

The Big Picture

Global Asset Allocation 2024 Q3

Quarterly update from Invesco's Global Market Strategy Office
16 June 2024

For professional/qualified/accredited investors only



The Big Picture

Global Asset Allocation 2024 Q3

We think politics may bring volatility and the global economy is fragile, with stronger growth in some areas balanced by a slowing US. However, more than 25 central banks have cut rates in 2024 (not the Fed), bringing hope of recovery. We believe a lot of the better news is already priced into markets and reduce investment grade (still Overweight) and high yield (to zero) within our Model Asset Allocation, while boosting government bonds and real estate (both Overweight). Regionally, we still prefer European and emerging market (EM) assets.

Model asset allocation

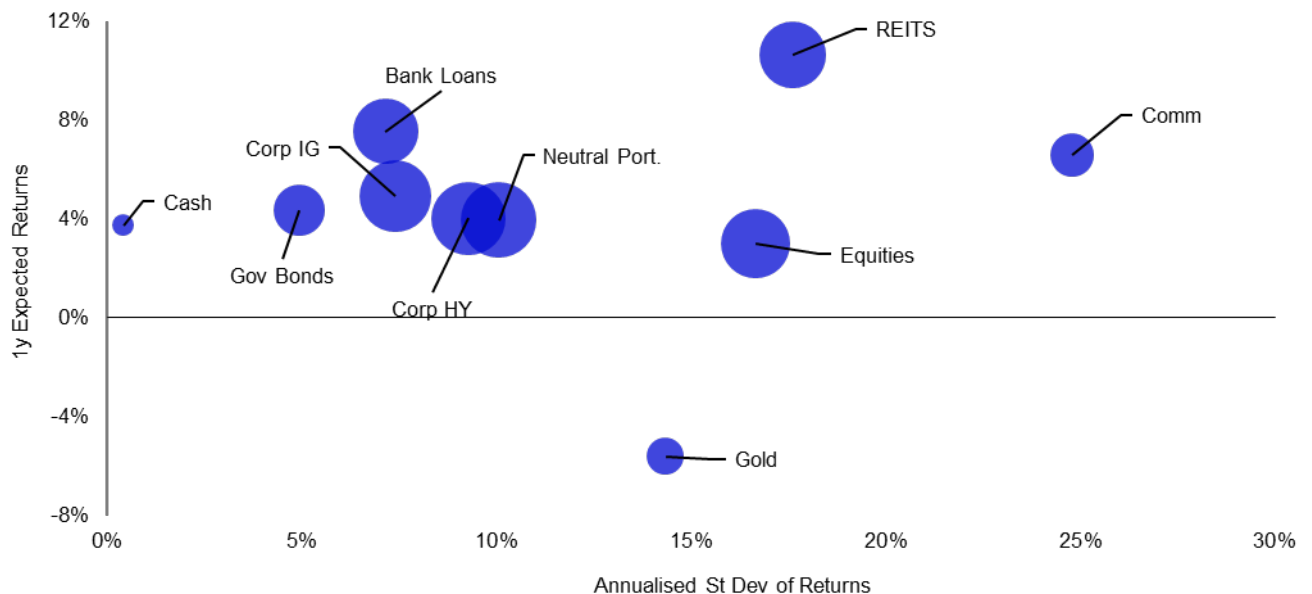
In our view:

- Cash rates remain competitive on a risk-adjusted basis. We remain Overweight.
- Bank loans also offer an attractive risk-reward trade-off. We stay at the Maximum.
- Government yields have risen and could fall over the coming months. We go Overweight.
- Real estate (REITS) has the potential to produce the best returns. We boost to the Maximum.
- Commodities have recovered but there may be more to come. We remain Overweight.
- Corporate investment grade (IG) is now less compelling than it was. We reduce but stay Overweight.
- Corporate high yield (HY) spreads are too tight. We reduce to Zero.
- Equities have performed very well and potential seems limited. We remain Underweight.
- Gold may be helped by falling yields and a weakening dollar but is expensive. We remain at Zero.
- Regionally, we favour Europe and EM.
- US dollar is likely to weaken and we maintain the hedge into JPY.

Our best-in-class assets (based on 12m projected returns)

- EM government bonds
- US bank loans
- China equities

Figure 1 – Projected 1-year total returns versus risk for global assets and neutral portfolio



Based on annualised local currency returns. Returns are projected but standard deviation of returns is based on 5-year historical data. Size of bubbles is in proportion to average 5-year pairwise correlation with other assets (hollow bubbles indicate negative correlation). Cash is an equally weighted mix of USD, EUR, GBP and JPY. Neutral portfolio weights shown in Figure 3. As of 31 May 2024. **There is no guarantee that these views will come to pass.** See Appendices for definitions, methodology and disclaimers.

Source: Credit Suisse/UBS, ICE BofA, MSCI, S&P GSCI, FTSE Russell, LSEG Datastream and Invesco Global Market Strategy Office

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We reduce credit, while adding to government bonds and real estate

After further gains in most assets, we spread risk away from IG and HY towards lagging assets

Underlying assumptions

Central banks are already easing and we expect the Fed to join them; election surprises may boost volatility

We think dollar weakness could help EM and commodities

Projected returns scaled back...a lot of good news is in the price but there are opportunities

Government bonds boosted to Overweight

Summary and conclusions: Elections and barbells

We think politics may bring volatility and the global economy remains fragile, with stronger growth in some areas balanced by a weakening in the US. However, more than 25 central banks have cut rates in 2024 (though not the Fed), which raises hopes about eventual recovery. We believe a lot of that is already priced into many assets and reduce investment grade (still Overweight) and high yield (to zero) within our Model Asset Allocation, while boosting government bonds and real estate (both Overweight). From a regional perspective we still prefer European and emerging market (EM) assets.

Most global assets generated positive returns during the last three months (to end-May) but the gains have slowed versus what was seen in late-2023/early-2024. Government bonds was the only global asset class to generate negative returns and the associated rise in yields could make the asset class more attractive (in our view). Having asked a number of questions about the outlook for growth, the stickiness of inflation, the timing and extent of possible central bank easing (and with what effect on markets), the possible impact of election surprises and after seeking opportunities, we adopt a barbell adjustment to allocations, with reductions in credit categories and a boost to government bonds (on the defensive side) and real estate (on the riskier and lagging side).

Underpinning our projections for the next 12 months are the following assumptions:

- Global GDP growth will slow and then recover
- Global inflation will fall towards central bank targets
- Major central banks will ease policy (except the BOJ and the PBOC)
- Yield curves will steepen (with long yields falling less than short yields)
- Credit spreads will widen (on the whole) and defaults will rise
- Bank loan current yield spreads will narrow marginally but defaults will rise
- Equity and REIT dividend growth will be minimal and yield movements will be mixed
- USD will weaken as Fed eventually eases, especially versus JPY (as BOJ tightens)
- Commodities will be mixed but supported by global recovery and USD weakness

The full set of assumptions is shown in **Appendix 4**, while the resultant market targets are shown in **Figure 28**. Projected returns for global assets are shown in **Figures 1 and 2**. Perhaps the single most important forecast is that most central banks will continue cutting rates and that the Fed and the BOE will join them. We think that by mid-2025, major Western central banks will have cut rates by 100-150 basis points (from peak levels). We think a lot of this is already priced into the long end of yield curves, so that downside in 10-year yields will be limited. Hence, we believe that yield curve steepening will largely be the result of falling short rates, though we are more attracted to duration assets than we were three months ago (after the rise in long yields). We assume recent election surprises will have limited durable impact but this is another reason for caution.

We still expect the dollar to weaken (especially versus the yen) as the Fed has more easing to do than other central banks (in our opinion). This could help gold, cushioning the decline back to more reasonable levels (we think gold is expensive). We believe it could also offer support to other commodities. We think it will also help EM assets.

Our projected returns are tempered by the belief that a lot of good news is in the price. For example, high yield (HY) spreads are narrower than we would expect at this stage of the cycle, and equities are at record highs in some markets. Hence, the expected returns shown in **Figures 1 and 2** are more modest than three months ago (especially for gold); exceptions are government bonds and real estate. Our optimisation process (based on those projections) favours government bonds, bank loans and real estate (see **Figure 30**), while gold, HY and equities are shunned. Among asset opportunities that we identify are bank loans, Chinese equities, the Japanese yen and Asian real estate.

Hence, within our Model Asset Allocation (see **Figure 3**), we boost government bonds and real estate. **Government bonds** have underperformed recently and yields have risen (and government bonds usually outperform equities when yield curves steepen). We go from an Underweight 22% to an Overweight 27% (Neutral is 25%). Additions are made to the US, Eurozone and UK, with our favoured regions being EM, US and UK.

We also boost real estate in a barbell spreading of risk	We balance the defensive boost to government bonds by adding to the riskier real estate (REITs) asset class, taking it to the maximum 8% allocation. It's not that we ignore the problems (we have a section on divergent return to office practices, for example) but we think a lot of bad news is in the price (when looking at REIT yields) and suspect the sector will benefit from falling interest rates. We boost allocations to the UK and EM (and highlight the opportunity in Asia).
HY spreads are narrow; reduce to Zero	We reduce listed credit categories, both investment grade (IG) and high yield (HY). We are concerned that HY is pricing in a lot of good news about the economic cycle and few of the risks. We continue to expect spreads to widen and default rates to rise (though only towards cyclical norms) and our 12-month projected returns are lower than they were. Hence, we go from an Underweight 3% to Zero (versus Neutral 5%).
IG also reduced but we remain Overweight	Though performing less well than HY, we note that IG spreads have narrowed and we expect a slight rewidening. Our projections no longer suggest a risk-adjusted advantage over government bonds (see Figure 1). We reduce the allocation to a still Overweight 12% (from 16% and versus Neutral 10%). Across regions, we have reduced exposure to EM, Eurozone and US but still favour the US, UK and EM (see Figure 3).
We continue to favour cash and bank loans	No changes have been made to the cash or bank loan allocations, both of which remain Overweight. Cash continues to offer reasonable rates, especially considering its diversification profile (see Figure 1). Bank loans also offer a higher return than most assets (in our opinion), with volatility similar to that of IG. We were already maximum allocated to the asset class and maintain that position. It may seem odd to favour bank loans over HY when we expect policy rates to fall but we are attracted by the high current yield and relatively generous spreads (as measured by discount margins).
Among risky assets, we like commodities but think gold is expensive	At the other end of the risk spectrum, we maintain the maximum allocation to commodities . Despite good performance over recent months (largely due to metals), we think there is scope for further upside, especially as economies recover into 2025. We are focused on agriculture (below historical norms in real terms), industrial metals and energy. This time, we switch at the margin from industrial metals to energy, reflecting the fact that the latter has lagged the former over recent months and our belief that energy prices could benefit from an escalation of geopolitical tensions. We remain Zero allocated to gold , which is often good in a crisis but which we believe is expensive.
We remain Underweight equities but like China, EM and Eurozone	As for equities , we stick to an Underweight 35% (Neutral is 45%). The problem continues to be a US market that we think is expensive (in a slowing economy). We prefer other markets and favour China, EM and the Eurozone (though we reduce the Eurozone allocation and add to Japan, where're we remain Underweight).
EM and Europe the preferred regions. Hedge from USD to JPY	Regionally, we are Overweight European and EM assets. We maintain the partial hedge out of US dollar into Japanese yen, believing the latter will rally as the BOJ normalises.

Figure 2 – Expected global total returns (annualised, local currency) and Model Asset Allocation*

	Expected 1-year Total Return	Neutral Portfolio	Policy Range	Model Asset Allocation	Position Vs Neutral
Cash & Gold	-1.0%	5%	0-10%		Overweight
Cash	3.7%	2.5%	0-10%		Overweight
Gold	-5.6%	2.5%	0-10%		Underweight
Government Bonds	4.4%	25%	10-40%	↑	Overweight
Corporate IG	4.9%	10%	0-20%	↓	Overweight
Corporate HY	4.0%	5%	0-10%	↓	Underweight
Bank Loans	7.5%	4%	0-8%		Overweight
Equities	3.0%	45%	25-65%		Underweight
Real Estate (REITS)	10.6%	4%	0-8%	↑	Overweight
Commodities	6.6%	2%	0-4%		Overweight

*This is a theoretical portfolio and is for illustrative purposes only. It does not represent an actual portfolio and is not a recommendation of any investment or trading strategy. Arrows show direction of change in allocations. See appendices for definitions, methodology and disclaimers. **There is no guarantee that these views will come to pass.** Source: Invesco Global Market Strategy Office

Model asset allocation*

Figure 3 – Model asset allocation (16/06/2024)

	Neutral	Policy Range	Allocation	Position vs Neutral	Hedged	Currency
Cash Equivalents	5%	0-10%	6%			
Cash	2.5%		6%			
Gold	2.5%		0%			
Bonds	40%	10-70%	39%	↓		
Government	25%	10-40%	27%	↑		
US	8%		16%	↑		25% JPY
Europe ex-UK (Eurozone)	7%		3%	↑		
UK	1%		2%	↑		
Japan	7%		2%			
Emerging Markets	2%		4%			
China**	0.2%		0%			
Corporate IG	10%	0-20%	12%	↓		
US Dollar	5%		7%	↓		50% JPY
Euro	2%		1%	↓		
Sterling	1%		2%			
Japanese Yen	1%		0%			
Emerging Markets	1%		2%	↓		
China**	0.1%		0%			
Corporate HY	5%	0-10%	0%	↓		
US Dollar	4%		0%	↓		
Euro	1%		0%	↓		
Bank Loans	4%	0-8%	8%			
US	3%		6%			
Europe	1%		2%			
Equities	45%	25-65%	35%			
US	25%		10%			
Europe ex-UK	7%		11%	↓		
UK	4%		3%	↓		
Japan	4%		3%	↑		
Emerging Markets	5%		8%			
China**	2%		4%			
Real Estate	4%	0-8%	8%	↑		
US	1%		2%			
Europe ex-UK	1%		1%			
UK	1%		2%	↑		
Japan	1%		1%			
Emerging Markets	1%		2%	↑		
Commodities	2%	0-4%	4%			
Energy	1%		2%	↑		
Industrial Metals	0.3%		1%	↓		
Precious Metals	0.3%		0%			
Agriculture	0.3%		1%			
Total	100%		100%			
Currency Exposure (including effect of hedging)						
USD	52%		39%			
EUR	19%		20%	↓		
GBP	7%		11%	↑		
JPY	13%		15%	↑		
EM	9%		16%			
Total	100%		100%			

*This is a theoretical portfolio and is for illustrative purposes only. It does not represent an actual portfolio and is not a recommendation of any investment or trading strategy. **China is included in Emerging Markets allocations. Cash is an equally weighted mix of USD, EUR, GBP and JPY. Currency exposure calculations exclude cash. Arrows show direction of change in allocations. See appendices for definitions, methodology and disclaimers.

Source: Invesco Global Market Strategy Office

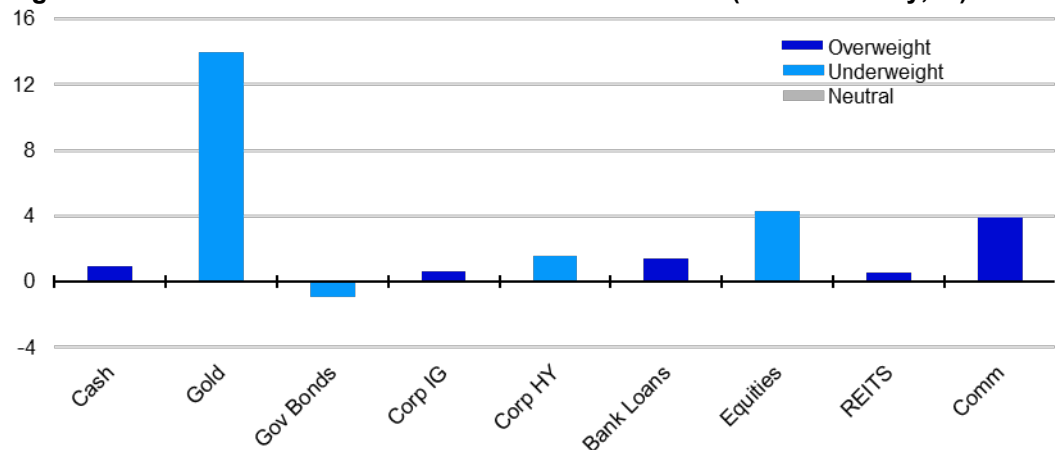
Gold outperformed over the last three months but equities outperformed government bonds

Since we last wrote

In the last Big Picture document we boosted cash to Overweight within our Model Asset Allocation (see [Big Picture 2024 Q2](#) published on 17 March 2024), also added to bank loans and commodities (both Overweight), while reducing IG (still Overweight), HY (to Underweight) and equities (to further Underweight). From a regional perspective we favoured EM and European assets. **Figure 4** shows how global assets have performed since then (as of 31 May 2024). Full regional detail is shown in **Appendix 2**.

