Uncommon truths
2024: a year in review

The central bank easing cycle started in 2024, helping to make the year rewarding for many investors. If only the same could be said for my Aristotle List of 10 surprises.

A year ago, we were expecting less economic growth but the belief that central banks would start easing led to optimism about market outcomes (see 2023 in review). Central banks did ease and assets did well.

The best performing global assets in 2024 were precious metals and equities (see **Figure 3**). The only global asset class to generate negative returns (in USD) was government bonds. The 13.6% USD total return on our Neutral portfolio in 2023 (13.3% in local currency) was followed by 7.9% in 2024 (11.1% in local currency). The Neutral portfolio is a static mix of global cash, fixed income, equity, real estate and commodity assets (see **Figure 6** for weightings).

As a reminder of events, here are Bloomberg's most-read articles during 2024 (paraphrased):

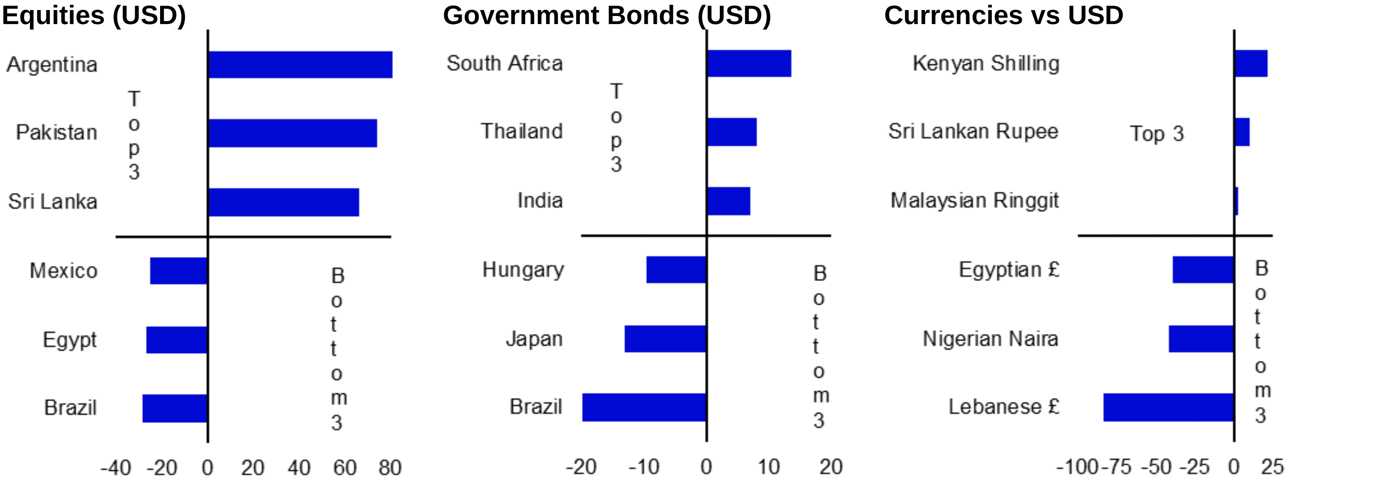
1. Harris urges peaceful transfer of power (Nov 6)
2. UnitedHealth executive fatally shot in NYC (Dec 4)
3. Dollar to fall as traders anticipate Fed cuts (Aug 5)
4. Stock meltdown puts S&P 500 on brink of correction (Aug 6)
5. How a 46-year hedge fund went bankrupt (May 14)
6. Stocks hit by biggest sell-off since August (Sep 3)
7. Fed confronts up to million jobs vanishing (Aug 20)
8. South Korea's Yoon declares martial law (Dec 3)
9. Fed cuts rates by half point… (Sep 18)
10. Donald Trump becomes first former US president guilty of crimes (May 30)

As usual, bad news sells and the majority of the most-read stories were on the negative side. The various ongoing conflicts did not make the list and US elections appeared only in odd ways (at #1 and #10). The dominant event was the early August volatility inspired by weak US jobs data and the rise of the yen (and the knock-on 50 basis point Fed rate cut). Below the top-10, there was interest in Israel/Gaza, Iran and Ukraine. Tariffs make an appearance but not until item 24.

