Uncommon truths

The Aristotle List: 10 improbable but possible outcomes for 2020

It is time to forget central scenarios and think about improbable but possible outcomes. Despite current geopolitical tensions, our surprises display a sense of hope (these hypothetical predictions are our views of what may happen even if they do not necessarily 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 2020 that we believe have at least a 30% chance of occurring. The concept was unashamedly borrowed from erstwhile colleague Byron Wien, who recently published his 10 surprises for 2020.

We believe the biggest returns are earned (or the biggest losses avoided) by successfully taking out-of-consensus positions. A year ago, the consensus was expecting Fed rate cuts but was bearish on stock prices. Hence, a lot of our improbable but possible ideas took the opposite view ("Value outperforms other equity factors"; "Turkish debt outperforms"; "Russian stocks outperform major indices, again" etc). The mood now seems more mixed, as is our list – do not expect it to be internally consistent.

1. Joe Biden wins the US presidential election

This comes in two parts: first, that Joe Biden is selected as the Democrat candidate and, second, that he defeats President Trump in the presidential race. Recent meetings with investors in Europe suggest a lot of scepticism about this idea (they fear an Elizabeth Warren candidacy and suspect President Trump will win anyway). President Trump has a lot going for him (the economy, the conflict with Iran, campaigning nous) and opinion polls that clearly favoured Biden a few months ago now suggest a close race between the two (see 270toWin). Nevertheless, President Trump's approval ratings are even worse than those of Jimmy Carter and are close to those of L.B. Johnson, neither of whom won a second term (see the FiveThirtyEight website). We believe that a change of president could reduce global risk premia and eliminate the "Trump premium" that we believe exists in the price of gold.

2. Success at the UN Climate Change Conference

After so many recent disappointments (as in 2019), the 2020 UN Climate Change Conference could surprise with some breakthrough agreements. It takes place in Glasgow from 9 to 19 November, which is just after the US presidential election. A change at the White House may open the door to progress. Though the new occupant will not be in place until January, it could change the tone of the conference and may weaken the resistance of countries such as Australia and Brazil. It would be good to see a globalisation of carbon pricing schemes, an initiative that failed in 2019.

3. The price of carbon in the EU breaks above €30/t

With Australian bush fires highlighting the challenges posed by climate change, we suspect investors will be searching for ways to protect portfolios and to play a role in finding solutions. Our recently published 21st Century Portfolio document showed the problem is

Figure 1 – The price of carbon in the European Union (€ per tonne)

Notes: weekly data from 22 April 2005 to 27 December 2019. Based on the ICE ECX EUA Daily Futures Contract, which shows the price of buying EU allowances (EUA) on the European Climate Exchange (ECX). One unit gives the right to emit one tonne of carbon. Past performance is no guarantee of future results. Source: Refinitiv Datastream and Invesco

not new (the land area burned by US wildfires has increased 10-fold since 1980) and gave examples of technological solutions to reduce or remove carbon. However, climate change is the ultimate externality and internalising the problem via pricing mechanisms has a big role to play (we believe). The EU carbon allowance programme is one such solution, whereby the right to emit carbon can be bought and sold, thus leaving it to the market to decide the most efficient way to reduce emissions (the number of allowances is reduced over time). As shown in **Figure 1**, the carbon price has struggled to go above €30/tonne but we suspect this may change in 2020.

4. The UK leaves the EU with no trade-deal

Since it became clear that Boris Johnson would win the recent UK election, sterling and UK risk-assets have performed well. We believe this is because the UK is expected to leave the EU on January 31 under the new withdrawal agreement. However, that is only the first step in the process and we believe that Boris Johnson has set an unrealistically tight end-date for the transition period (end-2020). This effectively means the UK and the EU need to agree all aspects of their future relationship by mid-2020, which strikes us as overly ambitious. We see three possibilities: first, the UK government extends the deadline; second a partial agreement is reached and the transition period ends on 31 December 2020 with the bulk of the future relationship still to be agreed or, third, the transition period finishes at end-2020 with no agreement about the future relationship. Sterling and UK financial markets seem to indicate faith that a "no-deal" outcome is off the table. We are not so sure and if it does become a possibility, we would expect sterling and UK assets to weaken.