Asset performance has been broadly positive since then (see **Figure 4**), though less so than in the previous period. Unfortunately, we missed the rebound in gold but did benefit from the even stronger bounce in industrial metals (the biggest Overweight within our commodities exposure). However, we were also Underweight equities, which had another good three months, though the Overweight in China and Underweight in the US worked in our favour (see **Appendix 2**). Our preference for EM ex-China within fixed income categories worked out well.

Figure 4 – Global asset class total returns since 29/02/24 (local currency, %) *

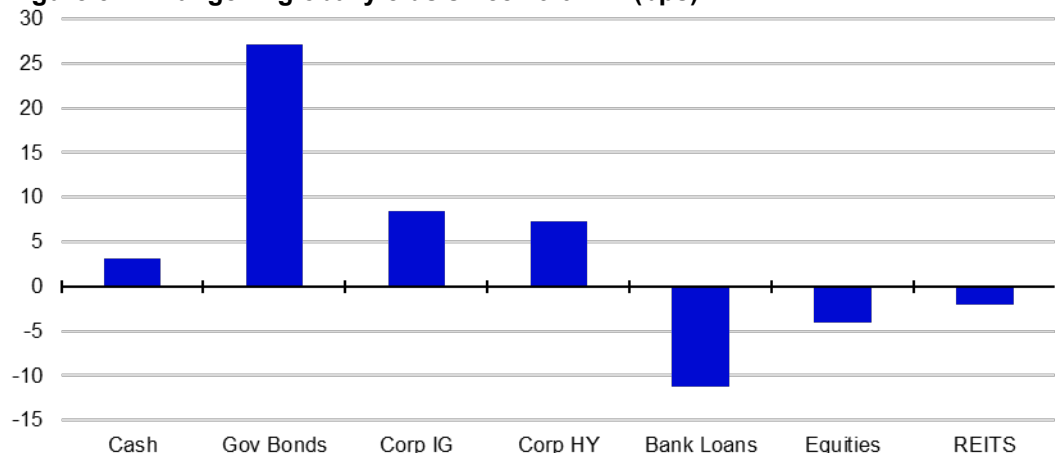


Past performance is no guarantee of future results. *29/02/2024 to 31/05/24. Colours represent model allocations during this period. See appendices for definitions and disclaimers. Source: LSEG Datastream and Invesco Global Market Strategy Office

Yields were largely stable

Cash rates appear to have stopped rising and yield movements on other assets were mixed, after the big declines seen around the turn of the year (see **Figure 5**). Bank loan current yields fell the most but from a high level, while credit yields reversed some of the recent declines, though government yields rose even more suggesting a further narrowing of spreads. That apparent optimism was also reflected by the slight decline in equity and REIT yields. We will explore whether this optimism is justified.

Figure 5 – Change in global yields since 29/02/24 (bps)



Past performance is no guarantee of future results. From 29/02/24 to 31/05/24. See appendices for definitions and disclaimers. Source: Credit Suisse, LSEG Datastream, Invesco Global Market Strategy Office

Invesco's 10-year CMAs have been published

Taking a step back: focusing on the next decade using Invesco's CMAs

Before considering projections for the next year, it may be instructive to use longer term return projections as a guide. Invesco Solutions have just published their 10-year capital market assumptions. **Figure 6** shows their projected returns for global asset classes in a range of currency bases (their framework differs from ours, so we have had to adapt some of their categories – for instance, we use their US Treasury Short category to represent cash and precious metals for gold). A more detailed version showing regional projections is contained in **Appendix 3**.

	USD	EUR	GBP	CHF
Cash & Gold	0.8	-1.1	0.6	-2.7
Cash - US Treasury Short	3.5	1.6	3.2	0.0
Gold	-1.9	-3.8	-2.1	-5.4
Government Bonds	5.0	3.1	4.7	1.5
Corporate IG	5.4	3.5	5.1	1.9
Corporate HY - US HY	6.2	4.3	6.0	2.7
Bank Loans (US)	6.1	4.2	5.9	2.6
Equities	5.9	4.0	5.6	2.4
Real Estate (REITS)	6.9	5.0	6.6	3.4
Commodities	4.6	2.7	4.3	1.1

Note: Estimates as of 31 March 2024 and based on the 10-year capital market assumptions published by Invesco Solutions in Long-Term Capital Market Assumptions (June 2024). The USD version of the CMAs is reproduced in Appendix 3. The above table uses the geometric expected return version for global asset classes ("gold" is based on the projections for precious metals and the "Cash & Gold" category shows the average of those two assets). These estimates reflect the views of Invesco Solutions, the views of other investment teams at Invesco may differ from those presented here. **There is no guarantee that these views will come to pass.**
Source: Invesco Solutions

HY and bank loans dominate 10-year CMA based optimal portfolios

Not surprisingly, the further we move along the risk spectrum, the higher the projected returns tend to be, though it is a relatively flat curve commodities don't appear to offer enough return given the extra volatility. When it comes to CMA based optimal solutions, the closest we get to consistent overweighting across currency bases and objectives is for HY and bank loans (see **Figure 7**). At the other extreme, gold, equities and commodities are nearly always underweighted. Cash, government bond, IG and real estate allocations are mixed, with IG and real estate preferred when maximising return and cash/government bonds preferred when we maximise the Sharpe ratio.

	Neutral Portfolio	Policy Range	Maximise Sharpe Ratio				Maximise Return			
			USD	EUR	GBP	CHF	USD	EUR	GBP	CHF
Cash & Gold	5%	0-10%	10%	10%	10%	0%	0%	0%	0%	
Cash	2.5%	0-10%	10%	10%	10%	0%	0%	0%	0%	
Gold	2.5%	0-10%	0%	0%	0%	0%	0%	0%	0%	
Government Bonds	25%	10-40%	40%	40%	37%	40%	10%	10%	22%	11%
Corporate IG	10%	0-20%	7%	7%	6%	11%	3%	20%	20%	20%
Corporate HY	5%	0-10%	10%	10%	10%	10%	10%	10%	10%	10%
Bank Loans	4%	0-8%	8%	8%	8%	8%	8%	8%	8%	8%
Equities	45%	25-65%	25%	25%	25%	25%	61%	44%	32%	43%
Real Estate (REITS)	4%	0-8%	0%	0%	0%	6%	8%	8%	8%	8%
Commodities	2%	0-4%	0%	0%	4%	0%	0%	0%	0%	0%

Note: optimisations are based on the 10-year projected returns published by Invesco Solutions in Long-Term Capital Market Assumptions (June 2024), as shown in **Figure 6** above. Optimisations are performed by the Asset Allocation Research team using our historical 10-year covariance matrices (for each currency). "Gold" is based on the projections for precious metals and the "Cash & Gold" category shows the sum of allocations for those two assets. "Maximise Sharpe Ratio" optimisations are performed by maximising the Sharpe Ratio subject not violating the constraints implied by the policy ranges shown in the table. "Maximise Return" optimisations are performed by maximising return subject to the policy range constraints but also subject to the standard deviation of returns not exceeding that of the Neutral Portfolio (as shown in **Figure 3**). Though based on the projected returns provided by Invesco Solutions, these optimal allocations do not represent their views, nor those of any other investment team at Invesco. See appendices for definitions, methodology and disclaimers.

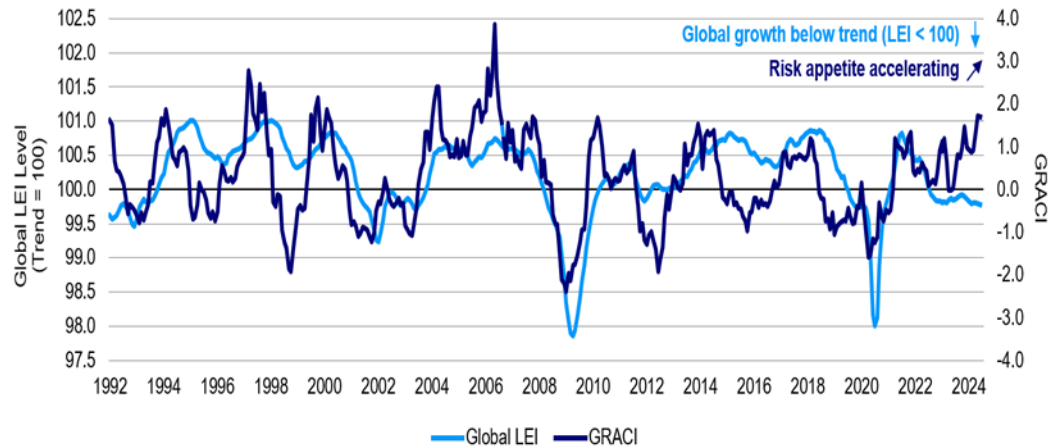
Source: Invesco Solutions and Invesco Global Market Strategy Office

Market behaviour suggests a recovery regime but leading indicators suggest otherwise

Key question #1: Is the global economy strengthening or weakening?

Figure 8 shows two proprietary indicators from Invesco Solutions, designed to help decide where we are in economic and market cycles. The Global LEI (leading economic indicator) measure suggests that global growth is below trend, while the GRACI (Global Risk Appetite Cycle Indicator) suggests that risk appetite has been improving, which is interpreted as being typical of what happens in the recovery phase.

Figure 8 – Global risk appetite and the global business cycle



Note: **past performance does not guarantee future results.** Monthly data from January 1992 to May 2024 (as of 31 May). Both Global LEI (Leading Economic Indicator) and GRACI (Global Risk Appetite Cycle Indicator) are proprietary tools provided by Invesco Solutions. Global LEI is a weighted average of leading indicators for 23 countries (both developed and emerging). A reading above (below) 100 signals growth above (below) a long-term average. GRACI measures the average incremental return received per incremental unit of risk taken in global financial markets (i.e., incremental return received for moving from government bonds to credit, from credit to developed equities, from developed equities to emerging equities, etc.). It is calculated using country-level total return indices across fixed income and equity markets. A reading above (below) zero signals a positive (negative) compensation for risk taking in global capital markets in the recent past. A rising index signals improving market sentiment and vice-versa. Sources: Bloomberg L.P., Macrobond, MSCI, FTSE, JP Morgan and Invesco Solutions

Global monetary growth appears to be picking up, which could lead to stronger growth over the next year or so

Figure 9 shows an uptick in global money supply growth, which could mean the worst of the economic slowdown may be over. Among the larger economies, there has been an improvement in monetary growth in the Eurozone and the US (though growth is minimal) but a deterioration in China. We expect the impact on growth to come with a lag.

Figure 9 – Global Money Supply Growth (% yoy)

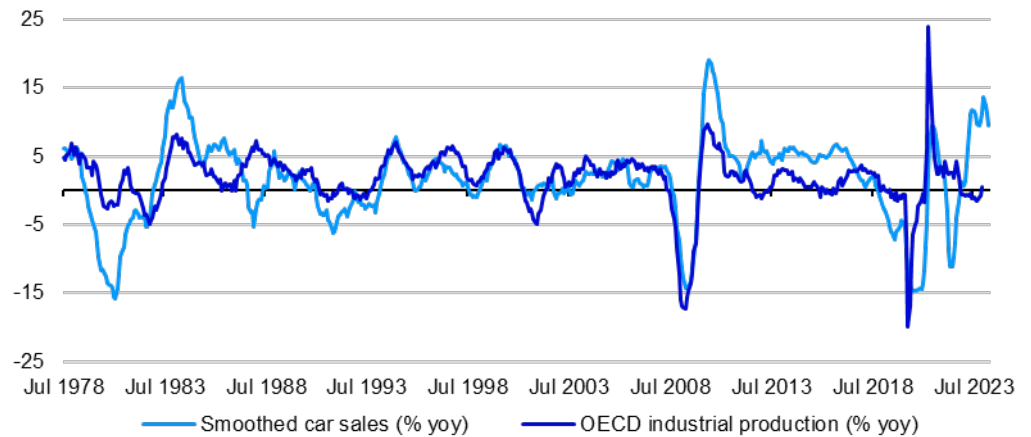


Note: based on monthly data from March 1980 to April 2024. "Global Money Supply" is based on an aggregation of broad money supply aggregates (usually M3) for the following countries: Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Czech Republic, Denmark, Eurozone, Hungary, India, Indonesia, Israel, Japan, Mexico, New Zealand, Norway, Poland, Russia, South Africa, South Korea, Sweden, Switzerland, Turkey, United Kingdom and United States. The aggregation is based on national money supplies using purchasing power parity (PPP) exchange rates to convert to US dollars (PPP exchange rates are those which equalise spending power across countries and are usually more stable than market exchange rates). Source: OECD, Oxford economics, LSEG Datastream and Invesco Global Market Strategy Office

In the meantime, global auto sales have been strong but there are signs of deceleration

Figure 10 shows that global auto sales have been growing strongly, though there is now some evidence of flattening out. Auto sales were heavily distorted by the pandemic, with exaggerated inventory cycles perhaps explaining the disconnect from industrial production growth (and the fact that China is not included in the OECD industrial production data). Nevertheless, we doubt the recent growth of sales can be maintained and expect a flattening out of demand over the coming months and quarters until a broader easing of monetary conditions allows further growth in auto sales in 2025.

Figure 10 – Global auto sales and OECD industrial production

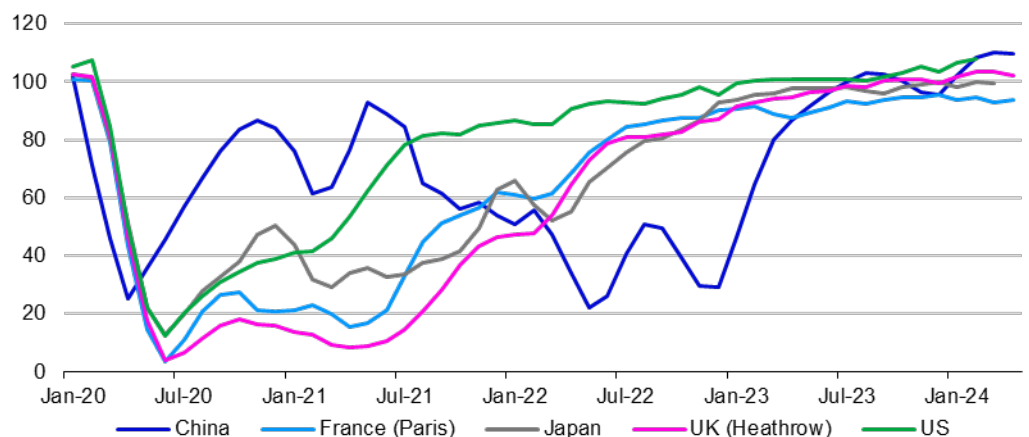


Notes: Monthly data from July 1978 to April 2024. Smoothed car sales (% yoy) is based on a 12 month moving average of an aggregation of country sales data (Australia, Austria, Belgium, Brazil, Bulgaria, China, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malaysia, Mexico, Netherlands, New Zealand, Norway, Panama, Philippines, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK, US, Vietnam.). Source: National data sources, OECD, European Automobile Manufacturers' Association, LSEG Datastream and Invesco Global Market Strategy Office

And services spending may be flattening out

We have become used to the idea that weakness in the manufacturing sector has been balanced by the recovery in the services sector as economies reopened ("experiences" replacing "things"). If we use air travel as a proxy for broader services activity, **Figure 11** suggests the recovery in services expenditure may have run its course, with growth moderating in the last year or so. To that extent, we think the global economy will continue to grow at a moderate pace until monetary easing provides an impulse.

