



Applied philosophy

Rising yields and sector selection

The rotation from growth into value seems to have intensified this week as sovereign yields rose. Investors appear to be positioning for an acceleration in the recovery, which may come with higher inflation. This could potentially lead to the withdrawal of generous monetary and fiscal stimulus efforts. We believe there is scope for global sovereign yields to rise further and have analysed how global equity sectors have behaved in similar periods.

We think the rally in risk assets since March 2020 was mainly driven by generous fiscal and monetary support, which allowed markets to look through the pandemic-induced economic slump. However, this risk-on move has hit speedbumps this year. We suspect investors have started to process what the levelling off and withdrawal of that support would mean for their portfolios.

If current trends of falling Covid-19 cases, hospitalisations and deaths are maintained, it would allow for a re-opening of more economies. Also, as vaccination programmes reach more people around the world, this will reduce the severity and spread of the virus in the future. In our view, it will be a while before humanity has enough protection against the virus to restore pre-pandemic normality, but we do not expect stimulus efforts to be extended much further.

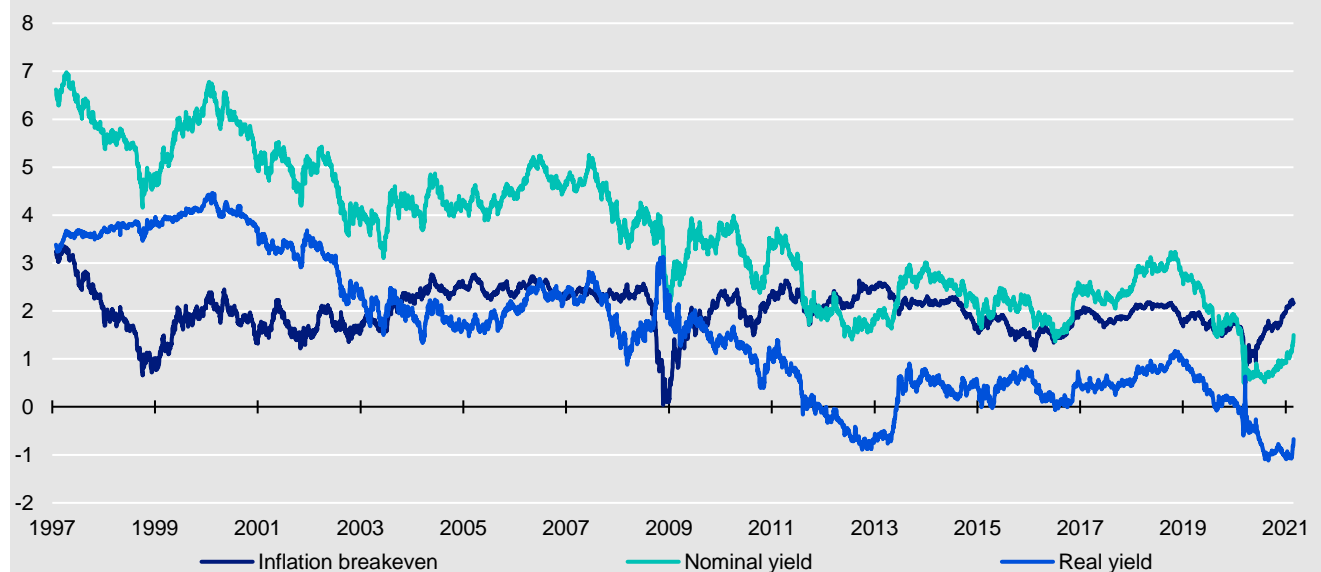
In our view, the current volatility in risk assets is related to a rebalancing from those assets that were boosted

by how societies reacted to the pandemic to those that would benefit from any return to normality. We think this is evident in the year-to-date underperformance of our growth and quality factor indices relative to value and size (**Figures 7a** and **7b**). Sectors that suffered when lockdowns were first introduced a year ago, such as travel & leisure, basic resources, energy and financials have recently started outperforming.

