



Strategic Sector Selector

The consumers are coming! Are they?

Equity markets remained buoyant in the final quarter of 2020 boosted by Joe Biden winning the US presidential election and positive news about vaccines. We still think that the market faces an uphill battle in the short term as infection rates rise in many parts of the world and mobility remains highly restricted. However, we believe that monetary policy will stay supportive in the next 12 months and expect more fiscal measures to help tide over the economy until at least the summer. We retain a balance of cyclicals and defensives in our model allocation but reshuffle them to concentrate more on consumer-related sectors and less on industrials. We raise consumer discretionary to Overweight by upgrading media, travel & leisure and consumer products & services. We finance this by downgrading retailers, chemicals and industrial goods & services, where our positions were tactical. Finally, while we retain our Overweights in food, beverage & tobacco and technology as defensive hedges, we cut healthcare to Underweight.

Changes in allocations:

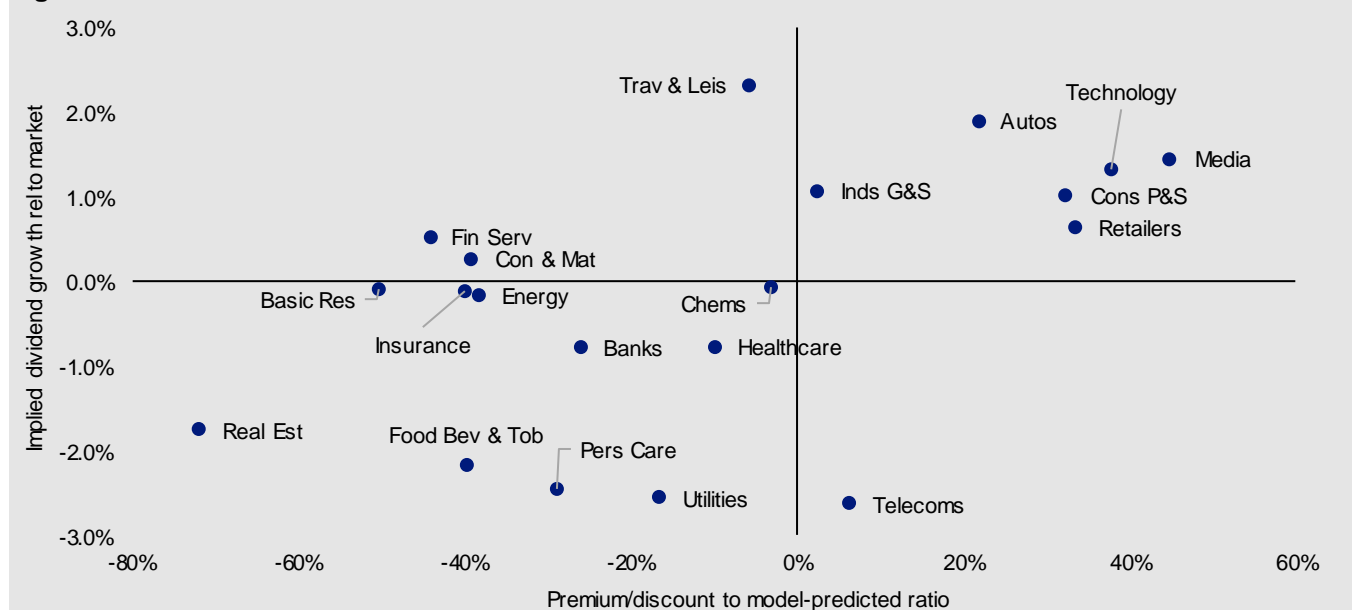
- Upgrades: media, travel & leisure (UW to OW); consumer products & services (N to OW); insurance (UW to N)
- Downgrades: chemicals, industrial goods & services (OW to N); retailers, healthcare (N to UW)

	Most favoured	Least favoured
Sector	EM real estate European food & beverage	US automobiles & parts US healthcare

Sectors where we expect the best returns:

- Food, beverage & tobacco: decent yield, undervalued, play on interest rates staying lower for longer
- Financial services: attractive valuations vs fundamentals, early-cyclical, play on strong financial markets
- Travel & leisure: play on pent-up demand for entertainment and travel

