

## Applied philosophy

### The Shiller P/E and S&P 500 returns revisited

**US equities have ignored valuation signals in the last 12 months as a technology-led rally boosted returns. This trend has shown signs of running out of steam year-to-date as European and Chinese stocks have outperformed. At the same time, valuations have reached levels close to extremes based on cyclically-adjusted price/earnings ratios. I use the Shiller P/E as a case study to approximate expected returns on the S&P 500 for the next 10 years. Should I ignore my contrarian instincts?**

It is the end of winter and, living in Northern Europe, I sorely need a dose of sunshine. Having underperformed year-to-date, it seems to me that US equities need the sun to shine on them, too, as sentiment has begun to sour on the impact of the Trump presidency. Indeed, it is European and Chinese stocks that have led the way, unlikely as it sounds in the era of “America First” policy. Part of the reason may be their relative underweight in technology, a mild drag this year as questions arise around AI-related capital expenditure. The US dollar has also weakened in 2025 so far, which tends to coincide with EM outperformance. Will the year progress in the same vein?

We outlined our expectations and forecasts for the year in November 2024 feeling hopeful about European and EM equities and more downbeat about Japan and the US. If the year-to-date performance continues, it would be a reversal of the trend seen in the last 12 months

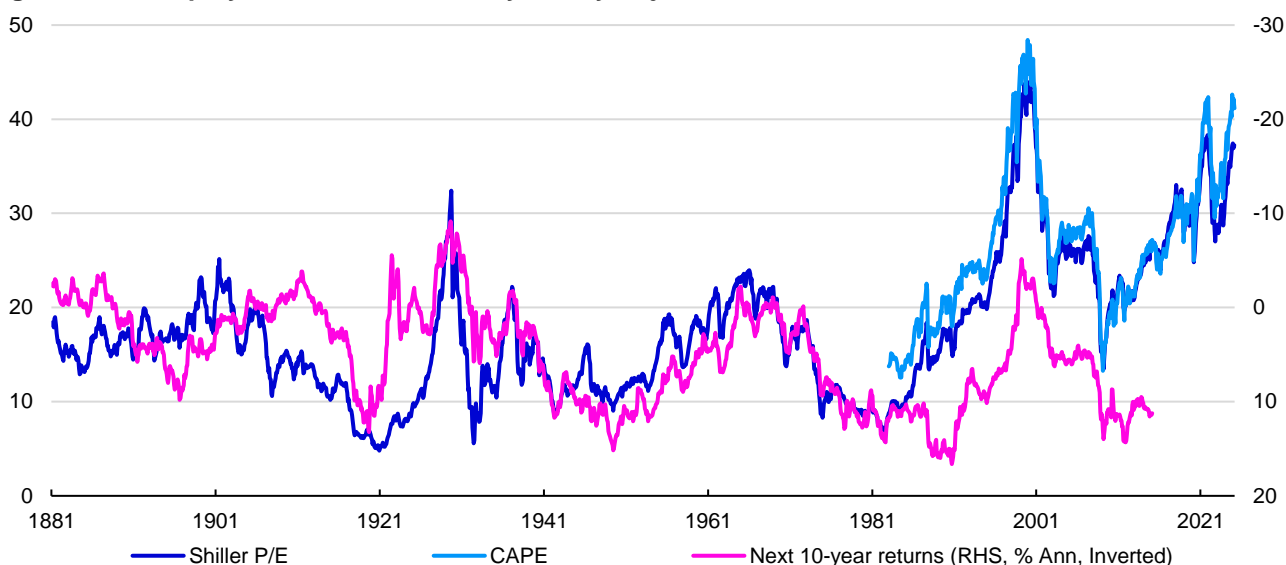
when US equities were among the strongest performers (Figure 5). A technology-led rally boosted the US stock market, which is the opposite of what I expected when I last published on the topic of US equities and valuations in February 2024.