The positive market outcomes suggest to me a willingness to look through geopolitics (except for the rise in gold) and to focus on rate cuts, fiscal activism and a potential pick-up in growth. There have also been a range of idiosyncratic factors that have driven various assets (AI and hoped for post-election US deregulation, for example). Bonds may be back, but the lack of recession helped equities again outperform government bonds by a wide margin (see **Figure 3**). Though emerging market (EM) bonds did well (relative to elsewhere), EM stocks did even better.

Figure 1 shows the results of our annual ranking within asset groups. As is often the case, emerging markets dominate both ends of the spectrum, though Japanese government bonds again appear in the bottom three whether in local currency or in US dollars. Argentina topped the equity league table, on both a local and a common currency basis. Otherwise, India's bonds ranked better than its equities (the latter were also outperformed by Chinese stocks!). Also of note is that its neighbouring stock markets (Pakistan and Sri Lanka) were in the top three. Finally, the 21% decline in the Brazilian real (versus USD) pushed its bond and equity performance to last place (in USD).

Figure 1 – Top and bottom performers by asset class in 2024 (year-to-date total returns, %)



Past performance is no guarantee of future results. As of 31 December 2024. Equity data is based on Datastream indices; government bond indices are supplied by ICE BofA; currencies are based on WM/Refinitiv exchange rates. Source: LSEG Datastream and Invesco Global Market Strategy Office.

The long awaited easing by the Fed finally came in September. By the time the Fed cut rates for the first time, more than 40 other central banks had already eased. The dramatic 50 basis point first move by the Fed suggested that its decision makers were worried they had waited too long, a concern no doubt stoked by the weaker than expected non-farm payroll data for July (published in early August). That data provoked volatility in a broad range of assets but it turned out to be partly the result of residual seasonality (July is usually one of the weaker payroll months of the year).

The Fed has continued to ease but at a more leisurely pace. Fed Funds Futures now imply there will be two 25 bp rate cuts by the end of 2025 (at most), bringing the upper end of the Fed's policy range to 4.00%, versus the below 3.00% rate implied at the time of the first cut. In that time, the 10-year treasury yield has risen from 3.62% to 4.57%.

In any case, the US avoided the recession I predicted in item #1 on my list of 10 surprises for 2024 (published on 7 January 2024 - see The Aristotle List). Unfortunately, the rest of the list didn't fare much better, as shown below (with my self-evaluation in blue):

1. US experiences short recession (No)
2. S&P 500 finishes year lower than it started (No)
3. USDJPY falls below 125 (No)
4. Democrats win at least two of three major races (No)
5. ANC loses sole control of South Africa (Yes)
6. Global government bonds outperform equities (No)
7. Geopolitics push Brent/gold above $100/$2350 (No and Yes)
8. Colombian stocks outperform major indices (No)
9. Chinese stocks to outperform the US (No)
10. France wins Euro 2024 (No)

Remember, this list does not represent my central scenario but is rather an attempt to identify non-consensus ideas that I believe have a reasonable chance of occurring (thereby surprising most investors). They must therefore be put in the context of the prevailing sentiment at the start of the year (optimism about US stocks and a Republican clean sweep).

2024 was a bad year for the Aristotle List, as was 2023 (after a successful 2022), which reminds me of the words of Rudyard Kipling: "If you can meet success and failure and treat them both as impostors, then you are a balanced man...". That is good to remember in good times and in bad.

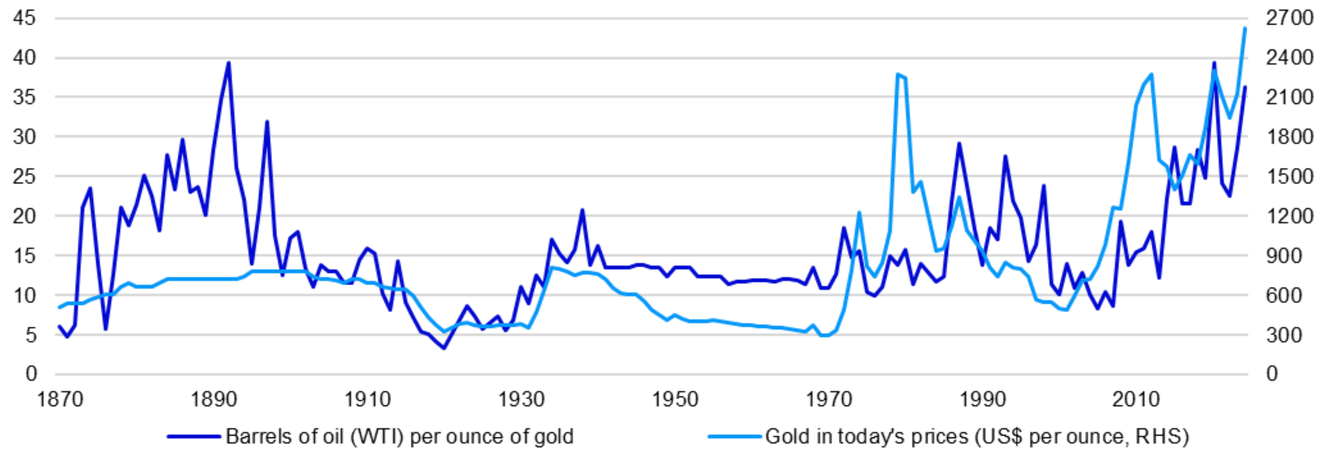
I will publish the selections for 2025 on 12 January. I have met many investors over recent months which helps to judge the prevailing mood. I am hoping the Christmas and New Year break has provided more inspiration than last year.