This rotation does not seem to have impacted the general risk-on mood in most asset classes. As we might have expected, the improvement in the economic outlook and concerns about the withdrawal of extreme stimulus impacts only certain assets. Nevertheless, this rebalancing may be painful, especially in equity markets, where the technology, consumer staples and healthcare sectors (alongside a few large stocks that command tech-like valuations) have such large index weightings that a rotation out of them may trigger a market-wide pull-back.

We also consider the above to be growth sectors and therefore long duration assets sensitive to movements in interest rates. Indeed, global government bond markets have started to reflect expectations of higher rates with sovereign yields rising since August 2020. We believe this has been largely driven by rising inflation expectations (see **Figure 1** for an example from the US). Hopes of extra stimulus packages and effective vaccination programmes have also started to impact real yields. We believe central banks will wait until the recovery is solid enough before they start

Figure 1 – Decomposed US 10-year Treasury yields (%)



Notes: Daily data from 19th January 1997 to 25th February 2021. Past performance is no guarantee of future results. We deduct inflation breakeven from the nominal yield to calculate the real yield.
Source: Refinitiv Datastream and Invesco



tightening policy, though we think [the probability of a sustained rise in inflation is low](#). This in turn may keep sovereign yields in check, although one of our [10 improbable but possible outcomes for this year](#) is that US 10-year Treasuries will yield 2%.

Even if much of the short-term increase is behind us, we believe that yields are now on an upward trend, especially if the recovery firms. With the current sector rotation in mind, how should we position ourselves within our model sector allocation? To help answer this, we have analysed the performance of global equity sectors during previous upswings in yields.

Excluding the current upswing, we identify 13 periods since 1985 when yields have risen meaningfully defined as a trough-to-peak rise of more than 50 basis points (using the ICE BofA Global Government Index – see **Figure 4**). These periods tended to coincide with monetary policy tightening during periods of economic expansion. They lasted 351 days on average (their median length was 273 days) and the average rise in the global yield was 125 basis points (the median was 114 basis points) leading to an annualised average fall of 5.8% in the total return index (4.3% if we use median).

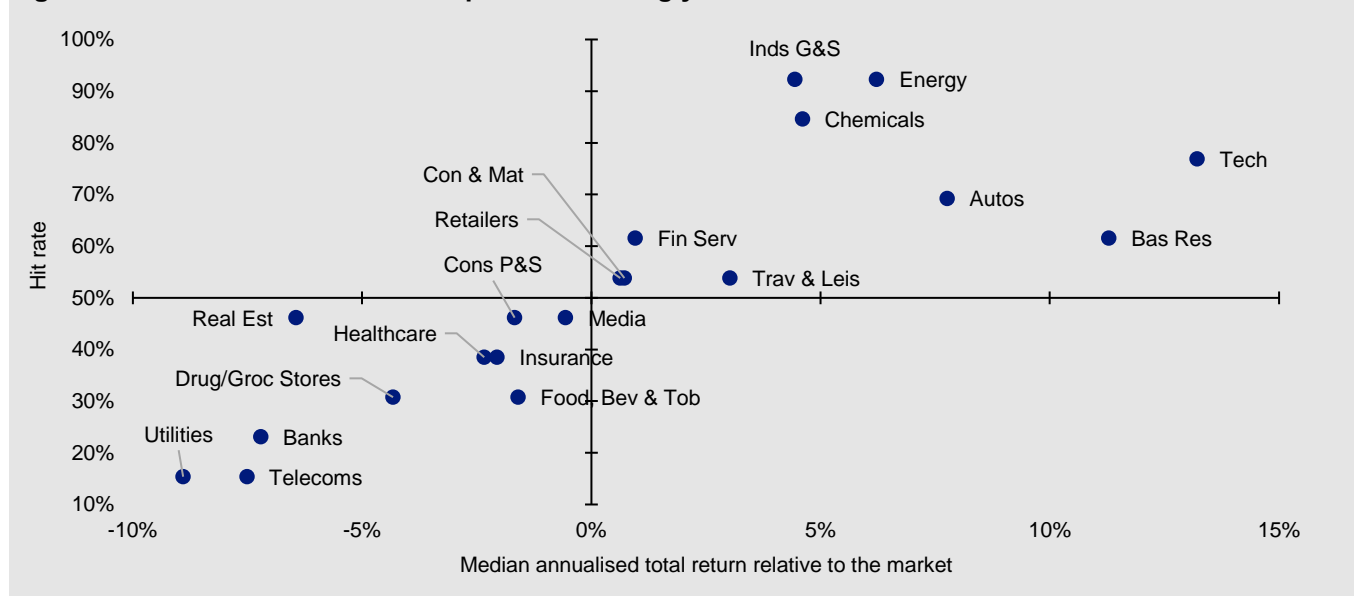
The results of this analysis were mostly in line with our expectations (see **Figure 2**). The sectors that were the most consistent underperformers in these periods (in at

