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 have been precious metals and equities (see **Figure 3**). The only asset class to generate negative returns was government bonds. The 13.6% USD total return on our Neutral portfolio in 2023 (13.3% in local currency) was followed by 9.3% so far in 2024 (+12.5% 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):

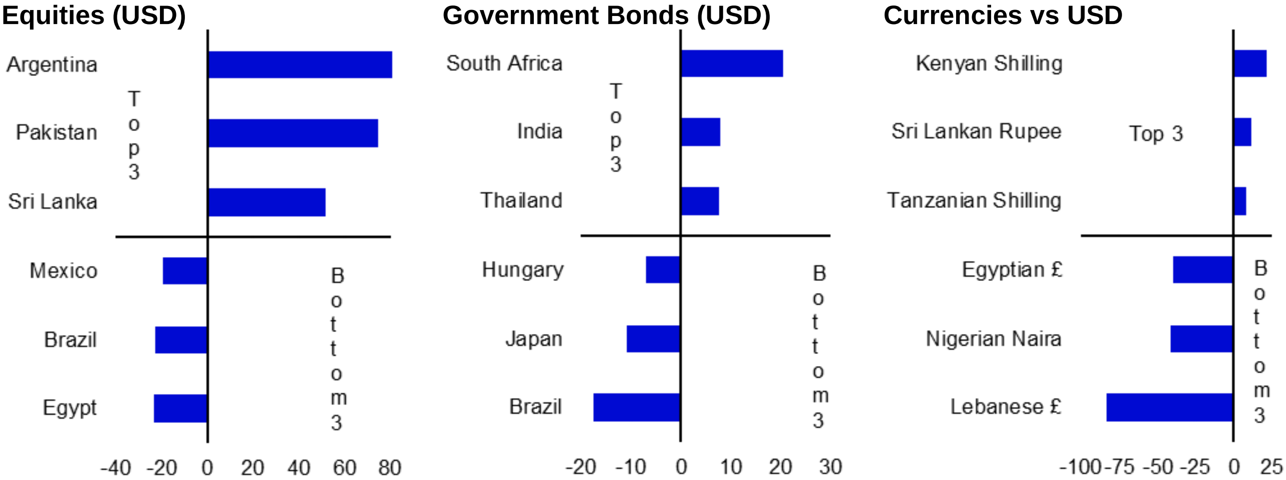
1. Harris urges peaceful transfer of power (Nov 6)
2. UnitedHealth executive fatally shot in NYC (Dec 4)
3. Dollar to fall as traders anticipate Fed cuts (Aug 5)
4. Stock meltdown puts S&P 500 on brink of correction (Aug 6)
5. How a 46-year hedge fund went bankrupt (May 14)
6. Stocks hit by biggest sell-off 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 easing). Below the top-10 there was interest in Israel/Gaza, Iran and Ukraine. Tariffs do 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 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 20% decline in the Brazilian real (versus USD) pushed its bond and equity performance into bottom three territory (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 13 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 only three 25 bp rate cuts by the end of 2025, 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 4.40%.

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 (TBD)
9. Chinese stocks to outperform the US (TBD)
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 (2022 had been particularly good with a hit rate of 9/10). I am reminded 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...", which is good to remember in good times and in bad.