If anything, those valuations have become even richer and they are telling us the same story now as they did last year: US equities are expensive when compared to historical norms, no matter the valuation metric used. Our favoured measure, the cyclically-adjusted price/earnings (CAPE) ratio stood at 41.1x at the end of February 2025 (using the Datastream US Total Market Index), while the Shiller P/E (its inflation-adjusted equivalent) was at 37.2x, according to our estimates (Figure 1).

To put that into perspective, these ratios were higher only during extreme market events: around the “tech bubble” between 1998 and 2002 and the recent post-pandemic market peak between 2020 and 2022. Since January 1983 (the first available data point) the CAPE was higher only 6% and the Shiller P/E 8% of the time (using monthly data).

Of course, a logical argument would be that we are using the wrong tools to try to determine equity returns (or at least their direction) over a relatively short investment horizon. Indeed, the relationship between our CAPE and 1-year forward returns on the S&P 500 index between 1983 and 2024 is practically zero.

**Figure 1 – US equity market Shiller P/E, cyclically-adjusted P/E and future returns since 1881**



Notes: **Past performance is no guarantee of future results.** Data as of 28 February 2025. We use monthly data since January 1881. See appendix for the definition of the Shiller P/E. CAPE stands for Cyclically-Adjusted Price/Earnings ratio, which is a price to earnings ratio constructed by dividing price by the average earnings per share in the previous 10 years. Future returns are calculated using monthly average values for the US equity index as calculated by Robert Shiller.

Source: LSEG Datastream, Robert Shiller, Invesco Global Market Strategy Office

However, this predictive power improves using 10-year forward returns to an R-squared of 0.78 (between 1983 and 2015). There is a similarly strong relationship using the Shiller P/E in the same period (though the R-squared drops to 0.10 using the whole history since 1881).

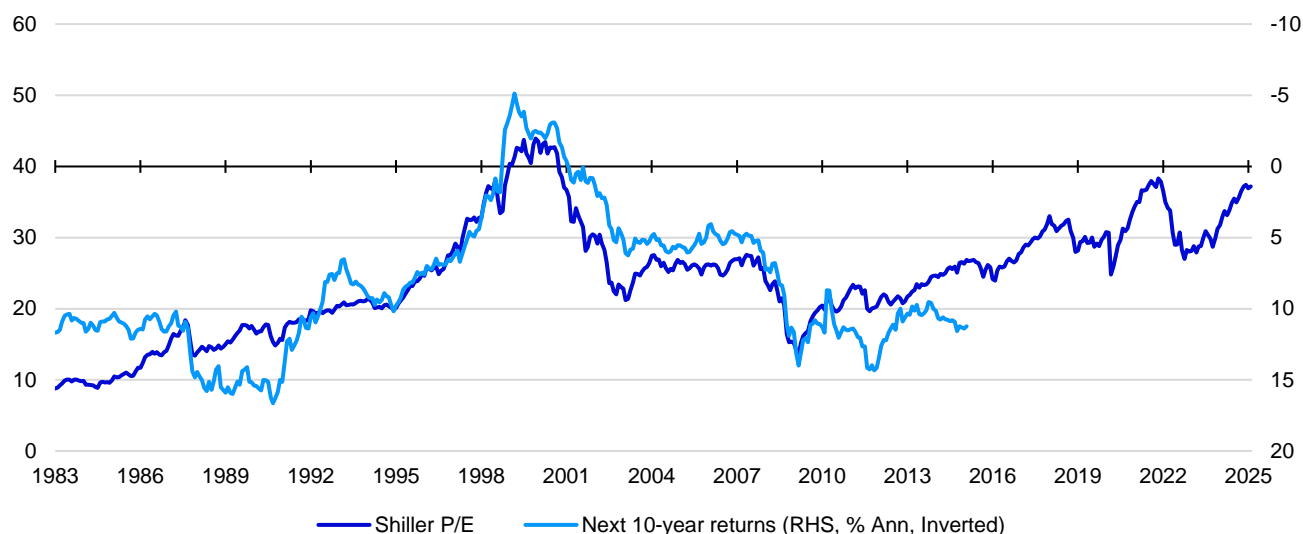
Even a quick glance reveals that valuations seem to have shifted higher in the 1980s: from an average of 15.6x between 1953 and 1983 to 24.5x between 1983 and February 2025. What were considered extreme values in the first 100 years of the history of the Shiller P/E reached only in 1929, became more “normal”. Therefore, assuming no structural change in the direction of inflation and interest rates, we ought to rely on the post-1983 model to predict long-term returns on the S&P 500 (**Figure 4**)