least 60% of them) were what we consider defensives: healthcare, consumer staples, telecommunications and utilities. Their median annualised underperformance ranged from 1.6% for food, beverage & tobacco to 8.9% for utilities. Somewhat surprisingly, banks and insurance were also in this group.

The most consistent outperformers were sectors we consider to be late-cyclicals, such as resource-related sectors and industrial goods & services. However, technology, automobiles & parts and financial services also had a similarly high “hit rate”. Commodities and related sectors are perhaps seen as good inflation hedges (although the direction of causality is unclear), while manufacturers of big-ticket items, such as cars, and providers of financial products are more likely to thrive when an expansion is mature enough for rates to rise. More surprising is the presence of technology, which we consider the ultimate growth sector. Its high “hit rate” suggests that its outperformance in periods of rising yields is not only a function of its high returns during the tech bubble.

The current period of rising yields started on 4th August 2020 and has run for around 200 days, which is below both the average and median of past episodes. Although the global sovereign yield has risen by only 31 basis points (as of 25th February), it has more than doubled since the August low. The worst performers so far have been defensives and real estate, as we would

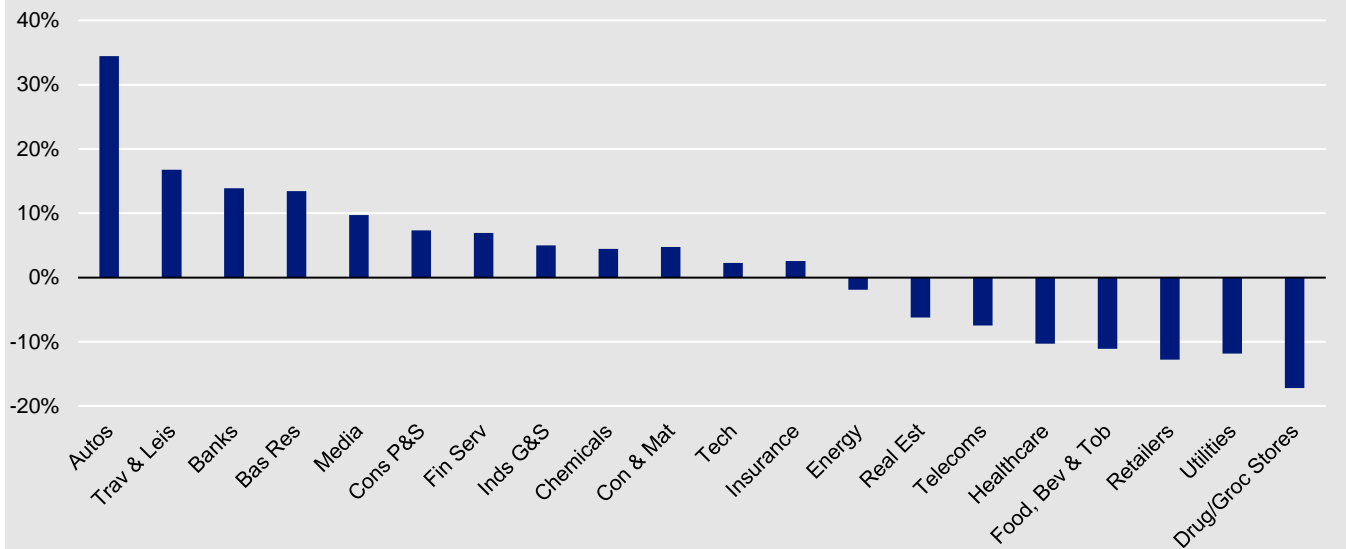
Figure 2 – Sector relative returns in periods of rising yields versus their “hit rate”