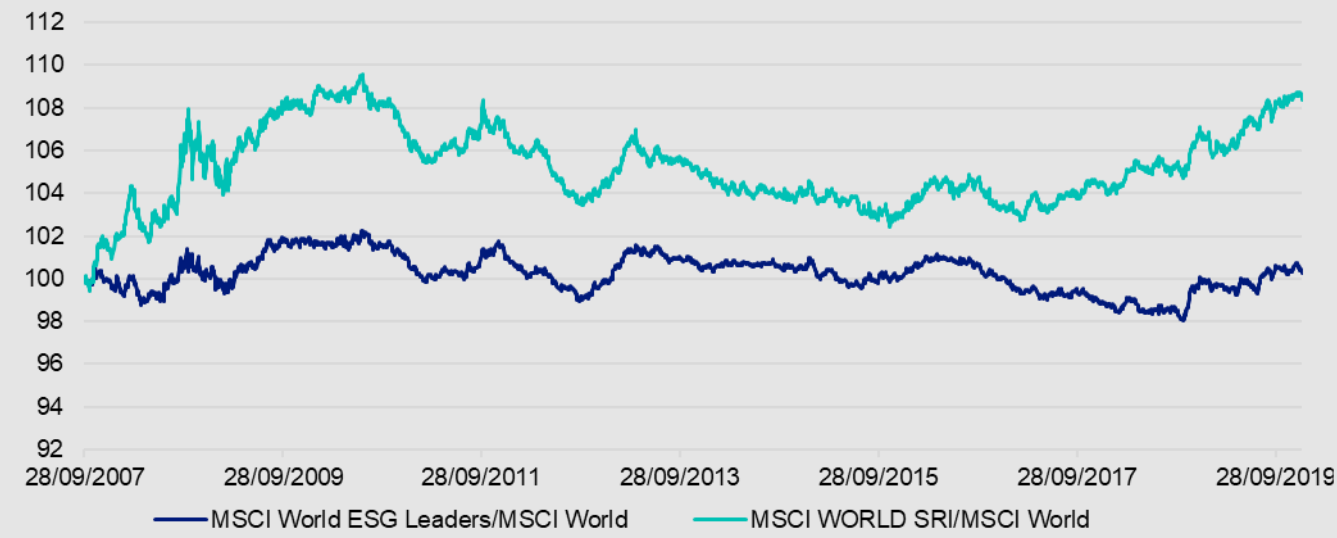
5. Global GDP growth slips below 2.5%

Global GDP growth was likely around 3.0% during 2019, down from 3.6% in 2018. The consensus view is that growth in 2020 will be at least as good as in 2019 and possibly better (the Bloomberg consensus forecast is 3.1%). This perhaps explains the strong performance of equity-like assets towards the end of 2019. Our central scenario is also that growth will stabilise but this is so far based more on hope than hard evidence. Were growth to slip further, we suspect it would damage global equity markets. A prolonged Middle-East stand-off could tip the scales.

6. MSCI World SRI outperforms MSCI World

Those of us who took an interest in green investing in the 1980s were disappointed by the slow uptake of the idea by investors and the consequent lack of return premium on such investments. However, the broader environmental, social and governance (ESG) concept has gained in popularity and a plethora of tailored indices now exist by which to judge the efficacy of such strategies. **Figure 2** shows two examples from MSCI, both compared to the standard MSCI World Index. Since its inception in September 2007, the MSCI World ESG Leaders Index has broadly tracked the underlying MSCI World Index. The more selective MSCI World SRI Index has fewer constituents (385 versus 781 at end-November 2019) and has historically diverged more from MSCI World. **Figure 2** suggests that MSCI World SRI is close to its previous peak relative to MSCI World, which may form a ceiling (it has returned an annualised 13.9% since the low of 16 March 2017 versus 11.8% for MSCI World). However, given the renewed interest in socially-responsible investing, we believe the recent outperformance of MSCI World SRI will continue during 2020.

Figure 2 – Will socially responsible investing pay in 2020?



Note: daily data from 28 September 2007 to 02 January 2020. Based on MSCI total return indices, rebased to 100 on 28 September 2007. Past performance is no guarantee of future results. Source: MSCI, Refinitiv Datastream and Invesco.

7. South African government debt outperforms
Another theme in the earlier mentioned 21st Century Portfolio document is demographics, with a conclusion that this century will belong to Africa. Hence, we are eager to gain exposure to African assets, including debt. South African debt came fifth in our global ranking of 35 government bond markets during 2019 and we suspect 2020 will be another year of outperformance. 10-year government yields were 9.02% on 3 January 2020 compared to a CPI inflation rate of 3.6% in November 2019 (and falling). We believe this offers an interesting cushion against the risk of currency losses, especially given that the South African rand is reasonably valued, in our opinion (based on the BIS Broad Effective CPI Based Index, it is currently 10% below the average since the start of this century).