It seems to me that both measures of cyclically-adjusted P/E ratios have veered close to all-time highs, and therefore it is reasonable to assume that valuations could limit US equity returns in the long term. If past relationships persist, my model suggests that annualised capital returns over the next 10 years could be around 0.5%, not just below the long-term average of 4.8% (since 1871 based on Shiller data) but underwhelming even compared to returns on cash (assuming interest rates stay above zero), though significantly higher than the -18% returns implied by **Figure 1**.

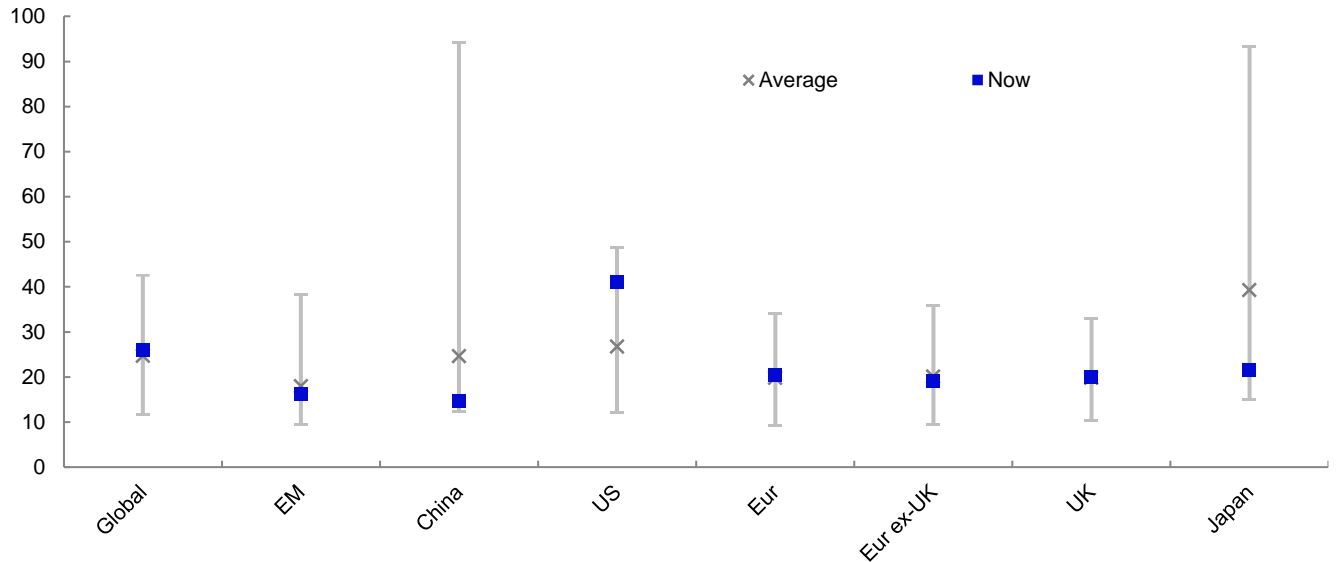
Assuming the S&P 500 dividend yield stays close to the 10-year average of 1.8%, a 0.5% capital return would imply a total return of around 2.3%. This appears disappointing compared to the 9.3% annualised total return since 1871 and the 11.7% seen in the last ten years. If the dividend yield stayed close to that 10-year average, the increase in future capital returns needed to generate a 9.2% total return would require a 34% fall in the S&P 500 from the February 2025 average, taking the Shiller P/E to 24.5x (based on the historical relationship between valuations and returns since 1983).