Figure 11 – Air passenger flows versus 2019 (indexed to 100 in 2019)



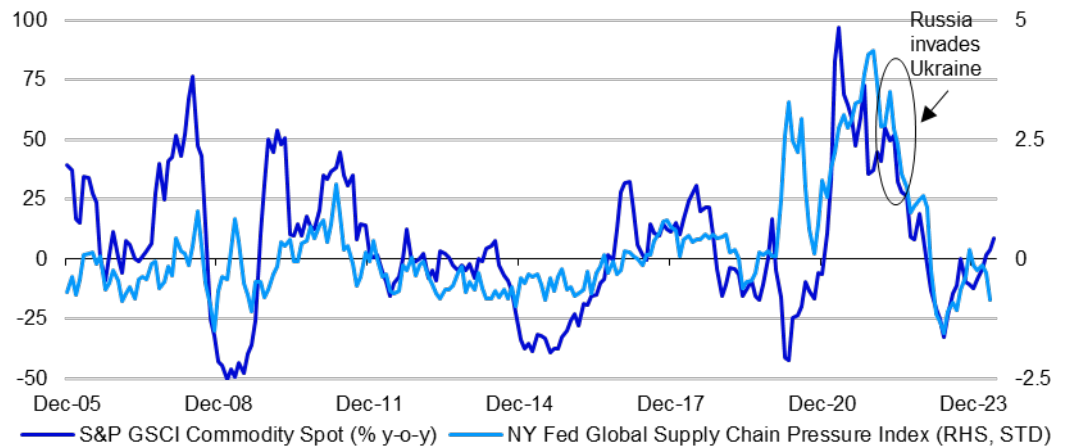
Note: monthly data from January 2020 to April 2024. Data shows three month moving averages compared to the same months in 2019 (2019 = 100). Data for each country is based on the following measures: China is civil aviation passenger traffic; France is passenger numbers at Paris Charles de Gaulle and Paris Orly airports; Japan is passengers on scheduled flights; UK is passenger numbers at Heathrow airport and US is system revenue passenger enplanements. Source: Civil Aviation Administration of China, Aeroports de Paris, Japan Ministry of Land, Infrastructure, Transport and Tourism, Heathrow Airport, US Department of Transportation, LSEG Datastream and Invesco Global Market Strategy Office

Inflation moving in the right direction, despite concerns about US CPI

Key question #2: Is inflation stickier than expected?

The simple answer appears to be yes, the downward path of inflation appears to have flattened out or even reversed in some cases. However, the reality is more complex. Most judgements about inflation are probably based upon US headline CPI data, with a year-on-year (yoy) rate that bottomed in June 2023 at 3.1% and which has since oscillated in the 3.1%-3.7% range. However, Eurozone headline inflation still seems to be trending down (after a short hiatus) and UK inflation has clearly been trending down. Even in Japan (where it would be nice to have higher inflation), the direction seems to be downward, while in China inflation is hovering around zero.

Figure 12 – Proximate drivers of global inflation are mixed

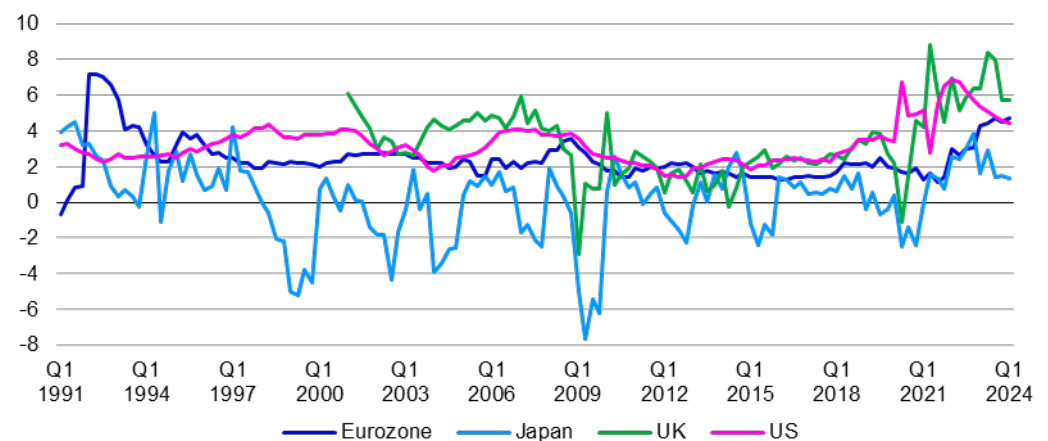


Note: **Past performance is no guarantee of future results.** Monthly data from December 2005 to May 2024 (as of 31 May 2024). NY Fed Global Supply Chain Pressure Index tracks the state of global supply chains using data from the transportation and manufacturing sectors, as constructed by the Federal Reserve Bank of New York. It is shown as standard deviations from the historical mean.
Source: Federal Reserve Bank of New York, Global Supply Chain Pressure Index, S&P GSCI, LSEG Datastream and Invesco Global Market Strategy Office

Commodity price gains are modest, supply chain pressures are limited but wage inflation trends are mixed

Figure 12 gives a clue as to why headline inflation is falling less rapidly: commodity prices are now rising. However, the gains are moderate compared to a few years ago and are perhaps being balanced by improvements in supply chains (despite concerns about the Red Sea). Further, even in the US, core inflation has continued to subside (both CPI and PCE) and the decline in wage growth (see **Figure 13**) suggests this may continue. But the direction of wage growth varies across countries with the Eurozone yet to see a convincing peak and Japan is expected to see a welcome uptick based on recent wage settlements. Overall, we think inflation is still falling.

Figure 13 – Wage inflation is mixed across countries (% yoy)



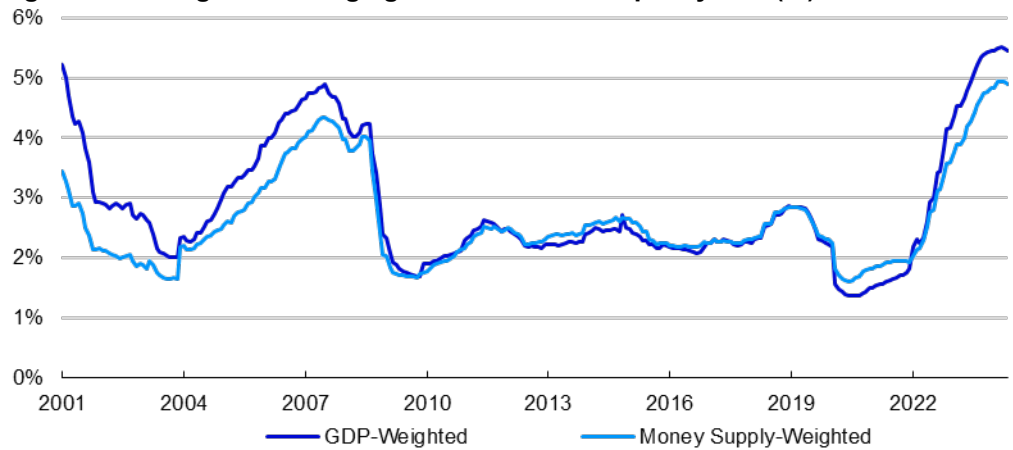
Note: quarterly data from 1991 Q1 to 2024 Q1. Eurozone is the ECB's measure of negotiated wage inflation. Japan is based on average monthly earnings across all industries (for companies with 30 employees or more). UK is based on average weekly earnings across the whole economy. US is based on average hourly earnings of production and non-supervisory employees in the non-farm private economy.
Source: LSEG Datastream and Invesco Global Market Strategy Office

More than 25 central banks have cut rates in 2024

Key question #3: When will the Fed ease and to what effect?

Major central banks have started to ease, including the ECB and those of Canada, Sweden and Switzerland. Indeed, more than 25 central banks have cut rates in 2024 (according to the CentralBankRates website). **Figure 14** shows that our measure of average global central bank policy rates has started to move lower and we expect more.

Figure 14 – Weighted average global central bank policy rate (%)



Based on monthly data from February 2001 to June 2024 (as of 11 June 2024). Based on the 20 largest economies during each calendar year, according to nominal GDP in US dollars (based on data from the IMF World Economic Outlook October 2023). Source: IMF, LSEG Datastream and Invesco Global Market Strategy Office

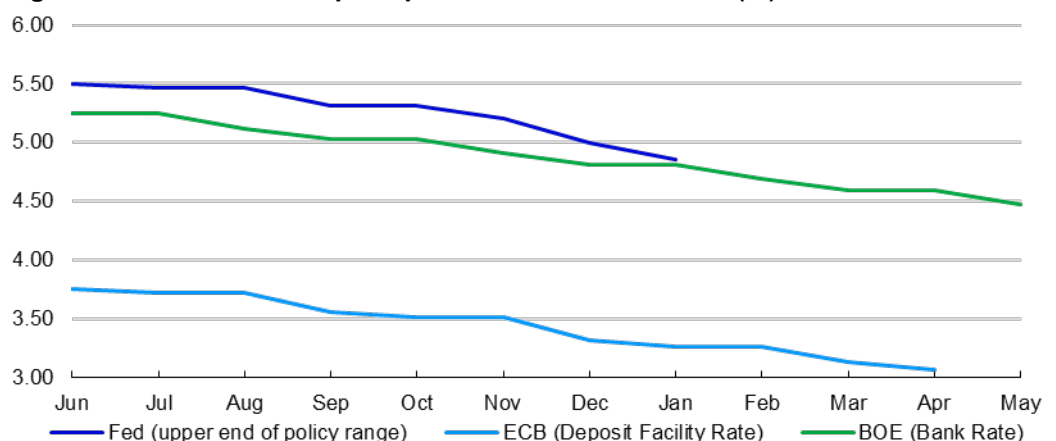
But the Fed is hesitating, perhaps mistakenly

However, financial markets are focused on the US Federal Reserve and for now there is no sign of a cut in the US. We think this may be a mistake on the part of the Fed. It appears to us that the US economy is slowing, though admittedly from strong growth rates during 2023 H2. Real personal disposable income shrank in the three months to April and we expect this to be a drag on consumer spending (given that savings rates are already very low). Further, the Fed's favoured gauge of inflation (core PCE) is still falling (to 2.8% in April, down from the high of 5.6% seen in February 2022). With wage inflation trending lower for the last two years, we suspect core inflation has further to fall.

We think the Fed will eventually follow

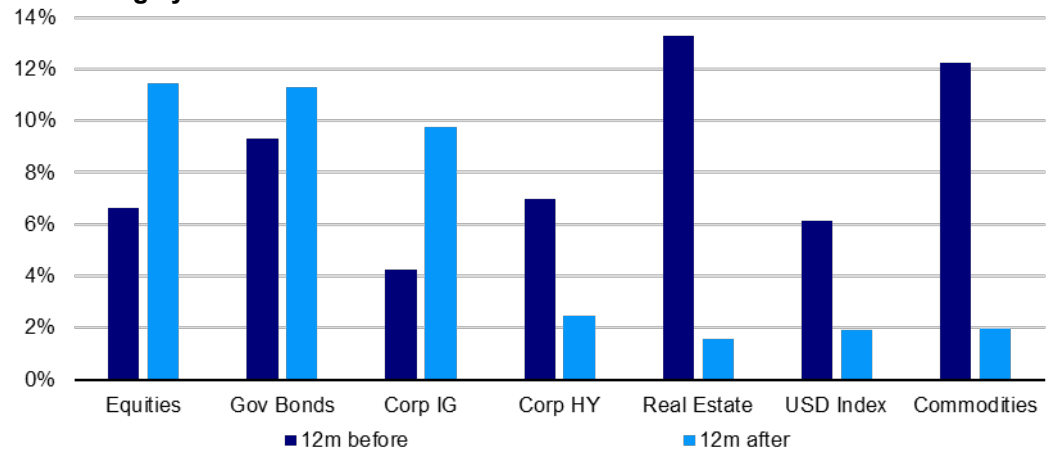
Nevertheless, markets believe the Fed is in no hurry (see **Figure 15**), with futures markets suggesting the first easing will perhaps come in September but more likely November (we think it would be unusual for the Fed to start a new policy phase in the September of an election year). Markets are suggesting two rate cuts by December 2024 and we expect more than 100bps of cuts over the next 12 months.

Figure 15 – The market implied path of central bank rates (%)



From June 2024 to May 2025. Based on Fed Funds Futures (for the Fed) and Overnight Index Swaps (for the BOE and ECB) as calculated by Bloomberg. Rates calculated for central bank policy meeting dates. For months where there is no meeting, we show the same rate as the month before. As of 13 June 2024. Source: Bloomberg and Invesco Global Market Strategy Office

Figure 16 – US asset average total returns around the time of the first rate cut in Fed easing cycles



Note: **Past performance is no guarantee of future results.** Data as of 31 May 2024. See appendices for definitions, methodology and disclaimers. Source: ICE, ICE BofA, FTSE Russell, MSCI, S&P GSCI, LSEG Datastream and Invesco Global Market Strategy Office.

Many cyclical assets have tended to perform better before the first Fed cut than after

Assuming that the Fed is to start easing during the second half of 2024, we need to consider what effect it will have on US assets. **Figure 16** shows what has typically happened in the year before and after the first cut in Fed rates, dating back to the mid-1970s (see **Appendix 5** for the detail). Cyclical assets have typically performed less well once the easing cycle starts (HY, real estate and commodities but not equities), which makes sense given that the Fed usually eases when the economy is weak.

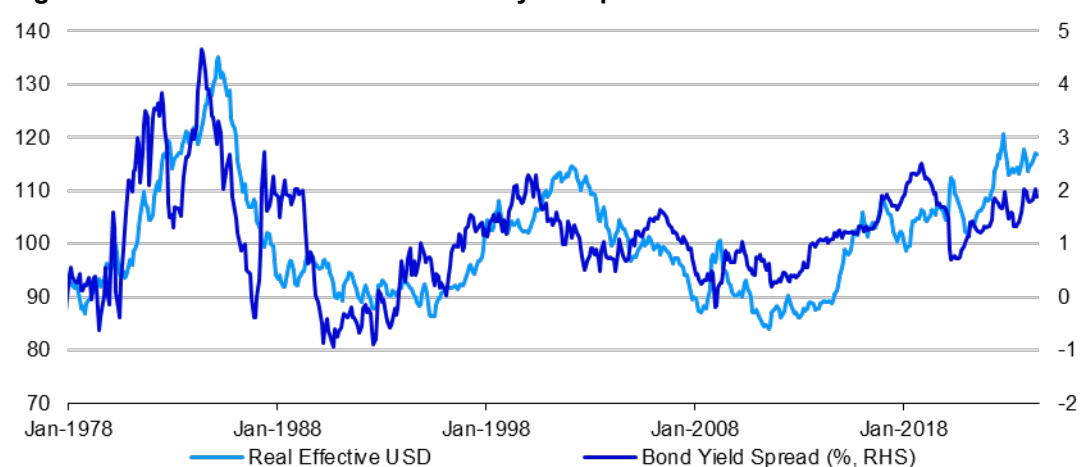
This is a long awaited easing cycle from the Fed, so a lot of good news may already be in the price (especially for equities)

However, as shown in **Appendix 5** each cycle is different. In particular, there is a lot of volatility in the cyclical asset outcomes, whereas government bonds and IG performance has been more universally positive following the first Fed rate cut. Given that markets (including ourselves) have been anticipating Fed easing for some time, we wonder if some of that positive performance that usually follows the first cut may already have occurred (**Appendix 2** shows that US asset performance has been strong over the last 12 months, with the exception of government bonds). We suspect this could further temper performance of cyclical assets upon the first rate cut. A lot is already in the price!