Notes: We use periods in which global government bond yields rose by at least 50 basis points using the ICE BofA Global Government Bond Index excluding the current period from 4th August 2020 to 25th February 2021. We use Datastream sector indices. Hit rate = percentage of periods in which the sector outperformed the Datastream Global Total Market Index. Inds G&S = industrial goods & services. Autos = automobiles & parts. Tech = technology. Bas Res = basic resources. Fin Serv = financial services. Trav & Leis = travel & leisure. Con & Mat = construction & materials. Cons P&S = consumer products & services. Food, Bev & Tob = food, beverage & tobacco. Real Est = real estate. Drug/Groc Stores = personal care, drug & grocery stores. Telecoms = telecommunications. Past performance is no guarantee of future results. Data as at 25th February 2021. Source: Refinitiv Datastream and Invesco.



Figure 3 – Global sector total returns relative to market since 4th August 2020



Notes: We use Datastream sector indices. Sector total returns relative to the Datastream Global Total Market Index. Past performance is no guarantee of future results. Inds G&S = industrial goods & services. Autos = automobiles & parts. Tech = technology. Bas Res = basic resources. Fin Serv = financial services. Trav & Leis = travel & leisure. Con & Mat = construction & materials. Cons P&S = consumer products & services. Food, Bev & Tob = food, beverage & tobacco. Real Est = real estate. Drug/Groc Stores = personal care, drug & grocery stores. Telecoms = telecommunications. Data as of 25th February 2021.

Source: Refinitiv Datastream and Invesco.

have expected (**Figure 3**). However, finding energy among the underperformers is a surprise based on previous precedent. Perhaps due to the nature of this cycle, consumer discretionary (apart from retailers) has performed better in the rebound than history would suggest, especially travel & leisure. Banks have also had higher-than-expected relative returns boosted by the steepening of the yield curve, in our view.

Although 10-year US Treasury yields have recently surpassed our year-end target of 1.35%, we would not

be surprised if they rose further as the economic cycle progresses. If that is the case and current trends continue, our sector allocation seems broadly appropriate (see **Figure 9**). We still believe that autos and basic resources have run ahead of fundamentals and that returns from the real estate sector should improve as restrictions are lifted. However, we think it makes sense to stay Overweight most of consumer discretionary and financial services with technology and food, beverage & tobacco as our hedges against a reversal of rising rates.



Figure 4 – Periods of rising global government bond yields

Trough	Peak	Duration (days)	Yield change (basis points)	Yield change (%)	Government bond total return index change	Annualised return index change
31/03/1987	30/09/1987	183	1.69	26.0%	-3.9%	-7.6%
29/02/1988	13/04/1989	409	1.46	21.5%	1.2%	1.1%
02/08/1989	02/05/1990	273	1.66	22.5%	-3.2%	-4.3%
07/09/1993	07/11/1994	426	2.39	48.1%	3.3%	2.9%
18/01/1996	08/07/1996	172	0.79	15.1%	-2.2%	-4.6%
05/10/1998	18/05/2000	591	1.27	34.8%	-7.7%	-4.8%
07/11/2001	25/03/2002	138	0.85	27.4%	-6.3%	-15.8%
13/06/2003	14/06/2004	367	1.04	47.7%	-0.2%	-0.2%
27/06/2005	06/07/2007	739	1.53	61.0%	2.0%	1.0%
17/03/2008	13/06/2008	88	1.01	37.3%	-8.0%	-29.2%
24/08/2010	08/04/2011	227	0.82	51.6%	0.7%	1.2%
02/05/2013	05/09/2013	126	0.58	50.9%	-4.4%	-12.3%
05/07/2016	05/10/2018	822	1.14	253.3%	-6.8%	-3.1%
04/08/2020	25/02/2021	205	0.31	172.2%	-1.9%	-3.3%
	Average	351	1.25	54%	-2.7%	-5.8%
	Median	273	1.14	37%	-3.2%	-4.3%