I continue to believe the main driver of returns will be economic and policy cycles. Central banks are now easing and I expect the global economy to accelerate as real incomes expand and financial conditions improve. As outlined in Big Picture 2025 Outlook, that leads me to be relatively optimistic about multi-asset returns during 2025. However, strong gains for some assets during 2024 leave me expecting lower returns than I did a year ago. I believe the big questions facing investors are whether duration will be rewarded (I am not convinced) and whether there will be a change of market leadership (US large caps have to underperform at some stage, in my opinion).

On that note, all that remains is for Andras and I to wish you a happy and prosperous 2025.

Unless stated otherwise, all data as of 31 December 2024.

Figure 2: Chart of the year: gold reaches new highs (real prices since 1870)



Notes: **past performance is no guarantee of future results**. Based on annual data from 1870 to 2024 (as of 31 December 2024). The chart shows the real price of gold, both deflated by US CPI and showing how many barrels of oil can be bought with an ounce of gold.
Source: Global Financial Data, LSEG Datastream and Invesco Global Market Strategy Office

Figure 3 – Asset class total returns (%)

Data as at 31/12/2024		Current	Total Return (USD, %)					Total Return (Local Currency, %)				
	Index	Level/RY	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Equities												
World	MSCI	841	-1.7	-2.3	-0.9	18.0	18.0	-1.6	-1.6	1.4	20.7	20.7
Emerging Markets	MSCI	1075	-0.8	-0.1	-7.8	8.1	8.1	-0.5	1.2	-4.2	13.7	13.7
China	MSCI	64	-0.9	2.7	-7.7	19.7	19.7	-0.8	2.7	-7.0	19.8	19.8
US	MSCI	5617	-2.6	-2.5	2.8	25.1	25.1	-2.6	-2.5	2.8	25.1	25.1
Europe	MSCI	2003	0.4	-2.4	-9.7	2.4	2.4	0.7	-0.5	-2.8	8.4	8.4
Europe ex-UK	MSCI	2463	0.4	-2.3	-10.5	1.0	1.0	0.7	-0.3	-3.6	8.1	8.1
UK	MSCI	1217	0.4	-2.8	-6.8	7.5	7.5	0.5	-1.3	-0.2	9.5	9.5
Japan	MSCI	3931	2.5	-0.3	-3.6	8.7	8.7	2.4	4.3	5.9	21.2	21.2
Government Bonds												
World	BofA-ML	3.39	-0.1	-2.9	-6.3	-4.2	-4.2	0.0	-1.3	-2.1	0.0	0.0
Emerging Markets	BBloom	7.07	0.0	-1.9	-1.9	9.6	9.6	0.0	-1.9	-1.9	9.6	9.6
China	BofA-ML	1.51	0.0	1.1	-0.6	6.0	6.0	0.1	2.0	3.4	9.1	9.1
US (10y)	Datastream	4.57	0.2	-2.5	-5.0	-1.5	-1.5	0.2	-2.5	-5.0	-1.5	-1.5