We look for dollar weakness this time around

Figure 16 suggests the US dollar tends to strengthen when the Fed eases but **Appendix 5** shows the erratic nature of those dollar movements. Given that the dollar is already at an elevated level (see **Figure 17**), we suspect the dollar will weaken this time.

Figure 17 – Real effective US dollar and yield spreads



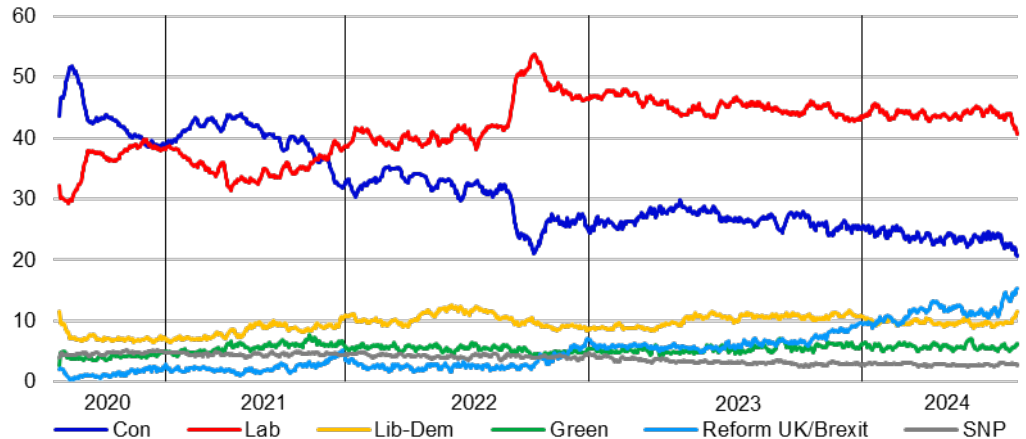
Note: **Past performance is no guarantee of future results.** Monthly data from January 1978 to May 2024 (as of 31 May 2024). Real effective US dollar is an index calculated by the OECD as the trade weighted value of the US dollar versus a basket of currencies and adjusted for CPI inflation differentials. Bond yield spread is the US 10-year treasury yield minus the average of the 10-year government yields of Germany, Japan and the UK. Source: OECD, LSEG Datastream and Invesco Global Market Strategy Office.

Recent EM elections have been a concern for markets

Key question #4: Will elections impact markets?

Among recent elections, Narendra Modi's BJP Party no longer has a majority in India but will form the next government; Mexico has its first female president (still from the Morena Party) and with a bigger than expected majority; in South Africa, the outcome requires a coalition to be formed (probably led by the ANC), which may be tricky.

Figure 18 – UK opinion polls since December 2019 (10-poll moving average, %)



Note: Based on opinion polls from 10 January 2020 to 13 June 2024 (the first data point shows the result of the last general election on 12 December 2019). The uneven spread of calendar years is due to the different number of opinion polls in each year. "Reform UK/Brexit" shows the opinion poll results for the Brexit Party until it was superseded by Reform UK. Source: BBC and Invesco Global Market Strategy Office

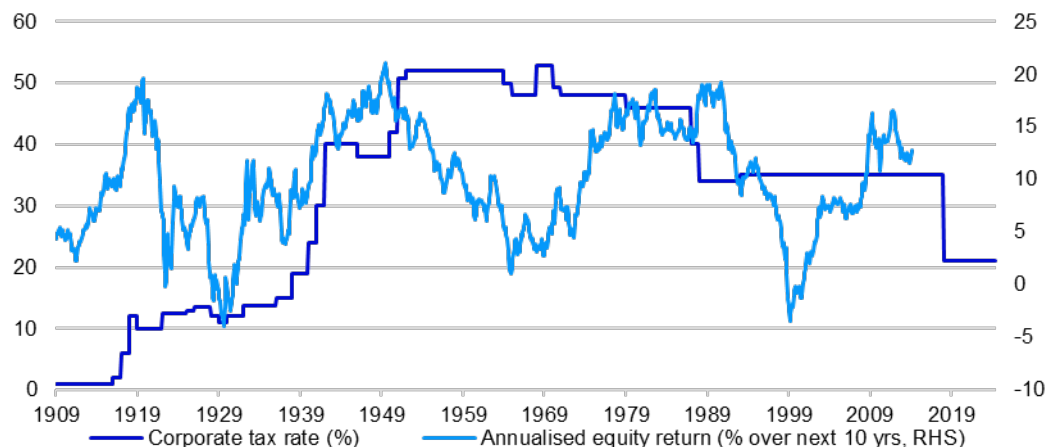
A new government seems likely in the UK but not a new fiscal stance

The UK votes on 4 July (earlier than expected) and opinion polls give Labour a large lead over the Conservatives and Reform UK (see **Figure 18**). If that is repeated on 4 July, we expect Labour to win a big majority. There will be some policy changes but we don't expect a negative market reaction (see [What would a Labour government mean for the UK?](#)). The calling of a snap election in France was an even bigger surprise. Recent opinion polls suggest Marine Le Pen's National Rally will be largest party in parliament but not big enough to form a majority (and Macron will continue as President until 2027).

US elections are on a knife edge but corporate tax policy may not be as important as supposed

Of course, all eyes are on the 5 November US election. Opinion polls suggest it is too close to call, though former President Trump seems to have the edge in key swing states. There are some important differences between the candidates. First, we think a Trump presidency would favour oil & gas development, whereas President Biden favours a greening of the economy. Second, corporate taxes may be lower under Donald Trump but **Figure 19** suggests that may not be the stock market positive commonly supposed.

Figure 19 – US corporate tax rate and future stock market returns)



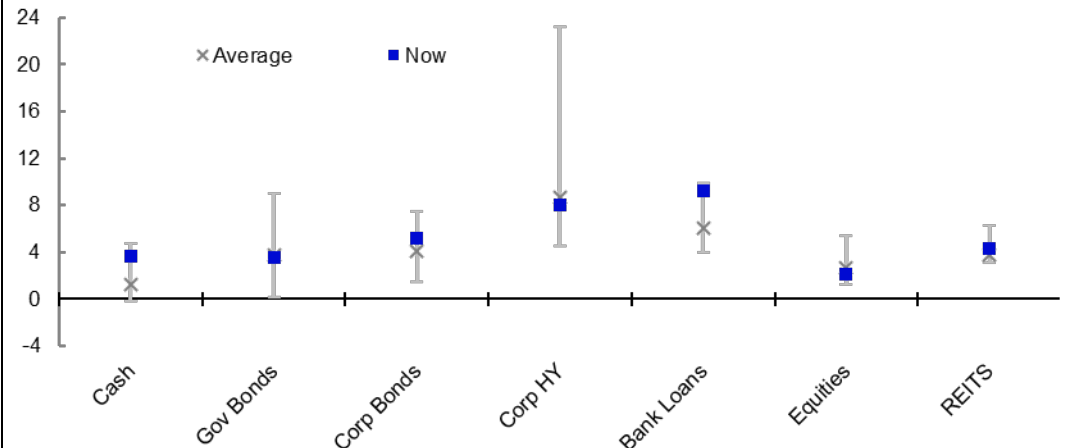
Notes: **Past performance is no guarantee of future results.** Based on monthly data from January 1909 to April 2024 (as of 30 April 2024). Corporate tax rate is the top marginal tax rate on corporations (as provided by the Tax Policy Center). See appendices for methodology and sources for the US equity index. Source: Robert Shiller, Tax Policy Center, LSEG Datastream and Invesco Global Market Strategy Office

We like bank loans, with yields well above historical averages

Key question #5: Where are the opportunities?

Despite the recent movements (Figure 5), asset class yields are largely in line with historical norms, when averaged across regions (see Figure 20). Exceptions are cash and bank loans (above norms) and HY and equities (slightly below norms). Appendix 1 shows that it is the US that is depressing the global equity dividend yield below norms.

Figure 20 – Global asset yields within historical ranges (%)



Start dates for historical ranges are Cash 1/1/01; Gov Bonds 31/12/85; Corp Bonds 31/12/96; Corp HY 31/12/97; Bank Loans 31/01/98; Equities 1/1/73; REITs 18/2/05. See appendices for definitions, methodology and disclaimers. As of 31 May 2024.

Source: Credit Suisse Indices/UBS, LSEG Datastream and Invesco Global Market Strategy Office

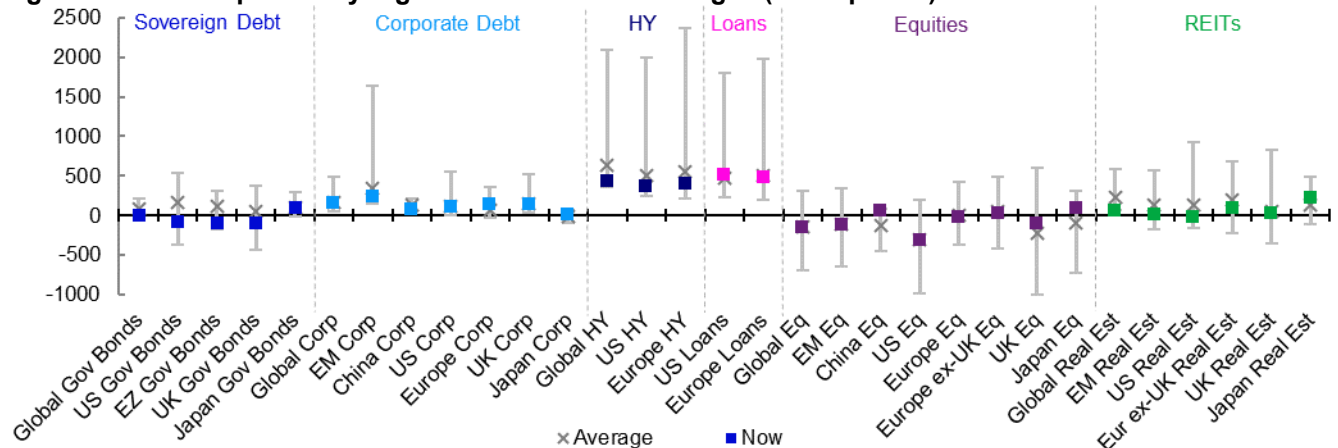
The longer the Fed waits to ease, the more we like US bank loans

Bank loans continue to stand out, with current yields well above historical norms. The longer the Fed waits to ease, the greater the advantage that will be conferred by US bank loan yields (that are floating, meaning that bank loans have near-zero duration).

Spreads on bank loans are also attractive relative to those on HY, say

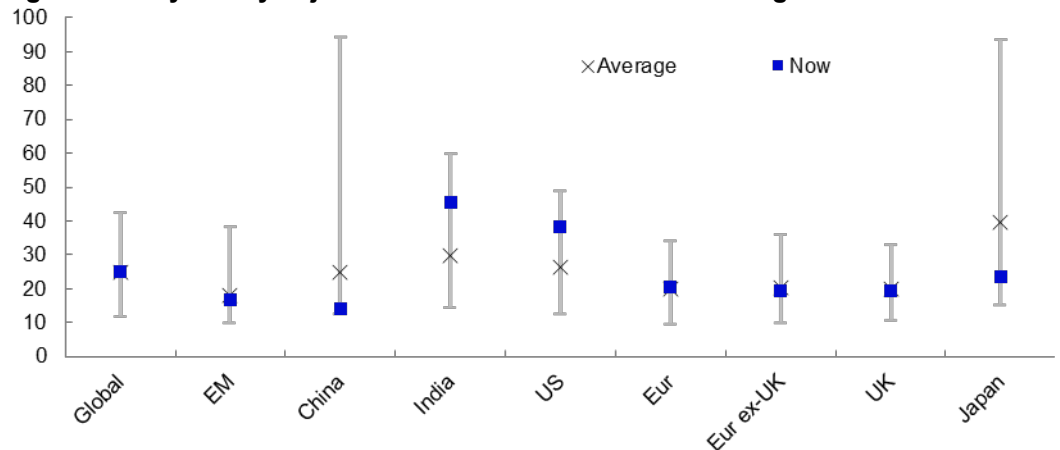
Further, Figure 21 suggests the spread on bank loans (discount margin) is close to historical norms, whereas those for high yield are narrower than normal, especially in the US. Figure 29 shows that the volatility of bank loans is closer to IG than to HY but we expect loans to offer better returns than either IG or HY over the next year. Of course, bank loans are subject to defaults (like HY) but tend to have better recovery rates (than HY) because they are higher in the capital structure. A severe US slowdown or recession (which we think is possible) would penalise US bank loans (via defaults) but we think they would fare better than US high yield, which we think is pricing in a lot of good news (based on the tight spreads shown in Figure 21). **We like bank loans.**

Figure 21 – Yield spreads by region within historical ranges (basis points)



Notes: **Past performance is no guarantee of future results.** As of 31 May 2024. "Sovereign Debt" is 10-year yield minus 3-month government rate. "Corporate Debt" is the investment grade yield minus local government bond yield. "HY" is the yield on high yield minus the local government bond yield. "Loans" is the discount margin on bank loans (3-year life). "Equities" is dividend yield minus local government bond yield. "REITs" is the REIT dividend yield minus local government yield. See appendices for definitions, methodology and disclaimers. Source: Bloomberg, Credit Suisse Indices/UBS, ICE BofA, FTSE Russell, LSEG Datastream and Invesco Global Market Strategy Office.

Figure 22 – Cyclically adjusted PE ratios within historical ranges



Note: Cyclically Adjusted Price/Earnings and uses a 10-year moving average of earnings. Based on daily data from 3 January 1983 (except for China from 1 April 2004, India from 31 December 1999 and EM from 3 January 2005), using Datastream indices. As of 31 May 2024.

Source: LSEG Datastream and Invesco Global Market Strategy Office

Can Chinese stocks maintain the recent upturn? We think so

Chinese equities performed well in the last three months. The question is whether this was a dead cat bounce or the start of a new trend? **Figure 22** shows that the cyclically adjusted PE ratio (CAPE) for China (14.1) is close to its historical low (12.4). It is also close to the US low seen in March 2009, when the S&P 500 bottomed at 666. In the meantime, the US market has risen to a CAPE of 38.2.

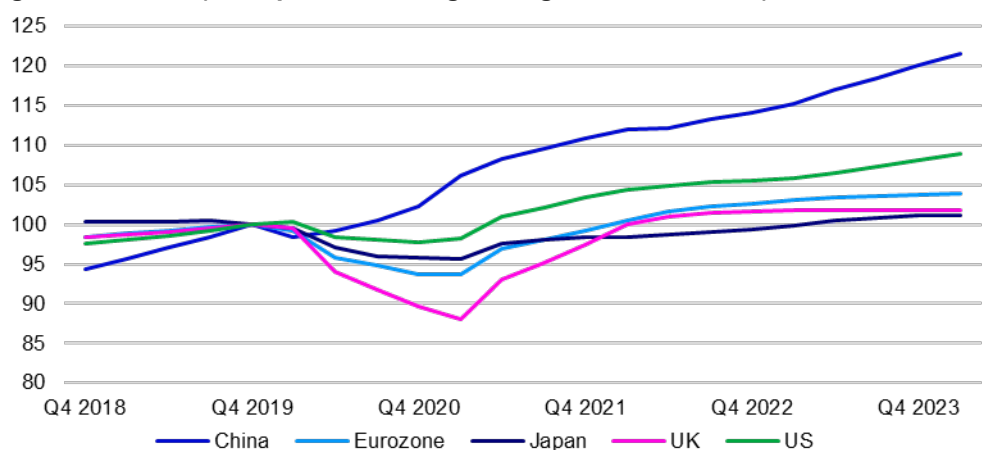
But there are problems

Of course, Chinese stocks are cheap for a reason. There have been concerns for many years that China is overinvesting and the housing market is the latest source of angst. However, we note that new starts have fallen substantially and that mortgages are shrinking as a share of financial sector loans. The problem is being lessened and the government seems willing to help stabilise the market.

