Uncommon truths

The Aristotle List: 10 improbable but possible outcomes for 2025

It is time to forget central scenarios and think about improbable but possible outcomes. The mixed market mood at the end of 2024 is reflected in our list of surprises (these hypothetical predictions are our views of what could happen even if they do not form part of our central scenario).

Aristotle said that “probable impossibilities are to be preferred to improbable possibilities”, meaning that we find it easier to believe in interesting impossibilities (B52s on the moon, say) than in unlikely possibilities. The aim of this document is to seek those unlikely possibilities -- out-of-consensus ideas for 2025 that I believe have at least a 30% chance of occurring. The concept was unashamedly borrowed from erstwhile colleague Byron Wien, who sadly passed away during 2023.

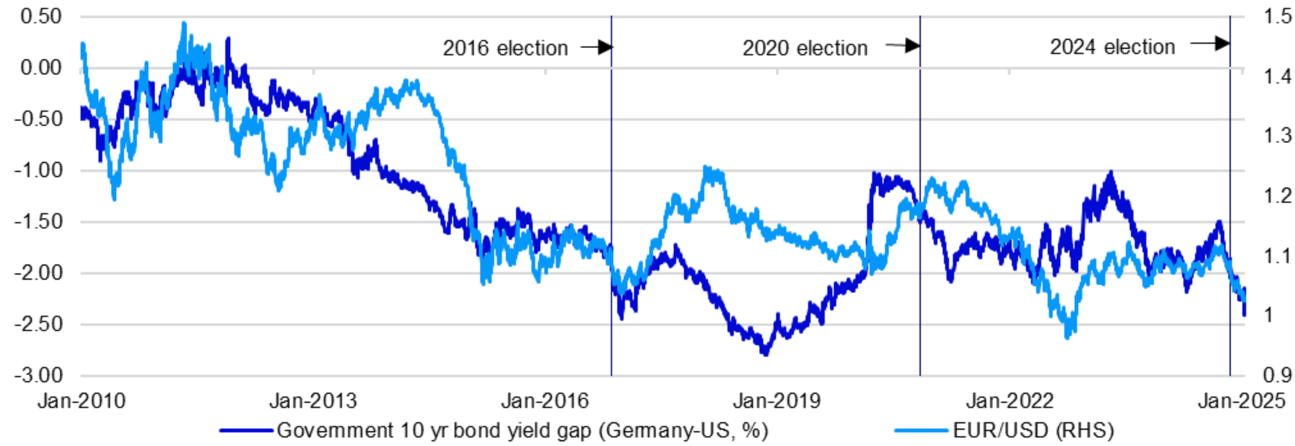
I believe the biggest returns are earned (or the biggest losses avoided) by successfully taking out-of-consensus positions. A year ago, the mood was optimistic as central bank easing approached. Hence, my improbable but possible ideas were biased to the negative side (“S&P 500 finishes the year lower than it started” and “Global government bonds outperform equities” were ideas that proved too bearish). The mood is now more mixed, so my list contains optimistic and pessimistic items – don’t look for internal consistency, as there is none.

1. US CPI inflation goes above 4.0% during 2025
Our central scenario is based on the idea that inflation continues falling towards central bank targets, thus allowing further rate cuts and healthy asset returns. However, US money supply growth has been on the rise, core CPI has remained stubbornly above 3.0% (and the monthly gains since the middle of 2024 have been consistent with a rate above 3.5%), energy prices have been rising and tariffs could boost US prices. Admittedly, house price inflation has been falling since mid-2024 but that may not feed through to the shelter component of the consumer price index until the latter part of 2025 (based on historical patterns). In my view, higher inflation could raise treasury yields and depress many asset prices.

