Applied philosophy
Dear Eurozone equities

Dear Eurozone equities, you have been our main hope and we have favoured you since 2014. You have been a disappointment and have lagged global equities. You may appear cheap compared to other regions, but not versus your own history. You will have to overcome rising dependency ratios by raising your productivity and perhaps become less reliant on exports in an age of potential de-globalisation. These concerns give us pause for thought, but for now, we stick with you.

Oh, Eurozone equities, you have been our great hope since the first edition of The Big Picture in December 2014. We have kept our faith in you and maintained our Overweight allocation, but you have continually disappointed us like a wayward teenager or a Brexit secretary. Of course, you have had bursts of outperformance versus global equities since then, notably in 2015 and 2016, but the trend has been one of underperformance (**Figure 1**). We would have been so right for each other in previous bull markets, when Nokia was your rising star in the 1990s and when your strength in banks and oil & gas shone through from 2002 to 2007. However, in this current tech- and healthcare-dominated bull run, you keep missing out. We still find you attractive but have started to wonder whether you really have what it takes?

We do not want to take anything away from you, though. You held your own against most regions in this bull market and your local currency annualised total returns of 11.6% were higher than Japan's (10.5%), and close to the UK's (11.4%) and Emerging Markets' (EM, 11.6%). You only really underperformed the US, which to be fair, has been the star performer of the last 10 years with an annualised 17.6% total return. Nevertheless, we like to get the warm and fuzzy feeling of being right, especially from an asset that carries the biggest weighting within equities in our model allocation (**Figure 7**).

The biggest contributor to your underperformance has been growth – or lack thereof – in dividends and earnings. In fact, you were the only region in the last 10 years whose dividends and earnings declined. Both fell by an annualised 1.3% compared to annualised dividend and earnings growth of 9% and 7.5% for the US, 5.7% and 8.9% for Japan, 4.4% and 4.1% for the UK, and 3% and 2.3% for EM. In the short term the expansion and contraction of valuation ratios can have an outsized influence and the income from dividends can boost returns but, in the long term, dividend growth (or earnings growth) has the biggest impact on returns.

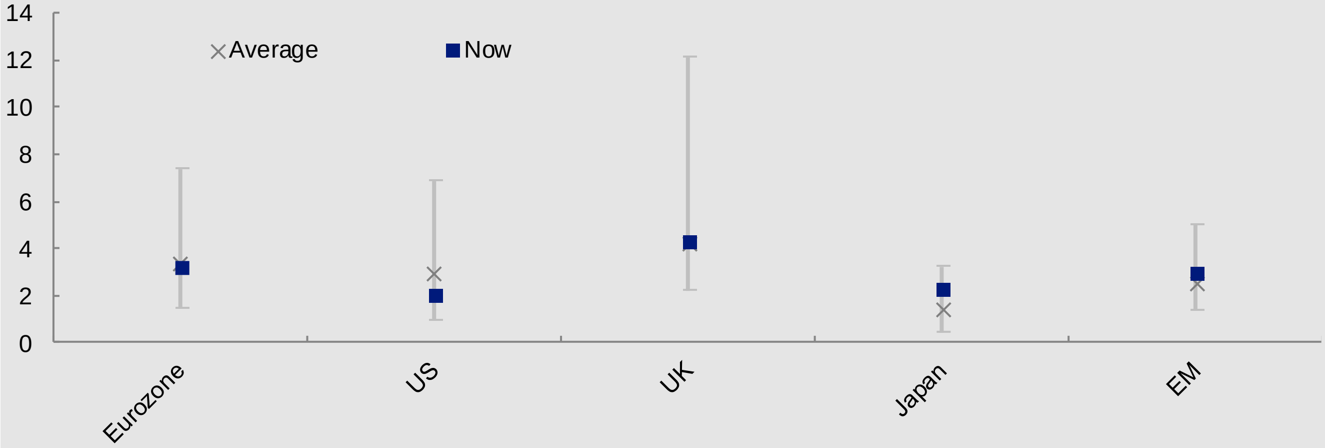
We are troubled by your lack of growth because it suggests that your valuation is not a sign of future opportunities, but rather a reflection of the difficulties you will face in the coming years. **Figure 2** shows that your dividend yield at 3.2% is higher than every other region apart from the UK (currently on 4.2%). Since the cheapest region, the UK, has taken itself out of our consideration until the dust settles around Brexit, we have naturally turned to you. Also, as we highlighted in the latest edition of our Strategic Sector Selector, equity market valuations implied a 0.4% perpetual decline in real dividends for Europe (which includes you) compared to growth of over 3% for the US. This is another reason why we believe you can outperform the US.

