

Creating the new communication services sector makes sense to us, but it will force us to rethink our sector strategy. It is impossible to tell how the sector will perform relative to the market, but we assume it will behave as an early-cyclical. Valuations look reasonable compared to the market and our Overweight stance in telecoms and media suggest an initial Overweight.

Setting our sector strategy for the US will become more difficult after 28th September. Standard & Poor's and MSCI have decided to change the Global Industry Classification Standard (GICS), and among the changes they are making is the creation of a new sector named communication services. They are merging what we would consider a defensive sector (telecommunications) with one that is cyclical (media) and sprinkle it with a few technology giants for good measure (see **Figure 4** for a list of constituents).

To be fair, the telecommunications sector had only 3 constituents, and after vertical integration and changes in the media landscape, the boundaries between some of the stocks in the two indices have blurred. Also, certain technology companies have been expanding into creating and distributing content alongside their traditional businesses (advertising, also normally in the media sector). Originally, they were lumped together with software providers and hardware manufacturers, though they operated differently.

This will cause a headache for us and those who are more used to rotating their sector portfolios based on the Industry Classification Benchmark (ICB). Our sector strategy is based on a "Frankenstein monster" combination of GICS and ICB (see **Figure 9**), thus we will be like many others having to make up our minds about integrating the new structure into our decision-making process. This report is our attempt of making

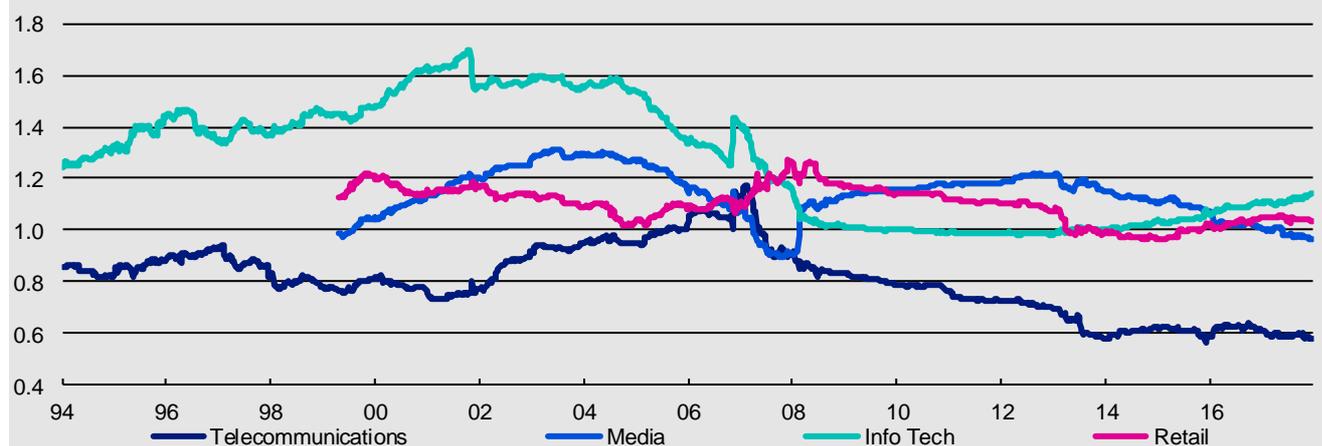
sense of the changes and thinking about how the new sector may behave.

Figure 1 illustrates quite how defensive the telecommunications sector is: its beta has been near 0.6 for the last four years, while the other three sectors have been close to or above 1. It is, of course, impossible to predict how the new communication services sector will move relative to the S&P 500, but we assume that it will behave like a cyclical sector; constituents of the old telecommunications sector will make up only 19% of the new sector.