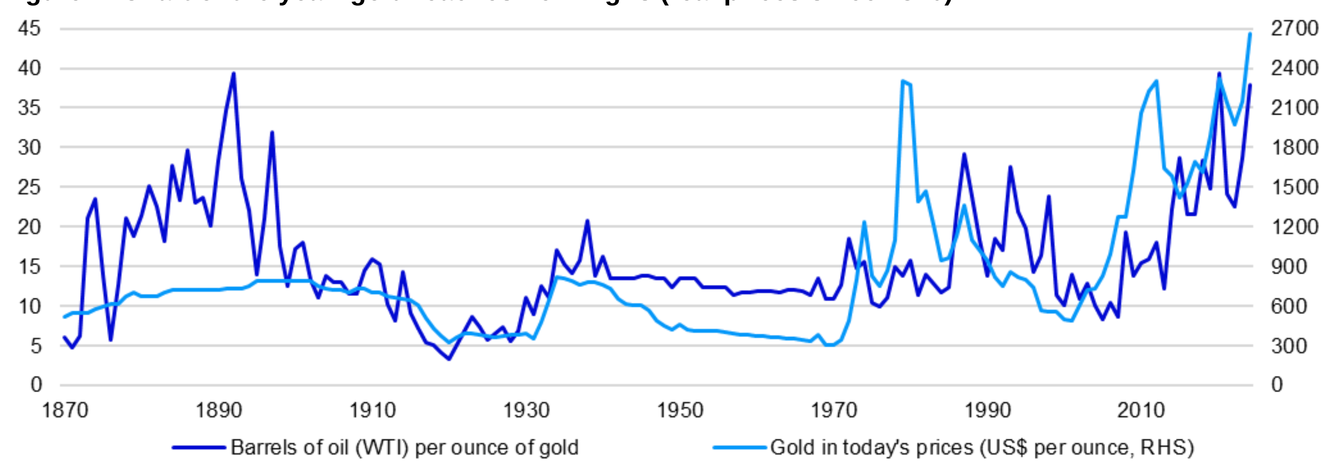
I will publish the selections for 2025 in early January. I have met many investors over recent weeks and months which helps to judge the prevailing mood. I am hoping a break over the Christmas and New Year period will provide more inspiration than last year.

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 and your loved ones a happy holiday season.