However, the valuation case supporting you is not so straightforward from other perspectives. First, your dividend yield is close to its historical average. Second, the small negative gap to that average implies that you are the second most expensive region compared to your own history (only the US is more expensive on

Figure 1 – Eurozone equities total returns relative to the World since 1987

Notes: We use MSCI total return indices in local currency. Data as at 28th February 2019. Past performance is not a guide to future returns.
Source: Datastream and Invesco

Figure 2 – Regional equity dividend yields within historical ranges (%)



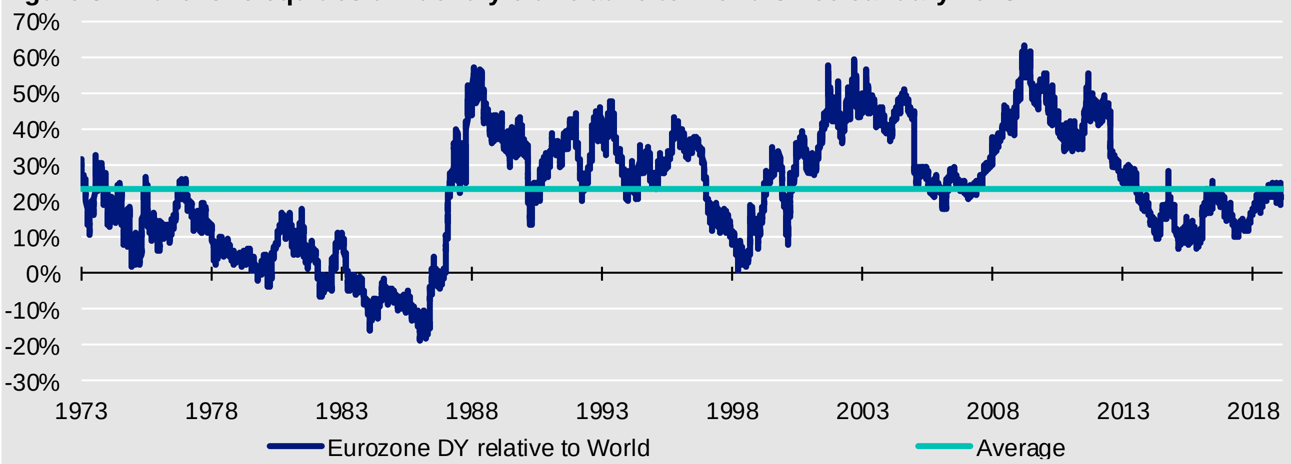
Notes: We show the dividend yields of Datastream total market indices. Data as at 28th February 2019. Source: Datastream and Invesco

that measure). Finally, the dividend yield surplus that you offer versus global equities has been present on over 90% of trading days since 1st January 1973 (the longest history we have). On average, your yield has been 23.4% higher than the yield on global equities in that period and your current 24.7% yield premium is not too far from that (**Figure 3**). It occurred to us that this may be down to your different sector weights, but the average dividend yield using global sector weights lowers your dividend yield by only 4 basis points. More interestingly your dividend yield would be 2.9% using US sector weights versus the current 3.25%, which perhaps explains why you appear cheaper.