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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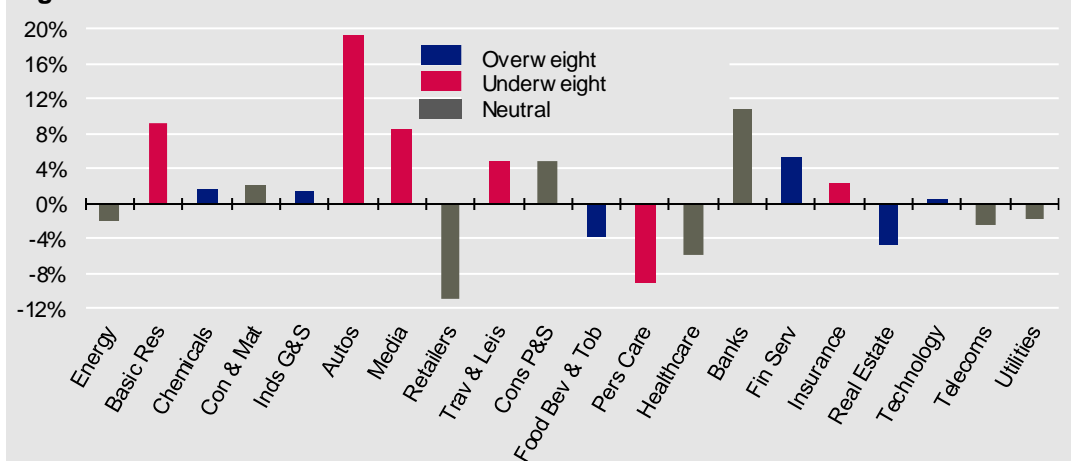
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Summary and conclusions

Since the last time

In the last quarter of 2020, the relief that vaccines were approved in Europe and the US was overshadowed by the discovery of new and more virulent strains in the UK and South Africa. They spread rapidly to other countries and worries that resurgent case numbers will overwhelm hospitals prompted the extension of restrictions on mobility well into 2021. This implies that the economic recovery will stall or go into reverse in the first quarter (possibly even the first half) of 2021, in our view. Nevertheless, global equity markets rallied, returning 13% in local currency terms in Q4, also boosted by the election of Joe Biden as the next president of the US.

Figure 2 – 3m Global sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th September 2020 and 31st December 2020. Colours indicate allocations in period considered. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 2 shows that the recovery was broad-based and that investors rotated into cyclical sectors, such as basic materials, industrials, consumer discretionary (apart from retailers) and financials, and out of defensives. This was more or less a continuation of trends from the third quarter. Sector performance was quite consistent among regions with only a few exceptions, notably technology where the underperformance of the US and European sectors was offset by outperformance in Japan and EM (see **Appendix 2** for more details). Although most of our Overweights outperformed, we were Underweight many of the top performers during the quarter.

Asset allocation backdrop

We believe that economic momentum slowed down as restrictions were reintroduced in the final quarter of 2020 and expect that to continue into the first quarter of 2021. However, as governments ramp up vaccination programmes this year, we think those restrictions will be gradually lifted allowing the global economy to reaccelerate into the second half of 2021 and early 2022 (see our [2021 Outlook](#)). We currently expect to reach something close to our pre-COVID normality in H1 2022 (our base case). In our view, the risk of a double-dip recession is low (our downside scenario) and there is a significant chance that our base case will be too conservative (see our “V” for vaccine scenario). It certainly seems that way to us after the blue wave in Washington.

A further layer of support comes from policy makers. We think fiscal policies will remain supportive over the coming quarters, which could lessen economic risks. On the monetary front, we do not foresee any change in policy rates at major central banks and expect asset purchase programmes to remain active. However, tapering of those purchases could happen during 2021, which may bring temporary market volatility.

Effectively, the greater the economic momentum, the better we expect “value” assets to perform. However, finding value is difficult, especially given the rally in risk assets since

spring lows. Luckily, asset allocation is more about relative value and, on that basis, given multi-century lows in policy rates and bond yields, we find more value (and hope) in risk assets, especially real estate.

Optimisations based on our base case projections (as of end-October 2020) suggested maximum allocations to real estate, commodities and cash; zero allocations to investment grade credit (IG), HY credit and gold but were less clear on government bonds and equities. **Real estate** is our favourite asset category based on valuations and the potential for an operational rebound. We boosted the allocation to the maximum allowed 16%. Likewise, we took **commodities** back to the maximum 4% (from zero), with a focus on industrial commodities and agriculture. The optimisation results were not so clear for **equities**, given the recent rebound. However, led by cyclical considerations we moved to a slightly Overweight 50% versus a Neutral 45%, with a focus on non-US markets. To balance all those risk assets, we maintained a maximum 10% exposure to **Cash**, our diversifier of choice.