Within equities no other region looks quite so overvalued based on CAPE (**Figure 3**). Having said that, apart from EM, no other region looks obviously undervalued either with CAPEs close to historical averages. The odd one out is Japan, which on the surface looks undervalued, but its average CAPE is inflated by the period around its prolonged stock market bubble and its valuations are close to the post-GFC average (a more relevant benchmark, in my view). At the same time, a comparison of yields across asset classes reveals that as of 28 February 2025 US equities have the least attractive valuations. If I found it difficult to make the case for US equities last year (see [here](#)), it is even more difficult now. Of course, the US stock market has defied gravity for a long time, and it may continue to do so, but I think valuations have reached levels that will be increasingly hard to ignore. Therefore, we remain Underweight within the Model Asset Allocation shown in **Figure 8**.

**Figure 2 – S&P 500 Shiller P/E and future returns since 1983**

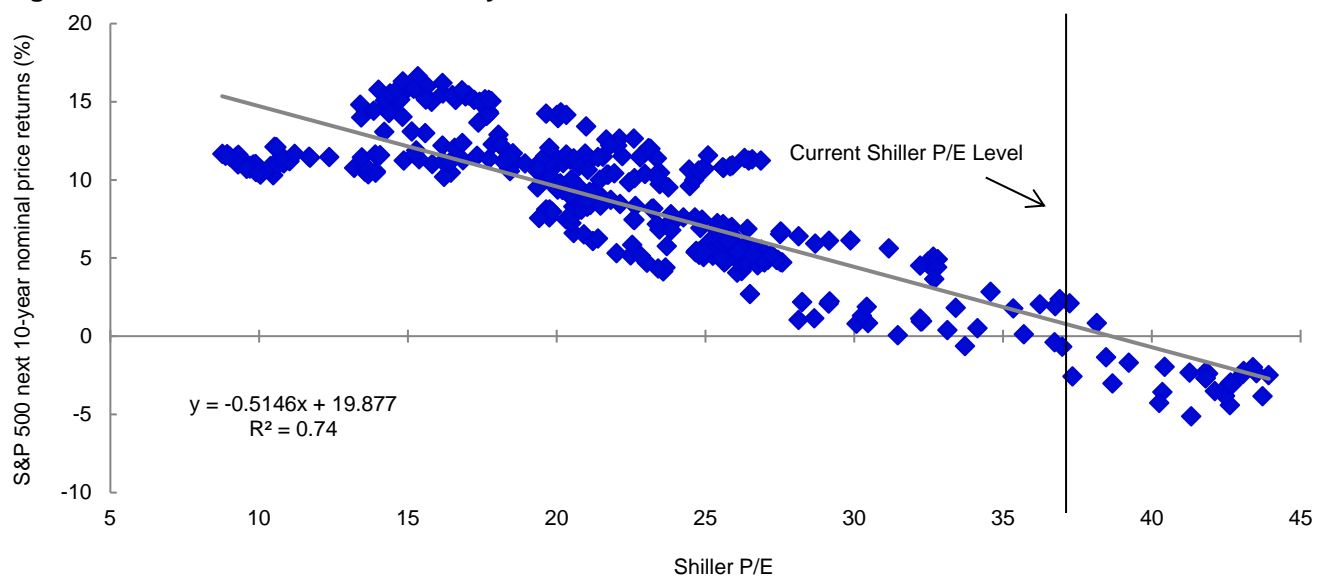


Notes: Data as of 28 February 2025. **Past performance is no guarantee of future results.** We use monthly data from January 1983. See appendix for the definition of the Shiller P/E. Future returns are calculated using monthly average values for the S&P 500 index. Source: LSEG Datastream, Robert Shiller, Invesco Global Market Strategy Office

**Figure 3 – Cyclically adjusted price/earnings ratios within historical ranges**


Notes: Data as of 28 February 2025. **Past performance is no guarantee of future results.** Cyclically Adjusted Price/Earnings uses a 10-year moving average of earnings. Based on daily data from 3 January 1983 (except for China from 1 April 2004 and EM from 3 January 2005), using Datastream Total Market indices.