Anyway, enough of the past! What can we say about the future? Without positive surprises in the Eurozone and Global economies we do not expect a significant boost in sentiment towards you and we doubt a big re-rating is likely. That puts a lot of pressure on you to improve your earnings and dividend payments. Although your earnings and dividend per share growth has flatlined, we do not foresee an earnings recession over the long term. In our view, the main cause of the 10-year decline was the Eurozone crisis and we do not expect a full repeat of that. Also, we do not think your dividend yield is under threat, because – as is commonly assumed – dividend cuts are a last resort for corporates. Historically, you achieved 7.3% dividend growth and 8.7% earnings growth on average since 1973 with an average payout ratio of 44% (it is currently 47%).

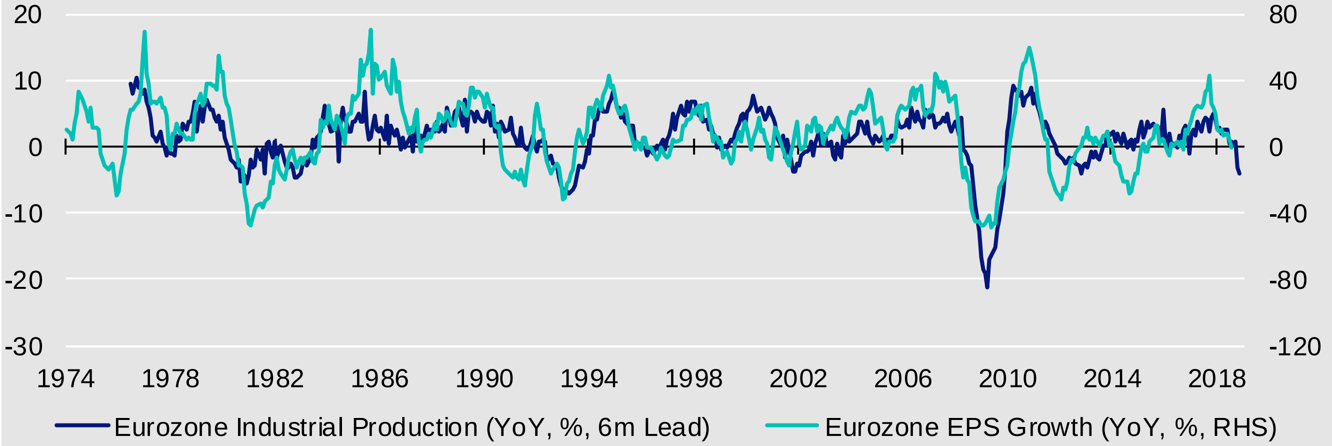
We have to keep in mind, though, that we are trying to estimate the prospects of a region that has struggled to grow its economy for its whole history. Real trend economic growth for the Eurozone has been around 2% since 1999 (using figures from the IMF), but it has struggled to exceed that since the Global Financial Crisis (GFC). In fact, it slipped into recession after 2011 and recovered only after Mario Draghi pledged to do "whatever it takes" in 2012. His term ends this year and

Figure 3 – Eurozone equities dividend yield relative to World since January 1973



Notes: We use the dividend yields of Datastream total market indices. Eurozone dividend yields are divided by Global dividend yields. Positive values indicate that Eurozone yields are higher than Global yields and vice versa. Data as at 28th February 2019. Source: Datastream and Invesco

Figure 4 – Eurozone industrial production and earnings per share growth



Notes: Data as at 28th February 2019. Source: Datastream and Invesco

it is not yet clear who will replace him, but it is possible that a more hawkish candidate will take the helm.

The economic outlook for the Eurozone is clouded by two further issues. First, if we believe that "demography is destiny" then it will struggle to achieve growth unless it can find novel ways to boost productivity (this is probably true for most other regions, too). In other words, it will have to work smarter, because it is not getting any younger – the average age of its population will rise from 42 in 2016 to 47 in 2080. Also, Eurostat reckons that population growth for its current members will be only 1.5% for the whole period between 2016 and 2080, thus old age dependency ratios will increase and only 2 people of working age (between 15 and 64 years old) will support every person above the age of 65 in 2080. As a comparison, according to World Bank population data, Euro Area population growth would have been 28% from 1960 to 2016.