Nevertheless, the Chinese economy has been outperforming

China also faces longer term demographic issues, with shrinkage of its working age population likely over the coming decades. UN estimates suggest China will suffer more than the US, UK and India, say, but less than neighbours such as South Korea and Japan. However, we feel that rumours of the imminent demise of China are greatly exaggerated, with GDP outstripping even the US since the onset of the pandemic (see **Figure 23**). There are, of course, concerns that a trade war initiated by the US would damage China. We agree but also believe that it would damage the US. **Overall, we are attracted by the valuations (believing that a lot of bad news is in the price) and remain Overweight Chinese stocks.**

Figure 23 – GDP (four quarter moving average, 2019 Q4 = 100)



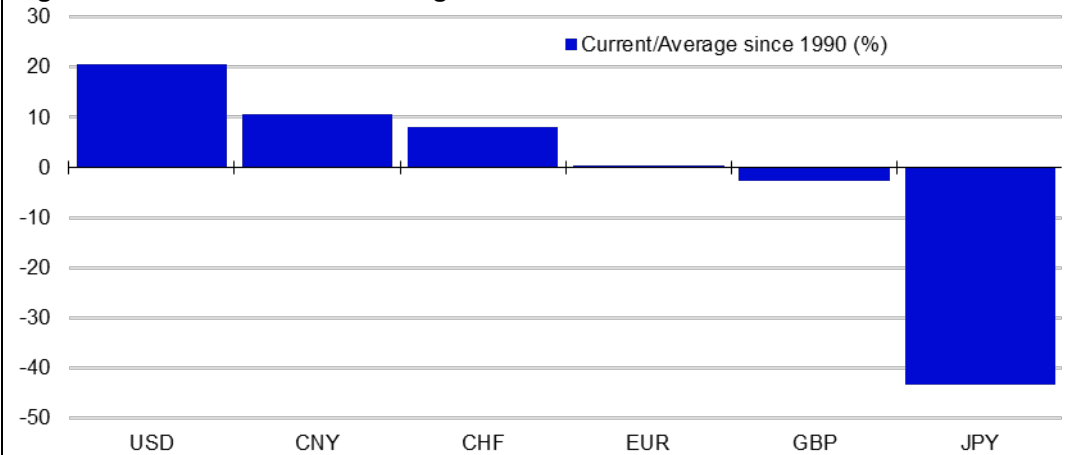
Notes: based on quarterly data from 2018 Q4 to 2024 Q1, using a four quarter moving average of GDP in constant prices, indexed to 100 in 2019 Q4.

Source: LSEG Datastream and Invesco Global Market Strategy Office

The yen is extremely weak and we expect a rebound

Among developed world currencies, the **Japanese yen** has been the weakest over recent years. While almost every other central bank in the world tightened aggressively during 2022 and 2023, the BOJ made no changes from a very loose stance (negative interest rates and continued asset purchases). The upshot was an extreme weakening of the yen, which has fallen by around 30% versus the US dollar in the last three years.

Figure 24 – Real effective exchange rates* relative to historical norms



*Currency indices measured against a trade-weighted basket of currencies and adjusted for inflation differentials. As of 30 April 2024. Source: OECD, Datastream and Invesco Global Market Strategy Office

In theory, because inflation has tended to be lower in Japan than in the US, the yen should gradually strengthen against the dollar to maintain its real (inflation adjusted) value. However, the opposite has happened, and **Figure 24** shows that the real trade weighted yen is well below historical norms, while the dollar is above its own norms.

A tightening BOJ (while the Fed et al loosen) could eventually act as the catalyst

A weakening yen should boost Japanese inflation (via the cost of imported raw materials and other goods and services), which may be why the BOJ has been happy to see this depreciation. However, as other central banks learned over recent years, you should be careful what you wish for when it comes to inflation. Indeed, the BOJ has started to tighten and we expect this to continue over the coming year or two (in an attempt to normalise policy, rather than move to an overtly tight stance). Our BOJ rate forecast (see **Figure 28**) doesn't suggest an aggressive tightening but, compared to other major central bank rates (which will be falling), it suggests a sizeable relative tightening, which we think could provoke **large yen appreciation (we forecast USDJPY to be 130 in 12 months)**. That could benefit holders of Japanese yen (we are partially hedging from USD into JPY) but we doubt it will be good news for Japanese equities (see **Figure 25**).

Figure 25 – Japanese equities could suffer if the yen recovers

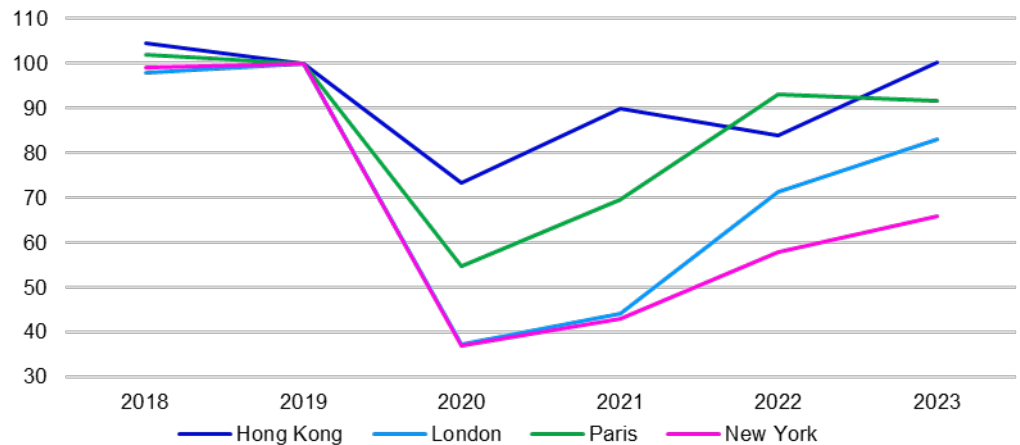


Note: **Past performance is no guarantee of future results.** Monthly data from January 1998 to May 2024 (as of 31 May 2024). Trade weighted JPY index is calculated by the Bank for International Settlements (BIS). Source: BIS, MSCI, LSEG Datastream and Invesco Global Market Strategy Office

Return to work practice varies around the world

Travelling around the world suggests that regions are at very different stages of the post-pandemic return to office. This anecdotal view is confirmed by the metro passenger flow data shown in **Figure 26**. Hong Kong's metro usage is back to pre-pandemic levels, while in New York there was still a 34% deficit in 2023.

Figure 26 – Metro usage across major financial centres (2019 = 100)



Notes: based on annual data from 2018 to 2023 (rebased to 100 in 2019). Paris data for 2023 assumes that full year year-on-year growth is the same as for the first three quarters. Paris data is based on passenger traffic on all RATP networks in Paris and Ile de France (source: INSEE). Hong Kong data is based on domestic weekday metro usage (source: MTR). London is based on underground and DLR usage (source: TFL). New York data is based on citywide average weekday metro usage (source Metropolitan Transit Authority). Source: INSEE, MTR, Metropolitan Transit Authority, TFL and Invesco Global Market Strategy Office

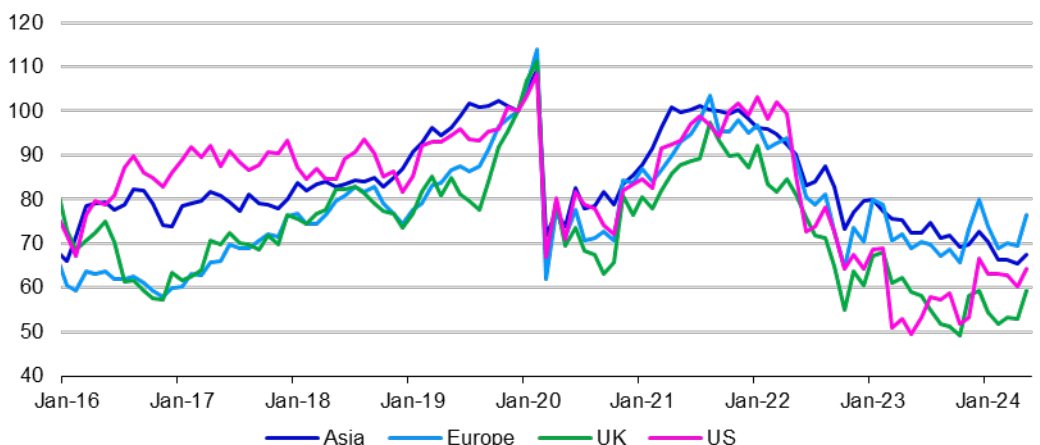
Office utilisation rates have recovered more in Asia than elsewhere

CBRE data shows that in 2023 the Hong Kong office utilisation rate had recovered to 61% (down from the pre-pandemic peak of 75%), while in London the gap was larger (55%, down from 80%). On the continent of Europe, the experience is mixed with Amsterdam (50%) and Paris (46%) closer to normal than Frankfurt (31%), with all three having pre-pandemic peaks in the 62%-66% range. The US appears to be lagging, with New York (44%) and Chicago (39%) behind most European cities (pre-pandemic peaks in the 57%-60% range). San Francisco appears to have a particular problem, with a rate of only 16% (the peak was 29%) and a 2023 Q3 vacancy rate around 20% (up from 6.1% in 2019 Q4) versus 9.1% in London, say (from CoStar data reported in the FT).

We continue to favour EM within our Overweight real estate exposure

The above analysis would lead us to expect better post-pandemic Office REIT performance in Asia than in the US but **Figure 27** suggests there has been little difference since December 2019. **That gives us comfort in continuing to favour EM markets among our real estate (REIT) exposure** (in addition to the 4.7% yield).

Figure 27 – Office REITs (total return indices, local currency, Dec 2019 = 100)



Note: **Past performance is no guarantee of future results.** Monthly data from January 2016 to May 2024 (as of 31 May 2024). Asia is for developed Asia and is in US dollars. Europe is for developed Europe and is in euros. Source: FTSE EPRA Nareit, LSEG Datastream and Invesco Global Market Strategy Office

Economies to slow and then recover...but that recovery seems already priced in

We assume lower growth and inflation will allow central banks to continue easing and bring eventual recovery

No matter when the first cut happens, we expect Fed rates to be lower in 12 months and yield curves to steepen

Equity and REIT yields face conflicting influences

Projections for the next year

We think the global economy is still decelerating, bringing short-term risk for the more cyclical assets, especially after recent strong performance. However, we have a 12-month forecast horizon, within which we expect most central banks to ease, which we think could help economies and assets (though we worry that is already in the price).

Underpinning our projections for the next 12 months are the following assumptions:

- Global GDP growth will slow and then recover
- Global inflation will fall towards central bank targets
- Major central banks will ease policy (except the BOJ and the PBOC)
- Yield curves will steepen (with long yields falling less than short yields)
- Credit spreads will widen (on the whole) and defaults rise
- Bank loan current yield spreads will narrow marginally but defaults rise
- Equity and REIT dividend growth will be minimal and yield movements to be mixed
- USD will weaken as Fed eventually eases, especially versus JPY (as BOJ tightens)
- Commodities will be mixed but supported by global recovery and USD weakness

The assumptions behind our projections are laid out in **Appendix 4**, while **Figure 28** shows the implied market targets. Perhaps the single most important forecast is that major central bank policy rates will be markedly lower in 12 months. Exceptions are the PBOC and the BOJ. We expect yield curves to steepen, though largely because short rates fall (we expect 10-year yields to fall but not a lot). We predict the US dollar will weaken (once the Fed eases), which we think could support commodities (despite recent gains) and EM assets, especially as the global economy improves into 2025.

Yields on equities and real estate will face competing forces: slowing economies could push them to the upside (perhaps balanced by falling bond yields) but they could then fall as economies recover. Overall, we expect little change, except for Chinese equities and US and UK REITS (declines expected). Equity and REIT dividend growth is expected to be in low single digits in most cases.

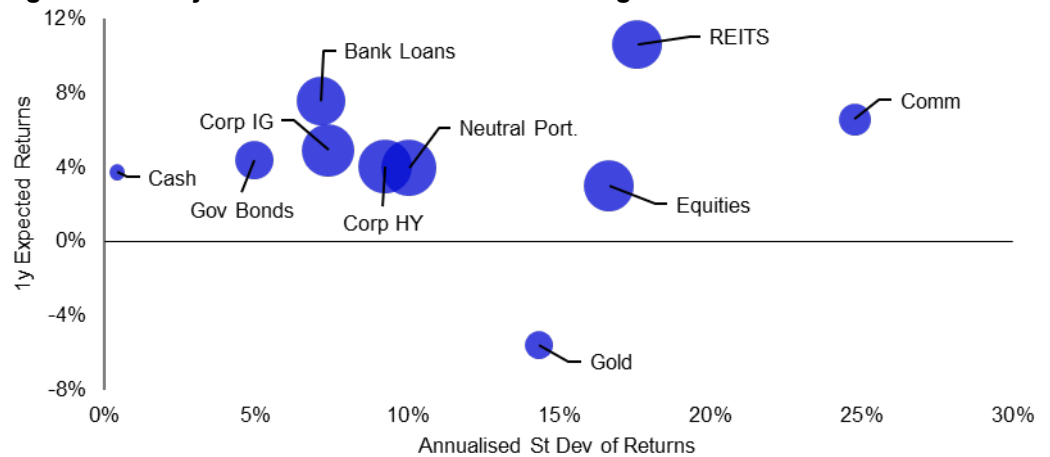
Figure 28 – Market forecasts

		Current (31/05/24*)	Forecast 12-month
Central Bank Rates	US	5.50	4.25
	Eurozone	3.75	3.00
	China	3.45	3.40
	Japan	0.10	0.50
	UK	5.25	4.00
10yr Bond Yields	US	4.49	4.10
	Eurozone	2.63	2.50
	China	2.32	2.25
	Japan	1.06	1.20
	UK	4.32	4.00
Exchange Rates/US\$	EUR/USD	1.08	1.15
	USD/CNY	7.24	7.00
	USD/JPY	157.32	130.00
	GBP/USD	1.27	1.30
	USD/CHF	0.91	0.85
Equity Indices	S&P 500	5278	5175
	Euro Stoxx 50	4984	5130
	FTSE A50	12452	13700
	Nikkei 225	38488	40500
	FTSE 100	8275	8275
Commodities (US\$)	Brent/barrel	79	85
	Gold/ounce	2331	2200
	Copper/tonne	9913	10000

Notes: * except for central bank rates which take account of subsequent changes. **There is no guarantee that these views will come to pass.** See Appendices for definitions, methodology and disclaimers.

Source: LSEG Datastream and Invesco Global Market Strategy Office

Figure 29 – Projected 12m return versus risk for global assets



Notes: based on local currency returns. Returns are projected but standard deviation of returns is based on 5-year historical data. Size of bubbles is in proportion to average pairwise correlation with other assets (hollow bubbles indicate negative correlation). Cash is an equally weighted mix of USD, EUR, GBP and JPY. Neutral portfolio weights shown in **Figure 3**. As of 31 May 2024. **There is no guarantee that these views will come to pass.** See Appendices for definitions, methodology and disclaimers. Source: ICE BofA, Credit Suisse Indices/UBS, FTSE Russell, MSCI, S&P GSCI, LSEG Datastream and Invesco Global Market Strategy Office

Changes to projected returns largely reflect the drop in yields (rise in prices) and an increase in expected defaults

Most of the return projections shown in **Figure 29** are lower than in the last edition (especially bank loans and equities), though government bonds and real estate (REITs) are exceptions. The changes since last time broadly reflect the intervening movement in yields (see **Figure 5**) and a more pessimistic view on HY defaults. Though the forecast return on bank loans is lower than last time (because of the fall in yields), it still looks attractive to us on a risk-reward basis (see **Figure 29**). The downgrading of equity returns is largely the result of higher prices and lower yields. The upgrading of government bonds reflects the rise in yields, while that of real estate reflects a more optimistic view about the normalisation (downward) of REIT yields.

Optimisation favours government bonds, bank loans and real estate

We use an optimisation process to help balance risk and reward and **Figure 30** shows the results. The outcome favours government bonds, bank loans and real estate, while shunning gold, HY and equities (the outcomes are mixed for cash, IG and commodities).

Credit downgraded and government bonds taken to Overweight

Within our Model Asset Allocation, we follow the output of the optimiser, in direction if not magnitude. We reduce IG (staying Overweight) and HY (to Zero), while boosting government bonds (going Overweight) and real estate (to the Maximum allowed).

