



Strategic Sector Selector

Have we got ourselves a recovery?

Equity markets have continued their upward march in Q3 led by the US and the technology sector. We believe that a tentative and fragile recovery is on the way, but fear that the rising number of COVID-19 cases will stop it in its tracks. However, the threat of an economic slowdown will spur central banks to keep monetary policy supportive and fiscal policy may respond with more stimulus to tide the economy over until we can get back to some sort of normality. In our view, this is unlikely before the second quarter of next year even if a vaccine goes into production before the end of 2020. Nevertheless, we tentatively increase our allocation to cyclicals by upgrading industrials on the hope of higher infrastructure spending and a more benign trade environment, especially if Joe Biden wins the US presidential election. We also downgrade banks and upgrade financial services to align our model allocation to rates staying lower for longer. Our preferred cyclical remains technology and food, beverage & tobacco our preferred defensive.

Changes in allocations:

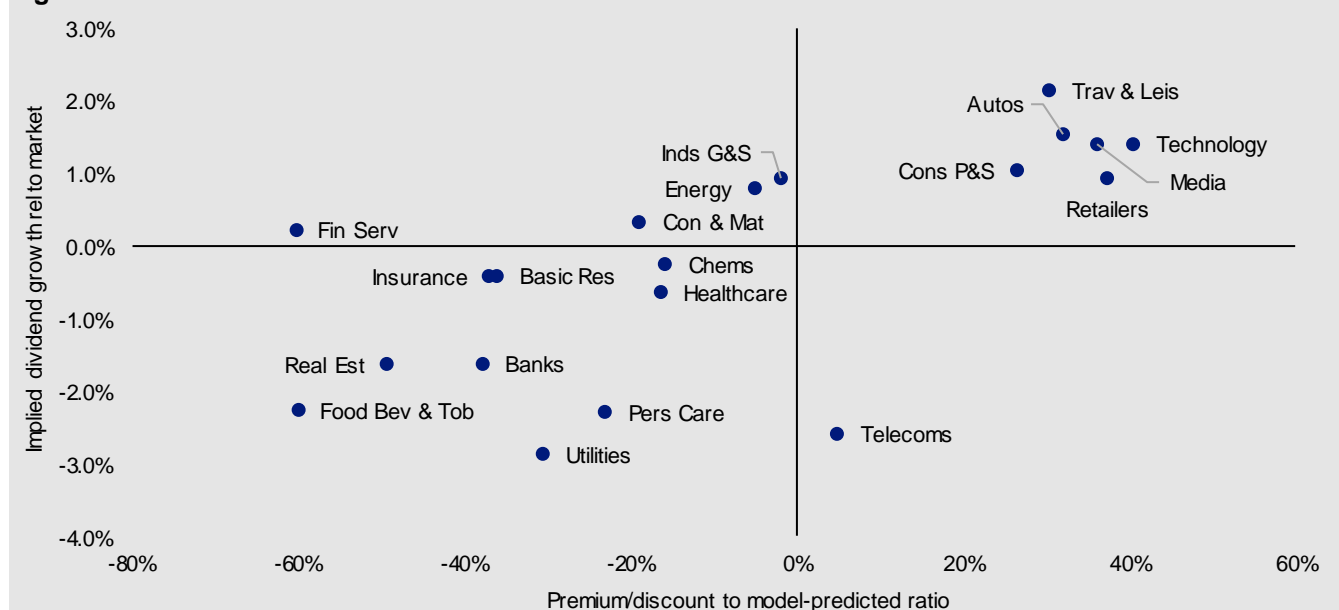
- Upgrades: construction & materials (UW to N); industrial goods & services (UW to OW); financial services (UW to N)
- Downgrades: personal care, drug & grocery stores (OW to UW); banks (OW to N)

	Most favoured	Least favoured
Sector	US technology European food & beverage	US automobiles & parts European travel & leisure

Sectors where we expect the best returns:

- Food, beverage & tobacco: decent yield, undervalued, play on interest rates staying lower for longer
- Technology: an opportunity to gain exposure to structural trends at decent valuations
- Financial services: attractive valuations, early-cyclical, play on strong financial markets

Figure 1 – Global sectors valuation matrix



Notes: On the horizontal axis, we show how far a sector's valuation is above/below that implied by our multiple regression model (dividend yield relative to market). The vertical axis shows the perpetual real growth in dividends required to justify current prices relative to that implied for the market. We consider the sectors in the top right quadrant expensive on both measures, and those in the bottom left are considered cheap. See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

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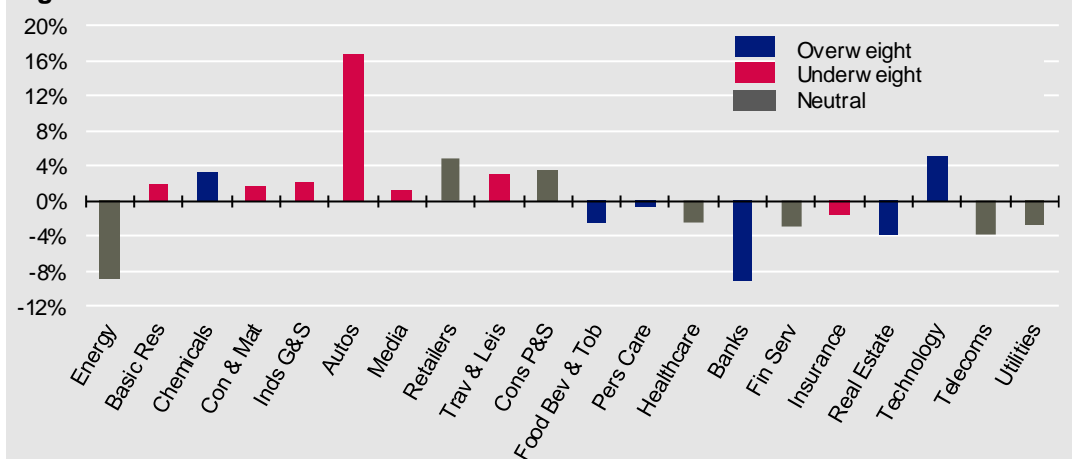
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Summary and conclusions

Since the last time

There seems to be growing consensus that we are in the second wave of COVID-19 infections in Europe and perhaps that daily new cases are reaccelerating globally. The Northern hemisphere winter promises to be tough as people move indoors and socialising will be difficult without increasing the risk of exposure to the virus. This implies that the recovery we have seen in most economies throughout the summer will be hard to maintain. Despite the renewed threat from the pandemic, global equity markets kept motoring ahead in the third quarter and returned 8% in US dollar terms. The rally was still driven by the US, while emerging markets were not far behind boosted by the weakness of the dollar (it fell by 3.6% in trade-weighted terms). Europe and Japan were essentially flat in local currency terms, hindered by the relative strength of their currencies.

Figure 2 – 3m Global sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2020 and 30th September 2020. Colours indicate allocations in period considered. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 2 suggests to us that investors have embraced the recovery trade to a certain extent in Q3. Cyclical sectors generally outperformed, with the notable exception of financials, while defensives underperformed. Unfortunately, our allocation was too cautious to take advantage of this, although two of our Overweights (chemicals and technology) continued to do well. A notable highlight is the automobiles & parts sector, which was by far the best performer mostly driven by the enduring outperformance of pure electric car manufacturers, although it would have been one of the top performers even without them.

Asset allocation backdrop

We believe that the global economy is at the start of a new cycle, which usually feels fragile and ridden with uncertainty. It also seems to us more like an extension of the post-Global Financial Crisis expansion, rather than one that resets the economic clock. Also, the threat of rolling lockdowns has increased, which may slow down the recovery or stop it in its tracks. We are assuming a vaccine will go into mass production within our 12-month forecast horizon but doubt that we will see a return to normal behaviour within that timeframe (if nothing else, we believe that working and shopping habits have changed for good). Policy makers have been generous during 2020 and we suspect policy support will diminish within our forecast horizon. There is a risk that further collateral damage (bankruptcies and unemployment) will reveal itself as government support programmes end (we assume a growth path somewhere between a traditional recovery and that seen after the Global Financial Crisis (GFC)). Finally, let's not forget the US presidential election on 3 November 2020, where we expect a change at the White House.

Based on this outlook, we have constructed a set of financial market assumptions to

enable the generation of 12-month projected returns (**Figure 3** shows how they convert into market benchmarks). A simplified description would be that we expect no change in policy rates (though asset purchases may be tapered); a steepening of yield curves; little change in credit spreads (and above average defaults); a rebound in equity earnings and dividends along with a rise in yields; a smaller recovery in real estate cash-flows but stability in yields and a flattening of commodity prices despite further slight weakness in the US dollar.

In determining our Model Asset Allocation, we have followed the results of our optimisation, which has suggested that we keep our maximum allocation to cash and investment grade credit. We have also stayed zero-weighted in gold for we expect a reversal of many of the factors that have supported the yellow metal this year, such as the extreme uncertainty surrounding COVID-19, central bank asset purchases and perhaps even a less confrontational US president. Finally, we have reduced our exposure to government bonds, because the starting yields are low, and we expect them to rise. EM is the only region in which we are Overweight government bonds.

Among cyclical assets, we favour high yield (HY) and real estate, largely on valuations. The yield on HY is low but spreads versus government bonds are in the middle of their historical range. Commodities have been reduced to zero after the strong rally in oil and industrial metals. Though we have added to equities, we remain Underweighted. We expect a healthy bounce in earnings and dividends but also fear a rebound in yields in some areas. Among regions, we favour Japan, while Eurozone stocks have been increased but have remained slightly Underweight. We have reduced EM to Underweight and remain well below Neutral in US equities (see [The Big Picture](#) for more details).