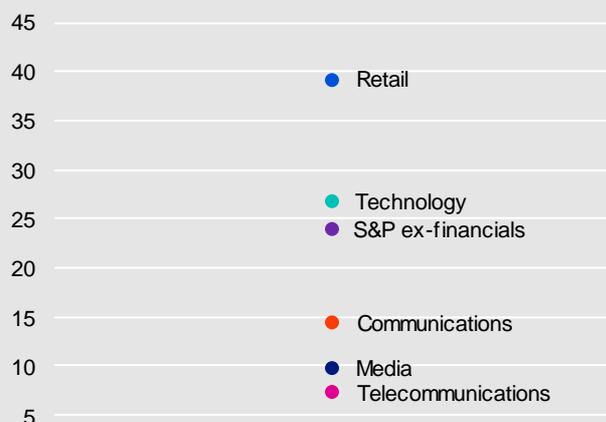
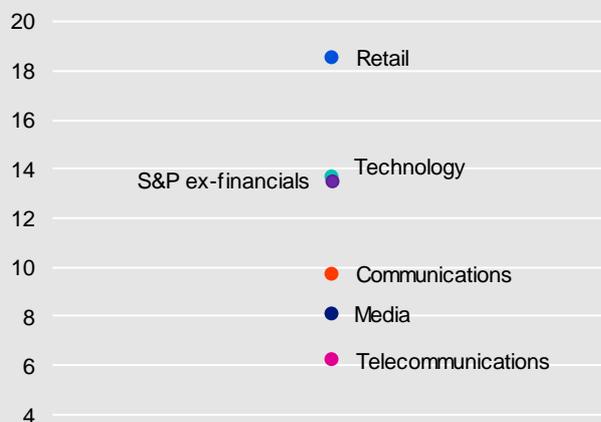
This is also evident if we analyse how they performed in bull and bear markets. As expected telecommunications outperformed by an annualised average 32% in the last five bear markets on a total return basis, while media underperformed by 5%. The difference in bull markets is less marked: telecommunications outperformed by 0.6% and media by 1%, although the former may be flattered by the relatively high dividends the sector tends to pay.

Even if it becomes more sensitive to movements in its benchmark, the new sector will be less sensitive to interest rates, in our view. We believe that the more indebted a sector is (the higher the proportion of debt in its capital structure), the more it may be impacted by shifts in interest rates. That is fine when interest rates are falling, but it can be a headwind when they are rising. Currently the telecommunications and media sectors have debt-to-capital ratios of 55% and 49% respectively. They will be combined with stocks from the current information technology sector that have virtually no debt. The new communication services sector will end up with a ratio of 44%, significantly lower than the 52% aggregate for the S&P 500, or 48% ex-financials.

Figure 1 – US sector historical beta since September 1994



Notes: We calculated beta using S&P sectors based on rolling 5-year weekly performance. Past performance is no guarantee of future results. Source: Datastream and Invesco

Figure 2a – Trailing P/E ratios for US sectors**Figure 2b – Trailing P/FCF ratios for US sectors**

Notes: P/E = price to earnings ratio using current market value and 12-month trailing net income. P/FCF = price to free cash flow using current market value and 12-month trailing free cash flow. We use ICB sector classifications. Source: Datastream and Invesco

The new communications sector will also be somewhat less concentrated than the old telecommunications and media sectors. Currently, telecommunications is dominated by two stocks making up 95% of the market capitalisation of the sector, while the top three stocks add up to 73% of media. Although the performance of communications will still be largely driven by its largest constituents, the top 5 stocks will make up “only” 72% of its total market capitalisation.

We understand the rationale why these stocks are grouped in the new communications sector but worry that they will not necessarily form a diversified set. On the surface the sector will have more cash to cover dividends on aggregate, but 58% of that cash belongs to the top two constituents that pay no dividends. They also face specific risks stemming from regulation (social networks, search engines), pressures on margins and increase in capital expenditure (telecommunications), and disruption of their traditional business model (television networks and advertising). Some of those risks will be neutralised by having the disruptors and the disrupted in the sector, but it can just as easily make the sector’s behaviour erratic and unpredictable. We are also concerned that the sector may become a quasi-FAANG (or more precisely, FNG) index and experience some of the hot money in and outflows that the current technology sector has had.

Valuing the sector will be difficult without any historical perspective on what “normal” levels have looked like in the past. Even choosing the most adequate ratio is not easy. The high proportion of intangible assets (47% of total assets compared to 29% for S&P 500 excluding financials) makes price to book value less informative than for more capital-intensive sectors. Even with that caveat, the 3.9x based on our calculations does not look out of proportion compared to the S&P 500’s 3.6x.

Income investors will also be disappointed by the significant drop from the 5%+ yields that telecommunications has, to the sub 1.5% that media, technology or retail have. We calculate dividend yields for the communications sector to be 1.36% based on end-of-August data, significantly dearer than the 1.9% for the market.