8. Russian stocks outperform major indices, again
In our search for exotic stock market opportunities, we usually look for that rare combination of a dividend yield that exceeds the price/earnings ratio. There are virtually no such examples right now and we therefore stick once again with the Russian market, which outperformed in both 2018 and 2019 (based on Datastream total return indices in US dollars). The Russian Depository Index (RDXUSD) was on a 2020 PE of 6.9 and a dividend yield of 7.5, as of January 3 and based on Bloomberg consensus estimates (**Figure 3** shows the historical valuation metrics based on Datastream indices). Even better, Bloomberg consensus forecasts suggest that gap will expand over the coming years, as earnings and dividends are expected to grow. We realise that many investors are not allowed to invest in Russia but we feel it may be one of the better ways to capture oil price upside should Middle-East tensions escalate.

9. Oil & gas outperforms technology in the US
During 2019, among US equity sectors, the most extreme comparison was between outperforming technology and underperforming oil & gas (see the evidence in **Figure 5**). This is partly due to the strong showing of technology but also because the weakness of oil since 2011 has handicapped the oil & gas sector. Notwithstanding the long term challenges that confront the oil & gas sector, we suspect there could be a reversal of this relative performance during 2020: first, the relative valuation of the two sectors is stretched (for example, the oil & gas price/cash-earnings ratio is 7.3, in line with historical norms, whereas that for technology is 17.9 versus a historical average of 11.9); second, if policy makers successfully avoid global recession during 2020, industrial commodity prices (including oil) could strengthen and, finally, geo-political tensions in the Middle-East could push the oil price above what the economic cycle may justify.

10. France wins EUFA EURO 2020
Despite football coming home (at least for the semi-final and final stages of the EURO 2020 tournament) and England being the bookmaker's favourite (see oddschecker.com), it is hard to see them progressing beyond the semi-final stage (where we think they will lose to the Netherlands). We reckon that France will beat Belgium in the other semi-final and go on to win the tournament on Sunday 12 July (the same day on which they won their first World Cup in 1998).

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 31 December 2019.

Figure 3 – Russia equity market price-earnings ratio (x) and dividend yield (%)

Note: based on monthly data from March 2000 to December 2019. Based on Datastream Russia Market Index. Past performance is no guarantee of future results. Source: Datastream and Invesco.

Figure 4 – Asset class total returns (%, annualised)