Figure 3 – Market forecasts

	Current (30/09/20)	Forecast 12-month
Central Bank Rates		
US	0.25	0.25
Eurozone	-0.50	-0.50
China	4.35	4.35
Japan	-0.10	-0.10
UK	0.10	0.10
10y Bond Yields		
US	0.68	1.25
Eurozone	-0.52	0.00
China	3.16	3.50
Japan	0.02	0.10
UK	0.19	0.60
Exchange Rates/US\$		
EUR/USD	1.17	1.24
USD/CNY	6.79	7.00
USD/JPY	105.47	104.00
GBP/USD	1.29	1.35
USD/CHF	0.92	0.88
Equity Indices		
S&P 500	3363	3400
Euro Stoxx 50	3194	3250
FTSE A50	15209	15600
Nikkei 225	23185	25500
FTSE 100	5866	6050
Commodities (US\$)		
Brent/barrel	40	40
Gold/ounce	1900	1700
Copper/tonne	6668	7000

Notes: There is no guarantee that these views will come to pass. See Appendices for definitions, methodology and disclaimers. See [The Big Picture](#) for a full explanation of each scenario. Source: Refinitiv Datastream and Invesco Global Market Strategy Office

Changes to sector allocations

Global equities have continued their upward march in the third quarter of this year and there still seems to be a lot of optimism from market participants. However, we remain cautious, especially ahead of an uncertain winter in the Northern hemisphere with COVID-19 cases rising in Europe. We also believe that the final stretch of the US presidential campaign may lead to higher volatility in financial markets. It is possible that the transition may also be turbulent, especially if the outcome is close and contested. For now, our view is that Joe Biden has a large enough margin to win the election and this remains our base case. What gives markets hope currently is the potential launch of a vaccine around the end of the year and that full national lockdowns can be avoided. We think that equity markets may continue to appear detached from the real economy after central banks pledged to maintain support for at least the next 12 months.

In any case, we do not expect the macroeconomic environment to shift meaningfully within our forecast horizon (the next 12 months), and therefore we view our current allocation focusing mostly on growth sectors and maintaining some defensive hedges as largely appropriate. We only make a few small changes to our model allocation and increase our exposure to industrials in the hope that the increasing demand for living space will spur more demand for **construction & materials**. It looks cheap on our multiple regression model, but its implied dividend growth is higher than that of the market. The main risk, in our view, is that mooted infrastructure spending by governments does not materialise and that housing demand does not grow as we expect. With all that in mind, we raise the sector to **Neutral**.

We also think that the worst of the slump may be over for **industrial goods & services**. Our multiple regression model suggests it is close to fair value and its implied dividend growth does not scream value, either (it stands at a premium to the market). However, we think the future is brighter for the sector for three main reasons: 1) increased infrastructure spending by governments; 2) higher economic growth as the recovery strengthens perhaps in the first half of 2021; 3) a potentially more benign trade environment in rhetoric, if not in substance if Joe Biden wins the US presidential election. The risks surrounding the sector are not negligible, but we believe that these arguments are solid enough to raise the sector to **Overweight**.

Although valuations look supportive, we downgrade **personal care, drug & grocery stores** to **Underweight**. We think the early phase of a recovery is under way and we are more confident that it will take root than in the summer, and therefore we think it makes sense to reduce our exposure to defensives slightly. We are also concerned that the increase in demand in the early phase of the pandemic is fading away and the “second wave” in Europe and potentially elsewhere in the Northern hemisphere will be different.

Finally, we are swapping our allocation within financials to adjust our exposure to a more extended period of lower central bank rates. We downgrade **banks** to Neutral and upgrade **financial services** to **Overweight**. Both sectors have underperformed year-to-date, but have different prospect for the medium term, in our view, based on how we think their business models would be impacted by low interest rates. Banks’ margins tended to compress in low-interest-rate periods and despite the boost from trading and investment banking, we expect them to struggle. Financial services on the other hand may be boosted by strong financial markets backstopped by central bank support (even if it is only their perception).

The best and worst of the rest

We maintain our **Underweight** in **basic resources**. Despite the strong rebound in commodity prices, it has only just outperformed year-to-date. In our view, the road ahead will be tougher as the strong ramp-up of industrial activity and construction spending in China that has driven industrial metal prices higher since the COVID-19-crisis trough will probably fade. The outlook for consumer spending remains mixed and export growth may be subdued if economic activity is restricted in much of the rest of the world.

It seems that we missed the boat on **automobiles & parts** (excuse the mixed metaphor) and we feel that it is prudent to remain **Underweight**. In our view, its gravity-defying rally has gone too far and the whole sector has mainly been pulled along by its dominant leader. We doubt that the sector will achieve its currently implied 3% dividend growth, although it may continue to outperform for a while as long as central bank support continues and investors give the sector technology-like valuations.

The environment for **travel & leisure** will stay tough for the foreseeable future, in our view. We are certain that people will travel, participate in mass entertainment and eat out in restaurants in the not-too-distant future, but we think activity will remain depressed within our 12-month forecast horizon. It does not help that the sector commands strangely high valuations – it is the most expensive sector based on implied dividend growth. We remain **Underweight**.

Despite the strong outperformance through the market turmoil, we keep our **Overweight** allocation to **food, beverage & tobacco**. Its valuations do not look demanding, and if rates stay low for an extended period, that should support those valuations. We prefer to maintain some exposure to defensives and we also like that their businesses may be boosted by a potential recovery.

We keep our **Neutral** allocation to **healthcare** as we think higher demand for its products may be offset by lower profitability. Vaccines and antiviral medication have not been the highest margin products, so reallocating research and production resources will potentially reduce their capacity to sell and develop their more profitable treatment solutions. The traditional defensive nature of the sector and positive investor sentiment towards it may be offset by lower earnings and dividend growth.

Insurance is the only financial we keep **Underweight**, even though we consider the sector an early-cyclical. It seems to be stuck in a cycle of unending woes, from wildfires to storm and flood-related damages and now COVID-19-related claims. An economic downturn will hinder their business by depressing demand for insurance if people travel less and buy fewer big-ticket items, including cars and property. Low bond yields may also hurt their investment returns crucial for their life insurance and pension businesses.

We retain our **Overweight** to **real estate**, a sector that has weathered this downturn relatively well so far. That would be a sign of complacency, but depressed valuations – dividend yields have priced in no growth – suggest good long-term potential for the sector. The main risk is that the economy will dip into recession if lockdowns have to be reintroduced and companies in the sector lose more tenants or are forced to offer further rent holidays.

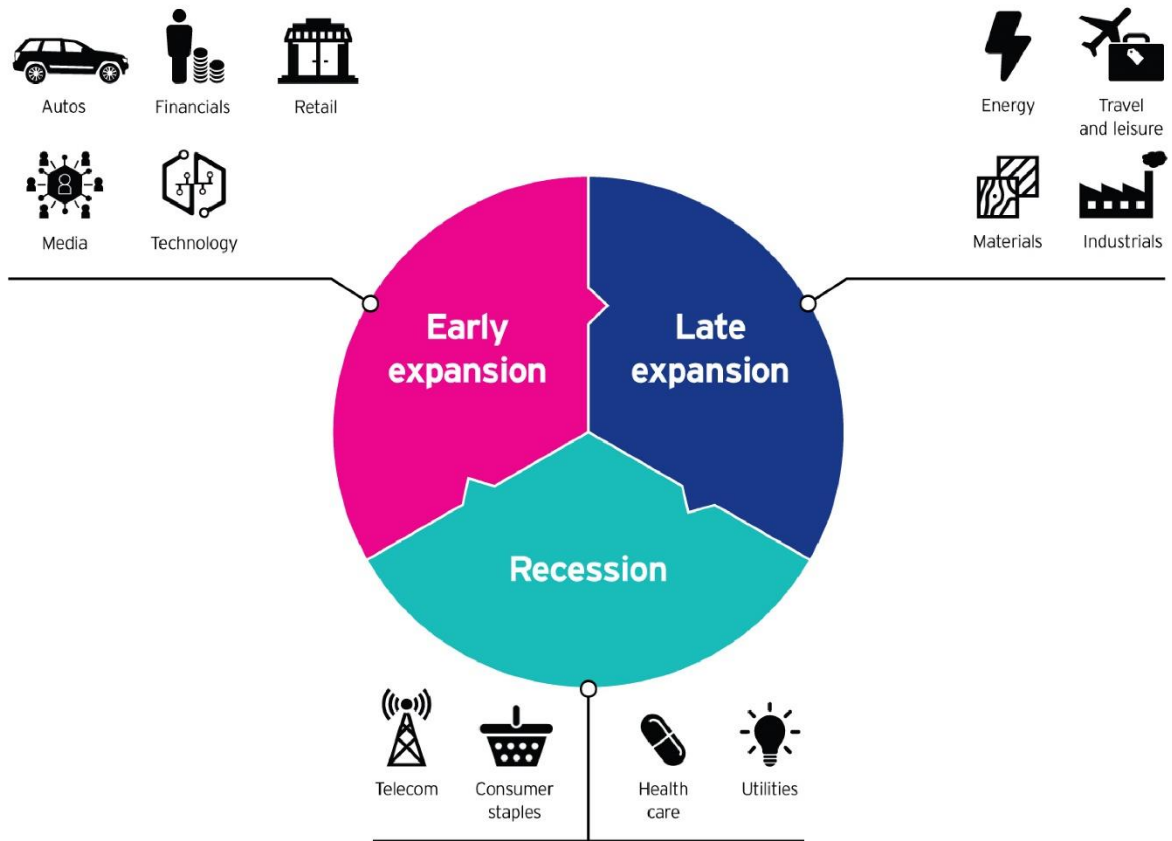
We keep our **Overweight** allocation to **technology**, which we think will continue to benefit from the structural trends accelerated and amplified by the COVID-19 crisis. Valuations look rich, but they are nowhere near the extremes of the tech bubble. We suspect the changing composition of the sector played a part in reducing its volatility and cyclicity, thus making it an unexpected defensive.