Europe	Bofa-ML	2.73	-0.5	-3.4	-7.4	-4.6	-4.6	-0.2	-1.5	-0.2	1.8	1.8
Europe ex-UK (EMU, 10y)	Datastream	2.36	-0.6	-4.0	-8.5	-6.4	-6.4	-0.3	-2.1	-1.4	-0.1	-0.1
UK (10y)	Datastream	4.57	0.2	-3.5	-9.6	-4.9	-4.9	0.3	-2.1	-3.2	-3.2	-3.2
Japan (10y)	Datastream	1.08	0.0	-4.7	-10.3	-12.4	-12.4	-0.2	-0.3	-1.5	-2.4	-2.4
IG Corporate Bonds												
Global	BofA-ML	4.77	0.0	-2.0	-4.0	1.2	1.2	0.1	-1.3	-1.6	3.4	3.4
Emerging Markets	BBloom	6.62	0.1	-1.2	-2.2	10.8	10.8	0.1	-1.2	-2.2	10.8	10.8
China	BofA-ML	2.24	0.1	0.5	-1.7	3.2	3.2	0.1	1.4	2.2	6.2	6.2
US	BofA-ML	5.39	0.1	-1.8	-2.8	2.8	2.8	0.1	-1.8	-2.8	2.8	2.8
Europe	BofA-ML	3.27	-0.4	-2.4	-6.5	-1.9	-1.9	0.0	-0.4	0.8	4.7	4.7
UK	BofA-ML	5.60	0.1	-2.0	-7.0	0.1	0.1	0.2	-0.6	-0.4	1.9	1.9
Japan	BofA-ML	1.26	0.1	-4.4	-9.6	-10.8	-10.8	0.0	0.0	-0.7	-0.5	-0.5
HY Corporate Bonds												
Global	BofA-ML	7.42	0.1	-0.6	-1.1	7.5	7.5	0.1	-0.2	0.5	8.9	8.9
US	BofA-ML	7.65	0.2	-0.4	0.2	8.2	8.2	0.2	-0.4	0.2	8.2	8.2
Europe	BofA-ML	5.87	-0.3	-1.3	-5.6	1.8	1.8	0.1	0.6	1.8	8.6	8.6
Cash (Overnight LIBOR)												
US		4.64	0.1	0.4	0.9	5.0	5.4	0.1	0.4	0.9	5.0	5.4
Euro Area		3.16	0.2	-1.5	-4.8	-1.2	1.5	0.1	0.3	0.6	3.5	3.8
UK		4.70	0.9	-0.8	-3.6	5.2	7.1	0.1	0.4	0.9	4.9	5.2
Japan		0.23	-1.5	0.5	-5.4	-7.1	-4.5	0.0	0.0	0.0	0.1	0.1
Real Estate (REITs)												
Global	FTSE	1595	-0.2	-6.6	-9.6	1.6	1.6	0.2	-4.7	-2.6	8.4	8.4
Emerging Markets	FTSE	1180	0.1	-1.6	-12.1	-3.6	-3.6	0.4	0.4	-5.3	2.9	2.9
US	FTSE	3185	-0.3	-7.4	-6.2	7.9	7.9	-0.3	-7.4	-6.2	7.9	7.9
Europe ex-UK	FTSE	2312	0.5	-6.1	-16.8	-6.6	-6.6	0.9	-4.2	-10.3	-0.4	-0.4
UK	FTSE	779	0.1	-7.8	-20.3	-13.2	-13.2	0.2	-6.4	-14.7	-11.7	-11.7
Japan	FTSE	1932	1.8	-3.1	-11.1	-7.7	-7.7	1.7	1.5	-2.3	2.9	2.9
Commodities												
All	GSCI	3656	1.5	3.3	3.8	9.2	9.2	-	-	-	-	-
Energy	GSCI	637	2.6	6.0	7.5	9.9	9.9	-	-	-	-	-
Industrial Metals	GSCI	1646	-1.5	-2.9	-7.5	2.8	2.8	-	-	-	-	-
Precious Metals	GSCI	2922	0.0	-1.5	-1.1	26.1	26.1	-	-	-	-	-
Agricultural Goods	GSCI	515	1.3	3.0	1.7	0.4	0.4	-	-	-	-	-
Currencies (vs USD)*												
EUR		1.04	-0.4	-2.1	-7.0	-6.2	-6.2	-	-	-	-	-
JPY		157.20	0.0	-4.7	-8.6	-10.3	-10.3	-	-	-	-	-
GBP		1.25	-0.1	-1.5	-6.6	-1.8	-1.8	-	-	-	-	-
CHF		1.10	-0.8	-2.9	-6.8	-7.2	-7.2	-	-	-	-	-
CNY		7.30	-0.1	-0.8	-3.8	-2.7	-2.7	-	-	-	-	-