Notes: We show periods in which global government bond yields rose by at least 50 basis points using the ICE BofA Global Government Bond Index. Averages exclude the current period from 4th August 2020 to 25th February 2021. Past performance is no guarantee of future results. Source: Refinitiv Datastream and Invesco.



Figure 5 – Asset class total returns (% annualised)

Data as at 25/02/2021	Index	Current Level/Ry	Total Return (USD, %)					Total Return (Local Currency, %)				
			1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Equities												
World	MSCI	667	-1.7	0.0	3.4	3.4	25.5	-1.9	-0.2	3.5	3.5	22.1
Emerging Markets	MSCI	1384	-2.9	-1.7	7.3	7.3	34.3	-2.8	-1.9	7.8	7.8	32.6
China	MSCI	118	-6.2	-4.6	9.7	9.7	44.3	-6.2	-4.7	9.6	9.6	42.6
US	MSCI	3733	-2.6	-0.8	2.0	2.0	27.0	-2.6	-0.8	2.0	2.0	27.0
Europe	MSCI	1900	1.1	2.6	3.4	3.4	16.5	0.2	1.5	3.0	3.0	5.0
Europe ex-UK	MSCI	2371	0.8	2.1	2.4	2.4	20.4	-0.1	1.8	2.9	2.9	7.6
UK	MSCI	1100	2.2	4.1	7.2	7.2	4.7	0.9	0.7	3.7	3.7	-3.6
Japan	MSCI	4018	-1.3	1.2	4.3	4.3	27.6	-0.8	3.7	7.3	7.3	23.1
Government Bonds												
World	BofA-ML	0.49	-0.8	-2.7	-3.6	-3.6	3.8	-1.1	-2.6	-3.1	-3.1	-1.3
Emerging Markets	BBloom	4.33	-2.5	-3.7	-5.4	-5.4	-2.0	-2.5	-3.7	-5.4	-5.4	-2.0
China	BofA-ML	3.15	0.3	0.0	1.5	1.5	9.3	0.0	-0.4	0.1	0.1	0.5
US (10y)	Datastream	1.50	-2.1	-3.7	-4.7	-4.7	1.6	-2.1	-3.7	-4.7	-4.7	1.6
Europe	Bofa-ML	0.04	0.4	-1.7	-2.9	-2.9	10.9	-0.9	-2.5	-2.8	-2.8	-1.5
Europe ex-UK (EMU, 10y)	Datastream	-0.26	0.1	-2.3	-3.1	-3.1	9.7	-1.1	-3.0	-3.0	-3.0	-2.5
UK (10y)	Datastream	0.82	-0.3	-1.7	-2.1	-2.1	6.3	-1.6	-4.9	-5.3	-5.3	-2.1
Japan (10y)	Datastream	0.14	-1.0	-3.3	-3.9	-3.9	1.6	-0.5	-1.0	-1.1	-1.1	-2.0
IG Corporate Bonds												
Global	BofA-ML	1.70	-1.0	-2.0	-2.7	-2.7	5.4	-1.4	-2.3	-2.8	-2.8	1.7