Second, the Eurozone's strength in exporting industrial goods and luxury products may become a liability if current trends continue. We may be at the dawn of a new age of de-globalisation, in which economic activity spanning the whole planet can splinter into regional trading zones. Of course, that can be mitigated by concentrating on its own internal market of 340 million people and on the European Union, itself having 510 million inhabitants including the Eurozone (450 million excluding the UK).

So, all things considered, we think real trend growth of 1.5% with perhaps 1.5-2% inflation is realistic giving us nominal GDP growth of 3-3.5%. If we assume that nominal GDP growth roughly equals the revenue growth opportunity for corporates in the region, and assume that margins will not expand, we reckon a roughly 5% dividend growth looks realistic based on historical relationships. One of the reasons why we may lean towards more conservative assumptions is because you are underweight certain structural growth areas, for example technology. Of course, there is no direct connection between nominal GDP growth and dividend growth, but their trends normally sync.

Assuming no change in your dividend yield in the next 5 years and a dividend decline of 5% in the next 12 months in line with what **Figure 4** is telling us, this would deliver 6.4% annualised total returns over the period. If you only achieved 3% growth after year one, that would limit returns to 4.8%. On the other hand, if your growth returned to the long-term average, returns would improve to 8.3%.

All of the above should give us pause for thought when we sit down for our quarterly forecasting exercise over the coming week. No matter what we think about the long-term, your short-term economic performance momentum suggests we may have to endure more pain before things turn for the better. At the very least, however, our long-term risk-premium type analyses suggest you offer better potential than your local bond alternatives (which is not hard). More challenging is the comparison between you and your US counterparts. Your yield has never been an issue, but the big question remains: can you deliver growth?