Figure 4 – Model allocations for Global sectors

	Neutral	Invesco	Preferred Region
Energy	6.0%	Neutral	US
Basic Materials	4.1%	Neutral	Europe
Basic Resources	2.2%	Underweight	Europe
Chemicals	1.9%	Overweight	US
Industrials	12.6%	Underweight	US
Construction & Materials	1.6%	Neutral ↑	Europe
Industrial Goods & Services	11.1%	Overweight ↑	US
Consumer Discretionary	16.3%	Underweight	Japan
Automobiles & Parts	2.3%	Underweight	Japan
Media	1.3%	Underweight	US
Retailers	6.9%	Neutral	EM
Travel & Leisure	2.0%	Underweight	Japan
Consumer Products & Services	3.9%	Neutral	Japan
Consumer Staples	7.0%	Overweight	Europe
Food, Beverage & Tobacco	4.5%	Overweight	Europe
Personal Care, Drug & Grocery Stores	2.5%	Underweight ↓	US
Healthcare	10.9%	Neutral	Europe
Financials	12.8%	Neutral	EM
Banks	5.8%	Neutral ↓	EM
Financial Services	3.8%	Overweight ↑	US
Insurance	3.2%	Underweight	Japan
Real Estate	3.7%	Overweight	Europe
Technology	18.9%	Overweight	US
Telecommunications	4.2%	Neutral	US
Utilities	3.5%	Neutral	Europe

Notes: Arrows indicate latest changes in allocations versus the previous edition. See appendices for methodology and disclaimers.
Source: Refinitiv Datastream and Invesco

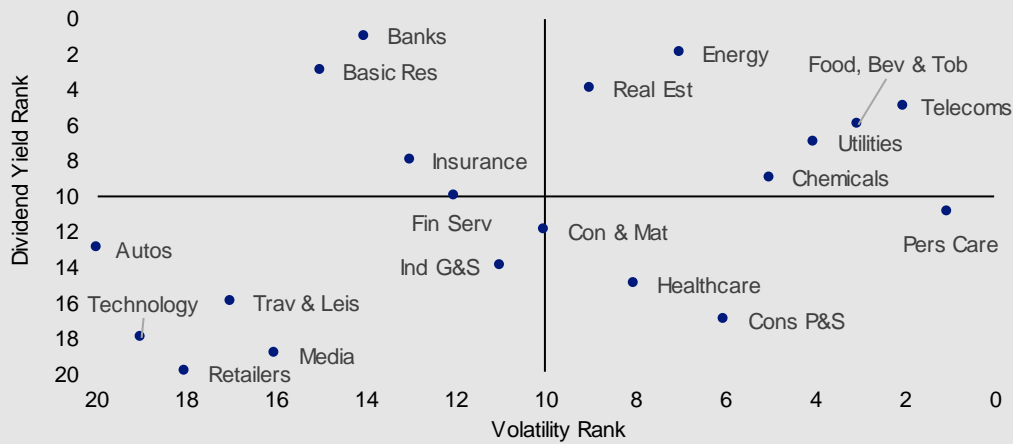
Figure 5 – Economic cycle and main sector allocation decisions



Note: The chart shows our opinion about which sectors tend to perform best at which stage of the economic cycle, based on our analysis of previous cycles. It also shows where we believe the 10 largest economies are within their economic cycles.
Source: Invesco

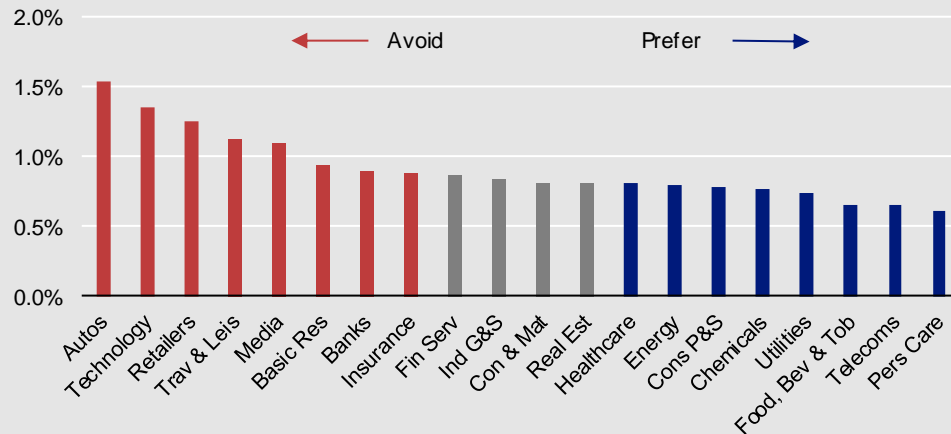
Systematic strategy – Global

Figure 6 – Global sectors ranked by volatility and dividend yield



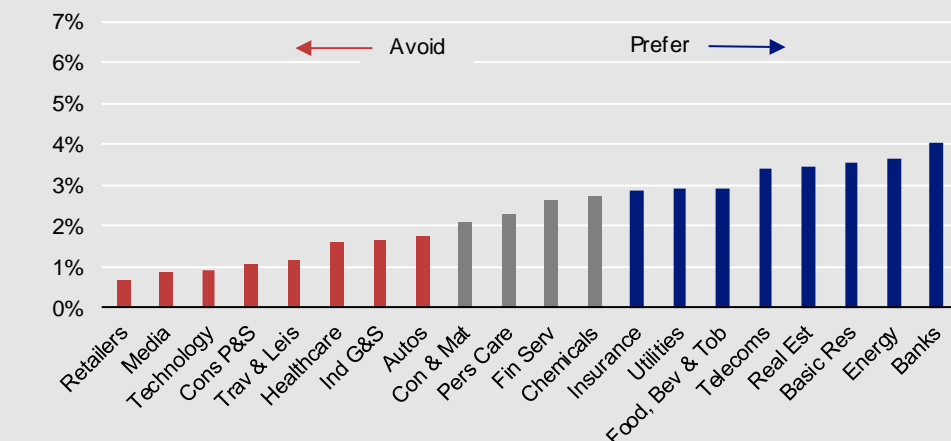
- A purely systematic approach would favour sectors in the top right corner: telecoms, food, beverage & tobacco and chemicals
- The approach would avoid sectors in the bottom left, such as tech, media, or travel & leisure

Figure 7 – Global sector volatility of daily returns (using standard deviation in the past 3 months)



- The daily returns of autos, technology and retailers were the most volatile in the past 3 months
- Personal care, telecoms and food, beverage & tobacco were the least volatile

Figure 8 – Global sector dividend yield (12-month trailing)

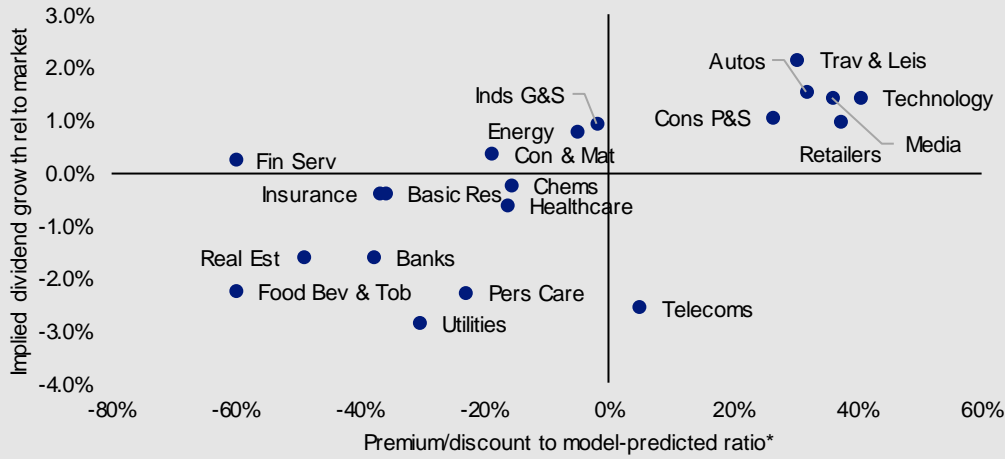


- Banks, energy and basic resources look the cheapest based on their dividend yield
- The lowest yielding sectors include retailers, media and technology

Notes: In Figure 6, we rank sectors on the vertical axis by their current 12-month trailing dividend yields. On the horizontal axis, the sectors are ranked by the 3-month standard deviation of their daily returns. See appendices for methodology and disclaimers. Any reference to a ranking, a rating or an award provides no guarantee for future performance results and is not constant over time.
Source: Refinitiv Datastream and Invesco

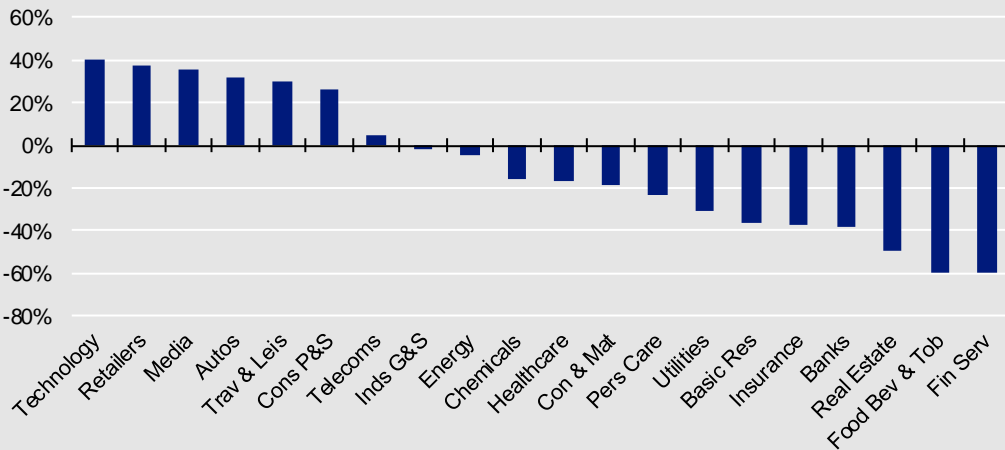
Valuations – Global

Figure 9 – Global sectors valuation matrix



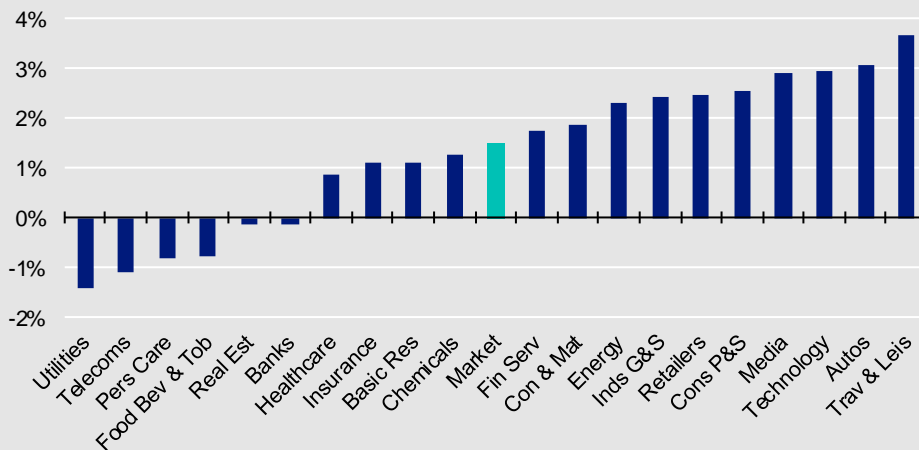
- Sectors in the top right corner look overvalued on both measures, while those in the bottom left appear undervalued
- This approach would avoid, for example, tech, media, and autos
- Food, beverage & tobacco, utilities, and real estate look better value