Source: LSEG Datastream and Invesco Global Market Strategy Office

**Figure 4 – Shiller P/E and S&P 500 10-year annualised forward returns since 1983**


Notes: Data as of 28 February 2025. **Past performance is no guarantee of future results.** We use monthly data from January 1983. See appendix for the definition of the Shiller P/E. Future returns are calculated using monthly average values for the S&P 500 index.

Source: LSEG Datastream, Robert Shiller, Invesco Global Market Strategy Office

**Figure 5 – Asset class total returns (%)**

Data as at 28/02/2025			Total Return (USD, %)					Total Return (Local Currency, %)				
	Index	Current Level/Ry	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
<b>Equities</b>												
World	MSCI	863	-1.3	-0.5	2.8	2.8	16.1	-1.0	-0.7	2.5	2.5	17.2
Emerging Markets	MSCI	1097	-4.3	0.9	2.3	2.3	10.9	-3.7	1.3	2.4	2.4	15.0
China	MSCI	73	-4.3	11.7	12.8	12.8	39.8	-4.2	11.6	12.8	12.8	39.3
US	MSCI	5686	-1.0	-1.9	1.4	1.4	19.2	-1.0	-1.9	1.4	1.4	19.2
Europe	MSCI	2215	0.2	4.9	10.8	10.8	11.8	0.7	4.6	10.2	10.2	15.2
Europe ex-UK	MSCI	2740	-0.2	4.9	11.4	11.4	9.7	0.3	4.8	10.8	10.8	13.9
UK	MSCI	1319	1.6	5.1	8.9	8.9	19.0	2.0	3.8	8.4	8.4	19.6
Japan	MSCI	3937	-3.0	0.4	0.2	0.2	1.9	-2.2	-2.8	-3.9	-3.9	1.8
<b>Government Bonds</b>												
World	BofA-ML	3.25	0.6	2.0	2.3	2.3	1.7	0.9	1.3	1.4	1.4	3.0
Emerging Markets	BBloom	6.75	1.3	2.3	3.8	3.8	15.0	1.3	2.3	3.8	3.8	15.0
China	BofA-ML	1.68	-0.6	-1.0	-0.1	-0.1	5.4	-0.2	-0.8	-0.3	-0.3	6.6
US (10y)	Datastream	4.20	1.9	3.1	3.7	3.7	4.8	1.9	3.1	3.7	3.7	4.8
Europe	BofA-ML	2.69	0.0	1.1	1.0	1.0	0.3	0.5	1.4	0.6	0.6	4.5
Europe ex-UK (EMU, 10y)	Datastream	2.39	-0.1	1.2	0.6	0.6	-1.0	0.5	1.4	0.2	0.2	3.2
UK (10y)	Datastream	4.52	0.2	2.5	1.8	1.8	1.5	0.5	1.2	1.2	1.2	2.0
Japan (10y)	Datastream	1.36	-0.3	1.9	2.1	2.1	-4.0	0.5	-1.4	-2.1	-2.1	-4.1
<b>IG Corporate Bonds</b>												
Global	BofA-ML	4.56	0.6	1.7	2.3	2.3	5.5	0.8	1.7	2.1	2.1	6.9
Emerging Markets	BBloom	6.33	1.1	2.8	4.0	4.0	13.5	1.1	2.8	4.0	4.0	13.5