Notes: **Past performance is no guarantee of future results.** *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

Figure 4 – Global equity sector total returns relative to market (%)

Data as at 31/12/2024	Global				
	1w	1m	QTD	YTD	12m
Energy	**1.9**	**-1.3**	**-0.1**	**-13.7**	**-13.7**
Basic Materials	**0.7**	**-4.8**	**-13.1**	**-19.8**	**-19.8**
Basic Resources	0.2	-6.0	-13.6	-19.3	-19.3
Chemicals	1.3	-3.0	-12.3	-20.4	-20.4
Industrials	**0.6**	**-2.5**	**-2.2**	**-3.0**	**-3.0**
Construction & Materials	0.5	-4.1	-5.4	-4.7	-4.7
Industrial Goods & Services	0.6	-2.3	-1.7	-2.8	-2.8
Consumer Discretionary	**-1.1**	**3.0**	**5.5**	**2.4**	**2.4**
Automobiles & Parts	-3.5	11.9	17.7	3.5	3.5
Media	-0.9	-0.2	11.4	15.2	15.2
Retailers	-1.4	1.8	6.8	13.8	13.8
Travel & Leisure	-0.2	-0.8	5.1	-2.2	-2.2
Consumer Products & Services	1.0	1.7	-6.9	-14.8	-14.8
Consumer Staples	**1.1**	**-2.6**	**-8.0**	**-13.8**	**-13.8**
Food, Beverage & Tobacco	1.1	-2.0	-8.7	-15.6	-15.6
Personal Care, Drug & Grocery Stores	1.1	-3.7	-6.9	-10.3	-10.3
Healthcare	**0.7**	**-3.2**	**-9.7**	**-10.9**	**-10.9**
Financials	**0.9**	**-1.0**	**2.6**	**5.6**	**5.6**
Banks	1.4	0.6	4.1	5.9	5.9
Financial Services	0.3	-2.4	3.2	4.8	4.8
Insurance	1.0	-2.5	-2.1	6.2	6.2
Real Estate	**1.1**	**-3.5**	**-7.6**	**-11.3**	**-11.3**
Technology	**-1.7**	**3.9**	**6.1**	**16.5**	**16.5**
Telecommunications	**1.1**	**-0.6**	**-0.8**	**-4.5**	**-4.5**
Utilities	**1.6**	**-2.1**	**-6.2**	**-4.0**	**-4.0**

Notes: **Past performance is no guarantee of future results.** Returns shown are for Datastream sector indices versus the total market index. Source: LSEG Datastream and Invesco Global Market Strategy Office

Figure 5a – US factor index total returns (%)

Data as at 31/12/2024	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	-1.8	-5.2	-0.2	12.7	12.7	0.8	-2.8	-2.5	-9.8	-9.8
Low volatility	-1.1	-5.8	-3.3	16.6	16.6	1.6	-3.5	-5.6	-6.8	-6.8
Price momentum	-2.3	-6.5	2.9	22.5	22.5	0.3	-4.2	0.5	-2.0	-2.0
Quality	-0.9	-7.4	-4.9	7.8	7.8	1.7	-5.2	-7.2	-13.7	-13.7
Size	-0.9	-5.8	-4.5	6.2	6.2	1.7	-3.5	-6.8	-15.1	-15.1
Value	-0.5	-7.1	-1.4	15.6	15.6	2.2	-4.8	-3.8	-7.6	-7.6
Market	-2.6	-2.4	2.4	25.0	25.0					
Market - Equal-Weighted	-1.4	-6.3	-1.9	13.0	13.0					

Notes: **Past performance is no guarantee of future results.** All indices are subsets of the S&P 500 index, 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. The market represents the S&P 500 index. Source: LSEG Datastream and Invesco Global Market Strategy Office

Figure 5b – European factor index total returns relative to market (%)

Data as at 31/12/2024	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	0.9	1.3	-2.4	3.6	3.6	0.2	1.7	0.1	-5.4	-5.4
Low volatility	0.7	-1.1	-1.9	12.7	12.7	0.0	-0.7	0.7	2.9	2.9
Price momentum	0.5	-0.2	-1.1	18.2	18.2	-0.2	0.2	1.5	8.0	8.0
Quality	0.9	-0.2	-1.0	8.8	8.8	0.1	0.2	1.6	-0.6	-0.6
Size	0.9	-0.1	-4.2	4.0	4.0	0.2	0.4	-1.7	-5.0	-5.0
Value	1.5	0.5	-3.3	8.5	8.5	0.8	1.0	-0.7	-0.9	-0.9
Market	0.8	-0.4	-2.6	9.5	9.5					
Market - Equal-Weighted	0.8	-0.4	-3.1	7.8	7.8					