Figure 5 – Asset class total returns

Data as at 06/03/2019	Index	Current Level/RY	Total Return (USD, %) 1w	1m	QTD	YTD	12m	Total Return (Local Currency, %) 1w	1m	QTD	YTD	12m
Equities												
World	MSCI	502	-0.6	1.7	10.6	10.6	-0.5	-0.2	2.0	10.7	10.7	2.5
Emerging Markets	MSCI	1056	-0.5	0.9	9.6	9.6	-9.0	-0.1	1.5	9.1	9.1	-3.8
US	MSCI	2642	-0.8	1.7	11.3	11.3	3.6	-0.8	1.7	11.3	11.3	3.6
Europe	MSCI	1634	0.3	2.4	10.4	10.4	-4.2	1.1	2.4	10.6	10.6	3.7
Europe ex-UK	MSCI	1919	0.4	2.4	10.1	10.1	-5.6	1.0	2.9	11.6	11.6	3.1
UK	MSCI	1139	0.0	2.6	11.3	11.3	-0.5	1.4	1.1	7.8	7.8	5.0
Japan	MSCI	3116	-1.1	0.3	6.2	6.2	-7.7	-0.4	2.1	8.1	8.1	-2.7
Government Bonds												
World	BofA-ML	1.27	-0.4	-0.4	0.1	0.1	-2.0	0.1	0.2	0.7	0.7	2.6
Emerging Markets	JPM	6.53	-0.9	-1.3	3.7	3.7	-6.6	0.0	0.3	2.2	2.2	4.6
US (10y)	Datastream	2.69	0.1	0.3	0.7	0.7	4.4	0.1	0.3	0.7	0.7	4.4
Europe	Bofa-ML	0.78	-0.2	0.3	1.0	1.0	-5.6	0.4	0.9	2.0	2.0	3.4
Europe ex-UK (EMU, 10y)	Datastream	0.13	-0.3	-0.2	0.7	0.7	-2.5	0.2	0.4	1.7	1.7	6.9
UK (10y)	Datastream	1.23	-0.9	1.5	3.9	3.9	-0.3	0.5	0.0	0.6	0.6	5.2
Japan (10y)	Datastream	0.00	-0.9	-1.8	-1.6	-1.6	-4.3	-0.2	-0.1	0.2	0.2	0.9
IG Corporate Bonds												
Global	BofA-ML	3.14	0.0	0.4	2.4	2.4	-0.2	0.3	0.5	2.5	2.5	2.6
US	BofA-ML	3.97	0.2	0.5	2.7	2.7	3.0	0.2	0.5	2.7	2.7	3.0
Europe	BofA-ML	1.09	-0.4	0.0	0.9	0.9	-7.6	0.2	0.5	2.0	2.0	1.3
UK	BofA-ML	2.83	-0.6	2.1	6.2	6.2	-2.5	0.8	0.7	2.8	2.8	3.0
Japan	BofA-ML	0.39	-0.8	-1.6	-1.7	-1.7	-4.7	0.0	0.1	0.1	0.1	0.4
HY Corporate Bonds												
Global	BofA-ML	6.50	-0.1	0.9	5.6	5.6	1.8	0.1	1.0	5.7	5.7	3.5
US	BofA-ML	6.86	0.0	0.9	6.3	6.3	4.3	0.0	0.9	6.3	6.3	4.3
Europe	BofA-ML	4.08	-0.4	0.9	3.2	3.2	-8.0	0.2	1.4	4.3	4.3	0.8
Cash (Overnight LIBOR)												
US		2.39	0.0	0.2	0.4	0.4	2.0	0.0	0.2	0.4	0.4	2.0
Euro Area		-0.47	-0.6	-0.5	-1.5	-1.5	-9.3	0.0	0.0	-0.1	-0.1	-0.4
UK		0.67	-1.0	1.9	3.3	3.3	-4.6	0.0	0.1	0.1	0.1	0.6
Japan		-0.08	-0.7	-1.6	-2.0	-2.0	-5.1	0.0	0.0	0.0	0.0	-0.1
Real Estate (REITs)												
Global	FTSE	1889	-0.1	-0.1	10.7	10.7	9.8	0.5	0.4	11.8	11.8	20.3
Emerging Markets	FTSE	2252	2.3	0.4	10.9	10.9	-5.2	2.9	1.0	12.0	12.0	3.9
US	FTSE	3017	-0.1	0.0	11.9	11.9	19.0	-0.1	0.0	11.9	11.9	19.0
Europe ex-UK	FTSE	3342	-0.8	-3.8	5.2	5.2	-1.6	-0.2	-3.3	6.3	6.3	7.9
UK	FTSE	1396	-0.7	2.9	14.5	14.5	-1.7	0.7	1.4	10.9	10.9	3.8
Japan	FTSE	2640	-1.2	-1.8	4.7	4.7	6.4	-0.5	-0.1	6.6	6.6	12.1
Commodities												
All	GSCI	2473	-0.9	1.9	12.2	12.2	-4.3	-	-	-	-	-
Energy	GSCI	464	-0.7	5.1	21.1	21.1	0.0	-	-	-	-	-
Industrial Metals	GSCI	1277	-1.0	1.3	7.5	7.5	-9.2	-	-	-	-	-
Precious Metals	GSCI	1522	-2.7	-2.1	0.1	0.1	-4.9	-	-	-	-	-
Agricultural Goods	GSCI	336	-1.6	-6.7	-3.7	-3.7	-18.1	-	-	-	-	-
Currencies (vs USD)*												
EUR		1.13	-0.5	-0.5	-1.4	-1.4	-8.8	-	-	-	-	-
JPY		111.77	-0.7	-1.6	-2.0	-2.0	-5.0	-	-	-	-	-
GBP		1.32	-1.4	1.4	3.3	3.3	-5.3	-	-	-	-	-
CHF		1.00	-0.4	-0.3	-2.3	-2.3	-6.4	-	-	-	-	-
CNY		6.71	-0.4	0.5	2.5	2.5	-6.0	-	-	-	-	-