China	BofA-ML	2.41	-0.3	-0.5	0.2	0.2	3.6	0.1	-0.3	0.0	0.0	4.8
US	BofA-ML	5.13	1.1	1.9	2.6	2.6	6.9	1.1	1.9	2.6	2.6	6.9
Europe	BofA-ML	3.15	-0.3	1.1	1.5	1.5	2.5	0.3	1.3	1.1	1.1	6.8
UK	BofA-ML	5.45	0.1	2.4	2.2	2.2	5.1	0.5	1.1	1.7	1.7	5.6
Japan	BofA-ML	1.45	-0.6	3.0	3.6	3.6	-1.0	0.2	-0.3	-0.6	-0.6	-1.1
<b>HY Corporate Bonds</b>												
Global	BofA-ML	7.16	0.2	1.0	2.1	2.1	9.4	0.3	1.0	2.1	2.1	10.3
US	BofA-ML	7.39	0.4	0.7	2.0	2.0	10.2	0.4	0.7	2.0	2.0	10.2
Europe	BofA-ML	5.70	-0.3	1.2	2.1	2.1	4.7	0.2	1.4	1.7	1.7	9.1
<b>Cash (Overnight LIBOR)</b>												
US		4.36	0.1	0.4	0.7	0.7	5.1	0.1	0.4	0.7	0.7	5.1
Euro Area		2.67	-0.7	-0.3	0.7	0.7	-0.9	0.1	0.2	0.5	0.5	3.5
UK		4.45	-0.3	1.5	1.3	1.3	4.4	0.1	0.4	0.8	0.8	5.1
Japan		0.48	-0.9	3.3	4.4	4.4	0.2	0.0	0.0	0.1	0.1	0.2
<b>Real Estate (REITs)</b>												
Global	FTSE	1648	0.8	2.5	3.7	3.7	10.8	1.3	2.8	3.3	3.3	15.4
Emerging Markets	FTSE	1166	-2.4	3.0	-0.8	-0.8	-0.3	-1.9	3.2	-1.3	-1.3	3.9
US	FTSE	3325	2.2	3.5	4.7	4.7	16.6	2.2	3.5	4.7	4.7	16.6
Europe ex-UK	FTSE	2400	0.8	1.2	3.9	3.9	11.7	1.4	1.4	3.4	3.4	16.4
UK	FTSE	804	-1.9	1.4	1.2	1.2	-1.7	-1.5	0.1	0.7	0.7	-1.2
Japan	FTSE	2068	1.4	1.5	7.7	7.7	4.3	2.2	-1.8	3.3	3.3	4.2
<b>Commodities</b>												
All	GSCI	3726	-2.7	-1.7	1.9	1.9	5.7	-	-	-	-	-
Energy	GSCI	646	-2.0	-2.1	1.4	1.4	1.9	-	-	-	-	-
Industrial Metals	GSCI	1709	-2.3	2.9	3.8	3.8	10.8	-	-	-	-	-
Precious Metals	GSCI	3141	-3.6	2.2	7.5	7.5	38.2	-	-	-	-	-
Agricultural Goods	GSCI	517	-5.5	-2.8	0.4	0.4	3.8	-	-	-	-	-
<b>Currencies (vs USD)*</b>												
EUR		1.04	-0.8	-0.5	0.2	0.2	-4.3	-	-	-	-	-
JPY		150.63	-0.9	3.3	4.4	4.4	0.0	-	-	-	-	-
GBP		1.26	-0.4	1.3	0.5	0.5	-0.5	-	-	-	-	-
CHF		1.11	-0.6	0.1	0.4	0.4	-2.7	-	-	-	-	-
CNY		7.28	-0.4	-0.4	0.2	0.2	-1.2	-	-	-	-	-

Notes: \*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). **Past performance is no guarantee of future results.** Please see appendix for definitions, methodology and disclaimers.