By contrast, the new communications sector would look cheap on price to earnings and price to free cash flow ratios (**Figure 2a** and **2b**). The new sector’s P/E ratio of 14.5x compares favourably to the market’s 22.4x. Similarly, communications would have a P/FCF ratio of 9.8x versus 13.1x for the S&P 500. That, perhaps should not be surprising when telecommunications and media are the two cheapest sectors currently on P/E ratios and are in the bottom six on P/FCF.

In summary, we think the new communications sector will most likely behave like an early-cyclical but will not be very sensitive to changes in interest rates. Although it will be quite concentrated, its top four stocks will behave very differently. Nevertheless, it can become a vehicle for expressing views on some of the frothiest stocks on the market. The sector’s valuation does not look too far removed from market aggregates on most measures, except perhaps on dividend yield, but that is the function of the two largest stocks not being dividend payers.

Our sector strategy is currently Overweight media and telecommunications, Underweight retail and Neutral technology (see **Figure 9**). Considering that most of the constituents will be from sectors we are currently Overweight would suggest an initial Overweight stance. We will get back to you when we rethink our sector allocation in October!

Unless stated otherwise, all data as of 31 August 2018.

Figure 3 – Aggregate sector valuation ratios

	Price/ Earnings	Dividend Yield	Price/ Book Value	Price/ Free Cash Flow
Communication services	14.5	1.36%	3.9	9.8
Automobiles & Parts	27.1	3.58%	1.8	4.2
Banks	16.2	2.40%	1.5	11.0
Basic Resources	10.1	2.38%	2.3	7.0
Chemicals	28.7	2.10%	2.7	15.4
Construction & Materials	22.0	0.94%	4.0	19.3
Financial Services	20.0	1.34%	3.1	12.9
Food & Beverage	18.7	2.93%	3.7	21.0
Healthcare	36.0	1.61%	4.6	16.9
Industrial Goods & Services	23.7	1.77%	5.3	17.1
Insurance	11.1	1.50%	1.3	7.6
Media	9.9	1.48%	2.9	8.1
Oil & Gas	22.5	2.89%	2.0	10.3
Personal & Household Goods	23.1	2.83%	5.9	15.5
Real Estate	36.2	3.35%	3.4	18.7
Retail	39.3	1.02%	8.7	18.5
Technology	26.8	1.21%	6.4	13.7
Telecommunications	7.4	5.55%	2.0	6.2
Travel & Leisure	17.8	1.60%	6.4	11.1
Utilities	20.2	3.46%	2.0	7.7
S&P 500	22.4	1.86%	3.6	13.1
S&P 500 ex-financials	24.0	1.83%	4.4	13.5

Source: Datastream and Invesco

Figure 4 – New communication services sector constituents

	Old GICS Sector	Current ICB Sector	Market cap (\$m)	Beta
CBS Corp B	Media	Media	17,949	1.33
Charter Communications Inc A	Media	Media	71,970	0.98
Comcast Corp A	Media	Media	169,136	1.09
Discovery, Inc A	Media	Media	4,348	1.19
Discovery, Inc C	Media	Media	9,222	1.16
DISH Network Corp A	Media	Media	8,098	0.95
Interpublic Group Cos	Media	Media	8,961	1.07
News Corp A	Media	Media	5,011	1.38
News Corp B	Media	Media	2,715	1.27
Omnicom Group	Media	Media	15,554	1.02
Twenty-First Century Fox Inc A	Media	Media	47,854	1.17
Twenty-First Century Fox Inc B	Media	Media	35,854	1.12
Viacom Inc B	Media	Media	10,349	1.11
Walt Disney Co	Media	Media	166,601	1.34
NetFlix Inc	Retailing	Retail	160,109	1.05
TripAdvisor Inc. A	Retailing	Travel & Leisure	6,775	1.14
Activision Blizzard Inc	Technology	Personal & Hh. Goods	54,970	1.04
Alphabet Inc A	Technology	Technology	368,202	1.09
Alphabet Inc C	Technology	Technology	426,225	1.10
Electronic Arts	Technology	Personal & Hh. Goods	34,569	1.00
Facebook Inc A	Technology	Technology	423,805	0.82
Take-Two Interactive Software	Technology	Personal & Hh. Goods	15,203	1.12
Twitter Inc	Technology	Technology	26,661	0.98
AT&T Inc	Telecommunications	Telecommunications	231,948	0.62
CenturyLink Inc	Telecommunications	Telecommunications	23,071	0.94
Verizon Communications Inc	Telecommunications	Telecommunications	224,653	0.68

Notes: The beta measure we show is calculated by Thomson Reuters using monthly price changes over the last five years.