IG has been our all-weather choice during 2020 but we now feel less need for its stability, especially given that spreads have normalised and that yields are at historical lows. We reduced it from the maximum 20% to zero. We also reduced the allocation to **HY** but left it at a Neutral 5% out of respect for its cyclical qualities. We left **government bonds** at an unchanged 15%, well below the Neutral 25%. We thought **gold** was expensive, even before treasury yields rose, and left it at a zero allocation. From a regional perspective, bearing in mind the recently increased likelihood of an early vaccine rollout, our emphasis is upon EM and Europe.

Figure 3 – Market forecasts

	Current (31/12/20)	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	0.91	1.35
Eurozone	-0.58	0.00
China	3.20	3.50
Japan	0.02	0.10
UK	0.24	0.75
Exchange Rates/US\$		
EUR/USD	1.22	1.24
USD/CNY	6.53	7.00
USD/JPY	103.26	106.00
GBP/USD	1.37	1.35
USD/CHF	0.88	0.94
Equity Indices		
S&P 500	3756	3600
Euro Stoxx 50	3553	3300
FTSE A50	17707	16500
Nikkei 225	27444	25250
FTSE 100	6461	6800
Commodities (US\$)		
Brent/barrel	51	45
Gold/ounce	1898	1600
Copper/tonne	7749	7250

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.

Source: Refinitiv Datastream and Invesco Global Market Strategy Office

Changes to sector allocations

Apart from a small wobble at the end of October before the US presidential election, global equities had a stellar fourth quarter in 2020. Amid optimism around vaccines and the change in the US presidency, markets seemed to be able to ignore surging infection rates and increasingly stringent lockdowns. The “reflation trade” seems to be the consensus view now, especially after the US Senate runoffs, which resulted in the Democratic Party controlling both houses of Congress. We are also positive that the economic recovery will accelerate in the second half of 2021, but the road remains rocky until the global population is vaccinated against Covid-19. We are also worried that equity valuations have fully priced in this year’s recovery and may be sensitive to bad news. Nevertheless, we reshuffle our allocations within cyclicals towards consumer discretionary and financials and slightly reduce our exposure to defensive sectors.

We have followed a gradual approach to changing our allocation throughout the recovery since the equity market trough in March 2020. We are still concerned that global equities have run ahead of themselves and would like to maintain some exposure to defensive sectors and “stay-at-home winners”. However, we believe that the global economy remains in its early-expansion phase, and therefore most of our Overweights stay in cyclical sectors.

Chemicals was one of the sectors we deemed to have been well-positioned for resilience in the pandemic, but as the most challenging stage of the pandemic nears its end, we close our Overweight in the sector and reduce it to **Neutral**. It looks close to fair value on our multiple regression model and its implied dividend growth is also in line with the market. One of its main input costs has risen with oil prices trading above \$50 per barrel and we think environmental concerns will resume once consumers emerge from “survival mode” reducing the demand for plastic products.

Joe Biden has been confirmed as the next president of the United States and the Democratic Party has gained control of the Senate, thus we think the time has come to close our tactical Overweight in **industrial goods & services** reducing it to **Neutral**. We think the mellowing of trade relations between the US and China has been priced into sector valuations. It now trades close to the fair value suggested by our multiple regression model and its implied dividend growth looks high. We also believe that the relationship will not revert to its pre-Trump state as political attitudes have shifted on both sides.

We also reshuffle our allocation within consumer discretionary. We shift our exposure to two sectors that have significant exposure to both winners and losers of pandemic-induced restrictions: we raise **media** to **Overweight** and cut **retailers** to **Underweight**. We believe that the balance between stocks in the media sector will shift towards those that have exposure to broadcasting live events and theme parks as they gradually reopen. Retailers has been dominated by those that have been able to take advantage of their online offering, but we think the boost to valuations provided by low bond yields will reverse somewhat. We also raise **travel & leisure** and **consumer products & services** to **Overweight**. Although valuations may not fully reflect the risks in travel & leisure, we think even a cautious return to travelling and eating out will lift the sector. We also expect consumer products & services to benefit from the potential pent-up demand as we hope some sort of normality will return in the second half of 2021.