Notes: **Past performance is no guarantee of future results.** All indices are subsets of the STOXX 600 index, they are rebalanced monthly, use data in euros 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 euros; Value includes stocks in the bottom quintile based on their price to book value ratios. The market represents the STOXX 600 index. Source: LSEG Datastream and Invesco Global Market Strategy Office

Figure 6 – Model asset allocation

	Neutral	Policy Range		Allocation	Position vs Neutral	Hedged	Currency
Cash Equivalents	**5%**	**0-10%**	↓	**0%**			
Cash	2.5%		↓	0%			
Gold	2.5%			0%			
Bonds	**40%**	**10-70%**	↑	**47%**			
Government	25%	10-40%	↓	25%			
US	8%		↓	12%		25%	JPY
Europe ex-UK (Eurozone)	7%		↑	7%			
UK	1%			2%			
Japan	7%		↓	0%			
Emerging Markets	2%			4%			
China**	0.2%			0%			
Corporate IG	10%	0-20%	↑	18%			
US Dollar	5%		↑	10%		50%	JPY
Euro	2%		↑	4%			
Sterling	1%			2%			
Japanese Yen	1%		↓	0%			
Emerging Markets	1%			2%			
China**	0.1%			0%			
Corporate HY	5%	0-10%	↑	4%			
US Dollar	4%		↑	3%			
Euro	1%		↑	1%			
Bank Loans	**4%**	**0-8%**		**8%**			
US	3%			6%			
Europe	1%			2%			
Equities	**45%**	**25-65%**		**35%**			
US	25%			10%			
Europe ex-UK	7%		↑	10%			
UK	4%		↑	6%			
Japan	4%			3%			
Emerging Markets	5%		↓	6%			
China**	2%			4%			
Real Estate	**4%**	**0-8%**	↑	**6%**			
US	1%			0%			
Europe ex-UK	1%		↑	2%			
UK	1%			2%			
Japan	1%		↑	2%			
Emerging Markets	1%			0%			
Commodities	**2%**	**0-4%**	↑	**4%**			
Energy	1%		↑	1%			
Industrial Metals	0.3%		↑	2%			
Precious Metals	0.3%			0%			
Agriculture	0.3%			1%			
Total	**100%**			**100%**			
Currency Exposure (including effect of hedging)							
USD	52%		↑	37%			
EUR	19%		↑	26%			
GBP	7%		↓	12%			
JPY	13%		↓	13%			
EM	9%		↓	12%			
Total	**100%**			**100%**			

Notes: **China is included in Emerging Markets allocations. This is a theoretical portfolio and is for illustrative purposes only. See the latest The Big Picture document for more details. It does not represent an actual portfolio and is not a recommendation of any investment or trading strategy. Arrows indicate the direction of the most recent changes.
Source: Invesco Global Market Strategy Office

Figure 7 – Model allocations for global sectors

	Neutral	Invesco	Preferred Region
Energy	**6.1%**	**Neutral**	**EM**
Basic Materials	**3.8%**	**Underweight ↓**	**Japan**
Basic Resources	2.3%	Underweight ↓	Japan
Chemicals	1.5%	Neutral	US
Industrials	**13.2%**	**Underweight**	**US**
Construction & Materials	1.7%	Underweight	US
Industrial Goods & Services	11.4%	Underweight	US
Consumer Discretionary	**14.0%**	**Underweight**	**US**
Automobiles & Parts	2.4%	Underweight	Europe
Media	1.1%	Neutral	Japan
Retailers	5.3%	Overweight	US
Travel & Leisure	1.9%	Underweight	EM
Consumer Products & Services	3.4%	Underweight	Japan
Consumer Staples	**5.4%**	**Overweight**	**US**
Food, Beverage & Tobacco	3.4%	Overweight	US
Personal Care, Drug & Grocery Stores	2.0%	Overweight	Europe
Healthcare	**9.3%**	**Overweight**	**US**
Financials	**15.7%**	**Overweight**	**US**
Banks	7.4%	Overweight	Europe
Financial Services	5.3%	Overweight	US
Insurance	3.1%	Overweight ↑	US
Real Estate	**2.8%**	**Neutral**	**Japan**
Technology	**23.0%**	**Neutral**	**EM**
Telecommunications	**3.4%**	**Underweight**	**US**
Utilities	**3.4%**	**Neutral**	**US**