Source: Standard & Poor's, Datastream, Invesco

Figure 5 – Asset class total returns

Data as at 31/08/2018	Index	Current Level/Ry	Total Return (USD, %)					Total Return (Local Currency, %)				
			1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Equities												
World	MSCI	523	0.7	0.8	3.9	3.8	12.0	0.6	1.2	4.2	5.4	13.5
Emerging Markets	MSCI	1056	0.6	-2.7	-0.5	-6.9	-0.3	1.0	-0.5	1.3	-1.4	4.7
US	MSCI	2767	1.0	3.3	7.0	10.1	19.7	1.0	3.3	7.0	10.1	19.7
Europe	MSCI	1705	-0.3	-2.8	0.5	-2.3	3.3	-0.8	-2.3	0.9	1.0	5.1
Europe ex-UK	MSCI	2019	-0.1	-2.2	2.0	-1.5	2.8	-0.5	-2.0	1.9	1.4	5.6
UK	MSCI	1163	-0.8	-4.2	-3.3	-4.3	4.5	-1.9	-3.3	-1.8	-0.4	3.6
Japan	MSCI	3352	1.7	0.2	0.6	-1.2	9.4	1.4	-0.7	0.7	-2.8	10.2
Government Bonds												
World	BofA-ML	1.40	0.0	0.0	-0.6	-1.2	-1.6	-0.1	0.0	-0.3	-0.3	-0.6
Emerging Markets	JPM	6.99	-1.5	-6.4	-4.0	-10.7	-11.0	-0.2	-1.1	-0.4	0.0	1.8
US (10y)	Datastream	2.86	-0.2	1.1	0.4	-2.6	-4.4	-0.2	1.1	0.4	-2.6	-4.4
Europe	Bofa-ML	0.98	0.0	-1.1	-1.3	-3.5	-1.9	-0.1	-0.5	-1.0	-0.4	0.2
Europe ex-UK (EMU, 10y)	Datastream	0.33	0.2	0.6	0.1	-0.9	-0.3	0.1	1.1	0.4	2.3	1.8
UK (10y)	Datastream	1.34	1.0	-0.5	-1.4	-4.0	-0.1	-0.1	0.4	0.2	-0.1	-1.0
Japan (10y)	Datastream	0.11	0.3	0.4	-0.7	1.3	-1.3	0.0	-0.5	-0.6	-0.3	-0.5
IG Corporate Bonds												
Global	BofA-ML	3.18	-0.1	0.2	0.8	-2.3	-1.2	-0.1	0.4	1.0	-1.2	-0.5
US	BofA-ML	4.02	-0.2	0.5	1.3	-1.9	-1.0	-0.2	0.5	1.3	-1.9	-1.0
Europe	BofA-ML	1.08	-0.1	-0.5	0.0	-3.4	-2.0	-0.1	0.0	0.3	-0.3	0.1
UK	BofA-ML	2.78	1.0	-0.4	-0.9	-4.8	0.0	-0.1	0.5	0.7	-0.9	-0.9
Japan	BofA-ML	0.36	0.3	0.8	-0.3	1.7	-0.7	0.0	-0.2	-0.2	0.1	0.0
HY Corporate Bonds												
Global	BofA-ML	6.39	0.0	-0.2	1.2	-0.3	1.3	-0.1	-0.1	1.3	0.3	1.6
US	BofA-ML	6.54	0.1	0.7	1.9	1.9	3.3	0.1	0.7	1.9	1.9	3.3
Europe	BofA-ML	3.81	-0.2	-0.8	1.0	-3.4	-1.2	-0.3	-0.2	1.4	-0.3	1.0
Cash (Overnight LIBOR)												
US		1.92	0.0	0.2	0.3	1.1	1.5	0.0	0.2	0.3	1.1	1.5
Euro Area		-0.44	1.1	-0.3	-0.2	-3.0	-2.2	0.0	0.0	-0.1	-0.3	-0.4
UK		0.70	1.6	-0.9	-1.4	-3.4	1.1	0.0	0.1	0.1	0.3	0.4
Japan		-0.06	0.3	0.1	-0.3	1.5	-0.7	0.0	0.0	0.0	0.0	0.0
Real Estate (REITs)												
Global	FTSE	1870	0.5	0.8	1.6	1.6	5.8	0.4	1.3	2.0	4.9	8.1
Emerging Markets	FTSE	2159	0.2	-1.5	-0.9	-7.7	-0.2	0.1	-1.0	-0.6	-4.8	1.9
US	FTSE	3012	0.3	2.7	3.4	5.1	7.0	0.3	2.7	3.4	5.1	7.0
Europe ex-UK	FTSE	3657	0.4	1.0	3.5	3.4	10.4	0.3	1.5	3.9	6.8	12.9
UK	FTSE	1429	1.5	-2.9	-4.1	-5.5	5.9	0.4	-2.0	-2.6	-1.7	5.0
Japan	FTSE	2523	1.3	-1.4	-2.5	5.1	6.1	1.0	-2.4	-2.4	3.5	6.9
Commodities												
All	GSCI	2751	1.1	1.1	-2.5	7.6	22.2	-	-	-	-	-
Energy	GSCI	545	1.6	3.6	-1.5	17.9	43.4	-	-	-	-	-
Industrial Metals	GSCI	1260	-1.1	-2.9	-7.8	-13.1	-7.6	-	-	-	-	-
Precious Metals	GSCI	1428	-0.7	-2.5	-5.0	-9.5	-10.5	-	-	-	-	-
Agricultural Goods	GSCI	360	0.6	-5.5	-1.9	-5.1	-6.9	-	-	-	-	-
Currencies (vs USD)*												
EUR		1.16	-0.2	-0.8	-0.7	-3.3	-2.6	-	-	-	-	-
JPY		111.04	0.2	0.7	-0.3	1.5	-1.0	-	-	-	-	-
GBP		1.30	1.1	-0.9	-1.6	-3.9	0.9	-	-	-	-	-
CHF		1.03	1.5	2.2	2.3	0.6	-1.1	-	-	-	-	-
CNY		6.83	-0.4	-0.3	-3.1	-4.8	-3.5	-	-	-	-	-