Figure 10 – Premium/discount to model-predicted ratio*



- Technology, retailers, and media look the most overvalued versus our model
- Financial services, food, beverage & tobacco and real estate seem the most undervalued versus our model-predicted ratios

Figure 11 – Global implied perpetual real dividend growth

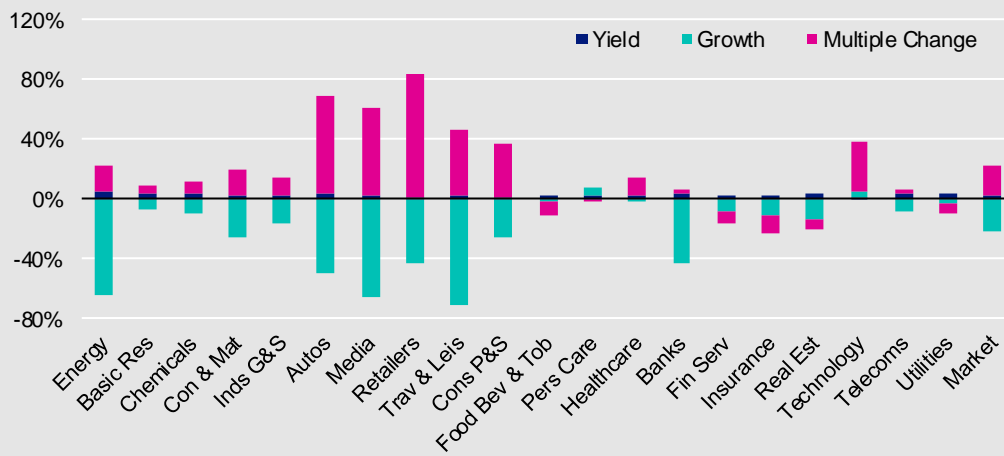


- Shows the future real growth required to justify current prices
- Technology appears priced for almost 3% real growth in dividends (expensive)
- Six sectors appear priced for negative growth (cheap)

Notes: *% above/below using dividend yield. See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

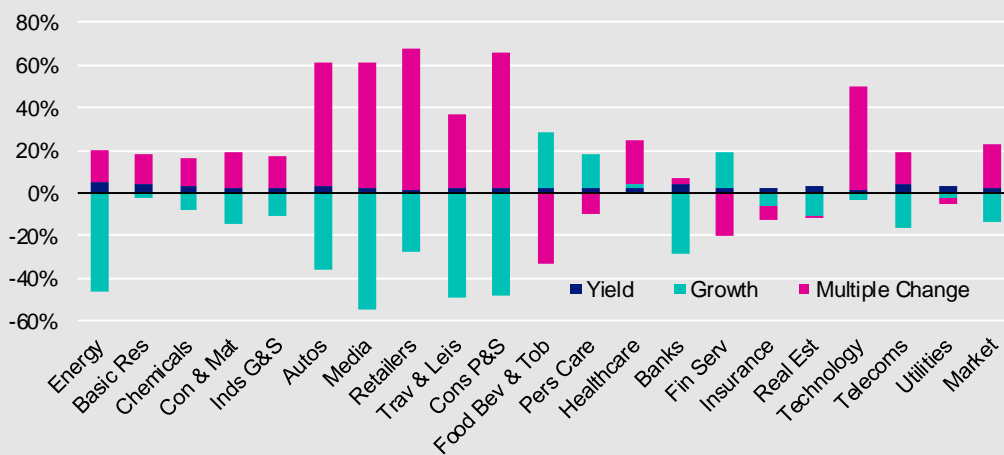
Decomposed returns – Global

Figure 12 – Global year-to-date total returns decomposed (annualised)



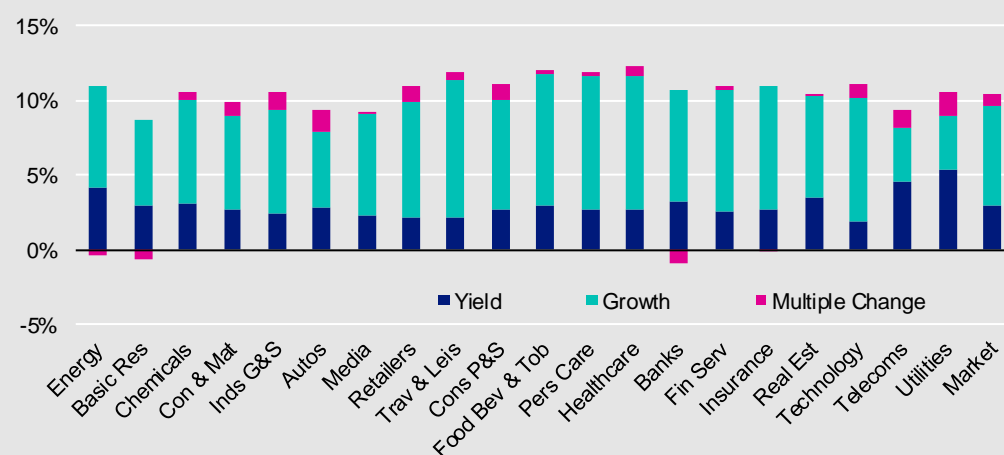
- Only two sectors raised dividends in 2020: personal care and technology
- Most sectors had negative sentiment (multiple contraction)

Figure 13 – Global rolling 12-month total returns decomposed



- Only four sectors have raised dividends in the last 12 months: food, beverage & tobacco, personal care, healthcare and financial services
- Four sectors had yields above 4%: energy, basic resources, banks and telecoms

Figure 14 – Global overall total returns decomposed (annualised, since 1973)



- Growth and yield drive long-term returns
- Growth is the most important, except for telecoms and utilities
- Four sectors suffered from a multiple-related performance drag: energy, basic resources, banks and insurance

Notes: See appendices for methodology and disclaimers. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Appendices

Appendix 1: Coefficients for variables used in multiple regression model

Figure 15 – Regression coefficients of Global defensive sectors

	Food, Bev & Tobacco	Personal Care	Health Care	Telecoms	Utilities	Market
Real Oil	0.57	0.22			0.77	-0.84
Real Copper	-0.01		0.00	0.02	-0.01	0.01
Consumer Confidence	0.00		0.00	0.00	0.00	-0.01
Manufacturing Confidence		0.01	0.01	0.01	-0.01	0.01
IP			0.78		2.74	-4.58
10y Yield				-6.48	15.21	-16.99
CPI		-2.92	-4.28		-12.70	13.53
Net Debt/EBITDA			-0.09	0.10	0.12	
ROE		-1.16	1.20	0.94	-3.32	

Notes: IP = industrial production. CPI = consumer price index. EBITDA = earnings before interest, taxes, depreciation and amortization. ROE = return on equity. Bev = beverage. Only showing coefficients that have a statistically significant relationship with valuations at the 0.05 level. We use the dividend yield relative to market as our dependent variable. See the Methodology in Appendix 6 for more details. Source: Refinitiv Datastream and Invesco

Figure 16 – Regression coefficients of Global resource-related and industrial sectors

	Energy	Basic Resources	Chemicals	Construction & Materials	Industrial G&S	Market
Real Oil	-1.13					-0.84
Real Copper		-0.01		-0.01	0.00	0.01
Consumer Confidence	0.01	0.01	0.01	0.00		-0.01
Manufacturing Confidence		-0.02	-0.01	-0.01	0.00	0.01
IP	-2.42	-1.28	-0.77	0.73	0.22	-4.58
10y Yield					0.96	-16.99
CPI	10.18	11.20	8.20	8.21	-1.28	13.53
Net Debt/EBITDA	-0.15	-0.07		0.20	0.03	
ROE	-3.31	-2.30	-1.71		0.68	

Notes: IP = industrial production. CPI = consumer price index. EBITDA = earnings before interest, taxes, depreciation and amortization. ROE = return on equity. G&S = goods & services. Only showing coefficients that have a statistically significant relationship with valuations at the 0.05 level. We use the dividend yield relative to market as our dependent variable. See the Methodology in Appendix 6 for more details. Source: Refinitiv Datastream and Invesco

Figure 17 – Regression coefficients of Global consumer discretionary and technology sectors

	Autos & Parts	Media	Retail	Travel & Leisure	Cons P&S	Tech	Market
Real Oil	0.43			0.24	0.64		-0.84
Real Copper	-0.01	0.01	0.01		-0.01	0.00	0.01
Consumer Confidence	0.01	0.00	0.00		0.00	0.00	-0.01
Manufacturing Confidence			0.00		0.00	0.02	0.01
IP	-2.86	-0.58	1.26		1.35	-2.13	-4.58
10y Yield	-2.68	5.41		-2.38	5.10	-3.99	-16.99
CPI	13.09	-2.22		2.73	-3.09		13.53
Net Debt/EBITDA	-0.05	-0.01		0.04	-0.15	0.08	
ROE	-0.64	0.59	-3.00	0.59	-2.35	0.70	

Notes: IP = industrial production. CPI = consumer price index. EBITDA = earnings before interest, taxes, depreciation and amortization. ROE = return on equity. Cons = consumer. P&S = products & services. Only showing coefficients that have a statistically significant relationship with valuations at the 0.05 level. We use the dividend yield relative to market as our dependent variable. See the Methodology in Appendix 6 for more details. Source: Refinitiv Datastream and Invesco