As the sentiment around the pandemic shifts from emergency to more business-as-usual with the rollout of vaccines, we reduce **healthcare** to **Underweight** from **Neutral**. Although its valuations look somewhat attractive, we think the risk of rising bond yields to defensive growth has increased. We also maintain our view that manufacturing and distributing vaccines will be a drag on profitability in the medium term.

Finally, we close our Underweight in **insurance** and raise the allocation to **Neutral**. They may be able to draw a line under Covid-19-related claims, though those from natural disasters may remain a risk. Sector valuations look attractive based on our multiple

regression model, but they are in line with that of the market using implied dividend growth.

The best and worst of the rest

We retain our **Neutral** allocation to **energy** even though oil prices may have overshot in the short term, in our view. Valuations look supportive based on our multiple regression model, though not so much using implied dividend growth (it is in line with the market). Economic recovery may support returns, but we think environmental concerns will be a headwind in the medium term, especially with the incoming US administration.

We maintain our **Underweight** in **basic resources**. The continued strong performance of commodity prices drove the outperformance of the sector in the final quarter of 2020. However, 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. In our view they have probably priced in our “V” for vaccine scenario and therefore any upside appears to be limited even if the economic recovery in developed markets strengthens in 2021.

It seems that we missed the boat on **automobiles & parts** (excuse the mixed metaphor) and we feel 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 3.5% 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.

Despite its underperformance since the market trough in March 2020, 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 also like that their businesses may be boosted by a potential recovery.

Banks outperformed in the fourth quarter of 2020 on the hopes of a recovering economy and this momentum may continue in the short term. As we outlined in [Are banks the real deal?](#) it would be logical to expect strong outperformance from the sector in the early part of an expansion on the expectation of improving margins and higher demand for loans. However, we think that low rates are here to stay for the foreseeable future and banks may have taken on loans that they would avoid in other circumstances. Valuations are attractive, but we fear this is not enough to warrant too much enthusiasm for the sector in the long term. We stay **Neutral**.

Financial services is our preferred sector within financials and we remain **Overweight**. The sector may be boosted by strong financial markets backstopped by central bank support. We think that monetary policy is unlikely to be tightened within our forecast horizon (the next 12 months), and even if it does, the economic recovery will probably lead to higher demand for financial and investment products.

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 remain in place longer than currently expected and companies in the sector lose more tenants or are forced to offer further rent holidays.

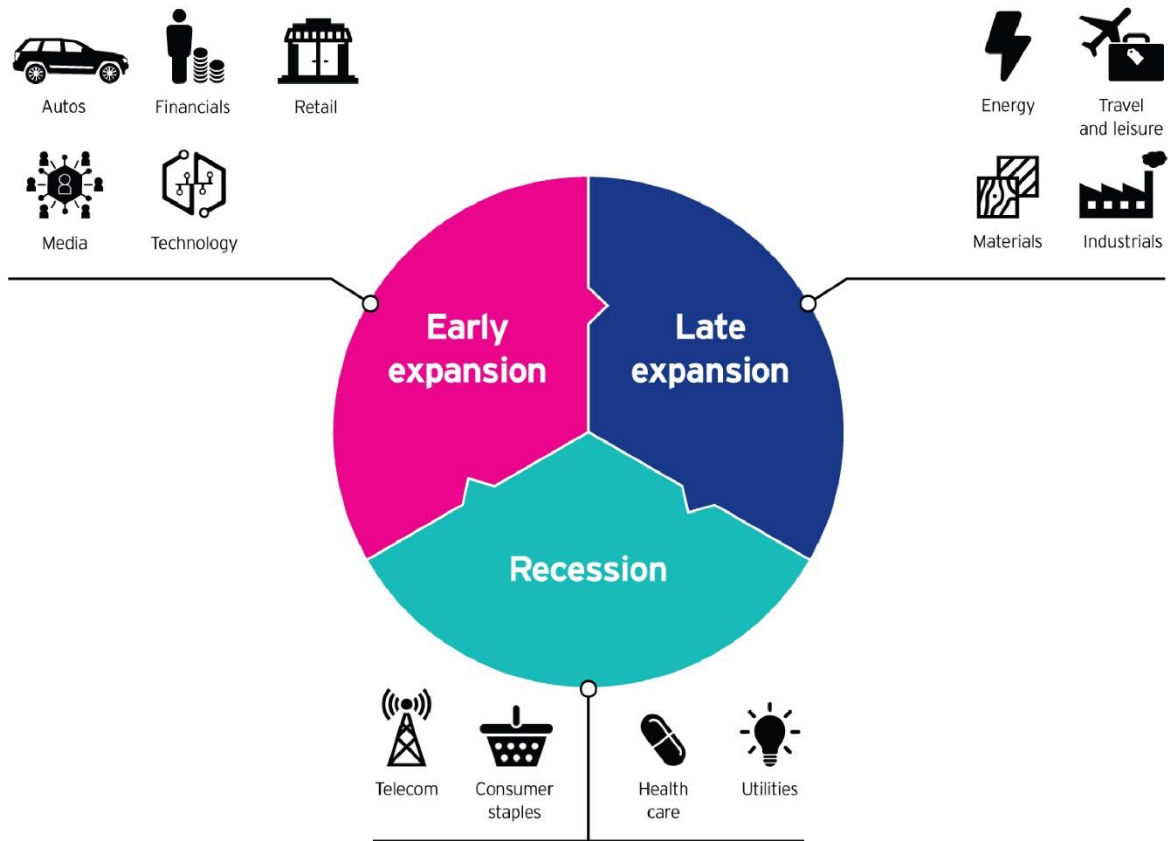
We keep our **Overweight** allocation to **technology**, which we think will continue to benefit from the structural trends accelerated and amplified by the COVID-19 crisis. Valuations look rich, but they are nowhere near the extremes of the tech bubble. We suspect the changing composition of the sector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