2. President Macron steps down after new elections
Although the president of France, Emmanuel Macron, has said he will stay in office until the end of his term in April 2027, I fear that political turmoil and parliamentary stagnation will force him to resign this year. Mid-2024 parliamentary elections (called by the president) led to deadlock. As a result, France has had two technocratic governments and I think the second (under centrist Francois Bayrou) will also struggle to reconcile the conflicting demands of the three major parliamentary blocks (left, centre and right). New elections seem likely once the minimum 12-month period since the last election has passed, though perhaps not until September/October to avoid a clash with the holiday season. I doubt the far-left will enter another pact to block candidates of Marine Le Pen’s RN party and opinion polls suggest the RN will garner most seats (though not a majority). Further chaos could lead to more strident calls for the president to resign and I think there is a chance he will accede. Adding fuel to the fire, is the possibility that a 31 March court judgement could ban Marine Le Pen from public office.

3. US dollar weakens during 2025
The US dollar appreciated by 7.1% during 2024, aided by a gain of 8.1% since 27 September, based on the ICE US Dollar (DXY) Index. I suspect this was in part due to the election victory of Donald Trump and brings to mind what happened after his victory in 2016 (see **Figure 1**). At that time it was commonly believed that a Trump White House would be dollar positive. But that

Figure 1 – EUR/USD and Germany-US government bond yield spread



Note: **Past performance is no guarantee of future results**. Daily data from 1 January 2010 to 10 January 2025. Elections show date of US presidential elections. Source: LSEG Datastream and Invesco Global Market Strategy Office was not the case and the DXY index fell by 10% in 2017. As seen in **Figure 1**, the same post-election pattern seems to have been repeated this time, with the bond yield spread versus Germany widening and the dollar strengthening versus the euro. It is easy to believe the momentum will continue but I suspect a number of factors will work against dollar: first, it is expensive and its fundamentals are poor (see FX Pulse); second, there could be a partial reversal of the upward shift in the market implied path of Fed policy rates since September and, finally, the policy environment may be erratic under the new president (and he seems to want a weaker dollar).

4. EU discord causes widening of spreads

It's hard not to make this list all about president-elect Donald Trump but this is the closest I will get. His ability to provoke chaos is already having an effect on the EU via tariff threats and covetous remarks about Greenland. However, there is also a way for him to sow discord among EU members via his approach to Ukraine. For example, if "peace" is forced upon Ukraine on terms that are deemed advantageous to Russia, large parts of the EU would object (including Germany under what appears likely to be a CDU led coalition after upcoming elections). But some EU members would align with the US on Ukraine, including Hungary, Slovakia, Czechia (after elections due by October 2025), Romania (if Calin Georgescu is allowed to stand and win again after his shock presidential election first round victory was cancelled due to suspected support from Russia) and Austria (FPO leader Herbert Kickl was recently asked to form a government and he opposes aid to Ukraine). Further, if ANO leader (Andrej Babic) does become prime minister of Czechia, the founding members of the EU-sceptic Patriots for Europe group would be in power in Austria, Czechia and Hungary, perhaps making it difficult to maintain EU solidarity. This could see an increase in peripheral yield spreads versus Germany.

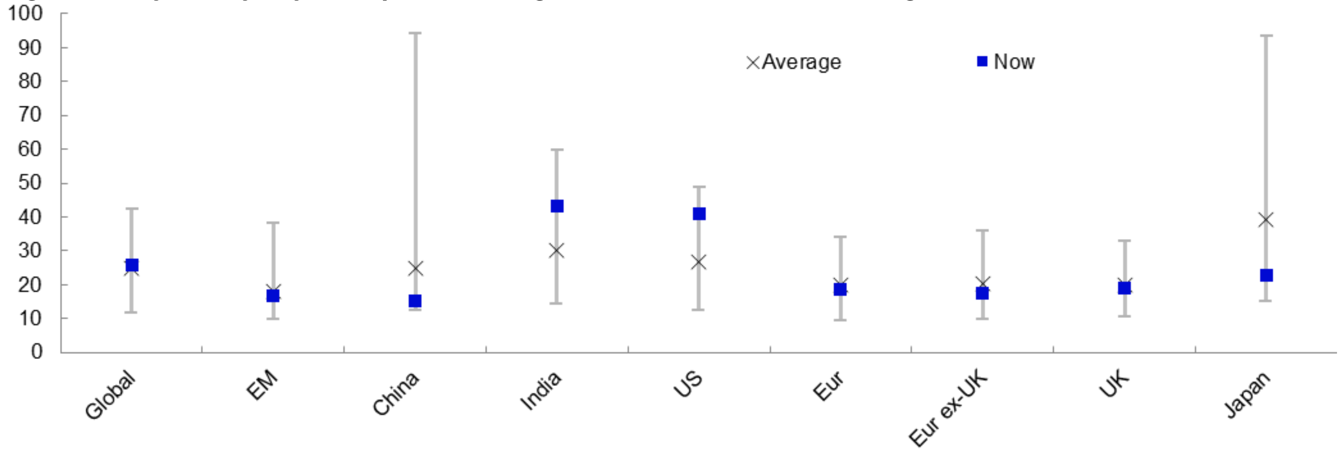
5. US stocks underperform global indices