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 31/08/2018	US					Europe				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Oil & Gas	-1.1	-6.3	-8.4	-4.7	2.0	-0.8	-0.1	-0.8	11.7	20.2
Materials	-0.5	-3.6	-4.3	-9.6	-8.1	0.6	-1.7	-3.6	-1.7	3.4
Basic Resources	-2.9	-15.0	-18.2	-22.8	-19.0	0.2	-4.0	-8.4	-5.3	-0.2
Chemicals	0.0	-1.6	-1.1	-6.0	-4.2	1.0	0.2	0.6	1.4	5.4
Industrials	-0.5	-2.9	0.5	-6.7	-5.4	0.9	1.9	1.9	3.2	5.0
Construction & Materials	-2.8	-2.7	-3.8	-13.3	-14.6	0.7	1.5	-0.3	-2.3	-3.3
Industrial Goods & Services	-0.5	-3.3	-0.2	-6.7	-5.7	0.9	2.0	2.4	4.7	7.3
Consumer Discretionary	0.9	1.8	0.0	8.6	10.5	0.7	0.7	-1.0	-0.8	2.5
Automobiles & Parts	-1.8	-8.9	-13.8	-20.6	-18.1	2.0	-3.5	-2.8	-10.8	-2.1
Media	-0.3	-2.0	-2.1	-6.5	-14.2	0.3	4.4	2.6	7.6	9.8
Retail	1.5	4.7	3.3	20.8	28.9	-1.4	-1.4	-4.1	4.2	5.7
Travel & Leisure	0.8	0.5	1.1	-10.4	-9.2	0.9	0.7	-1.4	-4.1	0.8
Consumer Staples	-1.4	-2.7	-2.3	-13.0	-15.6	-0.1	1.5	1.3	-0.3	-2.8
Food & Beverages	-1.6	-4.5	-4.7	-12.5	-14.7	0.0	2.4	1.8	-0.6	-2.0
Personal & Household Goods	-1.6	-3.2	-4.1	-14.8	-18.5	-0.2	0.9	1.0	-0.1	-3.3
Healthcare	0.1	1.1	3.9	3.1	-3.0	0.2	1.5	4.6	6.2	1.2
Financials	-0.6	-1.8	-0.3	-6.9	-2.3	-0.4	-2.4	-1.9	-7.3	-8.2
Banks	-0.8	-2.5	0.5	-6.2	1.3	-1.3	-5.7	-4.5	-13.7	-15.6
Financial Services	-0.9	-1.2	-3.4	-10.5	-4.5	1.3	3.9	0.8	2.7	3.7
Insurance	-0.8	-3.2	-1.3	-10.8	-12.3	0.4	0.7	1.7	0.3	0.4
Real Estate	-0.1	-0.7	-3.3	-5.0	-11.2	0.8	2.5	0.5	2.0	4.6
Technology	1.1	3.6	1.9	10.1	11.0	0.4	3.3	1.2	9.5	10.8
Telecommunications	-2.5	-0.2	-1.5	-12.1	-13.4	-3.0	-4.7	-4.4	-12.5	-17.1
Utilities	-1.5	-2.1	-3.8	-6.0	-15.8	-0.4	-1.1	-1.8	0.8	-5.9