Figure 30 – Optimised allocations for global assets (using local currency returns)

	Neutral Portfolio	Policy Range	Projected Returns	Optimisations Sharpe Ratio	Max Return	Model Asset Allocation*
Cash & Gold	5%	0-10%	-1.0%	10%	0%	6%
Cash	2.5%	0-10%	3.7%	10%	0%	6%
Gold	2.5%	0-10%	-5.6%	0%	0%	0%
Govt Bonds	25%	10-40%	4.4%	40%	35%	↑ 27%
Corporate IG	10%	0-20%	4.9%	10%	20%	↓ 12%
Corporate HY	5%	0-10%	4.0%	0%	0%	↓ 0%
Bank Loans	4%	0-8%	7.5%	8%	8%	8%
Equities	45%	25-65%	3.0%	25%	25%	35%
Real Estate	4%	0-8%	10.6%	6%	8%	↑ 8%
Commodities	2%	0-4%	6.6%	2%	4%	4%

Notes: *This is a theoretical portfolio and is for illustrative purposes only. It does not represent an actual portfolio and is not a recommendation of any investment or trading strategy. Based on local currency returns (for both the one-year projected returns and five-year historical covariance matrix). Cash is an equally weighted mix of USD, EUR, GBP and JPY. "Sharpe Ratio" shows the results of maximising the Sharpe Ratio. "Max Return" maximises returns while not exceeding the volatility of the Neutral Portfolio. **There is no guarantee that these views will come to pass.** See appendices for definitions, methodology and disclaimers. Source: Invesco Global Market Strategy Office

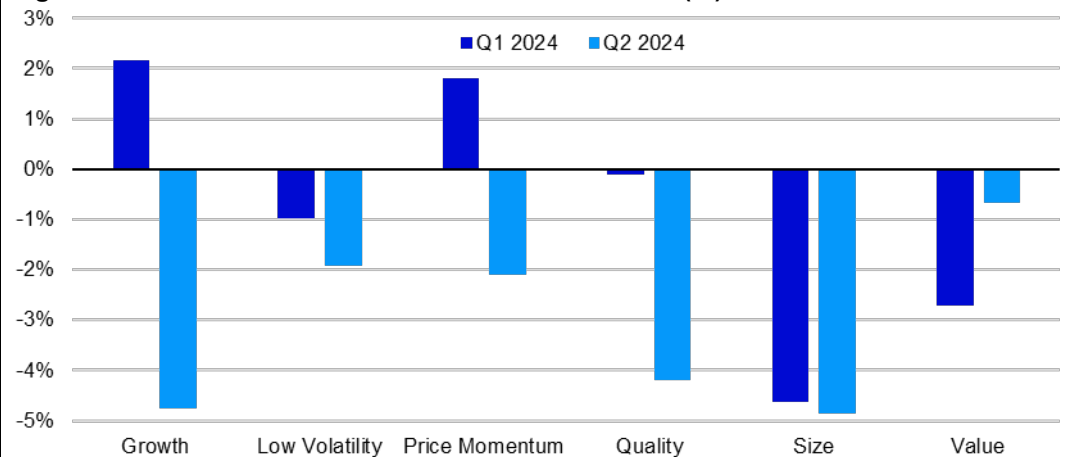
	Model Asset Allocation: reduce credit to boost government bonds and real estate
We spread the risk by boosting government bonds and real estate, while reducing credit	Further asset price gains over the last three months, and more pessimism about defaults, lead us to expect lower returns and to continue spreading the risk within our Model Asset Allocation. Consequently, we reduce IG (Overweight), HY (Zero), while boosting government bonds (to Overweight) and real estate (Overweight). From a regional perspective we still prefer European and EM assets.
A lot of good news is already priced-in, hence the need to spread risks	As outlined earlier, we think that cyclical assets such as equities and HY have already priced in a positive economic scenario. Hence, we believe that some valuations are challenging (leaving limited scope for returns) and we fear the possibility of short term volatility if the global economy slows. However, we expect a rapid decline in central bank interest rates over the next 12 months, which we think could limit the downside. The small decline in long rates that we foresee is still enough to generate relatively attractive government bond returns (in our view). There are potential geopolitical and election risks, but we doubt they will have an enduring effect.
Boosting government bonds	Asset price developments over the last three months have been largely positive but less so than in the previous period (see Figure 4). One exception was the negative return on government bonds and the accompanying rise in yields causes us to be more optimistic about the outlook for that asset class. Hence, we raise government bonds from Underweight 22% to Overweight 27% within our Model Asset Allocation (Neutral is 25%). This is done by raising the allocations to the US and UK (both Overweight) and the Eurozone (which remains Underweight). EM remains our favoured region. Full regional allocations are shown Figure 3 .
Credit exposure also reduced, given tight spreads	This rise in the government bond allocation was accommodated by reducing the allocations to both credit categories. The rise in government bond yields presents competition for investment grade from an asset with less volatility. Nevertheless, IG remains relatively attractive on a risk-reward basis compared to many other assets (in our view), so we reduce the allocation but remain Overweight (12% versus 10% Neutral). High yield spreads have narrowed again and are much narrower than we would expect at this stage of the economic cycle. We expect spreads to widen and defaults to rise (towards but not reaching cyclical norms). We reduce the allocation from an Underweight 3% to Zero (versus a Neutral 5%). Those reductions to HY and IG are implemented by scaling back US and Eurozone allocations, as well as EM in IG.
We also add to real estate	We also boost real estate to the Maximum allowed 8% (from an already Overweight 6%). This is achieved by boosting the EM allocation to further Overweight (as outlined earlier, we feel as though EM REIT performance is not reflecting the fundamentals, including better office occupancy than elsewhere). We also boost the UK allocation on the back of attractive return potential (the UK REIT yield is 4.6%).
Equities remain Underweight but Europe scaled back and China remains among our favourites	Equities have again performed relatively well over the last three months and we remain at an Underweight 35% (versus a Neutral 45%). However, within that, we reduce the allocations to Europe given recent strong performance (we remain Overweight in the Eurozone but move to Underweight in the UK). At the same time, we boost the allocation to Japan (after a bit of underperformance), though remain Underweight. We are still Overweight EM, especially China (where we find value).
No changes to cash or bank loans	There are no changes to cash or bank loans , both of which remain Overweight. In our opinion they offer among the best risk-reward trade-offs across assets (see Figure 29).
Likewise commodities, which also remains Overweight	Balancing those defensive assets is a continued Maximum 4% allocation to commodities . However, the focus shifts from industrial metals after recent strong gains (though we remain Overweight) to energy (now Overweight) after minimal price gains.
Regional favourites are Europe and EM	Regionally, we are Overweight European and EM assets and particularly Underweight US assets (and the US dollar). We maintain the partial hedge out of US dollar into Japanese yen, believing the latter will rally as the BOJ normalises.

We expect size and value to outperform over the next year

Equity factors and sectors

The first quarter of 2024 marked an outperformance of mega cap growth stocks despite rising bond yields. This changed around the start of Q2 2024, when these trends reversed (see **Figure 31** for the US as an example). Interestingly, low volatility performed well in Q1 2024 even as equities rose and it remained among the best performers during the pull-back in Q2. Despite a current weak patch in global economic growth, a reacceleration starting towards the end of 2024, falling inflation and easier monetary policy are likely to broaden equity market returns and may allow more cyclical factors, such as size and value, to outperform in the next 12 months, although a decline in interest rate expectations may boost growth stocks.

Figure 31 – United States factor relative total returns (%)

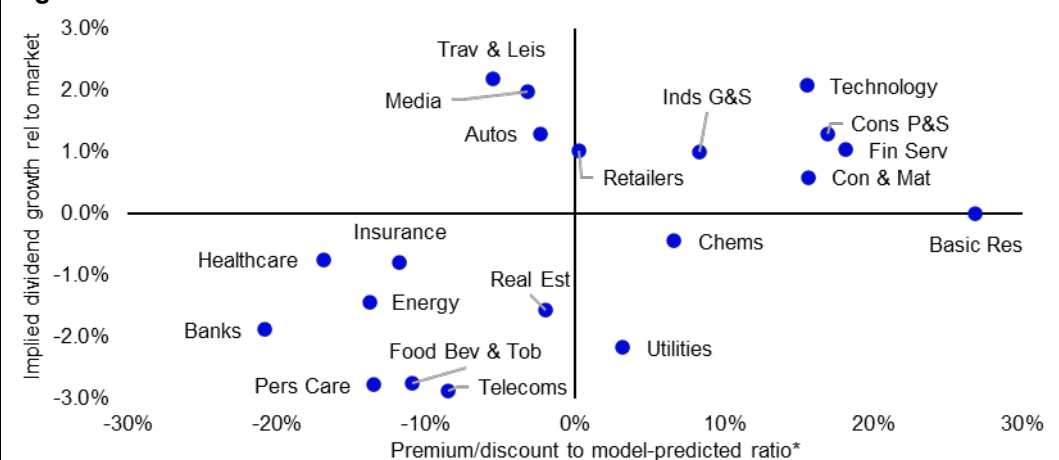


Note: **Past performance is no guarantee of future results.** As of 31 May 2024. Returns are relative to the S&P 500 (US) and the Stoxx 600 (Europe). Q2 2024 data is from 31 March to 31 May 2024. See appendices for methodology and disclaimers. Source: LSEG Datastream and Invesco Global Market Strategy Office

Cyclical sectors favoured

In our latest [Strategic Sector Selector](#) we maintained the view that global equities could continue to progress further in the mid-cycle stage of the market cycle. As long as the macroeconomic outlook does not change significantly, we would expect cyclical sectors to outperform in the next 12 months and prefer to keep Overweight exposures to those that historically tended to outperform during this phase, including industrial goods & services, banks and financial services. At the same time, we remain Overweight a limited selection of defensives that look undervalued on our models (see **Figure 32**), such as consumer staples and healthcare while the economic picture remains in flux.

Figure 32 – Global sectors valuation matrix

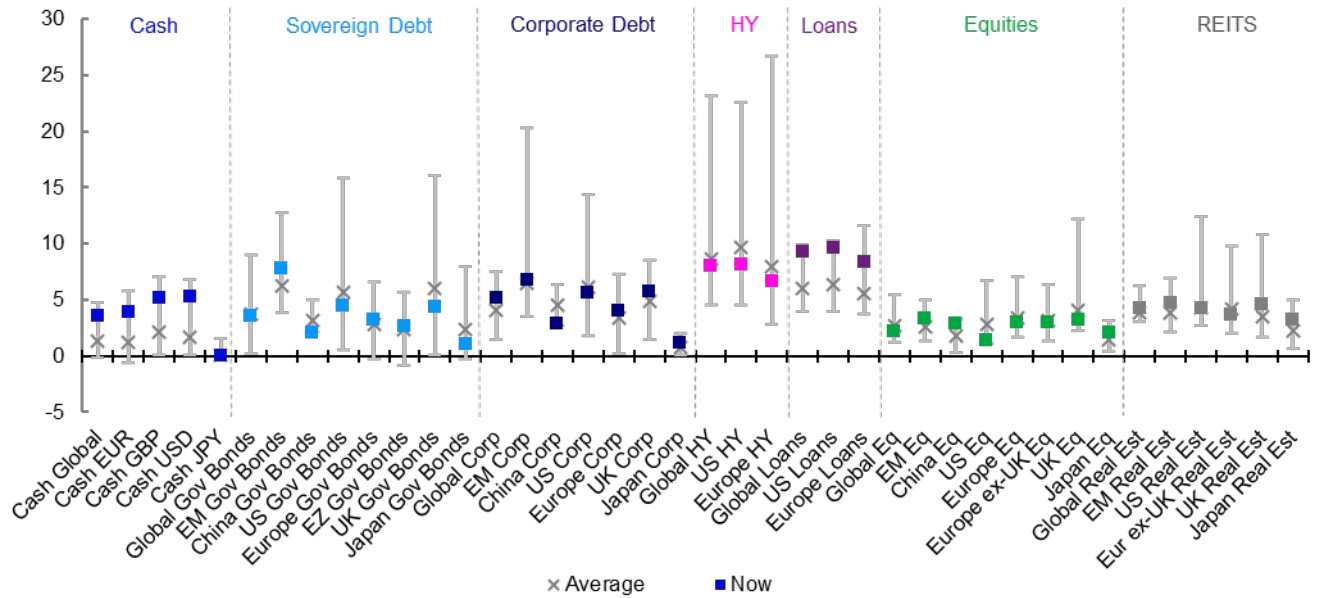


Notes: On the horizontal axis, we show how far a sector's valuation is above/below that implied by our multiple regression model (dividend yield relative to market). The vertical axis shows the perpetual real growth in dividends required to justify current prices relative to that implied for the market. We consider the sectors in the top right quadrant expensive on both measures, and those in the bottom left are considered cheap. See appendices for methodology and disclaimers. Data as of 31 May 2024. Source: LSEG Datastream and Invesco Global Market Strategy Office

Appendices

Appendix 1: Global valuations vs history

Regional yields within historical ranges (%)



Notes: **Past performance is no guarantee of future results.** As of 31 May 2024. "Corporate Debt" is investment grade credit and "Loans" are bank loans. See appendices for definitions, methodology and disclaimers. Source: Bloomberg, Credit Suisse Indices/UBS, FTSE Russell, ICE BofA, LSEG Datastream and Invesco Global Market Strategy office