I believe the US election result contributed to a strong 2024 for US stocks (see **Figure 4**). However, the market has struggled in the early part of 2025. I think valuations suggest there is a lot of good news in the price of US stocks compared to other markets (see **Figure 2**). The cyclically adjusted PE ratio of the US market was 41.1 at end-2024, versus a historical average of 26.7. Among the markets we monitor, only India appears more expensive and that market lagged in 2024. At the other extreme is China with a CAPE of 15.1, well below the historical average of 24.7. Bullish investors seem to predict a cut in US corporate taxation and the imposition of tariffs on other countries. But I find no historical relationship between corporate tax rates and future US equity returns, while I doubt the US can avoid the fallout from trade wars. Finally, I think erratic policy and rising treasury yields could damage US stocks, while an accelerating global economy may favour other markets (for example MSCI Germany has outperformed MSCI USA since the election).

6. Turkish govt. bonds outperform global indices

Turkey was the best performing government bond market in 2024 among the 35 that we follow (in local currency terms and based on ICE BofA government bond indices). We suspect it will outperform global indices again (in both local currency and in US dollars). South African and Indian markets provided competition in 2024 (with South Africa the top performer when measured in USD) but I suspect Mexico and Brazil could provide the main competition in 2025 (they were at the bottom of our USD performance league table in 2024 and 10-year yields are above 10% and 14%, respectively). The Turkish 10-year government yield was around 27% at the start of 2025 and the 2-year yield was around 37%. Currency depreciation is the big risk but inflation is falling (44% in December, down from the peak of 75% in May), and I think the lira is cheap in real terms, so the worst may be behind us.

Figure 2 – Cyclically adjusted price/earnings ratios within historical ranges



Note: Cyclically adjusted price/earnings ratio 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. "EM" is emerging markets. "Eur" is Europe. As of 31 December 2024. Source: LSEG Datastream and Invesco Global Market Strategy office

7. EU carbon price goes above €90 per tonne

I believe climate change is the biggest externality we face and that making the polluter pay is the most efficient way to deal with it. The EU's Emissions Trading System tries to set appropriate pricing signals by systematically reducing the volume of CO_2 emission allowances. The rate of reduction in the allowances cap has been doubled from 2.2% per year in the 2021-23 period to 4.3% from 2024 to 2027, which should support the price of allowances (carbon price). However, EU economies have been weak over recent years, thus reducing the demand for allowances, which I think is why the carbon price failed to stay above €100 and has been in the €60-€80 range for much of the last year. An upturn in global growth (which I expect), should help the EU economy and boost demand for allowances, just as supply falls more rapidly. I think that could push the EU carbon price above €90.

8. Kenyan stocks outperform major indices

In my search for exotic stock market opportunities, I usually look for the holy grail of a dividend yield that exceeds the price/earnings ratio. The options are very limited this year, Kenya being the only market I can find that meets the above criteria. The Nairobi All Share index has a current P/E ratio of 6.3 and a dividend yield of 7.8%, even after a 34% price gain in 2024 (as of 10 January 2025, according to Bloomberg). Usually, whenever valuation metrics are at such levels it signifies either that a big opportunity has presented itself or that something is about to go very wrong. Bloomberg consensus estimates suggest that both earnings and dividends are expected to rise in 2025. So, no problem there. Also, the usual macro metrics (growth, inflation and economic balances) do not signal problems and in 2024 the shilling was the strongest currency among the 94 we follow (see also our analysis in Africa 2024). The drawback is that market capitalisation of the index is only around $14bn.