Emerging Markets	BBloom	3.65	-1.0	-0.6	-0.7	-0.7	7.2	-1.0	-0.6	-0.7	-0.7	7.2
China	BofA-ML	4.07	0.4	0.3	1.9	1.9	10.8	0.1	-0.1	0.5	0.5	1.8
US	BofA-ML	2.19	-1.9	-2.9	-3.7	-3.7	2.1	-1.9	-2.9	-3.7	-3.7	2.1
Europe	BofA-ML	0.47	0.8	-0.3	-1.0	-1.0	12.9	-0.5	-1.1	-0.9	-0.9	0.4
UK	BofA-ML	1.87	-0.1	-0.5	-0.9	-0.9	9.5	-1.4	-3.8	-4.1	-4.1	0.9
Japan	BofA-ML	0.44	-0.6	-2.6	-3.1	-3.1	3.1	-0.1	-0.3	-0.2	-0.2	-0.5
HY Corporate Bonds												
Global	BofA-ML	4.67	-0.1	0.7	0.9	0.9	8.8	-0.4	0.5	0.8	0.8	6.3
US	BofA-ML	4.80	-0.4	0.4	0.9	0.9	6.9	-0.4	0.4	0.9	0.9	6.9
Europe	BofA-ML	3.00	1.1	1.4	1.2	1.2	16.7	-0.1	0.7	1.3	1.3	3.7
Cash (Overnight LIBOR)												
US		0.08	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Euro Area		-0.59	0.7	0.3	-0.4	-0.4	11.3	0.0	-0.1	-0.1	-0.1	-0.6
UK		0.04	0.3	2.5	2.5	2.5	7.8	0.0	0.0	0.0	0.0	0.1
Japan		-0.07	-0.5	-2.3	-2.8	-2.8	3.6	0.0	0.0	0.0	0.0	-0.1
Real Estate (REITs)												
Global	FTSE	1863	2.9	5.1	5.1	5.1	-4.0	1.6	4.3	5.2	5.2	-14.7
Emerging Markets	FTSE	2059	4.1	3.4	4.6	4.6	-4.8	2.8	2.6	4.7	4.7	-15.4
US	FTSE	2992	2.0	5.2	6.7	6.7	-5.2	2.0	5.2	6.7	6.7	-5.2
Europe ex-UK	FTSE	3545	1.9	-0.2	-5.6	-5.6	-4.2	0.6	-0.9	-5.5	-5.5	-14.9
UK	FTSE	1427	4.6	8.4	6.1	6.1	-3.2	3.3	4.8	2.6	2.6	-10.9
Japan	FTSE	2872	3.5	11.0	10.2	10.2	-2.2	4.0	13.6	13.4	13.4	-5.6
Commodities												
All	GSCI	2350	3.4	13.2	18.9	18.9	4.0	-	-	-	-	-
Energy	GSCI	344	4.0	19.3	28.8	28.8	-15.8	-	-	-	-	-
Industrial Metals	GSCI	1618	6.2	12.9	15.6	15.6	43.7	-	-	-	-	-
Precious Metals	GSCI	2082	0.3	-3.1	-5.3	-5.3	8.2	-	-	-	-	-
Agricultural Goods	GSCI	439	1.5	6.5	9.8	9.8	30.7	-	-	-	-	-
Currencies (vs USD)*												
EUR		1.22	0.7	0.3	-0.3	-0.3	11.9	-	-	-	-	-
JPY		106.23	-0.5	-2.3	-2.8	-2.8	3.7	-	-	-	-	-
GBP		1.41	1.3	3.4	3.4	3.4	8.6	-	-	-	-	-
CHF		1.11	-0.9	-1.8	-2.1	-2.1	7.9	-	-	-	-	-
CNY		6.45	0.5	0.4	1.1	1.1	8.7	-	-	-	-	-