Unless stated otherwise, all data as of 13 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 13 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 13/12/2024		Current	Total Return (USD, %)					Total Return (Local Currency, %)				
	Index	Level/RY	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Equities												
World	MSCI	866	-0.8	1.5	2.0	21.4	24.6	-0.5	1.7	3.8	23.7	25.8
Emerging Markets	MSCI	1107	0.3	1.4	-5.2	11.1	17.1	0.5	1.7	-2.5	15.8	20.4
China	MSCI	65	0.5	-0.4	-7.3	20.2	23.6	0.4	-0.3	-6.6	20.2	23.3
US	MSCI	5790	-0.7	1.4	5.9	28.8	30.7	-0.7	1.4	5.9	28.8	30.7
Europe	MSCI	2065	-1.5	2.2	-6.9	5.6	9.4	-0.5	3.1	-1.0	10.5	11.7
Europe ex-UK	MSCI	2545	-1.5	2.0	-7.5	4.3	8.0	-0.7	3.0	-1.6	10.3	11.0
UK	MSCI	1243	-1.1	2.7	-4.9	9.8	14.6	-0.1	3.6	1.2	11.0	13.8
Japan	MSCI	3961	-1.8	2.4	-3.0	9.4	13.2	0.7	1.5	4.3	19.2	19.8
Government Bonds												
World	BofA-ML	3.28	-1.7	0.5	-4.9	-2.8	-0.3	-0.9	0.7	-1.4	0.6	1.8
Emerging Markets	BBloom	6.89	-1.0	1.6	-0.1	11.6	15.5	-1.0	1.6	-0.1	11.6	15.5
China	BofA-ML	1.58	0.7	1.1	-0.9	5.7	8.0	1.0	1.8	2.8	8.5	9.4
US (10y)	Datastream	4.40	-1.9	0.8	-3.9	-0.4	1.1	-1.9	0.8	-3.9	-0.4	1.1
Europe	Bofa-ML	2.62	-1.6	0.4	-5.5	-2.6	1.1	-0.9	1.3	0.6	2.6	4.0
Europe ex-UK (EMU, 10y)	Datastream	2.25	-1.8	0.4	-6.5	-4.4	-0.9	-1.1	1.4	-0.5	0.7	2.0
UK (10y)	Datastream	4.41	-2.0	0.3	-8.1	-3.3	1.1	-0.9	1.2	-2.3	-2.3	0.4
Japan (10y)	Datastream	1.03	-2.3	1.0	-7.9	-10.1	-6.8	0.1	0.1	-1.1	-2.0	-1.3
IG Corporate Bonds												
Global	BofA-ML	4.64	-1.2	0.5	-2.9	2.4	4.7	-0.9	0.8	-0.9	4.2	5.6
Emerging Markets	BBloom	6.42	-0.7	0.7	-1.1	12.1	15.2	-0.7	0.7	-1.1	12.1	15.2
China	BofA-ML	2.30	0.4	0.6	-1.9	3.1	5.0	0.7	1.3	1.8	5.8	6.4
US	BofA-ML	5.24	-1.3	0.7	-1.9	3.8	5.1	-1.3	0.7	-1.9	3.8	5.1
Europe	BofA-ML	3.16	-0.9	0.0	-4.8	-0.2	3.6	-0.2	1.0	1.3	5.1	6.6
UK	BofA-ML	5.46	-1.2	0.5	-5.9	1.3	5.6	-0.2	1.3	0.1	2.4	4.9
Japan	BofA-ML	1.21	-2.4	0.9	-7.5	-8.6	-5.6	0.1	0.0	-0.6	-0.4	-0.1
HY Corporate Bonds												
Global	BofA-ML	7.16	-0.3	0.5	-0.4	8.3	11.2	-0.2	0.7	1.0	9.5	11.8
US	BofA-ML	7.39	-0.3	0.6	0.7	8.8	11.3	-0.3	0.6	0.7	8.8	11.3
Europe	BofA-ML	5.74	-0.5	0.0	-4.2	3.3	7.4	0.2	1.0	1.9	8.8	10.5
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	1650	-2.0	-1.3	-6.9	4.7	8.9	-1.3	-0.4	-0.9	10.3	12.0
Emerging Markets	FTSE	1206	-1.5	-1.3	-10.2	-1.4	4.3	-0.8	-0.3	-4.4	3.8	7.3
US	FTSE	3318	-1.5	-1.1	-2.7	11.9	14.5	-1.5	-1.1	-2.7	11.9	14.5
Europe ex-UK	FTSE	2370	-3.5	-0.1	-14.7	-4.3	4.4	-2.8	0.9	-9.3	0.8	7.4
UK	FTSE	799	-3.8	-2.5	-18.2	-10.9	-4.2	-2.9	-1.6	-13.0	-9.9	-4.8
Japan	FTSE	1936	-2.9	-1.0	-11.3	-7.9	-5.5	-0.5	-1.8	-4.7	0.4	0.1
Commodities												
All	GSCI	3626	3.1	3.5	3.0	8.3	11.3	-	-	-	-	-
Energy	GSCI	623	5.6	3.9	5.3	7.6	11.1	-	-	-	-	-
Industrial Metals	GSCI	1692	-0.6	1.4	-4.9	5.7	12.1	-	-	-	-	-
Precious Metals	GSCI	2965	0.5	2.6	0.4	28.0	33.2	-	-	-	-	-
Agricultural Goods	GSCI	510	0.1	3.9	0.7	-0.5	-1.4	-	-	-	-	-
Currencies (vs USD)*												
EUR		1.05	-0.6	-0.6	-5.7	-4.8	-3.4	-	-	-	-	-
JPY		153.66	-2.4	1.2	-6.5	-8.2	-7.0	-	-	-	-	-
GBP		1.26	-1.0	-0.9	-6.0	-1.1	0.7	-	-	-	-	-
CHF		1.12	-1.6	-0.8	-5.3	-5.7	-2.4	-	-	-	-	-
CNY		7.28	-0.1	-0.7	-3.5	-2.4	-1.4	-	-	-	-	-