Data as at 31/12/2019	Index	Current Level/RY	Total Return (USD, %) 1y	3y	5y	10y	Total Return (Local Currency, %) 1y	3y	5y	10y
Equities										
World	MSCI	565	27.3	13.0	9.0	9.4	26.9	12.4	9.6	10.3
Emerging Markets	MSCI	1115	18.9	12.0	6.0	4.0	18.5	11.9	7.9	6.5
US	MSCI	3076	31.6	15.3	11.6	13.5	31.6	15.3	11.6	13.5
Europe	MSCI	1784	24.6	10.5	5.7	5.8	24.6	8.4	7.7	7.8
Europe ex-UK	MSCI	2129	25.9	11.3	6.7	6.0	27.5	9.3	8.0	8.1
UK	MSCI	1191	21.1	8.4	3.3	5.1	16.5	5.9	6.7	7.2
Japan	MSCI	3437	20.1	9.3	8.1	6.9	18.9	6.8	6.0	8.5
Government Bonds										
World	BofA-ML	0.84	5.5	3.9	2.1	2.0	5.4	2.5	2.3	3.4
Emerging Markets	JPM	5.46	13.8	7.2	2.7	2.6	12.8	9.0	8.1	8.4
US (10y)*	Datastream	1.92	9.5	3.8	2.6	4.5	9.5	3.8	2.6	4.5
Europe	BofA-ML	0.36	6.0	4.9	0.9	2.1	8.0	2.7	2.5	4.6
Europe ex-UK (EMU, 10y)*	Datastream	-0.19	3.1	4.7	1.1	2.9	4.9	2.6	2.6	5.5
UK (10y)*	Datastream	0.83	9.5	5.7	0.6	3.9	5.2	3.3	3.9	6.0
Japan (10y)*	Datastream	-0.02	1.6	3.0	3.3	0.9	0.6	0.6	1.3	2.4
IG Corporate Bonds										
Global	BofA-ML	2.31	11.4	5.5	3.4	4.1	11.5	4.9	4.0	5.1
US	BofA-ML	2.94	14.2	5.9	4.6	5.6	14.2	5.9	4.6	5.6
Europe	BofA-ML	0.63	4.3	4.6	0.8	1.6	6.3	2.5	2.3	4.2
UK	BofA-ML	2.23	15.2	6.9	1.7	4.9	10.8	4.4	5.1	7.0
Japan	BofA-ML	0.41	1.6	3.0	2.6	-0.7	0.7	0.6	0.6	0.9
HY Corporate Bonds										
Global	BofA-ML	5.69	13.7	6.6	5.9	7.2	14.0	6.2	6.3	7.7
US	BofA-ML	6.04	14.4	6.3	6.1	7.5	14.4	6.3	6.1	7.5
Europe	BofA-ML	3.32	9.3	6.8	3.1	4.9	11.3	4.6	4.7	7.5
Cash (Overnight LIBOR)										
US		1.53	2.2	1.7	1.1	0.6	2.2	1.7	1.1	0.6
Euro Area		-0.57	-2.7	1.7	-1.9	-2.5	-0.5	-0.5	-0.4	0.0
UK		0.67	4.6	2.9	-2.7	-1.5	0.7	0.5	0.5	0.5
Japan		-0.12	0.8	2.4	1.9	-1.5	-0.1	-0.1	0.0	0.0
Real Estate (REITs)										
Global	FTSE	2036	23.6	10.3	6.9	8.9	25.9	8.1	8.6	11.6
Emerging Markets	FTSE	2485	27.8	19.9	10.7	5.7	30.1	17.4	12.3	8.3
US	FTSE	3236	24.3	7.5	6.6	11.6	24.3	7.5	6.6	11.6
Europe ex-UK	FTSE	3799	24.3	13.9	10.0	9.0	26.6	11.6	11.6	11.8
UK	FTSE	1598	35.9	11.1	2.2	7.3	30.6	8.6	5.6	9.5
Japan	FTSE	3008	22.1	8.6	4.7	8.0	20.9	6.1	2.6	9.7
Commodities										
All	GSCI	2592	17.6	2.4	-4.3	-5.4	-	-	-	-
Energy	GSCI	497	29.7	4.6	-4.6	-6.9	-	-	-	-
Industrial Metals	GSCI	1219	2.6	2.8	-0.7	-3.3	-	-	-	-
Precious Metals	GSCI	1789	17.6	8.3	4.1	2.3	-	-	-	-
Agricultural Goods	GSCI	348	-0.3	-6.9	-8.5	-5.5	-	-	-	-
Currencies (vs USD)*										
EUR		1.12	-2.3	2.2	-1.5	-2.4	-	-	-	-
JPY		108.63	0.9	2.5	2.0	-1.5	-	-	-	-
GBP		1.32	4.0	2.3	-3.2	-2.0	-	-	-	-
CHF		1.03	1.4	1.7	0.5	0.7	-	-	-	-
CNY		6.96	-1.2	-0.1	-2.3	-0.2	-	-	-	-

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: Refinitiv Datastream and Invesco

Figure 5 – Equity sector total returns relative to local market (%, annualised)