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: Datastream and Invesco

Figure 6 – Equity sector total returns relative to local market (%)

Data as at 06/03/2019	US					Europe				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Oil & Gas	**0.1**	**-0.1**	**3.2**	**3.2**	**-3.6**	**-0.2**	**-1.0**	**0.5**	**0.5**	**11.4**
Materials	**-0.5**	**1.3**	**-1.8**	**-1.8**	**-10.2**	**-0.8**	**0.9**	**2.5**	**2.5**	**-1.3**
Basic Resources	-2.3	-1.1	-0.7	-0.7	-22.1	-1.5	0.3	5.9	5.9	1.9
Chemicals	-0.7	1.2	-3.2	-3.2	-8.1	-0.3	1.4	0.4	0.4	-3.2
Industrials	**-1.6**	**0.2**	**4.7**	**4.7**	**-3.5**	**-0.4**	**0.3**	**1.9**	**1.9**	**-2.3**
Construction & Materials	0.6	4.7	7.7	7.7	-8.9	0.3	1.5	3.0	3.0	-3.2
Industrial Goods & Services	-1.5	0.5	5.2	5.2	-3.2	-0.5	0.0	1.6	1.6	-2.1
Consumer Discretionary	**0.6**	**0.2**	**0.6**	**0.6**	**1.9**	**-0.2**	**-0.2**	**2.3**	**2.3**	**-3.8**
Automobiles & Parts	-1.7	-2.8	5.3	5.3	-9.9	-1.2	-1.9	1.6	1.6	-19.5
Media	3.4	0.8	4.4	4.4	2.4	0.0	-1.6	-2.4	-2.4	6.5
Retail	0.5	-0.2	-1.5	-1.5	4.3	0.8	0.4	5.4	5.4	7.8
Travel & Leisure	0.3	-0.2	-1.4	-1.4	4.2	-0.9	-3.5	-2.8	-2.8	-6.8
Consumer Staples	**0.7**	**-0.2**	**-3.4**	**-3.4**	**-0.5**	**1.4**	**1.8**	**1.5**	**1.5**	**5.7**
Food & Beverages	1.6	-3.2	-6.4	-6.4	-4.7	1.9	2.0	1.9	1.9	10.0
Personal & Household Goods	0.5	2.6	2.6	2.6	-0.2	1.0	1.8	1.2	1.2	2.8
Healthcare	**-1.1**	**-2.1**	**-5.8**	**-5.8**	**5.2**	**0.9**	**1.2**	**-0.8**	**-0.8**	**12.5**
Financials	**-0.6**	**-0.9**	**-0.6**	**-0.6**	**-10.8**	**-0.3**	**-0.3**	**-1.0**	**-1.0**	**-11.1**
Banks	-0.9	-0.9	2.0	2.0	-14.6	-0.6	-0.3	-2.1	-2.1	-20.1
Financial Services	-0.1	0.4	0.4	0.4	-11.8	0.9	-1.6	-0.6	-0.6	-4.8
Insurance	-0.4	0.0	0.7	0.7	-3.9	0.1	1.6	1.4	1.4	3.5
Real Estate	1.3	-0.1	1.2	1.2	14.8	-1.1	-4.9	-2.9	-2.9	1.0
Technology	**-0.1**	**1.2**	**2.5**	**2.5**	**1.2**	**-0.6**	**-0.8**	**1.6**	**1.6**	**-2.3**
Telecommunications	**2.2**	**0.7**	**1.8**	**1.8**	**-0.1**	**-0.6**	**-3.3**	**-12.3**	**-12.3**	**-8.1**
Utilities	**1.5**	**2.8**	**-2.6**	**-2.6**	**16.1**	**-1.3**	**-3.1**	**-2.7**	**-2.7**	**15.1**

Notes: 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: Datastream and Invesco