9. Bitcoin falls below $50,000

Cryptocurrencies have gained a lot since the US election (I have no idea what drives them). The largest remains Bitcoin, and, after a price gain of around 120% in 2024, its market capitalisation briefly went above $2 trillion (for comparison, that of the S&P 500 is currently around $50 trillion and the value of above-ground gold is around $20 trillion). What I can say about Bitcoin is that it has gone through one bubble after another, with ever higher peaks (so far). **Figure 3** suggests it has recently performed in line with my mania template (the average price path during 15 historical manias). If the 17 December 2024 price of $108,250 was the peak of this cycle (which I think it may have been), then the descent could be rapid (the mania template suggests a price well below $50,000 by the end of 2025).

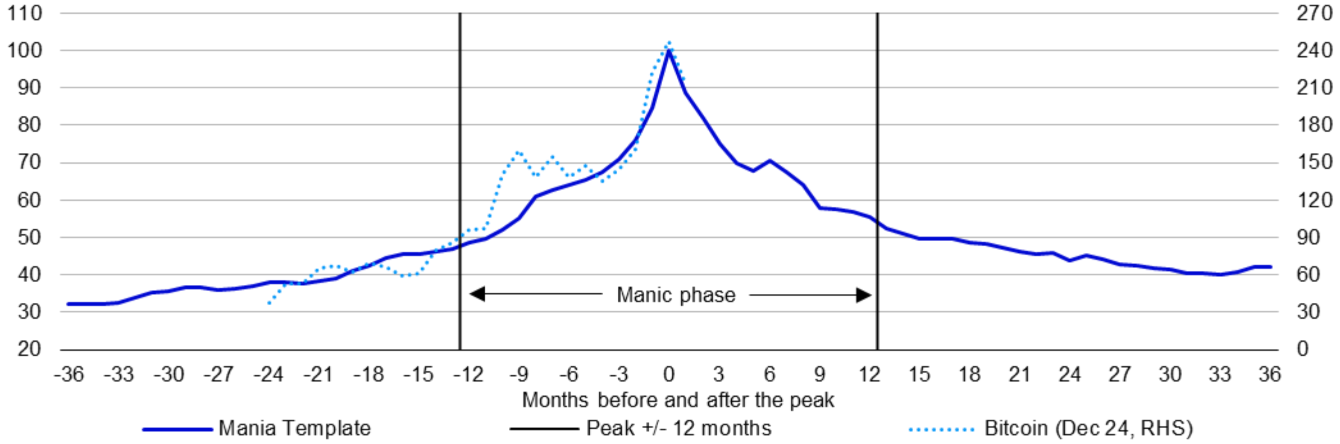
10. Europe wins Ryder Cup on US soil

The biennial golf tournament between Europe and the USA takes place on 26-28 September at Bethpage Black Course in New York. Europe has not won on US soil since the "Miracle at Medinah" in 2012, since when the home team has won each tournament (the USA won the last match on home soil by a massive 19-9 margin). Also, 11 of the world's top-20 players are from the US, versus six from Europe (according to Official World Golf Ranking). However, I think Europe will win. First, team USA was widely tipped to win the 2023 edition (in Italy) because of the ranking mismatch, but Europe had better team spirit and was more motivated and won easily (by $16^{1/2}$ to $11^{1/2}$). I wonder if the payments to USA players (for the first time), will motivate European players even more.

As a gift for the new year, we offer **Figures 4, 5** and **6** which show long term performance data across assets, sectors and factors.

Unless stated otherwise, all data as of 10 January 2025

Figure 3 – Another Bitcoin bubble bites the dust?