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 7a – US factor index total returns (%)

Data as at 31/08/2018	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	0.9	3.7	8.0	14.2	26.9	-0.1	0.4	0.8	3.8	6.1
Low volatility	0.4	1.9	6.0	9.0	13.7	-0.5	-1.3	-1.0	-0.9	-5.0
Price momentum	1.0	4.8	7.0	13.2	23.6	0.0	1.5	-0.1	3.0	3.3
Quality	0.2	2.4	6.9	8.6	23.8	-0.8	-0.8	-0.2	-1.2	3.4
Size	0.2	1.3	4.0	9.1	20.3	-0.8	-1.9	-2.9	-0.8	0.5
Value	0.3	-0.5	3.2	3.1	13.5	-0.7	-3.6	-3.7	-6.3	-5.2
Market	1.0	3.3	7.1	9.9	19.7					
Market - Equal-Weighted	0.5	2.0	5.3	7.1	17.1					

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: Datastream and Invesco

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

Data as at 31/08/2018	Absolute					Relative to Market				
	1w	1m	QTD	YTD	12m	1w	1m	QTD	YTD	12m
Growth	1.2	1.2	2.0	6.6	14.2	1.5	3.4	1.1	5.4	8.0
Low volatility	0.5	0.6	2.8	6.1	12.4	0.8	2.8	1.8	4.9	6.3
Price momentum	0.6	0.6	3.1	5.9	11.8	0.9	2.8	2.1	4.7	5.8
Quality	0.8	-1.4	-0.5	-2.0	4.3	1.1	0.8	-1.4	-3.1	-1.3
Size	0.5	-0.4	0.8	1.8	11.2	0.8	1.7	-0.2	0.7	5.1
Value	-0.6	-3.9	-0.1	-2.0	4.2	-0.3	-1.8	-1.1	-3.1	-1.4
Market	-0.3	-2.1	1.0	1.1	5.7					
Market - Equal-Weighted	0.1	-1.3	1.1	2.8	8.5					

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: Datastream and Invesco

Figure 8 – 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%	21%			
US	10%		14%			
Europe ex-UK (Eurozone)	8%		2%			
UK	2%		2%			
Japan	8%		0%			
Emerging Markets	2%		3%			
Corporate IG	10%	0-20%	18%			
US Dollar	5%		10%			
Euro	3%		4%			
Sterling	1%		2%			
Japanese Yen	1%		2%			
Corporate HY	5%	0-10%	5%			
US Dollar	4%		5%			
Euro	1%		0%			
Equities	45%	20-70%	40%			
US	25%		8%			
Europe ex-UK	7%		13%			
UK	4%		3%			
Japan	4%		7%			
Emerging Markets	5%		9%			
Real Estate	3%	0-6%	6%			
US	1%		2%			
Europe ex-UK	1%		2%			
UK	0.5%		0%			
Japan	0.5%		1%			
Emerging Markets	0%		1%			
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%		43%			
EUR	21%		23%			
GBP	8%		8%			
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 9 – Model sector allocations