Source: LSEG Datastream and Invesco Global Market Strategy Office

**Figure 6 – Global equity sector total returns relative to market (%)**

Data as at 28/02/2025	Global				
	1w	1m	QTD	YTD	12m
<b>Energy</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-1.1</b>	<b>-1.1</b>	<b>-11.6</b>
<b>Basic Materials</b>	<b>-1.6</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>-11.0</b>
Basic Resources	-2.7	1.0	0.9	0.9	-7.8
Chemicals	0.1	0.4	0.7	0.7	-15.2
<b>Industrials</b>	<b>1.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>-3.0</b>
Construction & Materials	0.2	-1.1	-2.1	-2.1	-6.3
Industrial Goods & Services	1.3	0.5	0.7	0.7	-2.4
<b>Consumer Discretionary</b>	<b>-0.3</b>	<b>-2.7</b>	<b>-1.3</b>	<b>-1.3</b>	<b>-0.8</b>
Automobiles & Parts	-5.3	-11.7	-15.1	-15.1	-10.1
Media	0.0	0.6	3.4	3.4	11.0
Retailers	1.0	-2.5	0.6	0.6	9.3
Travel & Leisure	1.8	1.5	0.1	0.1	-1.1
Consumer Products & Services	-0.1	0.5	4.7	4.7	-11.6
<b>Consumer Staples</b>	<b>2.0</b>	<b>4.8</b>	<b>2.6</b>	<b>2.6</b>	<b>-7.5</b>
Food, Beverage & Tobacco	2.0	6.1	3.1	3.1	-8.2
Personal Care, Drug & Grocery Stores	2.1	2.7	1.8	1.8	-6.3
<b>Healthcare</b>	<b>2.0</b>	<b>1.7</b>	<b>4.0</b>	<b>4.0</b>	<b>-8.8</b>
<b>Financials</b>	<b>2.3</b>	<b>2.7</b>	<b>4.5</b>	<b>4.5</b>	<b>10.1</b>
Banks	1.5	3.0	5.5	5.5	12.7
Financial Services	2.2	0.9	3.1	3.1	8.0
Insurance	4.4	5.3	4.5	4.5	7.5
<b>Real Estate</b>	<b>2.0</b>	<b>2.8</b>	<b>1.0</b>	<b>1.0</b>	<b>-3.5</b>
<b>Technology</b>	<b>-3.1</b>	<b>-3.2</b>	<b>-4.7</b>	<b>-4.7</b>	<b>6.2</b>
<b>Telecommunications</b>	<b>0.0</b>	<b>5.5</b>	<b>5.0</b>	<b>5.0</b>	<b>4.9</b>
<b>Utilities</b>	<b>0.4</b>	<b>1.9</b>	<b>-1.2</b>	<b>-1.2</b>	<b>0.6</b>

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

**Figure 7a – US factor index total returns (%)**

Data as at 28/02/2025	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
<b>Growth</b>	-1.2	-4.9	-0.4	-0.4	5.0	-0.3	-3.2	-1.8	-1.8	-11.8
<b>Low volatility</b>	1.8	3.9	6.3	6.3	17.4	2.8	5.7	4.8	4.8	-1.4
<b>Price momentum</b>	-0.6	-2.7	3.1	3.1	17.4	0.4	-1.0	1.6	1.6	-1.4
<b>Quality</b>	-0.4	-2.1	2.7	2.7	6.6	0.5	-0.3	1.2	1.2	-10.5
<b>Size</b>	-0.5	-2.4	0.6	0.6	7.5	0.4	-0.7	-0.9	-0.9	-9.7
<b>Value</b>	0.6	0.1	4.5	4.5	21.1	1.6	1.9	3.0	3.0	1.7
<b>Market</b>	-1.0	-1.7	1.4	1.4	19.1					
<b>Market - Equal-Weighted</b>	0.2	-0.7	2.9	2.9	13.1					

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 7b – European factor index total returns (%)**