Note: **Past performance is no guide to future returns.** Based on monthly data. See appendix for construction methodology of "Mania template". "Bitcoin" is constructed using the hypothesis that the 17 December 2024 level was the peak (month zero) and the final datapoint is for January 2025 (as of 8 January 2025). Source: LSEG Datastream and Invesco Global Market Strategy office

Figure 4 – Asset class total returns (% annualised)

Data as at 31/12/2024		Current	Total Return (USD, %)				Total Return (Local Currency, %)			
	Index	Level/RY	1y	3y	5y	10y	1y	3y	5y	10y
Equities										
World	MSCI	841	18.0	5.9	10.6	9.8	20.7	7.6	11.7	10.6
Emerging Markets	MSCI	1075	8.1	-1.5	2.1	4.0	13.7	2.1	4.9	6.4
China	MSCI	64	19.7	-5.9	-3.3	2.1	19.8	-5.3	-3.1	2.2
US	MSCI	5617	25.1	8.6	14.6	13.1	25.1	8.6	14.6	13.1
Europe	MSCI	2003	2.4	1.8	5.5	5.6	8.4	4.7	6.8	7.3
Europe ex-UK	MSCI	2463	1.0	0.8	5.9	6.3	8.1	3.6	7.2	7.6
UK	MSCI	1217	7.5	5.3	4.4	3.9	9.5	8.1	5.6	6.2
Japan	MSCI	3931	8.7	3.2	5.2	6.6	21.2	14.5	13.2	9.5
Government Bonds										
World	BofA-ML	3.39	-4.2	-6.6	-3.7	-0.8	0.0	-3.4	-1.6	0.4
Emerging Markets (USD)	BBloom	7.07	9.6	-0.9	0.2	4.0	9.6	-0.9	0.2	4.0
China	BofA-ML	1.51	6.0	1.1	4.2	3.1	9.1	5.8	5.2	4.7
US (10y)	Datastream	4.57	-1.5	-5.4	-1.4	0.6	-1.5	-5.4	-1.4	0.6
Europe	Bofa-ML	2.73	-4.6	-6.9	-3.6	-1.4	1.8	-3.9	-2.1	0.2
Europe ex-UK (EMU, 10y)	Datastream	2.36	-6.4	-8.1	-4.6	-1.8	-0.1	-5.2	-3.0	-0.2
UK (10y)	Datastream	4.57	-4.9	-8.8	-4.8	-2.2	-3.2	-6.4	-3.8	0.0
Japan (10y)	Datastream	1.08	-12.4	-10.7	-7.7	-2.3	-2.4	-1.0	-0.6	0.3
IG Corporate Bonds										
Global	BofA-ML	4.77	1.2	-2.6	-0.2	1.5	3.4	-1.5	0.4	2.2
Emerging Markets (USD)	BBloom	6.62	10.8	-1.4	0.6	5.0	10.8	-1.4	0.6	5.0
China	BofA-ML	2.24	3.2	-0.3	3.3	2.5	6.2	4.3	4.2	4.2
US	BofA-ML	5.39	2.8	-2.0	0.5	2.5	2.8	-2.0	0.5	2.5
Europe	BofA-ML	3.27	-1.9	-4.0	-1.8	-0.5	4.7	-0.9	-0.2	1.0
UK	BofA-ML	5.60	0.1	-6.0	-2.2	-0.3	1.9	-3.5	-1.1	2.0
Japan	BofA-ML	1.26	-10.8	-10.3	-7.2	-2.5	-0.5	-0.5	-0.1	0.2
HY Corporate Bonds										
Global	BofA-ML	7.42	7.5	1.9	3.0	4.4	8.9	2.6	3.4	4.8
US	BofA-ML	7.65	8.2	2.9	4.0	5.1	8.2	2.9	4.0	5.1
Europe	BofA-ML	5.87	1.8	-0.6	1.1	2.1	8.6	2.5	2.7	3.7
Cash (Overnight LIBOR)										
US		4.64	5.4	3.9	2.4	1.8	5.4	3.9	2.4	1.8
Euro Area		3.16	1.5	-0.2	0.0	-1.3	3.8	2.2	1.1	0.4
UK		4.70	7.1	2.3	1.6	-0.7	5.2	3.7	2.2	1.3
Japan		0.23	-4.5	-9.3	-6.5	-2.5	0.1	0.0	0.0	0.0
Real Estate (REITs)										
Global	FTSE	1595	1.6	-5.2	-1.0	2.9	8.4	-2.2	0.6	4.5
Emerging Markets	FTSE	1180	-3.6	-6.1	-9.8	-0.1	2.9	-3.2	-8.4	1.5
US	FTSE	3185	7.9	-2.8	3.5	5.0	7.9	-2.8	3.5	5.0
Europe ex-UK	FTSE	2312	-6.6	-11.9	-6.2	1.6	-0.4	-9.1	-4.6	3.2
UK	FTSE	779	-13.2	-14.9	-7.4	-2.7	-11.7	-12.7	-6.3	-0.5
Japan	FTSE	1932	-7.7	-6.3	-5.3	-0.5	2.9	3.9	1.9	2.3
Commodities										
All	GSCI	3656	9.2	9.6	7.1	1.2	-	-	-	-
Energy	GSCI	637	9.9	14.0	5.1	0.1	-	-	-	-
Industrial Metals	GSCI	1646	2.8	-3.2	6.2	2.7	-	-	-	-
Precious Metals	GSCI	2922	26.1	11.9	10.3	7.2	-	-	-	-
Agricultural Goods	GSCI	515	0.4	1.1	8.2	-0.5	-	-	-	-
Currencies (vs USD)**										
EUR		1.04	-6.2	-3.1	-1.6	-1.5	-	-	-	-
JPY		157.20	-10.3	-9.9	-7.1	-2.7	-	-	-	-
GBP		1.25	-1.8	-2.6	-1.1	-2.2	-	-	-	-
CHF		1.10	-7.2	0.2	1.3	0.9	-	-	-	-
CNY		7.30	-2.7	-4.5	-0.9	-1.6	-	-	-	-