Figure 4 – Model allocations for Global sectors

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

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

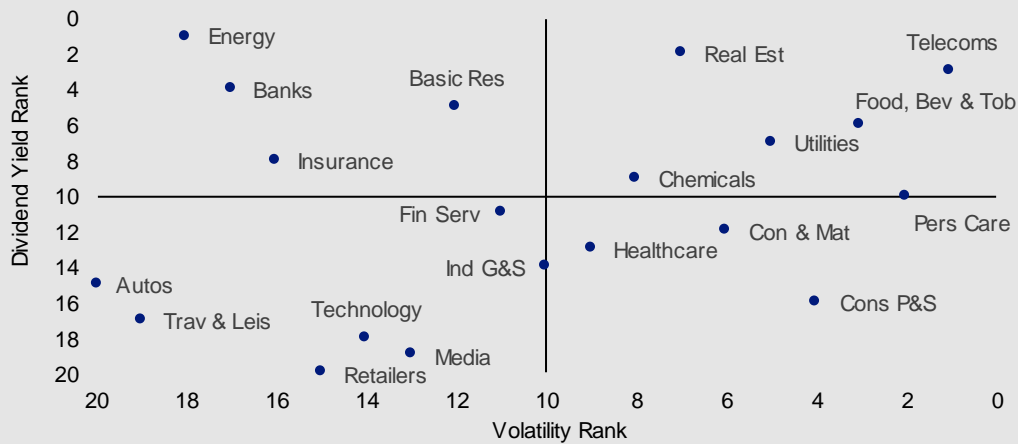
Figure 5 – Economic cycle and main sector allocation decisions