Notes: These are theoretical allocations which are for illustrative purposes only. They do not represent an actual portfolio and are not a recommendation of any investment or trading strategy. See the latest Strategic Sector Selector for more details.
Source: LSEG Datastream and Invesco Global Market Strategy Office

Appendix

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.

Definitions of data and benchmarks for Figure 3

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 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 ICE BofA government bond total return index for 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: ICE BofA investment grade corporate bond total return indices, except for in emerging markets where we use the Barclays Bloomberg emerging markets corporate US dollar bond index.

Corporate high yield (HY) bonds: ICE BofA 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

Investment risks

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Important information

This document is for informational purposes only and is intended only for Professional Clients and Financial Advisers in Continental Europe (as defined below); Professional Clients only in Dubai, Ireland, the Isle of Man, Jersey, Guernsey, Malta, Switzerland and the UK; for Qualified Clients/Sophisticated Investors in Israel, for Professional/Qualified/Sophisticated Investors in Bahrain, Jordan, Kuwait, Lebanon, Mauritius, Oman, Qatar, Saudi Arabia, South Africa, Tunisia, Turkey, and the United Arab Emirates; for Professional Investors in Hong Kong, for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China, for Sophisticated/Professional Investors in Australia, for Institutional Investors in the United States, Peru and Singapore; for AFPs and Qualified Investors in Chile and Colombia; for Accredited/Institutional Investors in Mexico; for Wholesale Investors (as defined in the Financial Markets Conduct Act) in New Zealand; for certain specific Qualified Institutions and/or Sophisticated Investors only in Taiwan, for Qualified Professional Investors in Korea, for certain specific institutional investors in Brunei and Indonesia, for Qualified Institutional Investors and/or certain specific institutional investors in Thailand, for qualified buyers in Philippines fand for certain specific institutional investors in Malaysia, upon request, for informational purposes only. This document is only intended for use with Qualified Institutional Investors in Japan; in Canada, this document is restricted to Institutional Investors and Advisors, is for educational purposes only, does not constitute investment, tax or legal advice and should not be relied on as such. This is not to be construed as an offer to buy or sell any financial instruments and should not be relied upon as the sole factor in an investment making decision. As with all investments there are associated inherent risks. Please obtain and review all financial material carefully before investing. All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed.

For the distribution of this document, Continental Europe is defined as Andorra, Austria, Belgium, Bulgaria, Czech Republic, Croatia, Denmark, Finland, France, Germany, Gibraltar, Greece, Hungary, Italy, Kosovo, Latvia, Liechtenstein, Luxembourg, Monaco, Netherlands, North Macedonia, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. By accepting this material, you consent to communicate with us in English, unless you inform us otherwise.

In Monaco this document is for duly authorised intermediaries only. Such intermediaries are banks and financial activities companies duly licensed by the "Commission de Contrôle des Activités Financières" by virtue of Law n° 1.338, of September 7, 2007, and authorised under Law n° 1.144 of July 26, 1991.

This document contains general information only and does not take into account individual objectives, taxation position or financial needs. Nor does this constitute a recommendation of the suitability of any investment strategy for a particular investor. Neither Invesco Ltd. nor any of its member companies guarantee the return of capital, distribution of income or the performance of any fund or strategy.

This document is not an invitation to subscribe for shares in a fund nor is it to be construed as an offer to buy or sell any financial instruments. As with all investments, there are associated inherent risks. This document is by way of information only. This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else and you may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. Asset management services are provided by Invesco in accordance with appropriate local legislation and regulations. Certain products mentioned are available via other affiliated entities. Not all products are available in all jurisdictions.

This is marketing material and not financial advice. It is not intended as a recommendation to buy or sell any particular asset class, security or strategy. Regulatory requirements that require impartiality of investment/investment strategy recommendations are therefore not applicable nor are any prohibitions to trade before publication.