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 5 – Global equity sector total returns relative to market (% annualised)

Data as at 31/12/2024	Global			
	1y	3y	5y	10y
Energy	**-13.7**	**4.4**	**-4.7**	**-5.0**
Basic Materials	**-19.8**	**-6.0**	**-2.6**	**-2.0**
Basic Resources	-19.3	-2.8	-0.1	-0.7
Chemicals	-20.4	-10.0	-5.8	-3.8
Industrials	**-3.0**	**-0.7**	**-0.8**	**0.0**
Construction & Materials	-4.7	0.5	0.5	-0.7
Industrial Goods & Services	-2.8	-0.9	-1.0	0.1
Consumer Discretionary	**2.4**	**-2.8**	**-1.1**	**-0.5**
Automobiles & Parts	3.5	-5.9	4.5	-0.7
Media	15.2	-2.9	-3.2	-2.2
Retailers	13.8	1.4	1.3	1.6
Travel & Leisure	-2.2	0.6	-5.5	-3.0
Consumer Products & Services	-14.8	-8.0	-3.4	-1.0
Consumer Staples	**-13.8**	**-5.9**	**-6.6**	**-4.1**
Food, Beverage & Tobacco	-15.6	-6.0	-6.7	-4.5
Personal Care, Drug & Grocery Stores	-10.3	-5.7	-6.4	-3.9
Healthcare	**-10.9**	**-5.6**	**-3.4**	**-1.2**
Financials	**5.6**	**3.9**	**0.1**	**-0.6**
Banks	5.9	4.4	-1.1	-2.1
Financial Services	4.8	1.9	1.7	1.8
Insurance	6.2	6.5	0.7	0.2
Real Estate	**-11.3**	**-9.7**	**-9.3**	**-5.1**
Technology	**16.5**	**5.3**	**10.4**	**9.3**
Telecommunications	**-4.5**	**-2.5**	**-4.2**	**-4.3**
Utilities	**-4.0**	**-0.7**	**-2.9**	**-2.1**

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 6a – US factor index total returns (% annualised)