Appendix 2: Asset class total returns

Data as at 31/05/2024	Index	Current Level/Ry	Total Return (USD, %)				Total Return (Local Currency, %)			
			3m	YTD	12m	5y*	3m	YTD	12m	5y*
Equities										
World	MSCI	786	4.0	9.1	24.1	12.2	4.4	10.6	24.7	12.9
Emerging Markets	MSCI	1049	3.6	3.5	12.8	3.9	5.1	6.6	15.1	6.1
China	MSCI	59	10.2	6.8	4.5	-2.3	10.3	7.3	4.7	-2.0
US	MSCI	5019	3.6	10.9	28.4	15.7	3.6	10.9	28.4	15.7
Europe	MSCI	2147	7.2	8.8	20.5	9.7	7.3	11.3	18.0	9.8
Europe ex-UK	MSCI	2670	6.3	8.8	20.9	10.5	6.7	12.0	18.7	10.7
UK	MSCI	1255	10.3	8.8	18.9	7.2	9.6	9.0	15.8	6.9
Japan	MSCI	3925	-0.5	7.2	19.0	8.0	4.4	19.5	33.9	16.2
Government Bonds										
World	BofA-ML	3.58	-1.7	-5.0	-2.4	-3.4	-0.9	-2.3	-0.6	-1.7
Emerging Markets (USD)	BBloom	7.80	2.8	2.0	15.3	0.4	2.8	2.0	15.3	0.4
China	BofA-ML	2.13	0.5	1.1	4.1	3.7	1.2	3.2	6.2	4.8
US (10y)	Datastream	4.49	-0.9	-3.2	-3.1	-1.1	-0.9	-3.2	-3.1	-1.1
Europe	BofA-ML	3.23	-0.2	-3.9	3.8	-2.6	-0.5	-2.2	1.9	-2.1
Europe ex-UK (EMU, 10y)	Datastream	2.63	-1.0	-5.5	1.4	-4.3	-1.4	-3.9	-0.4	-3.8
UK (10y)	Datastream	4.32	0.1	-4.1	6.8	-3.5	-0.5	-3.9	4.0	-3.7
Japan (10y)	Datastream	1.06	-7.5	-13.2	-15.0	-8.0	-2.8	-3.2	-4.4	-0.9
IG Corporate Bonds										
Global	BofA-ML	5.14	0.7	-1.1	5.4	0.4	0.7	-0.4	4.9	0.6
Emerging Markets (USD)	BBloom	6.82	2.5	4.3	12.3	1.2	2.5	4.3	12.3	1.2
China	BofA-ML	2.87	0.2	0.2	2.6	3.2	0.9	2.3	4.6	4.2
US	BofA-ML	5.60	0.7	-0.6	4.7	1.1	0.7	-0.6	4.7	1.1
Europe	BofA-ML	4.01	0.9	-1.9	7.1	-1.2	0.6	-0.2	5.2	-0.7
UK	BofA-ML	5.72	1.3	-1.0	11.3	-0.5	0.7	-0.9	8.4	-0.7
Japan	BofA-ML	1.12	-5.5	-11.0	-11.8	-7.3	-0.7	-0.8	-0.8	-0.2
HY Corporate Bonds										
Global	BofA-ML	7.97	1.7	2.1	12.1	3.3	1.6	2.5	11.7	3.4
US	BofA-ML	8.18	1.3	1.7	11.2	4.0	1.3	1.7	11.2	4.0
Europe	BofA-ML	6.66	1.7	0.8	12.7	2.2	1.4	2.6	10.7	2.7
Cash (Overnight LIBOR)										
US		5.33	1.4	2.3	5.4	2.1	1.4	2.3	5.4	2.1
Euro Area		3.91	1.3	-0.1	5.3	0.1	1.0	1.7	3.9	0.7
UK		5.20	2.3	2.3	7.8	1.9	1.3	2.2	5.3	1.8
Japan		0.08	-4.7	-10.3	-11.4	-7.3	0.0	0.0	0.0	-0.1
Real Estate (REITs)										
Global	FTSE	1550	0.8	-3.7	8.1	-0.2	0.5	-2.0	6.2	0.3
Emerging Markets	FTSE	1203	0.5	-3.7	4.3	-7.0	0.1	-2.1	2.5	-6.5
US	FTSE	2926	-0.9	-3.4	9.2	2.7	-0.9	-3.4	9.2	2.7
Europe ex-UK	FTSE	2471	14.1	-0.9	37.0	-2.8	13.7	0.9	34.5	-2.3
UK	FTSE	853	11.3	-0.2	15.0	-0.2	10.5	-0.1	12.0	-0.4
Japan	FTSE	2071	1.1	-3.2	2.8	-2.4	6.2	7.9	15.6	5.1
Commodities										
All	GSCI	3665	3.9	9.5	18.4	8.9	-	-	-	-
Energy	GSCI	638	0.6	10.1	25.1	7.6	-	-	-	-
Industrial Metals	GSCI	1830	17.6	14.3	19.9	9.2	-	-	-	-
Precious Metals	GSCI	2634	15.2	13.7	18.7	11.4	-	-	-	-
Agricultural Goods	GSCI	530	6.9	3.3	0.1	8.4	-	-	-	-
Currencies (vs USD)**										
EUR		1.08	0.4	-1.8	1.4	-0.6	-	-	-	-
JPY		157.32	-4.7	-10.3	-11.4	-7.2	-	-	-	-
GBP		1.27	0.7	-0.1	2.7	0.2	-	-	-	-
CHF		1.11	-1.9	-6.7	1.0	2.1	-	-	-	-
CNY		7.24	-0.7	-2.0	-1.8	-0.9	-	-	-	-

Notes: **Past performance is no guarantee of future results.** *Five-year returns are annualised. **The currency section is organised so that in all cases the numbers show the movement in the mentioned currency versus USD (+ve indicates appreciation, -ve indicates depreciation). Please see appendix for definitions, methodology and disclaimers. Source: LSEG Datastream and Invesco Global Market Strategy Office.

Appendix 3: Invesco 10-year Capital Market Assumptions (USD version)

	Asset Class	Index	Expected geometric return	Expected arithmetic return	Expected Risk	Arithmetic return to risk ratio
			%	%	%	
Fixed Income	US Treasury Short	BBG BARC US Treasury Short	3.5	3.5	1.5	2.36
	US Treasury Intermediate	BBG BARC US Treasury Intermediate	4.3	4.4	4.6	0.95
	US Treasury Long	BBG BARC US Treasury Long	4.4	5.1	12.2	0.42
	US TIPS	BBG BARC US TIPS	4.9	5.1	5.7	0.89
	US Bank Loans	CSFB Leverage Loan Index	6.1	6.4	8.2	0.78
	US Aggregate	BBG BARC US Aggregate	5.1	5.2	6.1	0.86
	US Inv Grd Corps	BBG BARC US Investment Grade	5.3	5.5	7.8	0.71
	US MBS	BBG BARC US MBS	5.4	5.6	6.7	0.84
	US Preferred Stocks	BOA ML Fixed Rate Pref Securities	5.0	5.7	12.2	0.47
	US High-Yield Corps	BBG BARC US High Yield	6.2	6.7	10.1	0.66
	US Muni	BOA ML US Muni	4.1	4.3	7.0	0.61
	US Muni (Taxable)	ICE BOA US Taxable Muni Securities Plus	5.1	5.4	8.0	0.68
	US HY Muni	BBG US Muni Bond HY	4.8	5.1	8.8	0.58
	Global Aggregate	BBG BARC Global Aggregate	5.0	5.2	7.2	0.72
	Global Aggregate-Ex US	BBG BARC Global Aggregate- Ex US	5.0	5.5	10.4	0.53
	Global Treasury	BBG BARC Global Treasuries	5.0	5.3	8.6	0.62
	Global Sovereign	BBG BARC Global Sovereign	5.0	5.3	8.1	0.65
	Global Corporate	BBG BARC Global Corporate	5.3	5.6	8.0	0.70
	Global Inv Grd	BBG BARC Global Corporate Inv Grd	5.4	5.7	8.2	0.69
	Eurozone Corporate	BBG BARC Euro Aggregate Credit - Corporate	5.3	6.1	13.4	0.46
Eurozone Treasury	BBG BARC Euro Aggregate Government - Treasury	5.2	6.0	12.7	0.47	
Asian Dollar Inv Grd	BOA Merrill Lynch ACIG	5.4	5.7	8.1	0.70	
EM Aggregate	BBG BARC EM Aggregate	6.3	7.0	12.8	0.55	
EM Agg IG	BBG BARC EM USD Agg IG	5.3	5.6	8.8	0.64	
China Policy Bk & Tsy	BBG BARC China PB Tsy TR	4.6	4.6	4.0	1.15	
China RMB Credit	BBG BARC China Corporate	5.0	5.1	3.5	1.46	
Equities	World Equity	MSCI ACWI	5.9	7.2	17.0	0.42
	World Ex-US Equity	MSCI ACWI Ex-US	6.7	8.3	18.8	0.44
	US Broad	Russell 3000	5.3	6.7	17.5	0.38
	US Large Cap	S&P 500	5.4	6.7	16.8	0.40
	US Mid Cap	Russell Midcap	6.1	7.9	19.5	0.40
	US Small Cap	Russell 2000	7.9	10.1	22.7	0.45
	MSCI EAFE	MSCI EAFE	5.9	7.5	18.7	0.40
	MSCI Europe	MSCI Europe	6.4	8.0	18.8	0.43
	Eurozone	MSCI Euro X UK	6.1	7.9	19.8	0.40
	UK Large Cap	FTSE 100	7.1	8.9	20.0	0.44
	UK Small Cap	FTSE Small Cap UK	8.7	11.5	25.6	0.45
	Canada	S&P TSX	6.1	7.9	20.2	0.39
	Japan	MSCI JP	3.7	5.9	22.3	0.27
Emerging Market	MSCI EM	8.8	11.4	24.6	0.46	
Asia Pacific Ex JP	MSCI APXJ	8.9	11.6	24.8	0.47	
China Large Cap	CSI 300	10.0	14.7	34.1	0.43	
Alternatives	Global Infra	DJ Brookfield Global Infra	9.8	10.8	14.8	0.73
	Global REITs	FTSE EPRA/NAREIT Developed Index	6.9	8.5	18.8	0.45
	Hedge Funds	HFRI HF Index	6.5	6.8	8.6	0.79
	Commodities	S&P GSCI	4.6	7.2	23.7	0.30
	Agriculture	S&P GSCI Agriculture	4.0	6.0	21.2	0.28
	Energy	S&P GSCI Energy	5.8	11.5	36.9	0.31
	Industrial Metals	S&P GSCI Industrial Metals	4.7	7.2	23.9	0.30
Precious Metals	S&P GSCI Precious Metals	-1.9	-0.2	18.4	-0.01	

Notes: Estimates as of 31 March 2024, as published in Long-Term Capital Market Assumptions (June 2024). These estimates reflect the views of Invesco Solutions; the views of other investment teams at Invesco may differ from those presented here. **There is no guarantee that these views will come to pass.** TIPS = treasury inflation protected securities, MBS = mortgage-backed securities.
Source: Invesco Solutions

Appendix 4: Key assumptions

Key assumptions for 1-year projected returns

	US	Eurozone/ Europe ex-UK	UK	Japan	EM	China
Central bank rates (%)	4.25	3.00	4.00	0.50	-	3.40
Sovereign spreads vs rates (bps)	25	25	25	75	-	-
Corporate IG spread vs sovereign (bps)	140	60	150	10	-	-
Corporate HY spread vs sovereign (bps)	450	450	-	-	-	-
Bank Loan spread vs 3M cash rates (bps)	420	440	-	-	-	-
Corporate HY default rates (%)	2.0	2.0	-	-	-	-
Corporate HY recovery rates (%)	40	30	-	-	-	-
Bank Loan default rates (%)	3.0	3.0	-	-	-	-
Bank Loan recovery rates (%)	40	40	-	-	-	-
Equities dividend growth (%)*	5.0	3.0	3.0	5.0	2.0	2.0
Equities dividend yield (%)*	1.5	3.0	3.4	2.1	3.2	2.6
Real estate (REITS) dividend growth (%)*	2.0	5.0	2.0	3.0	7.0	-
Real estate (REITS) dividend yield (%)*	4.1	3.6	4.4	3.3	4.7	-

Notes: *assumptions for Europe ex-UK. One-year assumptions are based on our analysis of how current values compare to historical norms (assuming some degree of reversion to the mean, except where our analysis suggests historical norms are unlikely to be a guide to the future), adjusted for our view about the development of the economic and financial market cycles over the next year in each region.

There is no guarantee that these views will come to pass.

Source: Invesco Global Market Strategy Office

Appendix 5: Dates, data, definitions and source information for Fed rate cut section

US Federal Reserve Bank easing cycles since 1974

Start (date of first target rate cut)	End (date of last target rate cut)
31/07/1974	12/01/1976
22/04/1980	12/08/1980
07/07/1981	14/12/1982
30/08/1984	21/08/1986
06/06/1989	04/09/1992
06/07/1995	17/11/1998
03/01/2001	25/06/2003
18/09/2007	16/12/2008
01/08/2019	16/03/2020

Source: LSEG Datastream and Invesco

US asset total returns in the 12 months before the first Federal Reserve rate cut

	Fed Rate (bp)	Equities	Gov Bonds	Corp IG	Corp HY	Real Estate	USD Index	Commodities
Jul-74	150	-18.9%		-0.9%			8.4%	34.9%
Apr-80	625	2.5%		-13.9%			0.4%	6.9%
Jul-81	775	19.4%	-6.5%	-8.3%			30.2%	-9.7%
Aug-84	206.25	-4.8%	7.8%	6.4%			6.8%	4.2%
Jun-89	256.25	26.7%	13.0%	14.1%	10.6%		13.2%	29.9%
Jul-95	175	27.3%	15.3%	14.6%	15.3%	9.1%	-8.9%	-5.1%
Jan-01	100	-14.9%	16.5%	10.4%	-4.7%	32.4%	8.3%	46.8%
Sep-07	0	14.2%	6.8%	4.9%	6.6%	0.9%	-7.1%	9.1%
Aug-19	50	8.2%	12.2%	10.7%	6.9%	10.8%	4.1%	-7.0%
Last 12m	300	15.8%	-4.2%	0.9%	7.0%	-3.1%	-4.7%	-1.8%
Average	259.72	6.6%	9.3%	4.2%	7.0%	13.3%	6.2%	12.2%

Notes: **Past performance is no guarantee of future results.** Data as of 31 August 2023. We show the change in the target rate of the US Federal Reserve Bank in basis points and the US Dollar total returns of each asset class in the 260 trading days before the first interest rate cut in each monetary easing cycle (day 0 = the day before the first cut). See above for the list of easing cycles and the date of the first interest rate cut in each. Gov = government, IG = investment grade, HY = high yield. We use the following benchmarks for each asset class: equities = MSCI USA, government bonds = Datastream benchmark 10-year Treasury Index, corporate investment grade = ICE BofA US Corporate Index, corporate high yield = ICE BofA US High Yield Index, real estate = FTSE EPRA NAREIT US Index, USD index = DXY US Dollar Index, commodities = S&P GSCI Commodity Total Return Index. The averages exclude returns in the last 12-months. Source: FTSE Russell, ICE, ICE BofA, MSCI, S&P GSCI, LSEG Datastream and Invesco Global Market Strategy Office

US asset total returns in the 12 months after the first Federal Reserve rate cut

	Fed Rate (bp)	Equities	Gov Bonds	Corp IG	Corp HY	Real Estate	USD Index	Commodities
Jul-74	-575	38.1%		6.2%			0.2%	-1.1%
Apr-80	-100	-10.2%		11.8%			10.7%	8.2%
Jul-81	-650	33.4%	10.1%	9.3%			9.2%	-1.6%
Aug-84	-375	16.9%	28.6%	26.8%			-2.2%	-5.3%
Jun-89	-156.25	27.1%	6.8%	7.8%	-1.3%		-9.7%	15.1%
Jul-95	-75	-9.6%	1.3%	4.7%	9.7%	23.2%	7.8%	48.4%
Jan-01	-475	-17.1%	2.4%	9.7%	4.3%	11.0%	7.3%	-29.8%
Sep-07	-325	12.6%	12.4%	-0.1%	-3.0%	-14.3%	-1.0%	14.3%
Aug-19	-225	11.9%	17.5%	11.6%	2.7%	-13.7%	-5.1%	-30.5%
Average	-328.47	11.4%	11.3%	9.8%	2.5%	1.5%	1.9%	2.0%

Notes: **Past performance is no guarantee of future results.** Data as of 31 August 2023. We show the change in the target rate of the US Federal Reserve Bank in basis points and the US Dollar total returns of each asset class in the 260 trading days after the first interest rate cut in each monetary easing cycle (day 0 = the day before the first cut). See above for the list of easing cycles and the date of the first interest rate cut in each. Gov = government, IG = investment grade, HY = high yield. We use the following benchmarks for each asset class: equities = MSCI USA, government bonds = Datastream benchmark 10-year Treasury Index, corporate investment grade = ICE BofA US Corporate Index, corporate high yield = ICE BofA US High Yield Index, real estate = FTSE EPRA NAREIT US Index, USD index = DXY US Dollar Index, commodities = S&P GSCI Commodity Total Return Index.

Source: FTSE Russell, ICE, ICE BofA, MSCI, S&P GSCI, LSEG Datastream and Invesco Global Market Strategy Office

Appendix 6: Methodology for asset allocation, expected returns and optimal portfolios

Portfolio construction process

The optimal portfolios are theoretical and not real. We use optimisation processes to guide our allocations around “neutral” and within prescribed policy ranges based on our estimations of expected returns and using historical covariance information. This guides the allocation to global asset groups (equities, government bonds etc.), which is the most important level of decision. For the purposes of this document the optimal portfolios are constructed with a one-year horizon.

Which asset classes?

We look for investibility, size and liquidity. We have chosen to include equities, bonds (government, corporate investment grade and corporate high yield), bank loans, REITs to represent real estate, commodities and cash (all across a range of geographies). We use cross-asset correlations to determine which decisions are the most important.

Neutral allocations and policy ranges

We use market capitalisation in USD for major benchmark indices to calculate neutral allocations. For commodities, we use industry estimates for total ETP market cap + assets under management in hedge funds + direct investments. We use an arbitrary 5% for the combination of cash and gold. We impose diversification by using policy ranges for each asset category (the range is usually symmetric around neutral).