Data as at 31/12/2019	US				Europe			
	1y	3y	5y	10y	1y	3y	5y	10y
Oil & Gas	**-15.0**	**-16.0**	**-12.1**	**-9.0**	**-13.1**	**-3.6**	**0.1**	**-4.1**
Materials	**-5.3**	**-4.9**	**-4.1**	**-3.9**	**0.1**	**1.0**	**0.8**	**-1.5**
Basic Resources	-2.7	-8.8	-9.0	-13.9	-3.8	1.2	0.8	-5.8
Chemicals	-7.2	-3.7	-3.7	-1.3	3.4	0.6	0.7	2.3
Industrials	**-1.6**	**-3.9**	**-2.0**	**-0.1**	**7.2**	**2.6**	**3.4**	**2.6**
Construction & Materials	12.4	-7.2	-0.5	-3.4	10.8	0.9	4.1	0.9
Industrial Goods & Services	-1.4	-3.5	-1.5	0.0	6.2	3.0	3.2	3.2
Consumer Discretionary	**-2.7**	**1.2**	**1.3**	**3.2**	**2.1**	**-1.1**	**-0.9**	**3.0**
Automobiles & Parts	-4.9	-10.3	-9.5	-5.7	-5.8	-6.5	-3.7	2.2
Media	2.0	-5.1	-3.6	2.5	-5.8	-2.2	-1.8	1.6
Retail	-3.6	4.7	4.0	4.1	7.7	-0.7	-1.7	-1.5
Travel & Leisure	-4.2	-0.2	0.7	2.5	-4.3	-1.5	-1.2	3.3
Consumer Staples	**-2.9**	**-4.7**	**-3.0**	**-1.3**	**-4.2**	**-1.7**	**0.2**	**1.5**
Food & Beverages	-4.3	-5.9	-2.7	-1.5	1.1	2.5	2.2	3.7
Personal & Household Goods	-0.1	-4.6	-3.6	-1.3	2.6	0.1	2.6	4.6
Healthcare	**-8.1**	**0.8**	**-1.2**	**1.1**	**3.5**	**3.0**	**1.1**	**4.0**
Financials	**0.5**	**-2.9**	**-0.5**	**-1.1**	**-3.4**	**-3.5**	**-3.4**	**-3.7**
Banks	5.7	-3.0	0.2	-1.1	-10.3	-8.8	-8.0	-8.5
Financial Services	-1.9	-4.6	-4.7	-1.2	12.5	6.5	4.6	4.4
Insurance	-1.6	-4.5	-1.6	-1.0	2.4	2.6	2.4	3.6
Real Estate	-1.9	-3.0	-2.7	-0.1	0.3	0.3	-0.3	1.5
Technology	**14.3**	**10.7**	**7.6**	**3.5**	**7.5**	**5.8**	**5.1**	**4.1**
Telecommunications	**0.9**	**-9.2**	**-3.4**	**-3.4**	**-17.7**	**-8.7**	**-7.6**	**-3.6**
Utilities	**-3.9**	**-1.3**	**-1.3**	**-1.5**	**2.3**	**5.2**	**-0.1**	**-2.7**

Notes: showing annualised returns. We use a sector classification created by merging the two main systems used by Standard & Poor's (S&P) for the US and STOXX for Europe. We have decided to classify our 10 top level industries using categories that most closely resemble the Global Industry Classification Standard (GICS) and at the level below that (super sectors) we are using the Industry Classification Benchmark (ICB). The former is used for the S&P 500 index and the latter for the STOXX 600, our benchmark indices. The two systems overlap in most cases and the only material difference seems to be in the consumer sectors. Therefore, we define consumer staples as the aggregate of personal & household goods and food & beverage, while consumer discretionary includes automobiles & parts, media, retail and travel & leisure. For the rest, we assume 100% overlap for the corresponding top-level sectors. Past performance is no guarantee of future results.
Source: Refinitiv Datastream and Invesco

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

Data as at 31/12/2019	Absolute				Relative to Market			
	1y	3y	5y	10y	1y	3y	5y	10y
Growth	36.0	16.7	10.1	14.2	3.5	1.2	-1.4	0.6
Low volatility	25.8	15.9	13.2	15.2	-4.3	0.5	1.4	1.4
Price momentum	23.2	11.8	9.4	13.1	-6.3	-3.0	-2.1	-0.4
Quality	25.8	13.3	10.1	13.6	-4.4	-1.7	-1.5	0.0
Size	23.7	8.1	8.1	13.6	-5.9	-6.3	-3.3	0.1
Value	28.8	7.3	8.3	13.9	-2.0	-6.9	-3.0	0.3
Market	31.5	15.3	11.7	13.6				
Market - Equal-Weighted	29.2	12.4	9.8	13.5				

Notes: 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. Past performance is no guarantee of future results.
Source: Refinitiv Datastream and Invesco

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

Data as at 31/12/2019	Absolute				Relative to Market			
	1y	3y	5y	10y	1y	3y	5y	10y
Growth	37.6	13.0	11.5	13.7	7.8	4.3	3.7	4.6
Low volatility	26.2	12.8	12.0	14.0	-1.1	4.1	4.2	4.9
Price momentum	30.4	11.6	12.0	15.2	2.2	2.9	4.2	5.9
Quality	35.8	10.5	10.3	13.4	6.4	2.0	2.5	4.3
Size	41.0	12.1	9.4	10.7	10.5	3.4	1.8	1.8
Value	23.3	6.9	6.3	7.4	-3.4	-1.4	-1.2	-1.2
Market	27.6	8.4	7.5	8.7				
Market - Equal-Weighted	28.8	9.5	8.8	10.2				