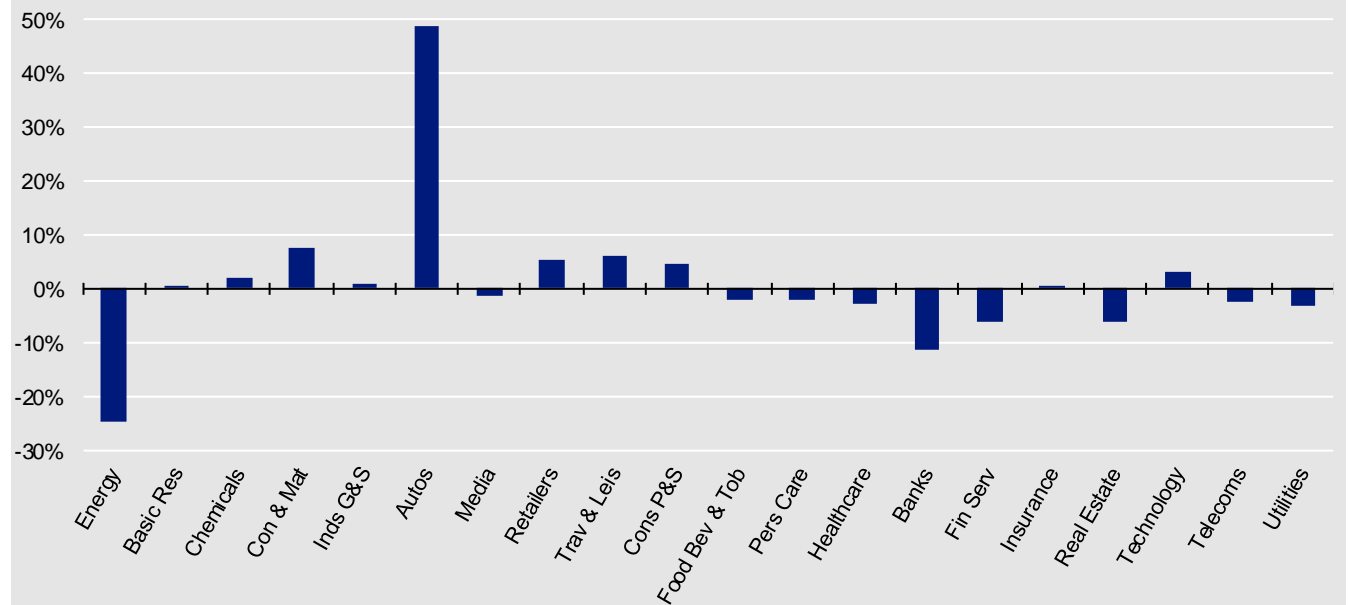
Figure 18 – Regression coefficients of Global financial sectors

	Banks	Financial Services	Insurance	Real Estate	Market
Real Oil	0.80		0.24	0.75	-0.84
Real Copper	-0.01	-0.01		-0.02	0.01
Consumer Confidence	0.01	0.00	0.00	0.01	-0.01
Manufacturing Confidence	-0.01	-0.02		-0.03	0.01
IP	-2.55	1.67	-0.72	3.72	-4.58
10y Yield	-7.62	2.10	-2.95	4.43	-16.99
CPI	4.81				13.53
ROE	4.12	0.70	-0.53	-3.39	

Notes: IP = industrial production. CPI = consumer price index. EBITDA = earnings before interest, taxes, depreciation and amortization. ROE = return on equity. Only showing coefficients that have a statistically significant relationship with valuations at the 0.05 level. We use the dividend yield relative to market as our dependent variable. See the Methodology in Appendix 6 for more details. Source: Refinitiv Datastream and Invesco

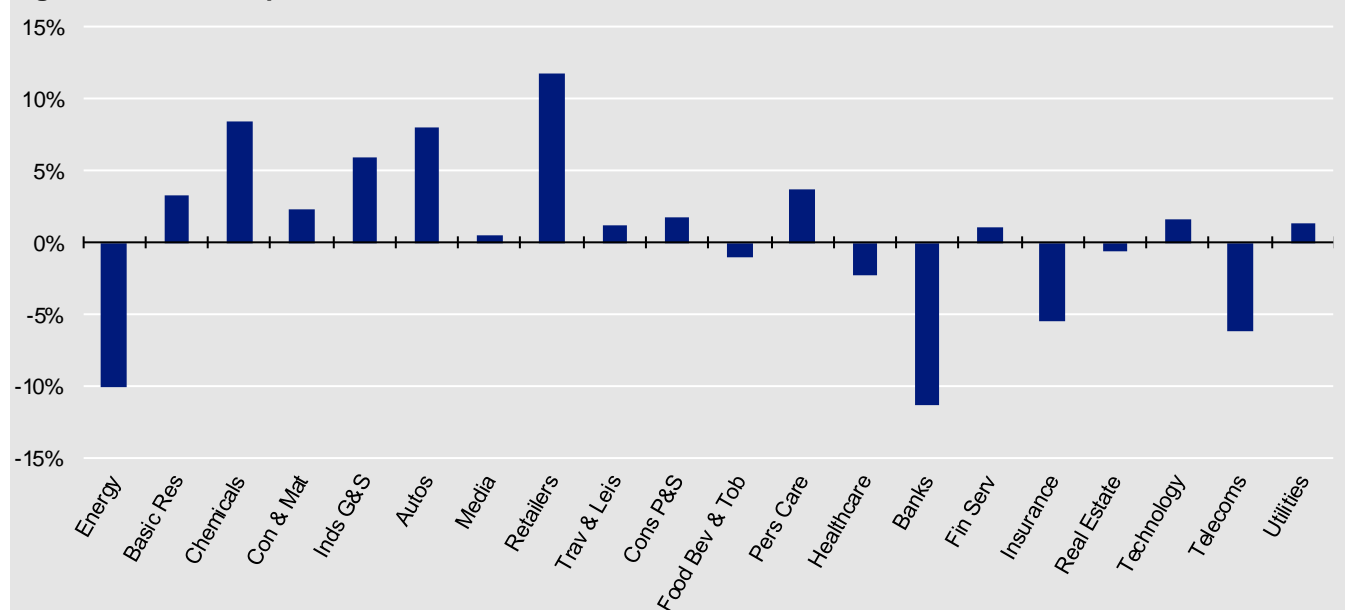
Appendix 2: Sector returns by region

Figure 19 – 3m US sector returns relative to market



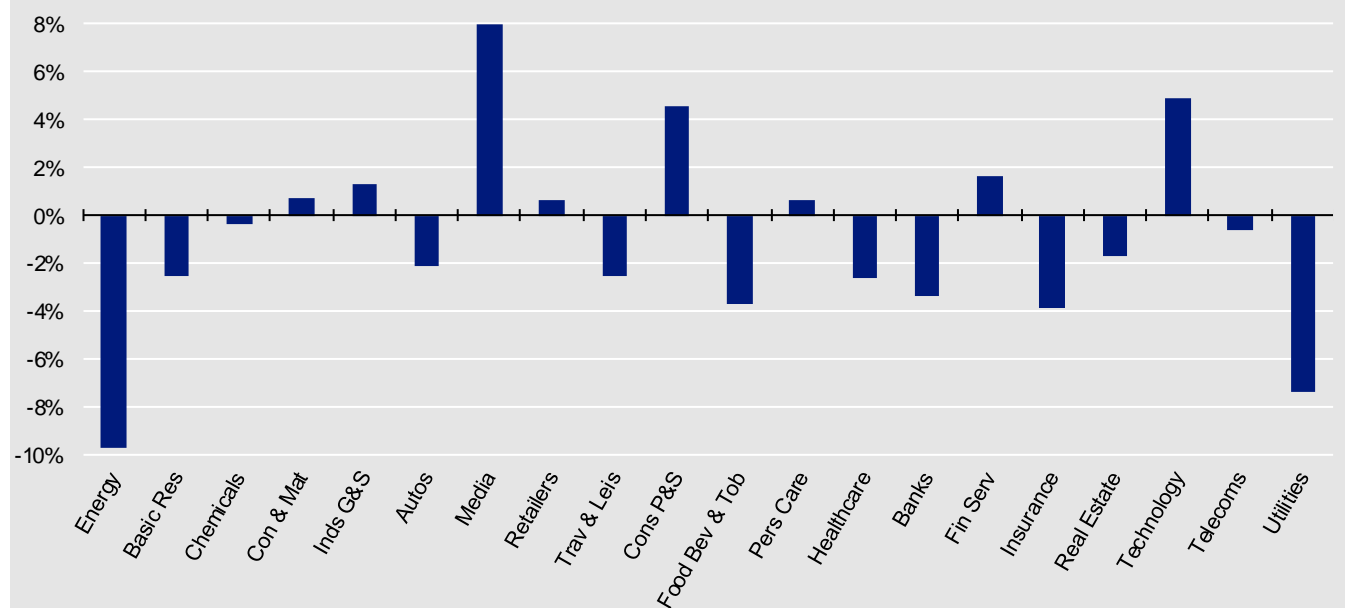
Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2020 and 30th September 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 20 – 3m European sector returns relative to market