Expected/projected returns

The process for estimating expected returns is based upon yield (except commodities, of course). After analysing how yields vary with the economic cycle, and where they are situated within historical ranges, we forecast the direction and amplitude of moves over the next year. Cash returns are calculated assuming a straight-line move in short term rates towards our targets (with, of course, no capital gain or loss). Bond returns assume a straight-line progression in yields, with capital gains/losses predicated upon constant maturity (effectively supposing constant turnover to achieve that). Forecasts of corporate investment-grade, high-yield and bank loan spreads are based upon our view of the economic cycle (as are forecasts of credit losses). Coupon/interest payments are added to give total returns. Equity and REIT returns are based on dividend growth assumptions. We calculate total returns by applying those growth assumptions and adding the forecast dividend yield. No such metrics exist for commodities; therefore, we base our projections on US CPI-adjusted real prices relative to their long-term averages and views on the economic cycle. All expected returns are calculated in local currency and then, where necessary, converted into other currency bases using our exchange rate forecasts.

Optimising the portfolio

Using a covariance matrix based on monthly local currency total returns for the last 5 years and we run an optimisation process that maximises the Sharpe Ratio. Another version maximises Return subject to volatility not exceeding that of our Neutral Portfolio. The optimiser is based on the Markowitz model.

Currency hedging

We adopt a cautious approach when it comes to currency hedging as currency movements are notoriously difficult to accurately predict and sometimes hedging can be costly. Also, some of our asset allocation choices are based on currency forecasts. We use an amalgam of central bank rate forecasts, policy expectations and real exchange rates relative to their historical averages to predict the direction and amplitude of currency moves.

Appendix 7: Definitions of data and benchmarks

Sources: we source data from LSEG Datastream unless otherwise indicated.

Cash: returns are based on a proprietary index calculated using the Intercontinental Exchange Benchmark Administration overnight LIBOR (London Interbank Offer Rate). From 1st January 2022, we use the Refinitiv overnight deposit rate for euro, British pound and Japanese yen. The global rate is the average of the euro, British pound, US dollar and Japanese yen rates. The series started on 1 January 2001 with a value of 100.

Gold: London bullion market spot price in USD/troy ounce.

Government bonds: Current values in the market forecast table (**Figure 28**) use Datastream benchmark 10-year yields for the US, Eurozone, Japan and the UK and the Thomson Reuters China benchmark 10-year yield for China. Historical and projected yields and returns (**Figures 1, 2, 4, 5, 20, 21, 28, 29, 30**) are based on Bank of America Merrill Lynch government bond indices with historical ranges starting on 31 December 1985 for the Global, Europe ex-UK, UK and Japanese indices, 30 January 1978 for the US and 31 December 2004 for China. The emerging markets yields and returns are based on the Bloomberg emerging markets sovereign US dollar bond index with the historical range starting on 28 February 2003. The same indices are used to construct **Appendix 1**.

Corporate investment grade (IG) bonds: Bank of America Merrill Lynch investment grade corporate bond indices with historical ranges starting on 31 December 1996 for the Global, 31 January 1973 for the US dollar, 1 January 1996 for the euro, 31 December 1996 for the British pound, 6 September 2001 for the Japanese yen and 31 December 2004 for the China indices. The emerging markets yields and returns are based on the Bloomberg emerging markets corporate US dollar bond index with the historical range starting on 28 February 2003.

Corporate high yield (HY) bonds: Bank of America Merrill Lynch high yield indices with historical ranges starting on 29 August 1986 for the US dollar, and 31 December 1997 for the Global and euro indices.

Bank Loans: Credit Suisse Leveraged Loan Indices with historical ranges starting on 31 January 1992 for the US index, 31 January 1998 for the Western Europe Index and 31 January 1998 for the Global Index (the global index is constructed by Invesco Global Market Strategy Office as a weighted average of the US and Western European indices, using market capitalisation as the weighting factor). **Figure 20** and **Appendix 1** are based on current yield. Data is sourced from Credit Suisse Indices/UBS and Bloomberg.

Equities: We use MSCI benchmark indices to calculate projected returns and calculate long-term total returns with historical ranges starting on 31 December 1969 for the Global, US, Europe ex-UK, UK and Japanese indices, 31 December 1987 for the emerging markets index and 31 December 1992 for the China index (**Figures 1, 2, 28, 29, 30**). Equity index valuations (**Figures 4, 5, 20, 21 and Appendix 1**) are based on dividend yields and price-earnings ratios using Datastream benchmark indices with historical ranges starting on 1 January 1973 for the Global, US, Europe ex-UK and Japanese indices, 31 December 1969 for the UK index, 2 January 1995 for the Emerging Markets index, 26 August 1991 for the China A-Shares index.

Real estate: We use FTSE EPRA/NAREIT indices with historical ranges starting on 29 December 1989 for the US, Europe ex-UK, UK and Japanese indices, 18 February 2005 for the Global index, and 31 October 2008 for the Emerging Markets index.

Commodities: Goldman Sachs Commodity Index with historical ranges starting on 31 December 1969 for the All Commodities and Agriculture indices, 31 December 1982 for the Energy index, 3 January 1977 for the Industrial Metals index, and 2 January 1973 for the Precious Metals index. "Industrial commodities" is oil & gas and industrial metals.

Definitions of data and benchmarks for Appendix 2

Sources: we source data from LSEG Datastream unless otherwise indicated.

Cash: returns are based on a proprietary index calculated using the Intercontinental Exchange Benchmark Administration overnight LIBOR (London Interbank Offer Rate). From 1st January 2022, we use the LSEG overnight deposit rate for the euro, the British pound and the Japanese yen. The global rate is the average of the euro, British pound, US dollar and Japanese yen rates. The series started on 1 January 2001 with a value of 100.

Gold: London bullion market spot price in USD/troy ounce.

Government bonds: Current levels, yields and total returns use Datastream benchmark 10-year yields for the US, Eurozone, Japan and the UK, and the Bank of America Merrill Lynch government bond total return index for China, the World and Europe. The emerging markets yields and returns are based on the Barclays Bloomberg emerging markets sovereign US dollar bond index.

Corporate investment grade (IG) bonds: Bank of America Merrill Lynch investment grade corporate bond total return indices and the Barclays Bloomberg emerging markets corporate US dollar bond total return index for emerging markets.

Corporate high yield (HY) bonds: Bank of America Merrill Lynch high yield total return indices

Equities: We use MSCI benchmark gross total return indices for all regions.

Commodities: Goldman Sachs Commodity total return indices

Real estate: FTSE EPRA/NAREIT total return indices

Currencies: Global Trade Information Services spot rates

Definition of US equity benchmark used to generate long-term returns (Figure 19)

To generate US equity returns we have calculated a total return index for broad US stocks based on index and dividend data from US academic Robert Shiller and LSEG Datastream. The index prior to 1926 is Robert Shiller's recalculation of data from Common Stock Indexes by Cowles & Associates (see here). From 1926 to 1957, the Shiller data is based on the S&P Composite Index and thereafter is based on the S&P 500 as we know it today.

Definitions of data and benchmarks for Figure 21 (yield spreads)

We calculate spreads for government bonds by deducting 3-month government yields from redemption yields for government bond indices within each region. For other assets we deduct government bond yields from redemption yields for corporate bond indices (both investment grade and high yield) and dividend yields for equity and real estate indices. Based on daily data.

3-month government yields: we use the Refinitiv Government Benchmark 3-month yields for the Eurozone, United Kingdom and Japan, and the United States Treasury Bill 3 Month yield for the United States. The series start on 1 January 1980 for the United States and the United Kingdom, on 1 June 1994 for Japan and 4 January 1999 for the Eurozone.

Government bonds: We use Datastream benchmark 10-year yields for the US, Eurozone, Japan and the UK. The global government bond spread is based on an average of the Eurozone, Japanese, UK and US three month rates deducted from the redemption yield on the Intercontinental Exchange Bank of America Global Government Index. Historical ranges start on 4 January 1999.

Corporate investment grade (IG) bonds: we use Bank of America Merrill Lynch investment grade corporate bond total return indices and the Barclays Bloomberg emerging markets corporate US dollar bond total return index for emerging markets. The spread for Europe uses Eurozone government bond yields. The spread for emerging markets uses the US 10-year government yield. Historical ranges start on 31 May 1984 for the US data, 31 December 1996 for the Global and the UK, 4 January 1999 for Europe, 3 January 2000 for Japan, 28 February 2003 for Emerging Markets and 31 December 2004 for China.

Corporate high yield (HY) bonds: we use redemption yields on Bank of America Merrill Lynch high yield indices. The spread for Europe uses Eurozone government bond yields. Historical ranges start on 30 September 1986 for the US data, 31 December 1997 for Global and 4 January 1999 for Europe.

Bank loans: we use the 3-year discount margin on Credit Suisse Leveraged Loan Indices with historical ranges starting on 31 January 1992 for the US index, 31 January 1998 for the Western Europe Index.

Equities: we use Datastream Total Market indices. The dividend yield gap for Europe uses yields on the Intercontinental Exchange Bank of America European Union Government Index Eurozone government bond yields. Europe ex-UK yields gaps use Eurozone government bond yields. The dividend yield gap for emerging markets uses the US 10-year government yield. Historical ranges start on 1 January 1980 for the US and UK data, 2 January 1984 for Japan, 31 December 1985 for Global, 2 January 1995 for Emerging Markets, 3 September 1996 for Europe, 4 January 1999 for Europe ex-UK and 31 December 2004 for China.

Real estate: FTSE EPRA/NAREIT total return indices. The dividend yield gap for Europe ex-UK uses Eurozone government bond yields. The dividend yield gap for emerging markets uses the US 10-year government yield. Historical ranges start on 29 December 2000 for Europe ex-UK, 28 February 2001 for UK, 31 October 2001 for the US and Japan, 22 December 2008 for Emerging Markets and 2 March 2010 for Global.

Appendix 8: Sector classifications, valuation methodology, sector name abbreviations (Figure 32) and equity factor definitions (Figure 31)

We use a sector classification created by merging the two main systems used by Standard & Poor's (S&P) for the US and Stoxx for Europe. We have decided to classify our 10 top level industries using categories that most closely resemble the Global Industry Classification Standard (GICS) and at the level below that (super sectors) we are using the Industry Classification Benchmark (ICB). The former is used for the S&P 500 index and the latter for the Stoxx 600, our benchmark indices for this document. The two systems overlap in most cases and the only material difference seems to be in the consumer sectors. Therefore, we define consumer staples as the aggregate of personal & household goods and food & beverage, while consumer discretionary includes automobiles & parts, media, retail and travel & leisure. For the rest, we assume 100% overlap for the corresponding top-level sectors.

Autos = Automobiles & parts
 Basic Res = Basic Resources
 Chem = Chemicals
 Con & Mat = Construction & Materials
 Fin Serv = Financial Services
 Food & Bev = Food & Beverage
 Ind G&S = Industrial Goods & Services
 Pers & Hh Gds = Personal & Household Goods
 Real Est = Real Estate
 Tech = Technology
 Telecoms = Telecommunications
 Trav & Leis = Travel & Leisure

Multiple regression analysis

We have run a multiple regression analysis to examine how macroeconomic factors influence sector valuations. We have used the dividend yield relative to market as the dependent variable and have run the regressions with the following independent variables:

Monthly series since 31/01/1991:

- 1-year change in: industrial production, consumer price index
- The level of: real oil price (US CPI adjusted), real copper price (US CPI adjusted), consumer confidence index, manufacturing confidence index, 10-year benchmark government bond yield, net debt/EBITDA (only for non-financial sectors), return on equity

We calculate a global measure of industrial production growth, consumer price index growth, consumer confidence, manufacturing confidence and government bond yields using data from four regions or countries representing 65% of global Gross Domestic Product: United States, Europe, Japan and China. The global measures are weighted averages using Datastream global index market capitalisations as weights.

This analysis shows us which independent variables have a statistically significant relationship with sector valuation ratios. In addition, the regression coefficients tell us how much each independent variable influences those ratios. Finally, we use those coefficients to calculate what the valuation ratios should be, based on the model, and compare them to currently observed valuations. In theory, this allows us to determine whether a sector is undervalued or overvalued based on the macroeconomic factors we have used.

Leverage and profitability ratios

We calculate Net Debt/EBITDA from sector and market level aggregates supplied by LSEG Datastream. They define Net Debt as Total Debt minus Cash, where Cash represents Cash & Due from Banks for Banks, Cash for Insurance companies and Cash & Short Term Investments for all other industries. We tend to exclude Financials from

Net Debt/EBITDA comparisons for it is difficult to distinguish debt they sell as a product and debt they incur during the operation of the business. In addition, LSEG Datastream define EBITDA – Earnings before Interest, Taxes and Depreciation – as the earnings of a company before interest expense, income taxes and depreciation. It is calculated by taking the pre-tax income and adding back interest expense on debt and depreciation, depletion and amortisation and subtracting interest capitalised.

Implied perpetual growth models

A valuation cross-check is sought by calculating the perpetual real growth in dividends required to justify current prices. This then allows an evaluation of whether those implied growth rates are realistic.

We use a simple perpetual growth model to calculate implied growth. If $\text{Price} = \text{Dividend}/(\text{Discount Factor} - \text{Growth})$, then $\text{Growth} = \text{Discount Factor} - \text{Dividend Yield}$. The Discount Factor is equal to $\text{Risk Free Rate} + (\text{Beta} \times \text{Market Risk Premium})$. Everything is expressed in real terms to eliminate the distorting influence of inflation, the output being growth in real terms. The important ingredients are derived as follows:

- The risk-free rate is an equity market capitalisation weighted average of US, UK, Eurozone, Japanese and Chinese 10-year real yields.
- Sector betas are calculated using five years of weekly price movements relative to the global market index.
- The risk premium is derived from US equity and treasury market returns since 1871.
- The dividend yield for each sector is the 12-month trailing yield calculated by Datastream.

Equity factor index definitions

All indices are subsets of the S&P 500 index for the US and the Stoxx 600 for Europe, they are rebalanced monthly, use data in US dollars and are equal-weighted.

Growth includes stocks in the top third based on both their 5-year sales per share trend and their internal growth rate (the product of the 5-year average return on equity and the retention ratio).

Low volatility includes stocks in the bottom quintile based on the standard deviation of their daily returns in the previous three months.

Price momentum includes stocks in the top quintile based on their performance in the previous 12 months.

Quality includes stocks in the top third based on both their return on invested capital and their EBIT to EV ratio (earnings before interest and taxes to enterprise value).

Size includes stocks in the bottom quintile based on their market value in US dollars.

Value includes stocks in the bottom quintile based on their price to book value ratios.

Appendix 9: Invesco Solutions Capital Market Assumptions methodology (Figure 6 & Appendix 3)

We show a summary of the Capital Market Assumptions produced by Invesco's Solutions team (Solutions) and this is a summary of their methodology.

Invesco Solutions employ a fundamentally based "building block" approach to estimating asset class returns. Estimates for income and capital gain components of returns for each asset class are informed by fundamental and historical data. Components are then combined to establish estimated returns. This is a summary of key elements of the methodology used to produce long-term (10-year) and medium term (5-year) estimates.

Fixed income returns are composed of the average of the starting (initial) yield and expected yield for bonds, estimated changes in valuation given changes in the Treasury yield curve, roll return which reflects the impact on the price of bonds that are held over time, and a credit adjustment which estimates the potential impact on returns from credit rating downgrades and defaults.

Equity returns are composed of: a dividend yield, calculated using dividend per share divided by price per share, buyback yield, calculated as the percentage change in shares outstanding resulting from companies buying back or issuing shares, valuation change, the expected change in value given the current Price/Earnings (P/E) ratio and the assumption of reversion to the long-term average P/E ratio, and the estimated growth of earnings based on the long-term average real GDP per capita and inflation.

Alternative returns are composed of a variety of public versus private assets with heterogeneous drivers of return given their distinct nature. They range from a beta driven proxy to public markets or a bottom up, building block methodology like that of fixed income or equities, depending on whether they are more bond like or stock like.

Volatility estimates for the different asset classes are derived using rolling historical quarterly returns of various market benchmarks. Given that benchmarks have differing histories within and across asset classes, volatility estimates of shorter-lived benchmarks are normalised to ensure that all are measured over similar time periods.

For the full Capital Market Assumptions methodology, please contact the Solutions team.

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