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

Data as at 25/02/2021	Global				
	1w	1m	QTD	YTD	12m
Energy	3.9	4.8	4.5	4.5	-20.9
Basic Materials	3.4	4.1	4.2	4.2	18.9
Basic Resources	4.5	7.0	7.3	7.3	28.3
Chemicals	1.9	0.4	0.1	0.1	8.3
Industrials	2.1	2.9	0.0	0.0	0.4
Construction & Materials	2.7	2.0	0.8	0.8	-1.4
Industrial Goods & Services	2.1	3.1	-0.1	-0.1	0.7
Consumer Discretionary	-2.1	-1.6	-1.6	-1.6	9.6
Automobiles & Parts	-3.7	-7.7	0.0	0.0	38.2
Media	1.8	5.4	1.9	1.9	8.9
Retailers	-4.6	-5.2	-5.2	-5.2	5.9
Travel & Leisure	4.3	9.3	3.7	3.7	-4.6
Consumer Products & Services	-1.9	0.6	-1.2	-1.2	12.7
Consumer Staples	-0.5	-2.8	-6.3	-6.3	-13.0
Food, Beverage & Tobacco	-0.3	-1.4	-5.8	-5.8	-14.0
Personal Care, Drug & Grocery Stores	-0.9	-5.3	-7.2	-7.2	-11.2
Healthcare	-1.8	-4.9	-3.5	-3.5	-2.7
Financials	3.5	6.9	5.2	5.2	-8.9
Banks	4.6	9.2	7.6	7.6	-12.4
Financial Services	1.5	4.2	3.7	3.7	-1.7
Insurance	3.6	4.9	2.0	2.0	-10.8
Real Estate	3.1	2.7	0.0	0.0	-19.1
Technology	-3.5	-3.8	0.9	0.9	23.0
Telecommunications	0.7	0.3	-1.3	-1.3	-8.9
Utilities	-0.7	-5.1	-7.1	-7.1	-18.0

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 25/02/2021	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	-2.2	1.2	4.3	4.3	42.3	0.0	1.7	2.1	2.1	14.2
Low volatility	-2.6	-2.5	-3.1	-3.1	11.1	-0.5	-2.0	-5.1	-5.1	-10.8
Price momentum	-2.7	-0.3	3.5	3.5	26.2	-0.6	0.2	1.3	1.3	1.3
Quality	-0.8	1.5	4.5	4.5	28.9	1.4	2.0	2.3	2.3	3.5
Size	3.5	7.5	14.0	14.0	34.0	5.8	8.1	11.5	11.5	7.5
Value	4.5	10.2	17.2	17.2	35.1	6.7	10.7	14.7	14.7	8.4
Market	-2.1	-0.5	2.2	2.2	24.6					
Market - Equal-Weighted	0.4	2.9	5.9	5.9	25.5					

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 7b – European factor index total returns relative to market (%)

Data as at 25/02/2021	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	-1.9	0.8	1.2	1.2	24.2	-1.7	-1.0	-2.2	-2.2	18.9
Low volatility	-1.3	-1.3	0.1	0.1	1.3	-1.1	-3.0	-3.2	-3.2	-3.0
Price momentum	-2.4	-0.4	2.6	2.6	17.4	-2.2	-2.2	-0.7	-0.7	12.4
Quality	-0.9	1.4	3.6	3.6	13.7	-0.7	-0.4	0.2	0.2	8.8
Size	1.3	3.9	5.9	5.9	14.7	1.4	2.1	2.4	2.4	9.8
Value	4.9	11.8	11.4	11.4	9.7	5.1	9.9	7.7	7.7	5.0
Market	-0.2	1.8	3.4	3.4	4.5					
Market - Equal-Weighted	0.4	3.0	4.2	4.2	9.2					

