correlated with Developed Europe x UK & lowest with EM.

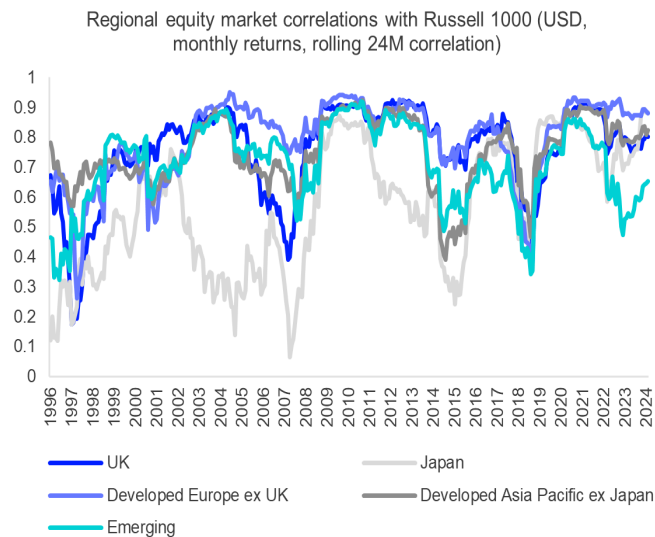
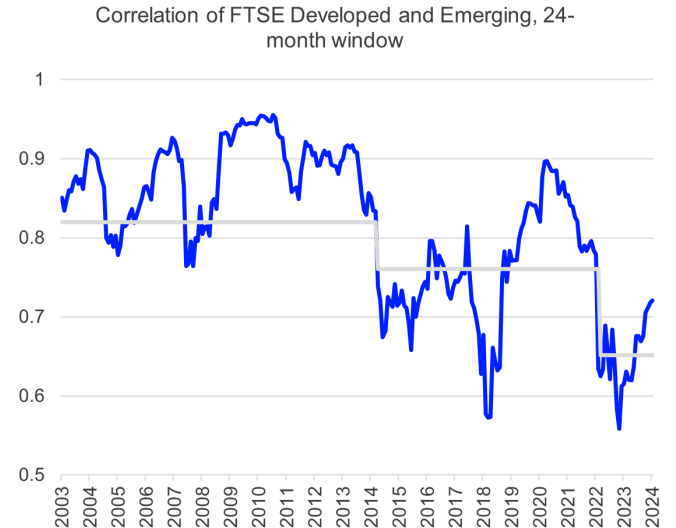


Chart 3: The correlation between DM & EM equities has been decreasing over last 20 years, but seems to have bottomed.



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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
China 7-10yr	CN_TSY_7-10
EM 7-10yr	EMGBI_7-10
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 Corporate Capped Extended Broad Bond Index – Investment-Grade	EMBBICCE_IG
US High-Yield Market Index	HY_MKT_US
European High-Yield Market Index	EUROPE_HYM
Emerging Markets Corporate Capped Extended Broad Bond Index – High-Yield	EMBBICCE_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	AWORLDV
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
FTSE China A 150 Index	XIN150
Refinitiv Commodity Index	RTCI
Refinitiv Core/Commodity CRB® Index Total Return	TRCCRBTR

## Appendix 2: Methodology Reference Guide

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### Report calculations

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- 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 in geographic markets based on domicile of fund as defined by LSEG Lipper. Cumulative USD estimated fund flow commencing at the beginning of the 12 month period. 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 February 29, 2024 with the exception of the most recent Fed Dot Plot that got released December 14, 2023.

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EMEA +44 (0) 20 7866 1810	Asia-Pacific	Authors	
North America +1 877 503 6437	Hong Kong +852 2164 3333	Indrani De, CFA, PRM	Zhaoyi Yang, CFA, FRM
	Tokyo +81 3 6441 1430	Head of Global Investment Research	Senior Manager
	Sydney +61 (0) 2 7228 5659	<a href="mailto:Indrani.De@lseg.com">Indrani.De@lseg.com</a>	<a href="mailto:Zhaoyi.Yang@lseg.com">Zhaoyi.Yang@lseg.com</a>

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