Data as at 28/02/2025	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
<b>Growth</b>	-1.6	1.7	5.2	5.2	9.3	-2.2	-3.1	-4.4	-4.4	-6.1
<b>Low volatility</b>	1.4	4.8	8.3	8.3	20.3	0.8	-0.2	-1.6	-1.6	3.4
<b>Price momentum</b>	1.1	5.4	9.7	9.7	22.8	0.5	0.4	-0.3	-0.3	5.5
<b>Quality</b>	0.3	3.6	7.3	7.3	16.0	-0.3	-1.4	-2.5	-2.5	-0.3
<b>Size</b>	-0.7	1.8	5.0	5.0	11.4	-1.4	-3.0	-4.5	-4.5	-4.3
<b>Value</b>	2.3	6.5	10.5	10.5	24.1	1.6	1.4	0.5	0.5	6.6
<b>Market</b>	0.6	5.0	10.0	10.0	16.4					
<b>Market - Equal-Weighted</b>	0.2	3.4	7.5	7.5	15.3					

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 8 – Model asset allocation**

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

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

**Figure 9 – Model allocations for Global sectors**

	<b>Neutral</b>	<b>Invesco</b>	<b>Preferred Region</b>
<b>Energy</b>	<b>6.1%</b>	<b>Overweight</b>	<b>EM</b>
<b>Basic Materials</b>	<b>3.3%</b>	<b>Neutral</b>	<b>Japan</b>
Basic Resources	2.0%	Neutral	Japan
Chemicals	1.3%	Neutral	US
<b>Industrials</b>	<b>12.9%</b>	<b>Underweight</b>	<b>US</b>
Construction & Materials	1.7%	Underweight	US
Industrial Goods & Services	11.2%	Neutral	US
<b>Consumer Discretionary</b>	<b>14.8%</b>	<b>Underweight</b>	<b>US</b>
Automobiles & Parts	2.8%	Underweight	Europe
Media	1.2%	Overweight	US
Retailers	5.6%	Overweight	US
Travel & Leisure	2.0%	Underweight	EM
Consumer Products & Services	3.1%	Underweight	Japan
<b>Consumer Staples</b>	<b>4.9%</b>	<b>Neutral</b>	<b>US</b>
Food, Beverage & Tobacco	3.1%	Overweight	US
Personal Care, Drug & Grocery Stores	1.8%	Neutral	Europe
<b>Healthcare</b>	<b>8.4%</b>	<b>Underweight</b>	<b>US</b>
<b>Financials</b>	<b>16.1%</b>	<b>Overweight</b>	<b>US</b>
Banks	7.6%	Overweight	US
Financial Services	5.5%	Overweight	US
Insurance	3.0%	Neutral	US
<b>Real Estate</b>	<b>2.6%</b>	<b>Neutral</b>	<b>Japan</b>
<b>Technology</b>	<b>24.4%</b>	<b>Neutral</b>	<b>EM</b>
<b>Telecommunications</b>	<b>3.3%</b>	<b>Underweight</b>	<b>US</b>
<b>Utilities</b>	<b>3.2%</b>	<b>Underweight</b>	<b>US</b>

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: Refinitiv Datastream and Invesco



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## Appendix

**US Shiller P/E:** the Shiller P/E is a price to earnings ratio constructed by dividing price by the average EPS in the previous 10 years (with both numerator and denominator adjusted for inflation). It is what is commonly known as a cyclically adjusted PE ratio. It is constructed by US academic Robert Shiller. Data is monthly from 1881 (source Robert Shiller – see [here](#)).

### **Definition of US equity benchmark used to generate long-term returns (Figure 1)**

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

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### **Definitions of data and benchmarks for Figure 5**

**Sources:** we source data from 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 1<sup>st</sup> 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<sup>st</sup> January 2001 with a value of 100.

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

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

**Corporate investment grade (IG) bonds:** Bank of America Merrill Lynch investment grade corporate bond total return indices. The emerging markets yields and returns are based on the Bloomberg Barclays emerging markets aggregate corporate bond index.

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

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

**Commodities:** Goldman Sachs Commodity total return indices

**Real estate:** FTSE EPRA/NAREIT total return indices

**Currencies:** Global Trade Information Services spot rates

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**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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**Important information**

*Data as of 28 February 2025 unless stated otherwise.*

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