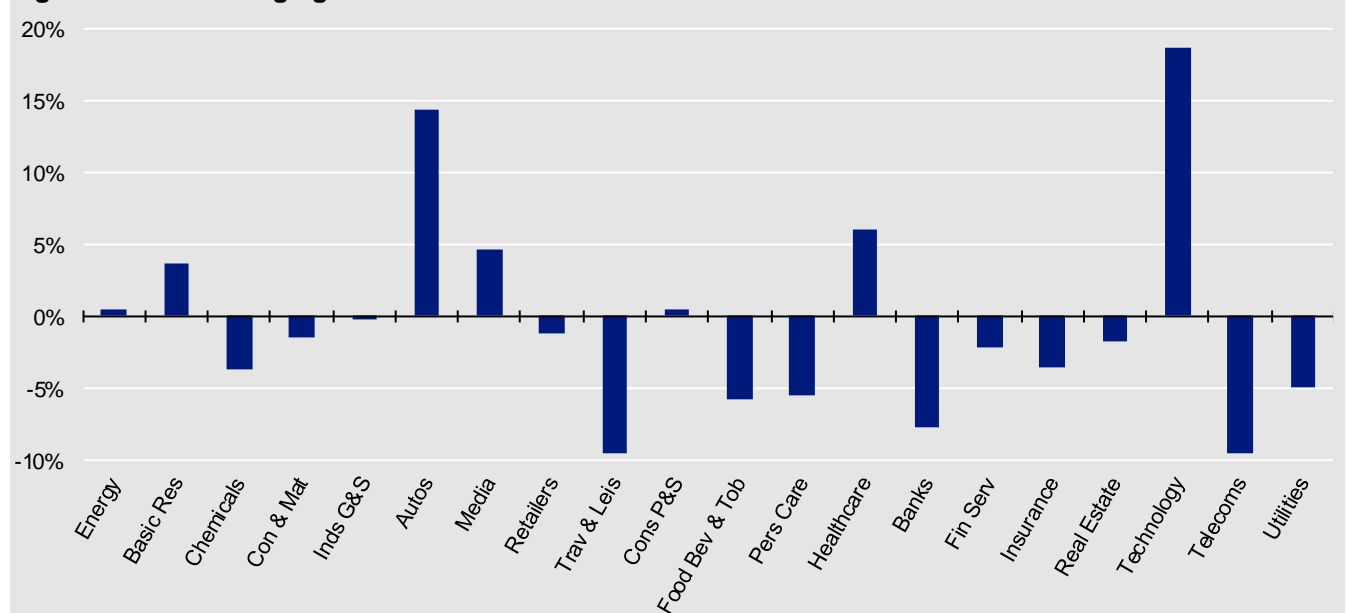
Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2020 and 30th September 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 21 – 3m Japanese sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2020 and 30th September 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 22 – 3m Emerging Market sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2020 and 30th September 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Appendix 3: Valuations tables

Figure 23 – Global absolute valuations

	Price/Earnings			Dividend Yield			Price/Book Value			Price/Cash Flow		
	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*
Energy	24.7	14.2	1.7	3.7	3.8	-0.2	1.4	1.7	-0.7	6.0	6.1	0.0
Basic Materials	22.0	16.8	1.1	3.2	2.7	0.6	1.7	1.8	-0.3	8.0	7.2	0.5
Basic Resources	18.6	17.1	0.2	3.6	2.8	0.9	1.5	1.7	-0.5	6.8	7.2	-0.2
Chemicals	27.7	16.9	2.3	2.7	2.9	-0.2	1.9	2.0	-0.1	10.0	7.5	1.6
Industrials	26.9	18.0	1.9	1.7	2.3	-0.8	2.6	2.1	1.2	10.9	9.0	1.1
Construction & Mat.	20.3	16.6	0.9	2.1	2.5	-0.7	1.8	1.8	-0.1	8.7	8.9	-0.1
Industrial G&S	28.2	18.4	2.1	1.7	2.2	-0.8	2.8	2.2	1.4	11.3	9.1	1.3
Consumer Disc.	35.1	18.3	3.4	1.0	2.3	-1.6	3.4	2.1	2.7	12.0	8.2	2.6
Automobiles & Parts	27.3	14.9	1.6	1.7	2.7	-0.8	1.2	1.5	-0.7	5.7	5.2	0.5
Media	38.1	21.3	2.3	0.9	2.1	-1.6	3.0	2.3	1.0	11.1	9.4	0.5
Retailers	39.4	20.8	3.2	0.7	1.9	-1.6	7.8	3.3	4.3	21.1	13.3	2.6
Travel & Leisure	40.3	21.8	2.6	1.1	1.9	-1.0	3.3	2.5	1.2	9.0	8.7	0.1
Consumer Prod & Serv	31.3	18.9	2.9	1.1	2.5	-2.2	3.7	2.1	2.9	13.4	10.5	1.3
Consumer Staples	23.7	16.5	1.4	2.7	2.5	0.2	3.4	2.9	0.7	12.4	10.7	0.6
Food, Bev & Tobacco	23.6	18.2	1.1	2.9	2.7	0.3	3.1	2.8	0.5	12.7	10.9	0.6
Personal Care	24.0	20.3	0.6	2.3	2.4	-0.1	4.1	3.2	0.9	11.7	10.3	0.5
Healthcare	30.5	19.7	1.9	1.6	2.4	-1.0	4.6	3.4	1.0	17.8	13.0	1.2
Financials	13.1	15.8	-0.6	3.3	2.7	0.8	0.9	1.5	-1.4	4.6	5.6	-0.7
Banks	10.8	14.5	-0.7	4.1	3.0	1.2	0.7	1.4	-1.6	3.9	6.4	-1.2
Financial Services	15.5	18.4	-0.5	2.6	2.3	0.6	1.0	1.4	-1.0	7.8	7.8	0.0
Insurance	16.2	16.1	0.0	2.9	2.4	0.6	1.2	1.7	-0.9	3.9	4.0	-0.1
Real Estate	17.6	19.3	-0.3	3.5	3.2	0.3	1.3	1.4	-0.4	13.6	13.4	0.1
Technology	34.2	24.1	0.9	0.9	1.6	-0.8	6.1	3.0	3.0	20.6	11.3	2.3
Telecommunications	18.4	17.5	0.1	3.4	4.3	-0.4	2.1	2.7	-0.5	5.4	6.6	-0.4
Utilities	18.2	14.2	1.0	3.5	4.9	-0.7	1.6	1.6	-0.1	6.9	5.5	1.0
Market	24.0	17.0	1.5	2.1	2.7	-0.7	2.2	2.0	0.4	9.6	7.7	1.1

Notes: *in standard deviations from historical average. Mat. = materials. G&S = goods & services. Disc. = discretionary. Prod & Serv = products & services. Bev = beverage. Data starts on 1st January 1973 for price/earnings and dividend yield and 1st January 1980 for price/book and price/cash flow. See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

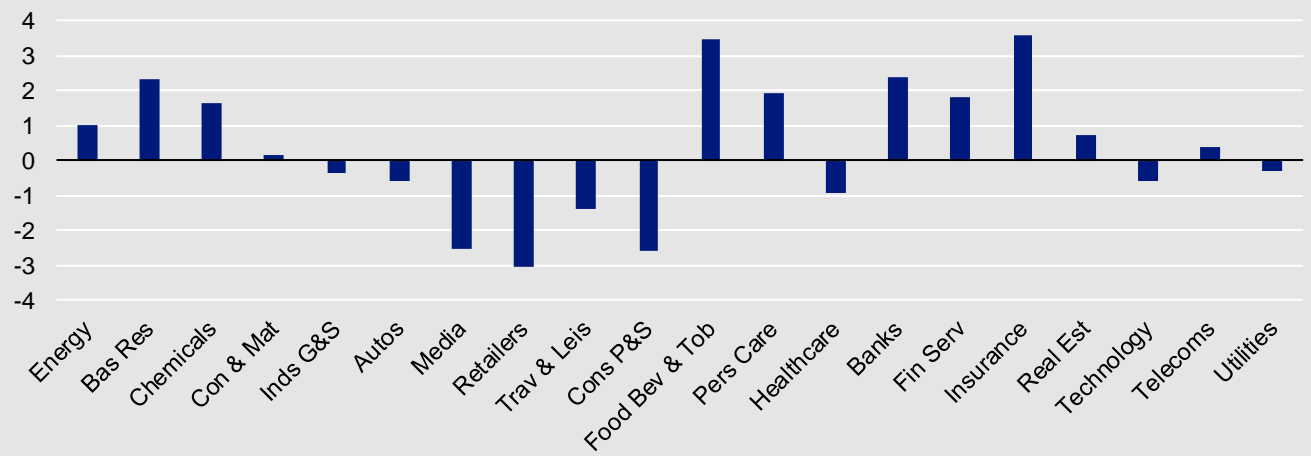
Figure 24 – Global cyclically-adjusted valuations

	Price/Earnings			Dividend Yield			Price/Book Value			Price/Cash Flow		
	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*	Now	Avg	Now vs Avg*
Energy	8.3	19.1	-1.4	5.9	2.7	3.3	0.8	2.6	-1.7	3.7	8.7	-1.6
Basic Materials	17.9	23.2	-0.7	2.4	1.9	1.0	1.7	2.4	-0.9	8.1	9.6	-0.6
Basic Resources	15.6	21.5	-0.7	2.7	2.1	0.8	1.4	2.3	-0.9	6.7	9.2	-0.7
Chemicals	19.7	24.5	-0.9	2.2	1.9	0.8	2.2	2.7	-1.1	9.8	10.5	-0.4
Industrials	23.7	26.5	-0.5	1.6	1.5	0.4	2.9	3.0	-0.2	12.9	12.7	0.1
Construction & Mat.	19.4	24.0	-0.4	2.1	1.9	0.4	1.9	2.4	-0.6	10.0	11.5	-0.4
Industrial G&S	24.4	27.3	-0.5	1.5	1.4	0.3	3.1	3.0	0.2	13.4	12.5	0.5
Consumer Disc.	27.3	26.9	0.1	1.3	1.4	-0.4	3.6	2.9	1.5	13.6	11.4	1.3
Automobiles & Parts	13.2	19.0	-1.3	1.9	1.7	0.4	1.5	2.0	-1.4	6.2	6.4	-0.1
Media	26.6	30.2	-0.4	1.4	1.4	-0.2	3.3	3.2	0.0	13.9	13.0	0.3
Retailers	44.2	31.7	2.1	0.9	1.1	-1.0	7.6	4.8	3.2	25.4	19.8	1.3
Travel & Leisure	20.8	34.7	-1.4	1.7	1.1	1.4	3.5	3.5	0.0	10.0	13.1	-1.0
Consumer Prod & Serv	29.1	28.4	0.1	1.5	1.6	-0.2	3.9	2.9	2.2	17.0	15.1	1.0
Consumer Staples	20.8	22.6	-0.4	2.0	1.6	1.0	3.8	3.9	-0.2	14.9	14.5	0.2
Food, Bev & Tobacco	23.9	28.4	-0.9	2.2	1.6	1.5	3.5	4.2	-1.5	14.7	16.4	-1.0
Personal Care	29.5	31.8	-0.3	1.7	1.4	0.7	4.5	5.0	-0.6	15.3	16.2	-0.4
Healthcare	36.6	31.2	0.9	1.2	1.4	-0.6	5.4	5.2	0.2	22.2	20.0	0.7
Financials	12.3	23.9	-1.1	3.2	1.9	1.5	1.0	2.0	-1.6	5.1	7.2	-1.3
Banks	8.9	21.3	-1.3	4.5	2.3	2.0	0.8	1.9	-1.7	4.0	8.2	-1.7
Financial Services	20.0	29.7	-0.6	1.7	1.5	0.3	1.3	1.9	-1.1	10.3	10.1	0.1
Insurance	15.1	24.2	-1.0	2.4	1.6	1.3	1.4	2.4	-1.2	4.7	5.2	-0.5
Real Estate	14.8	27.1	-0.9	3.3	2.5	0.9	1.4	1.7	-0.8	15.0	16.9	-0.5
Technology	48.1	38.2	0.5	0.6	0.9	-0.6	7.7	4.5	1.4	27.3	17.9	1.0
Telecommunications	15.0	23.3	-0.8	4.3	3.0	1.1	2.1	3.4	-1.1	5.4	8.3	-1.0
Utilities	17.0	18.5	-0.3	3.6	3.5	0.1	1.5	2.0	-1.0	6.3	6.9	-0.5
Market	21.1	24.8	-0.6	2.0	1.8	0.5	2.3	2.8	-0.8	10.3	10.6	-0.1