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

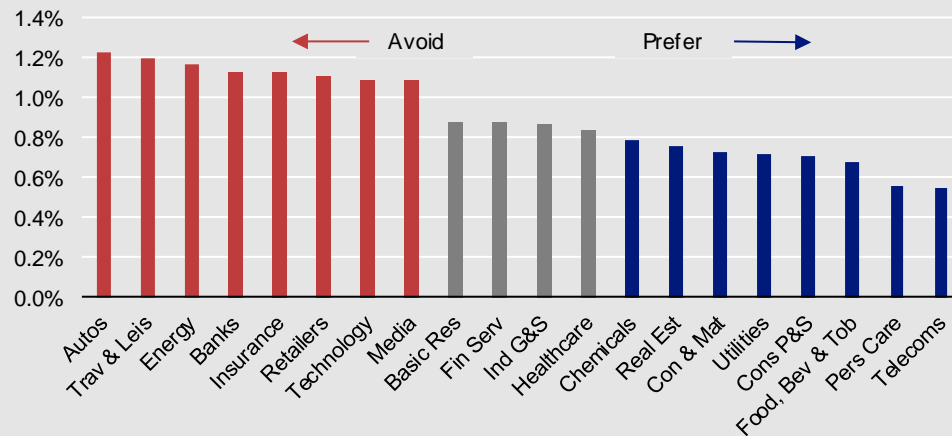
Systematic strategy – Global

Figure 6 – Global sectors ranked by volatility and dividend yield



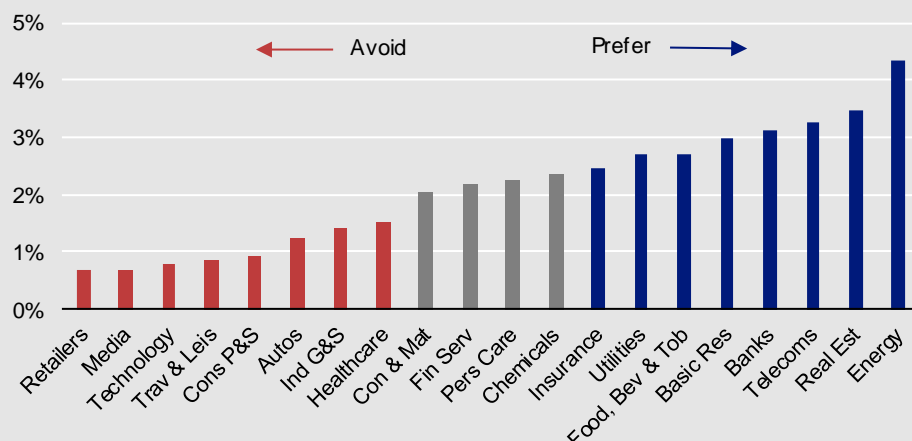
- A purely systematic approach would favour sectors in the top right corner: telecoms, food, beverage & tobacco and utilities
- The approach would avoid sectors in the bottom left, such as autos, retailers, or travel & leisure

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



- The daily returns of autos, travel & leisure and energy were the most volatile in the past 3 months
- Telecoms, personal care, and food, beverage & tobacco were the least volatile

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

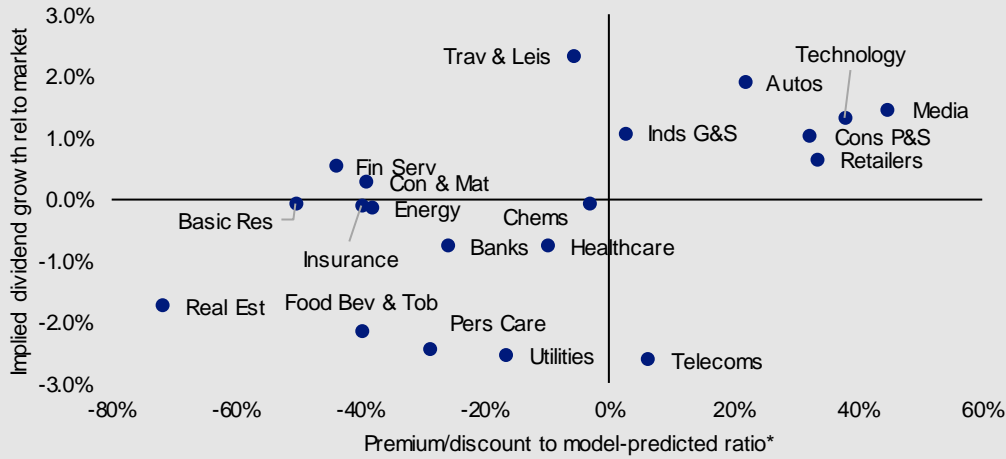


- Energy, real estate and telecoms look the cheapest based on their dividend yield
- The lowest yielding sectors include retailers, media and technology