Data as at 31/12/2024	Absolute				Relative to Market			
	1y	3y	5y	10y	1y	3y	5y	10y
Growth	12.7	4.3	15.4	12.7	-9.8	-4.2	0.7	-0.4
Low volatility	16.6	6.2	11.4	12.3	-6.8	-2.5	-2.7	-0.7
Price momentum	22.5	9.1	13.7	11.5	-2.0	0.1	-0.7	-1.4
Quality	7.8	4.9	11.7	10.9	-13.7	-3.7	-2.5	-2.0
Size	6.2	3.2	9.0	8.6	-15.1	-5.2	-4.8	-4.0
Value	15.6	6.9	11.8	10.1	-7.6	-1.8	-2.4	-2.7
Market	25.0	8.9	14.5	13.1				
Market - Equal-Weighted	13.0	4.5	10.8	10.3				

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 6b – European factor index total returns relative to market (% annualised)

Data as at 31/12/2024	Absolute				Relative to Market			
	1y	3y	5y	10y	1y	3y	5y	10y
Growth	3.6	-6.1	6.7	9.4	-5.4	-10.3	-0.5	1.9
Low volatility	12.7	5.3	7.7	9.8	2.9	0.6	0.4	2.3
Price momentum	18.2	1.0	7.1	9.5	8.0	-3.5	-0.1	2.0
Quality	8.8	1.2	6.5	8.4	-0.6	-3.3	-0.6	0.9
Size	4.0	-3.5	2.5	5.9	-5.0	-7.8	-4.4	-1.3
Value	8.5	5.0	7.2	6.8	-0.9	0.4	0.0	-0.6
Market	9.5	4.7	7.2	7.4				
Market - Equal-Weighted	7.8	0.5	4.8	6.8				

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 7 – 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 8 – 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 4

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

Methodology, data and benchmarks for Mania Template

The Mania Template is based on monthly data during 15 historical manias, sourced from LSEG Datastream unless stated otherwise. For each mania, the relevant asset price is indexed to 100 at the peak (month zero) and is shown over the three years before and after that point. The template shows the average of the 15 manias at each point in time. The 15 manias are (with peak month and source):

1) UK equities during the South Sea Bubble -- an index that is an unweighted average of the prices of Bank of England, East India Company and South Sea Company (Jun 1720, Global Financial Data)

2) UK equities -- an index of UK stocks (including industrials but excluding banks, insurance and bridge stocks) calculated by Hayek as provided by Rostow and Schwartz in The Growth and Fluctuation of the British Economy (Jul 1864, GFD)

3) US oil -- West Texas Intermediate oil price (US$/barrel), from The Derrick's Handbook of Petroleum (Sep 1876, GFD)

4) US oil -- West Texas Intermediate oil price (US$/barrel), from The Derrick's Handbook of Petroleum (Dec 1895, GFD)

5) US equities -- S&P Composite Index (Sep 1929, Robert Shiller)

6) US bank stocks -- S&P 500 Diversified Banks calculated by Standard & Poor's based on historical price data (Sep 1929, GFD)

7) US wheat -- US Wheat #2 Cash Price (US$/bushel) from The Chicago Board of Trade (Jan 1974, GFD)

8) Gold -- bullion price on the London Bullion Market (US$/ounce) provided by ICE Benchmark Administration Ltd. (Sep 1980, LSEG Datastream)

9) Nikkei index (Dec 1989, LSEG Datastream)

10) Greek bank stocks -- Datastream Banks Index for Greece (Sep 1999, LSEG Datastream)

11) NASDAQ Composite (Feb 2000, LSEG Datastream)

12) Miami house prices (Feb 2007, FHFA index from LSEG Datastream)

13) China A-shares -- China A-DS Market Index calculated by Datastream (Oct 2007, LSEG Datastream)

14) US oil -- West Texas Intermediate oil price (US$/barrel), 40-degree API, f.o.b. Cushing Oklahoma (Jun 2008, GFD)

15) Bitcoin -- USD to Bitcoin on the Bitstamp exchange, from Thomson Reuters (Nov 2013, data to Jul 2011 from Bloomberg and thereafter LSEG Datastream)

"Bitcoin" indexed to start at the same level as the "Mania Template" in month -24 (the recent low in Bitcoin was in December 2022) and is sourced from LSEG Datastream.

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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