Views and opinions are based on current market conditions and are subject to change.
These materials may contain statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return, future performance targets, sample or pro forma portfolio structures or portfolio composition, scenario analysis,

specific investment strategies and proposed or pro forma levels of diversification or sector investment. These forward-looking statements can be identified by the use of forward looking terminology such as “may,” “will,” “should,” “expect,” “anticipate,” “project,” “estimate,” “intend,” “continue,” “target,” “believe,” the negatives thereof, other variations thereon or comparable terminology. Forward looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict, are beyond the Issuer’s control, and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Invesco assumes no duty to update any forward-looking statement.

This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions if they are uncertain whether an investment is suitable for them.

Forecasts are not reliable indicators of future performance.

Australia
This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco.
The information in this document has been prepared without taking into account any investor’s investment objectives, financial situation or particular needs. Before acting on the information the investor should consider its appropriateness having regard to their investment objectives, financial situation and needs.
You should note that this information:

- may contain references to dollar amounts which are not Australian dollars;
- may contain financial information which is not prepared in accordance with Australian law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian tax issues.

New Zealand
This document is issued only to wholesale investors (as defined in the Financial Markets Conduct Act) in New Zealand to whom disclosure is not required under Part 3 of the Financial Markets Conduct Act. This document has been prepared only for those persons to whom it has been provided by Invesco. It should not be relied upon by anyone else and must not be distributed to members of the public in New Zealand. Information contained in this document may not have been prepared or tailored for a New Zealand audience. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on Interests to members of the public in New Zealand. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted.

Issued in Australia and New Zealand by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services Licence number 239916.

Israel: This document may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Nothing in this document should be considered investment advice or investment marketing as defined in the Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 1995 (“Investment Advice Law”). Neither Invesco Ltd. nor its subsidiaries are licensed under the Investment Advice Law, nor does it carry the insurance as required of a licensee thereunder.

This document is provided by Invesco Management S.A., President Building, 37A Avenue JF Kennedy, L-1855 Luxembourg, regulated by the Commission de Surveillance du Secteur Financier, Luxembourg, Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322- Frankfurt/M., Germany, Invesco Asset Management (Schweiz) AG, Talacker 34, 8001 Zurich, Switzerland, and Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on Thames, Oxfordshire RG9 1HH, UK Authorised and regulated by the Financial Conduct Authority.

In the US by Invesco Advisers, Inc., 1331 Spring Street NW, Suite 2500, Atlanta, GA 30309 and Invesco Capital Management LLC, 3500 Lacey Road, Suite 700, Downers Grove, IL 60515.

In Canada by Invesco Canada Ltd., 16 York Street, Suite 1200, Toronto, Ontario M5J 0E6.

This document is issued in the following countries:

- in Hong Kong by Invesco Hong Kong Limited 景順投資管理有限公司, 45/F, Jardine House, 1 Connaught Place, Central, Hong Kong
- in Singapore by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.
- in Taiwan by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). **Invesco Taiwan Limited is operated and managed independently**.
- In Japan by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114: Registration Number: The Director – General of Kanto Local Finance Bureau (Kin-sho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association

Telephone calls may be recorded.

© 2025 Invesco. All rights reserved. II-GMSOUT-COM-1-E 4125379.

Authors

Paul Jackson
Global Head of Asset Allocation Research
paul.jackson@invesco.com
London, EMEA

Global Market Strategy Office

Kristina Hooper
Chief Global Market Strategist
kristina.hooper@invesco.com
New York, Americas

Ashley Oerth
Associate Global Market Strategist
ashley.oerth@invesco.com
London, EMEA

Brian Levitt
Global Market Strategist, Americas
brian.levitt@invesco.com
New York, Americas

James Anania
Investment Strategy Analyst, Americas
james.anania@invesco.com
New York, Americas

David Chao
Global Market Strategist, Asia Pacific
david.chao@invesco.com
Hong Kong, Asia Pacific

Thomas Wu
Market Strategy Analyst, Asia Pacific
thomas.wu@invesco.com
Hong Kong, Asia Pacific

Tomo Kinoshita
Global Market Strategist, Japan
tomo.kinoshita@invesco.com
Tokyo, Asia Pacific

Arnab Das
Global Macro Strategist
arnab.das@invesco.com
London, EMEA

Paul Jackson
Global Head of Asset Allocation Research
paul.jackson@invesco.com
London, EMEA

András Vig
Multi-Asset Strategist
andras.vig@invesco.com
London, EMEA

Telephone calls may be recorded