Notes: *in standard deviations from historical average. Mat. = materials. G&S = goods & services. Disc. = discretionary. Prod & Serv = products & services. Bev = beverage. Data starts on 1st January 1983 for price/earnings and dividend yield and 1st January 1990 for price/book and price/cash flow. See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

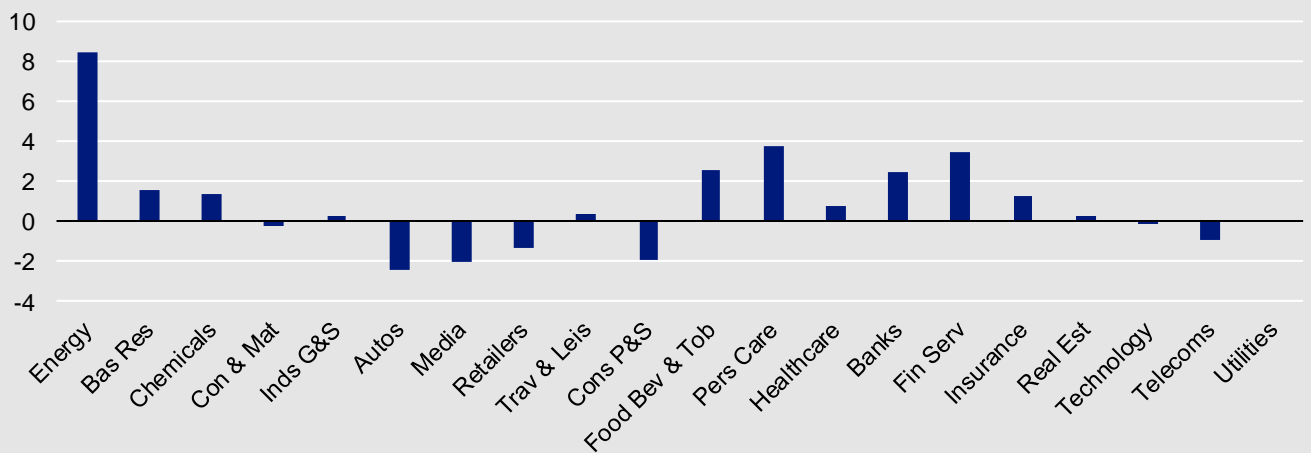
Appendix 4: Sector valuations by region

Figure 25 – Global dividend yields relative to market (z-score)



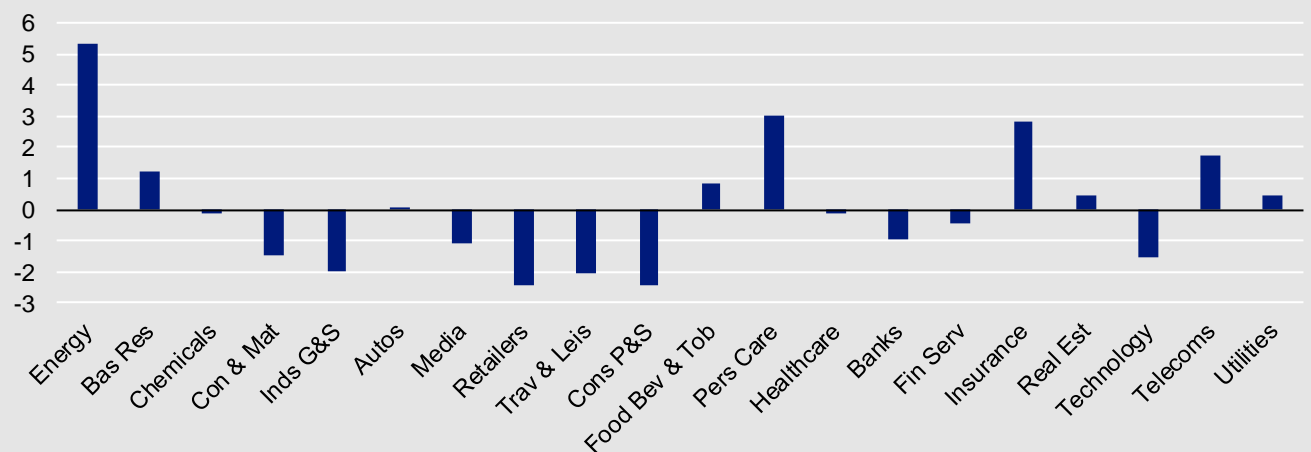
Notes: See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

Figure 26 – US dividend yields relative to local benchmark (z-score)



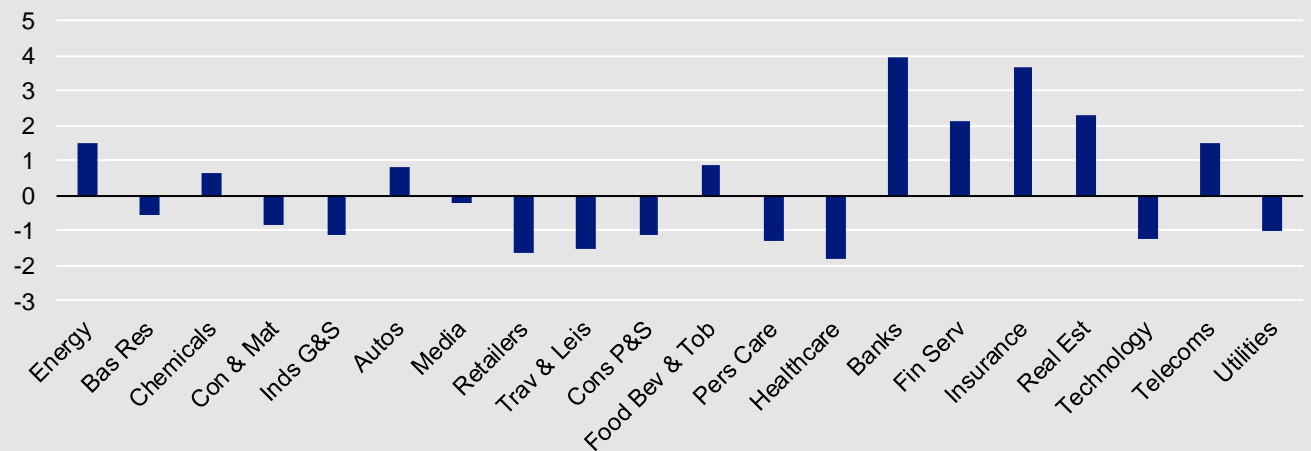
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream US Total Market Index. Source: Refinitiv Datastream and Invesco

Figure 27 – Europe dividend yields relative to local benchmark (z-score)



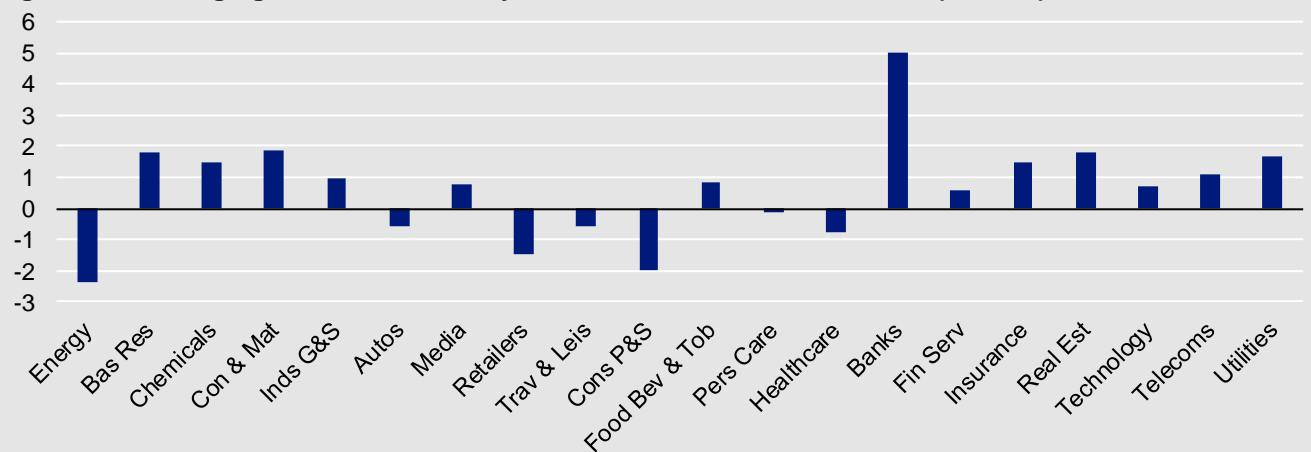
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Europe Ex-Emerging Total Market Index. Source: Refinitiv Datastream and Invesco