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 8 – Model asset allocation

	Neutral	Policy Range		Allocation	Position vs Neutral
Cash Equivalents	5%	0-10%		10%	
Cash	2.5%			10%	
Gold	2.5%			0%	
Bonds	40%	10-70%	↓	20%	
Government	25%	10-40%		15%	
US	8%		↓	2%	
Europe ex-UK (Eurozone)	7%		↑	4%	
UK	1%		↑	2%	
Japan	7%		↓	3%	
Emerging Markets	2%			4%	
China**	0.2%			1%	
Corporate IG	10%	0-20%	↓	0%	
US Dollar	5%		↓	0%	
Euro	2%		↓	0%	
Sterling	1%		↓	0%	
Japanese Yen	1%		↓	0%	
Emerging Markets	1%		↓	0%	
China**	0.1%			0%	
Corporate HY	5%	0-10%	↑	5%	
US Dollar	4%		↓	4%	
Euro	1%		↓	1%	
Equities	45%	20-60%	↑	50%	
US	25%		↑	18%	
Europe ex-UK	7%		↑	12%	
UK	4%		↑	6%	
Japan	4%			6%	
Emerging Markets	5%		↑	8%	
China**	2%			3%	
Real Estate	8%	0-16%	↑	16%	
US	2%		↑	3%	
Europe ex-UK	2%		↑	4%	
UK	1%			3%	
Japan	2%		↓	3%	
Emerging Markets	1%		↑	3%	
Commodities	2%	0-4%	↑	4%	
Energy	1%		↑	2%	
Industrial Metals	0.3%		↑	1%	
Precious Metals	0.3%			0%	
Agriculture	0.3%		↑	1%	
Total	100%			100%	
Currency Exposure (including effect of hedging)					
USD	48%		↓	36%	
EUR	20%		↑	23%	
GBP	7%		↑	12%	
JPY	15%		↓	13%	
EM	9%		↑	15%	
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



Figure 9 – Model allocations for Global sectors

	Neutral	Invesco	Preferred Region
Energy	5.8%	Neutral	US
Basic Materials	4.3%	Underweight	Europe
Basic Resources	2.4%	Underweight	Europe
Chemicals	1.9%	Neutral	US
Industrials	12.8%	Neutral	US
Construction & Materials	1.6%	Neutral	Europe
Industrial Goods & Services	11.3%	Neutral	US
Consumer Discretionary	16.5%	Overweight	Japan
Automobiles & Parts	2.7%	Underweight	Japan
Media	1.4%	Overweight	US
Retailers	6.1%	Underweight	EM
Travel & Leisure	2.1%	Overweight	US
Consumer Products & Services	4.2%	Overweight	Japan
Consumer Staples	6.6%	Overweight	Europe
Food, Beverage & Tobacco	4.3%	Overweight	Europe
Personal Care, Drug & Grocery Stores	2.3%	Underweight	Europe
Healthcare	10.3%	Underweight	Europe
Financials	13.7%	Neutral	EM
Banks	6.3%	Neutral	EM
Financial Services	4.1%	Overweight	US
Insurance	3.2%	Neutral	Europe
Real Estate	3.4%	Overweight	EM
Technology	19.0%	Overweight	US
Telecommunications	4.2%	Neutral	Europe
Utilities	3.4%	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 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). 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 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

Factor index definitions

We focus on relatively large-cap stocks, as we suspect that most investors will be conscious of liquidity constraints when implementing such strategies. We have chosen six factors, that we think cover the classic definitions used by most investors. We aim to capture roughly a fifth of the market in each of our factor indices using the historical constituents of the STOXX 600 since August 1999 and the S&P 500 since September 1989, with monthly rebalancing. All our rankings are based on data in euros for Europe and in US dollars for the US. All factor indices are equal-weighted. We use the following definitions:

Growth: stocks in both the top third based on their 5-year sales per share trend and the top-third based on their internal growth rate (the product of the 5-year average return on equity and the retention ratio).

Low volatility: stocks in the bottom quintile based on the standard deviation of their daily returns in the previous three months.

Price momentum: stocks in the top quintile based on their performance in the previous 12 months.

Quality: stocks in both the top third based on their return on invested capital and the top third based on their EBIT to EV ratio (earnings before interest and taxes to enterprise value). This follows Joel Greenblatt's "magic formula" from his 2005 book: The little book that beats the market.

Size: stocks in the bottom quintile based on their market value.

Value: stocks in the bottom quintile based on their price to book value ratios.



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Data as of 25th February 2021 unless stated otherwise.

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