Notes: 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. Past performance is no guarantee of future results.
Source: Refinitiv Datastream and Invesco

Figure 7 – Model asset allocation

	Neutral	Policy Range		Allocation Position vs Neutral	Hedged	Currency
Cash	**5%**	**0-10%**		**5%**		
Cash	2.5%			5%		
Gold	2.5%			0%		
Bonds	**45%**	**10-80%**	↑	47%		
Government	30%	10-50%	↑	17%		
US	10%		↑	7%		
Europe ex-UK (Eurozone)	8%			0%		
UK	2%		↓	2%		
Japan	8%			4%		
Emerging Markets	2%			4%		
Corporate IG	10%	0-20%	↑	20%		
US Dollar	5%			10%		
Euro	3%		↑	6%		
Sterling	1%			2%		
Japanese Yen	1%			2%		
Corporate HY	5%	0-10%	↑	10%		
US Dollar	4%			8%		
Euro	1%		↑	2%		
Equities	**45%**	**20-70%**	↓	40%		
US	25%			12%		
Europe ex-UK	7%		↓	8%		
UK	4%		↓	4%		
Japan	4%			8%		
Emerging Markets	5%			8%		
Real Estate	**3%**	**0-6%**		6%		
US	1%			0%		
Europe ex-UK	1%			2%		
UK	0.5%		↓	0%		
Japan	0.5%		↑	2%		
Emerging Markets	0%			2%		
Commodities	**2%**	**0-4%**	↑	2%		
Energy	1%		↑	1%		
Industrial Metals	0.3%		↑	1%		
Precious Metals	0.3%			0%		
Agriculture	0.3%			0%		
Total	**100%**			**100%**		
Currency Exposure (including effect of hedging)						
USD	49%		↑	41%		
EUR	21%		↑	19%		
GBP	8%		↓	8%		
JPY	14%			17%		
EM	7%			15%		
Total	**100%**			**100%**		

Notes: 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 8 – Model sector allocations

	US		Europe		Preferred
	Neutral	**Invesco**	**Neutral**	**Invesco**	**Region**
Oil & Gas	**4.4%**	**Neutral**	**6.2%**	**Neutral**	**US**
Materials	**2.0%**	**Neutral**	**6.3%**	**Neutral**	**Europe**
Basic Resources	0.3%	Overweight	2.6%	Overweight	Europe
Chemicals	1.7%	Neutral	3.8%	Neutral	Europe
Industrials	**12.6%**	**Underweight**	**14.0%**	**Underweight**	**US**
Construction & Materials	0.5%	Underweight	2.9%	Underweight	Europe
Industrial Goods & Services	12.0%	Underweight	11.1%	Underweight	US
Consumer Discretionary	**15.5%**	**Underweight**	**9.8%**	**Overweight**	**Europe**
Automobiles & Parts	0.6%	Underweight	2.8%	Neutral	Europe
Media	2.5%	Overweight	1.9%	Neutral	US
Retail	9.7%	Underweight	3.6%	Overweight	Europe
Travel & Leisure	2.8%	Overweight	1.5%	Overweight	US
Consumer Staples	**7.7%**	**Overweight**	**17.6%**	**Neutral**	**US**
Food & Beverage	3.4%	Neutral	8.3%	Underweight	US
Personal & Household Goods	4.3%	Overweight	9.2%	Neutral	US
Healthcare	**12.1%**	**Overweight**	**13.3%**	**Overweight**	**Europe**
Financials	**18.0%**	**Underweight**	**19.3%**	**Neutral**	**Europe**
Banks	5.5%	Underweight	9.2%	Neutral	Europe
Financial Services	6.0%	Neutral	2.5%	Neutral	Europe
Insurance	3.4%	Underweight	5.6%	Overweight	Europe
Real Estate	3.1%	Overweight	2.1%	Underweight	US
Technology	**21.7%**	**Neutral**	**4.9%**	**Neutral**	**US**
Telecommunications	**2.5%**	**Neutral**	**3.5%**	**Neutral**	**Europe**
Utilities	**3.4%**	**Underweight**	**5.0%**	**Neutral**	**Europe**

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

Appendix

Definitions of data and benchmarks for Figure 4

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). The global rate is the average of the euro, British pound, US dollar and Japanese yen rates. The series started on 1st 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 JP Morgan emerging markets global composite government bond index.

Corporate investment grade (IG) bonds: Bank of America Merrill Lynch investment grade corporate bond total return indices.

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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