Figure 28 – Japan dividend yields relative to local benchmark (z-score)



Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Japan Total Market Index. Source: Refinitiv Datastream and Invesco

Figure 29 – Emerging markets dividend yields relative to local benchmark (z-score)



Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Emerging Markets Total Market Index. Source: Refinitiv Datastream and Invesco

Appendix 4: Performance tables

Figure 30 – Global equity sector total returns relative to market

Data as at 30/09/2020	Global				
	3m	YTD	12m	5y*	10y*
Energy	-8.9	-32.1	-33.6	-9.3	-9.1
Basic Materials	2.4	1.6	3.2	0.8	-4.9
Basic Resources	1.9	1.6	6.6	3.3	-8.9
Chemicals	3.2	1.7	-0.3	-0.9	-1.0
Industrials	2.0	-2.2	-2.6	0.7	0.4
Construction & Materials	1.6	-4.5	-4.6	-3.0	-3.0
Industrial Goods & Services	2.1	-1.8	-2.3	1.3	1.0
Consumer Discretionary	5.4	9.5	8.2	0.9	2.3
Automobiles & Parts	16.7	14.8	15.0	-2.1	-0.5
Media	1.3	-3.5	-2.2	-2.3	2.4
Retailers	4.8	27.8	25.9	5.4	4.9
Travel & Leisure	3.1	-18.4	-20.1	-4.8	-0.8
Consumer Products & Services	3.5	8.3	6.9	1.3	2.3
Consumer Staples	-1.9	-1.7	-5.7	-2.7	-0.1
Food, Beverage & Tobacco	-2.5	-5.7	-12.0	-4.1	-0.8
Personal Care, Drug & Grocery Stores	-0.7	5.9	0.0	-1.3	0.9
Healthcare	-2.4	9.6	14.6	1.3	5.2
Financials	-5.5	-21.0	-20.7	-5.3	-3.6
Banks	-9.1	-29.2	-29.0	-8.7	-6.9
Financial Services	-3.0	-10.6	-8.9	-0.2	1.2
Insurance	-1.6	-15.6	-17.2	-3.5	-0.7
Real Estate	-3.8	-12.7	-15.5	-3.5	-2.1
Technology	5.1	28.8	35.6	13.5	8.9
Telecommunications	-3.9	-1.8	-6.6	-5.1	-3.0
Utilities	-2.6	-4.9	-9.7	-1.3	-3.5

Notes: *showing annualised returns. 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

Appendix 5: Methodology

Multiple regression analysis

We have run a multiple regression analysis to examine how macroeconomic factors influence sector valuations. We have used the dividend yield relative to market as the dependent variable and have run the regressions with the following independent variables:

Monthly series since 31/01/1991:

- **1-year change in:** industrial production, consumer price index
- **The level of:** real oil price (US CPI adjusted), real copper price (US CPI adjusted), consumer confidence index, manufacturing confidence index, 10-year benchmark government bond yield, net debt/EBITDA (only for non-financial sectors), return on equity

We calculate a global measure of industrial production growth, consumer price index growth, consumer confidence, manufacturing confidence and government bond yields using data from four regions or countries representing 65% of global Gross Domestic Product: United States, Europe, Japan and China. The global measures are weighted averages using Datastream global index market capitalisations as weights.

This analysis shows us which independent variables have a statistically significant relationship with sector valuation ratios. In addition, the regression coefficients tell us how much each independent variable influences those ratios. Finally, we use those coefficients to calculate what the valuation ratios should be, based on the model, and compare them to currently observed valuations. In theory, this allows us to determine whether a sector is undervalued or overvalued based on the macroeconomic factors we have used.

Sector classification

We use the Industry Classification Benchmark (ICB).

Leverage and profitability ratios

We calculate Net Debt/EBITDA from sector and market level aggregates supplied by Refinitiv Datastream. They define Net Debt as Total Debt minus Cash, where Cash represents Cash & Due from Banks for Banks, Cash for Insurance companies and Cash & Short Term Investments for all other industries. We tend to exclude Financials from Net Debt/EBITDA comparisons for it is difficult to distinguish debt they sell as a product and debt they incur during the operation of the business. In addition, Refinitiv Datastream define EBITDA – Earnings before Interest, Taxes and Depreciation – as the earnings of a company before interest expense, income taxes and depreciation. It is calculated by taking the pre-tax income and adding back interest expense on debt and depreciation, depletion and amortisation and subtracting interest capitalised.

Decomposed returns

We break down total returns into 3 components to examine what has driven sector performance year-to-date, in the last 12 months and for the whole history of the index. “Yield” shows the income investors received from dividends paid during the period concerned. “Growth” shows the rate of dividend growth, calculated using the percentage change in dividend per share (DPS) values for the sector indices. DPS is calculated as dividend yield times the price index. “Multiple Change” refers to the change in dividend yield between the two periods indicated, plus the change in dividend yield times dividend growth. We use it to measure investor expectations and sentiment regarding the sectors.

Implied perpetual growth models

A valuation cross-check is sought by calculating the perpetual real growth in dividends required to justify current prices. This then allows an evaluation of whether those implied growth rates are realistic.

We use a simple perpetual growth model to calculate implied growth. If $\text{Price} = \text{Dividend}/(\text{Discount Factor} - \text{Growth})$, then $\text{Growth} = \text{Discount Factor} - \text{Dividend Yield}$. The Discount Factor is equal to $\text{Risk Free Rate} + (\text{Beta} \times \text{Market Risk Premium})$. Everything is expressed in real terms to eliminate the distorting influence of inflation, the output being growth in real terms. The important ingredients are derived as follows:

- The risk-free rate is an equity market capitalisation weighted average of US, UK, Eurozone, Japanese and Chinese 10-year real yields.
- Sector betas are calculated using five years of weekly price movements relative to the global market index.
- The risk premium is derived from US equity and treasury market returns since 1871.
- The dividend yield for each sector is the 12-month trailing yield calculated by Datastream.

Sector allocations

We start by considering where the equity markets are in their respective economic cycles, which determines whether cyclical or defensive sectors are more likely to outperform. Our preferred measure of cyclical sensitivity is beta. Sector betas are calculated using five years of weekly price movements relative to the local market index.

Next, we refine our decisions by looking at how sector yields relative to the market relate to the ratio calculated by our multiple regression model and how much dividend growth is implied in current trailing 12-month dividend yields relative to market.

Finally, we rank sectors by their recent volatility, using the standard deviation of daily returns for the three months before our cut-off date. After that we rank sectors by their 12-month trailing dividend yield. Based on our thematic report about sector strategies, Sector strategies: Control your volatility, combining these approaches provided the best cost-adjusted and risk-adjusted returns in the US, and was among the best in cost-adjusted returns in Europe.

An investment decision is the result of balancing a range of factors and the weightings applied to those factors can vary across time and sectors. "Overweight" suggests that we prefer to hold more of the given sector than suggested by the market capitalisation-weighted "neutral" position. "Underweight" suggests we prefer to hold less of the given sector than suggested by the market capitalisation-weighted "neutral" position. "Neutral" suggests a holding in line with the market capitalisation-weighted benchmark.

Preferred regions

We measure sector valuations relative to their respective local benchmarks in the United States, Europe, Japan and Emerging Markets. We calculate a z-score comparing the latest relative dividend yield to its historical average, which gives us a standardised way to measure how far valuations are from those averages in each region. Our normal preference would be for the cheapest region based on this measure, but we also take into account thematic and other fundamental considerations.

Appendix 6: Abbreviations

Changes in allocations on the front page: OW = Overweight, N = Neutral, UW = Underweight

Sector name abbreviations:

Autos = Automobiles & parts
Basic Res = Basic Resources
Chem = Chemicals
Con & Mat = Construction & Materials
Cons P&S = Consumer Products & Services
Fin Serv = Financial Services
Food, Bev & Tob = Food, Beverage & Tobacco
Ind G&S = Industrial Goods & Services
Pers Care = Personal Care, Drug & Grocery Stores
Pers & Hh Gds = Personal & Household Goods
Real Est = Real Estate
Tech = Technology
Telecoms = Telecommunications
Trav & Leis = Travel & Leisure

Appendix 7: Definitions of data and benchmarks

Sources: we source data from Refinitiv Datastream unless otherwise indicated.

Government bonds (figure 3): Current values use Refinitiv Datastream benchmark 10-year yields for the US, Eurozone, Japan and the UK and the Thomson Reuters China benchmark 10-year yield for China.

Value sectors: stocks or sectors that have low price/book value or price/earnings multiples or high dividend yields. Some of these stocks or sectors may generally trade at a discount compared to the market if investors expect their earnings or dividends to grow at a slower pace than the market. Examples of such sectors are utilities, telecommunications, banks and oil & gas.

Growth sectors: stocks or sectors that have high price/book or price/earnings multiples or low dividend yields, because investors expect them to have high earnings or dividend growth. Examples of these sectors are technology, healthcare and food & beverage.

Defensive sectors: stocks or sectors that have business models that investors consider to be relatively stable throughout the business cycle. We refer to the following sectors as defensive: food & beverage, personal & household goods, healthcare, telecommunications and utilities.

Cyclical sectors: stocks or sectors that have business models that investors consider to be sensitive to the economic cycle. We refer to the following sectors as cyclical: oil & gas, basic resources, chemicals, construction & materials, industrial goods & services, automobiles & parts, media, retail, travel & leisure, banks, financial services, insurance, real estate and technology.

Growth factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and 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 factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and includes stocks in the bottom quintile based on the standard deviation of their daily returns in the previous three months.

Price momentum factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and includes stocks in the top quintile based on their performance in the previous 12 months.

Quality factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and 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 factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and includes stocks in the bottom quintile based on their market value in US dollars for the US and euros for Europe.

Value factor: a subset of the S&P 500 in the US and the Stoxx 600 index in Europe and includes stocks in the bottom quintile based on their price to book value ratios.

Data as of 30th September 2020 unless stated otherwise. This publication is updated quarterly.

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