Figure 7 – Model asset allocation

	Neutral	Policy Range	Allocation	Position vs Neutral	Hedged	Currency
Cash	**5%**	**0-10%**	**10%**			
Cash	2.5%		10%			
Gold	2.5%		0%			
Bonds	**45%**	**10-80%**	**44%**			
Government	30%	10-50%	20%			
US	10%		14%			
Europe ex-UK (Eurozone)	8%		0%			
UK	2%		2%			
Japan	8%		0%			
Emerging Markets	2%		4%			
Corporate IG	10%	0-20%	16%			
US Dollar	5%		10%			
Euro	3%		2%			
Sterling	1%		2%			
Japanese Yen	1%		2%			
Corporate HY	5%	0-10%	8%			
US Dollar	4%		8%			
Euro	1%		0%			
Equities	**45%**	**20-70%**	**40%**			
US	25%		8%			
Europe ex-UK	7%		13%			
UK	4%		4%			
Japan	4%		8%			
Emerging Markets	5%		7%			
Real Estate	**3%**	**0-6%**	**6%**			
US	1%		2%			
Europe ex-UK	1%		1%			
UK	0.5%		1%			
Japan	0.5%		0%			
Emerging Markets	0%		2%			
Commodities	**2%**	**0-4%**	**0%**			
Energy	1%		0%			
Industrial Metals	0.3%		0%			
Precious Metals	0.3%		0%			
Agriculture	0.3%		0%			
Total	**100%**		**100%**			

Currency Exposure		
USD	49%	47%
EUR	21%	18%
GBP	8%	10%
JPY	14%	11%
EM	7%	14%
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.
Source: Invesco

Figure 8 – Model sector allocations

	US		Europe		Preferred
	Neutral	Invesco	Neutral	Invesco	Region
Oil & Gas	**5.1%**	**Overweight**	**6.8%**	**Neutral**	**US**
Materials	**2.3%**	**Neutral**	**6.7%**	**Underweight**	**US**
Basic Resources	0.3%	Underweight	3.0%	Neutral	Europe
Chemicals	2.0%	Neutral	3.7%	Underweight	US
Industrials	**11.8%**	**Underweight**	**13.3%**	**Underweight**	**US**
Construction & Materials	0.4%	Neutral	2.7%	Underweight	US
Industrial Goods & Services	11.4%	Underweight	10.7%	Underweight	US
Consumer Discretionary	**15.6%**	**Underweight**	**9.9%**	**Overweight**	**Europe**
Automobiles & Parts	0.6%	Underweight	3.0%	Overweight	Europe
Media	2.5%	Overweight	2.0%	Underweight	US
Retail	9.7%	Underweight	3.3%	Overweight	Europe
Travel & Leisure	2.8%	Overweight	1.7%	Overweight	US
Consumer Staples	**7.5%**	**Overweight**	**16.6%**	**Overweight**	**Europe**
Food & Beverage	3.4%	Neutral	7.3%	Overweight	Europe
Personal & Household Goods	4.2%	Overweight	9.4%	Overweight	Europe
Healthcare	**14.1%**	**Neutral**	**13.2%**	**Underweight**	**US**
Financials	**17.8%**	**Neutral**	**20.0%**	**Overweight**	**Europe**
Banks	5.6%	Neutral	10.6%	Overweight	Europe
Financial Services	5.8%	Underweight	2.0%	Overweight	Europe
Insurance	3.5%	Neutral	5.6%	Overweight	Europe
Real Estate	2.9%	Overweight	1.8%	Underweight	US
Technology	**20.5%**	**Underweight**	**4.6%**	**Underweight**	**US**
Telecommunications	**2.1%**	**Overweight**	**3.9%**	**Overweight**	**Europe**
Utilities	**3.2%**	**Underweight**	**5.0%**	**Underweight**	**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: 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 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

Authors

Paul Jackson
Head of EMEA ETFs' Research
T. +44 (0)20 3370 1172
E. paul.jackson@invesco.com

András Vig
Multi-Asset Strategist
T. +44 (0)20 3370 1152
E. andras.vig@invesco.com

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