	US		Europe		Preferred Region
	Neutral	Invesco	Neutral	Invesco	
Oil & Gas	6.2%	Overweight	6.8%	Neutral ↓	US
Materials	2.1%	Underweight	7.0%	Underweight	Europe
Basic Resources	0.4%	Neutral	3.5%	Neutral	Europe
Chemicals	1.7%	Underweight	3.5%	Underweight	Europe
Industrials	11.8%	Underweight	13.9%	Overweight	Europe
Construction & Materials	0.5%	Underweight	2.8%	Underweight ↓	Europe
Industrial Goods & Services	11.3%	Underweight	11.0%	Overweight	Europe
Consumer Discretionary	15.3%	Underweight ↓	10.8%	Overweight	Europe
Automobiles & Parts	0.7%	Underweight ↓	3.3%	Overweight ↑	Europe
Media	2.4%	Overweight	2.3%	Underweight	US
Retail	9.6%	Underweight ↓	3.5%	Neutral ↓	Europe
Travel & Leisure	2.7%	Overweight	1.8%	Overweight	US
Consumer Staples	7.5%	Overweight ↑	16.6%	Neutral	US
Food & Beverage	3.2%	Overweight	6.9%	Neutral ↓	US
Personal & Household Goods	4.3%	Overweight ↑	9.7%	Neutral ↑	US
Healthcare	12.8%	Overweight	11.7%	Neutral	US
Financials	18.3%	Underweight	20.5%	Overweight ↑	Europe
Banks	6.1%	Underweight	11.3%	Overweight ↑	Europe
Financial Services	6.0%	Underweight	2.2%	Overweight	Europe
Insurance	3.4%	Neutral ↑	5.2%	Neutral	Europe
Real Estate	2.8%	Overweight	1.8%	Neutral	US
Technology	21.2%	Neutral	4.8%	Underweight	US
Telecommunications	1.9%	Overweight	3.5%	Overweight ↑	US
Utilities	2.8%	Underweight	4.6%	Underweight	US

Notes: These are theoretical allocations which are for illustrative purposes only. They do not represent an actual portfolio and are not a recommendation of any investment or trading strategy. See the latest [Strategic Sector Selector](#) for more details.

Source: 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

Important information

Your capital is at risk. You may not get back the amount you invested.

By accepting this document, you consent to communicating with us in English, unless you inform us otherwise. This document is for informational purposes only and is intended only for Professional Clients and Financial Advisers in Continental Europe (as defined in important information); Qualified Investors in Switzerland; Professional Clients only in Dubai, Ireland, the Isle of Man, Jersey, Guernsey, Malta and the UK; for Qualified Clients in Israel, for Professional/Qualified/Sophisticated Investors in Bahrain, Jordan, Kuwait, Lebanon, Mauritius, Oman, Qatar, Saudi Arabia, South Africa, Tunisia, Turkey, and the United Arab Emirates; for Professional Investors in Hong Kong, for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China, for Institutional Investors in Australia, the United States and Singapore; for Wholesale Investors in New Zealand; for certain specific Qualified Institutions and/or Sophisticated Investors only in Taiwan, for Qualified Professional Investors in Korea, for certain specific institutional investors in Brunei, for Qualified Institutional Investors and/or certain specific institutional investors in Thailand and for certain specific institutional investors in Malaysia, upon request, for informational purposes only. This document is only intended for use with Qualified Institutional Investors in Japan; in Canada, this document is restricted to Accredited Investors as defined under National Instrument 45-106. It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. It is not intended for solicitation of any security. Please do not redistribute this document.

For the distribution of this document, Continental Europe is defined as Andorra, Austria, Belgium, Czech Republic, Croatia, Denmark, Finland, France, Germany, Gibraltar, Greece, Hungary, Italy, Latvia, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

This document is not an offering of a financial product and should not be distributed to retail clients who are resident in jurisdiction where its distribution is not authorized or is unlawful. Circulation, disclosure, or dissemination of all or any part of this document to any unauthorized person is prohibited. This document is only intended for and will be only distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

This document is solely for duly registered banks or a duly authorized Monegasque intermediary acting as a professional institutional investor which has such knowledge and experience in financial and business matters as to be capable of evaluating the contents of this document. Consequently, this document may only be communicated to banks duly licensed by the "Autorité de Contrôle Prudentiel et de Résolution" and fully licensed portfolio management companies by virtue of Law n° 1.144 of July 26, 1991 and Law 1.338, of September 7, 2007, duly licensed by the "Commission de Contrôle des Activités Financières. Such regulated intermediaries may in turn communicate this document to potential investors.

This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco.

The information in this document has been prepared without taking into account any investor's investment objectives, financial situation or particular needs. Before acting on the information the investor should consider its appropriateness having regard to their investment objectives, financial situation and needs.