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 13/12/2024	Global				
	1w	**1m**	**QTD**	**YTD**	**12m**
Energy	**0.4**	**-2.0**	**-0.9**	**-14.4**	**-14.3**
Basic Materials	**-1.0**	**-1.7**	**-10.7**	**-17.6**	**-15.3**
Basic Resources	-0.9	-1.1	-10.2	-16.1	-11.7
Chemicals	-1.2	-2.5	-11.3	-19.5	-20.1
Industrials	**-0.7**	**-2.0**	**-1.6**	**-2.5**	**-1.3**
Construction & Materials	-1.1	-0.9	-3.1	-2.4	-0.4
Industrial Goods & Services	-0.7	-2.1	-1.4	-2.5	-1.5
Consumer Discretionary	**1.0**	**4.9**	**6.2**	**3.1**	**2.7**
Automobiles & Parts	6.4	12.9	17.7	3.5	4.1
Media	-0.6	5.3	12.8	16.6	14.1
Retailers	0.1	3.4	8.5	15.6	15.8
Travel & Leisure	-0.7	1.0	5.8	-1.6	-1.9
Consumer Products & Services	-0.1	3.3	-7.2	-15.1	-16.3
Consumer Staples	**0.1**	**-1.1**	**-7.5**	**-13.2**	**-14.1**
Food, Beverage & Tobacco	0.6	-1.3	-8.0	-15.1	-16.1
Personal Care, Drug & Grocery Stores	-0.8	-0.9	-6.5	-9.9	-10.4
Healthcare	**-1.5**	**-4.6**	**-10.1**	**-11.3**	**-12.0**
Financials	**-0.5**	**-0.4**	**2.1**	**5.1**	**5.7**
Banks	-0.1	0.3	3.1	4.8	6.8
Financial Services	-0.6	-0.9	3.4	5.0	5.5
Insurance	-1.5	-1.1	-2.4	5.8	3.2
Real Estate	**-1.2**	**-2.3**	**-7.6**	**-11.3**	**-10.1**
Technology	**1.0**	**1.7**	**5.8**	**16.1**	**15.2**
Telecommunications	**-0.1**	**0.4**	**-0.9**	**-4.6**	**-4.1**
Utilities	**-1.3**	**-2.3**	**-7.7**	**-5.5**	**-7.3**

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 13/12/2024	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	-2.0	1.4	4.3	17.8	21.9	-1.4	0.1	-1.0	-8.4	-6.5
Low volatility	-1.4	-1.5	-0.7	19.7	19.7	-0.8	-2.8	-5.7	-6.9	-8.2
Price momentum	-2.5	-0.1	6.7	27.0	28.8	-1.9	-1.3	1.4	-1.2	-1.2
Quality	-2.3	-3.1	-2.0	11.2	14.8	-1.7	-4.3	-6.9	-13.5	-12.0
Size	-0.5	0.5	-0.5	10.7	14.6	0.1	-0.7	-5.5	-13.9	-12.1
Value	-1.5	-1.6	1.7	19.2	21.9	-0.9	-2.8	-3.5	-7.3	-6.5
Market	-0.6	1.3	5.3	28.6	30.4					
Market - Equal-Weighted	-1.7	-0.8	1.7	17.1	19.4					

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 13/12/2024	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	-0.9	4.4	-1.1	5.0	9.4	-0.2	1.2	-0.2	-5.7	-3.1
Low volatility	-1.2	2.1	-1.2	13.5	13.8	-0.5	-1.0	-0.3	1.9	0.7
Price momentum	-1.5	1.5	0.0	19.5	21.4	-0.7	-1.6	0.9	7.3	7.5
Quality	-0.8	2.3	0.2	10.1	15.0	-0.1	-0.8	1.1	-1.1	1.9
Size	-1.2	3.0	-2.8	5.5	11.2	-0.4	-0.2	-1.9	-5.2	-1.6
Value	-0.3	3.9	-2.2	9.8	14.0	0.4	0.7	-1.3	-1.4	1.0
Market	-0.8	3.1	-0.9	11.4	12.9					
Market - Equal-Weighted	-0.8	2.9	-1.6	9.5	12.7					

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.

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Telephone calls may be recorded.

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

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