You should note that this information:

- may contain references to dollar amounts which are not Australian dollars;
- may contain financial information which is not prepared in accordance with Australian law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian tax issues.

Issued in Australia and New Zealand by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services Licence number 239916.

This document is issued only to wholesale investors in New Zealand to whom disclosure is not required under Part 3 of the Financial Markets Conduct Act. This document has been prepared only for those persons to whom it has been provided by Invesco. It should not be relied upon by anyone else and must not be distributed to members of the public in New Zealand. Information contained in this document may not have been prepared or tailored for a New Zealand audience. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on Interests to members of the public in New Zealand. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted. The distribution and offering of this document in certain jurisdictions may be restricted by law. Persons into whose possession this marketing material may come are required to inform them about and to comply with any relevant restrictions. This does not constitute an offer or solicitation by anyone in any jurisdiction in which such an offer is not authorised or to any person to whom it is unlawful to make such an offer or solicitation. This does not constitute a recommendation of any investment strategy or product for a particular investor. Investors should consult a financial professional before making any investment decisions.

This overview contains general information only and does not take into account individual objectives, taxation position or financial needs. Nor does this constitute a recommendation of the suitability of any investment strategy for a particular investor. It is not an offer to buy or sell or a solicitation of an offer to buy or sell any security or instrument or to participate in any trading strategy to any person in any jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it would be unlawful to market such an offer or solicitation. It does not form part of any prospectus. All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. Investments have risks and you may lose your principal investment. Please obtain and review all financial material carefully before investing. Asset management services are provided by Invesco in accordance with appropriate local legislation and regulations.

The opinions expressed are those of the authors and may differ from the opinions of other Invesco investment professionals. Opinions are based upon current market conditions, and are subject to change without notice. Past performance is no guarantee of future results.

This material may contain statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return or future performance targets. These forward-looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Invesco assumes no duty to update any forward-looking statement. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented. All information is sourced from Invesco, unless otherwise stated.

Effective 8/18/17, Invesco Ltd completed the acquisition of Source. Links to documents published prior to this date are from Source as a predecessor firm and are provided for historical and informational purposes only.

Investment strategies involve numerous risks. The calculations and charts set out herein are indicative only, make certain assumptions and no guarantee is given that future performance or results will reflect the information herein. Past performance is not a guarantee of future performance.

The Directors of Invesco do not guarantee the accuracy and/or the completeness of any data included herein and we shall have no liability for any errors, omissions, or interruptions herein. We make no warranty, express or implied, as to the information described herein. All data and performance shown is historical unless otherwise indicated. Investors should consult their own business, tax, legal and accounting advisors with respect to this proposed transaction and they should refrain from entering into a transaction unless they have fully understood the associated risks and have independently determined that the transaction is appropriate for them. In no way should we be deemed to be holding ourselves out as financial advisers or fiduciaries of the recipient hereof and this document is not intended to be "investment research" as defined in the Handbook of the UK Financial Conduct Authority.

Invesco, and our shareholders, or employees or our shareholders may from time to time have long or short positions in securities, warrants, futures, options, derivatives or financial instruments referred to in this material. As a result, investors should be aware that we may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

This document is provided by Invesco UK Services Limited, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, Oxfordshire, RG9 1HH, authorised and regulated by the Financial Conduct Authority, Invesco Asset Management S.A., 18, rue de Londres, 75009 Paris, France, authorised and regulated by the Autorité des marchés financiers, Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322- Frankfurt/M., Germany, Invesco Asset Management (Schweiz) AG, Talacker 34, 8001 Zurich, Switzerland, and Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on Thames, Oxfordshire RG9 1HH, UK Authorised and regulated by the Financial Conduct Authority.

In the US by Invesco Capital Management LLC, 3500 Lacey Road, Suite 700, Downers Grove, IL 60515.

In Canada by Invesco Canada Ltd., 5140 Yonge Street, Suite 800, Toronto Ontario, M2N 6X7. Terms and Conditions for Canadian investors can be seen [here](#).

This document is issued in the following countries:

- in Hong Kong by Invesco Hong Kong Limited 景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong. This document has not been reviewed by the Securities and Futures Commission.
- in Singapore by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.
- in Taiwan by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). Invesco Taiwan Limited is operated and managed independently.
- In Japan by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114: Registration Number: The Director – General of Kanto Local Finance Bureau(Kin-sho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association

© 2018 Invesco. All rights reserved. GL515.