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

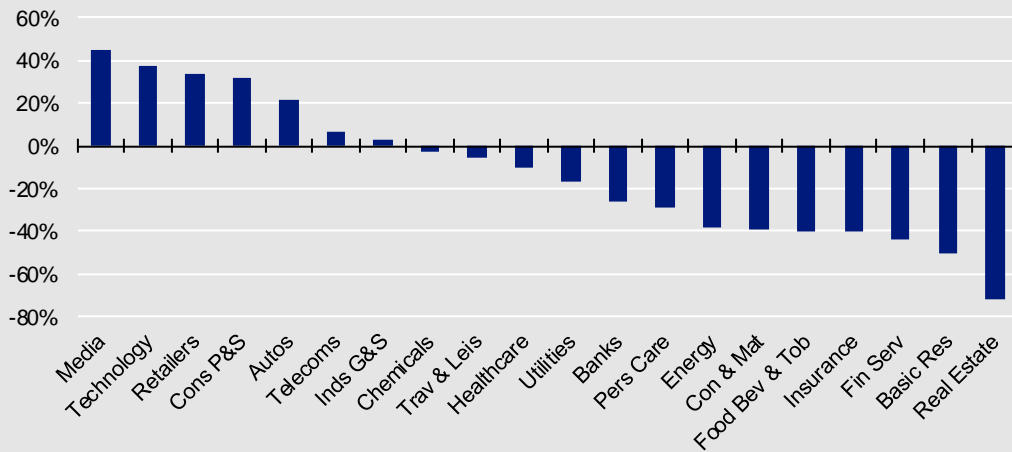
Valuations – Global

Figure 9 – Global sectors valuation matrix



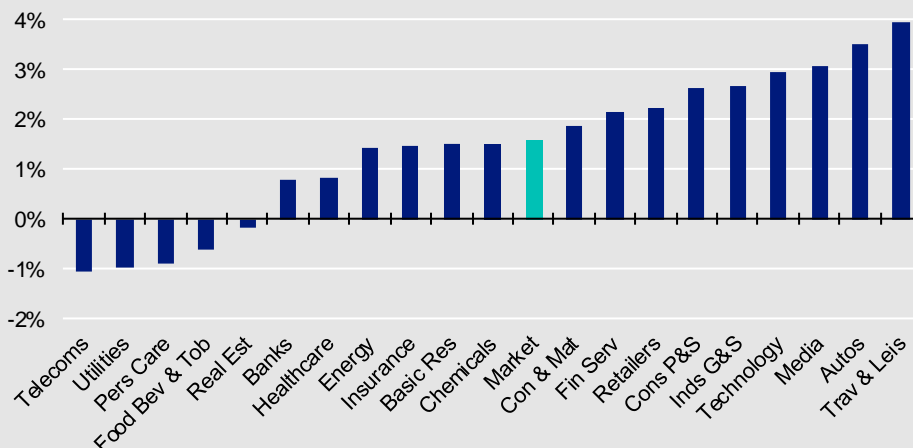
- Sectors in the top right corner look overvalued on both measures, while those in the bottom left appear undervalued
- This approach would avoid, for example, tech, media, and autos
- Food, beverage & tobacco, personal care, and real estate look better value

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



- Media, technology and retailers look the most overvalued versus our model
- Real estate, basic resources and financial services seem the most undervalued versus our model-predicted ratios

Figure 11 – Global implied perpetual real dividend growth

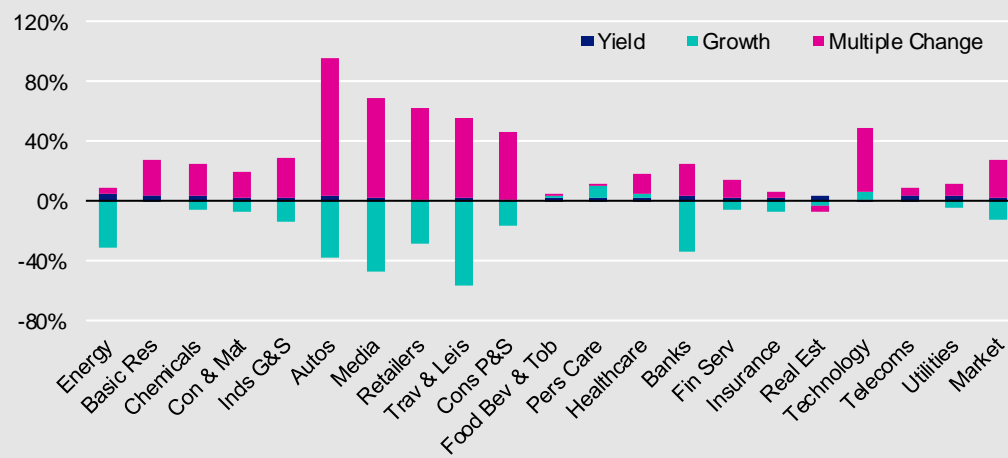


- Shows the future real growth required to justify current prices
- Technology appears priced for almost 3% real growth in dividends (expensive)
- Five sectors appear priced for negative growth (cheap)

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

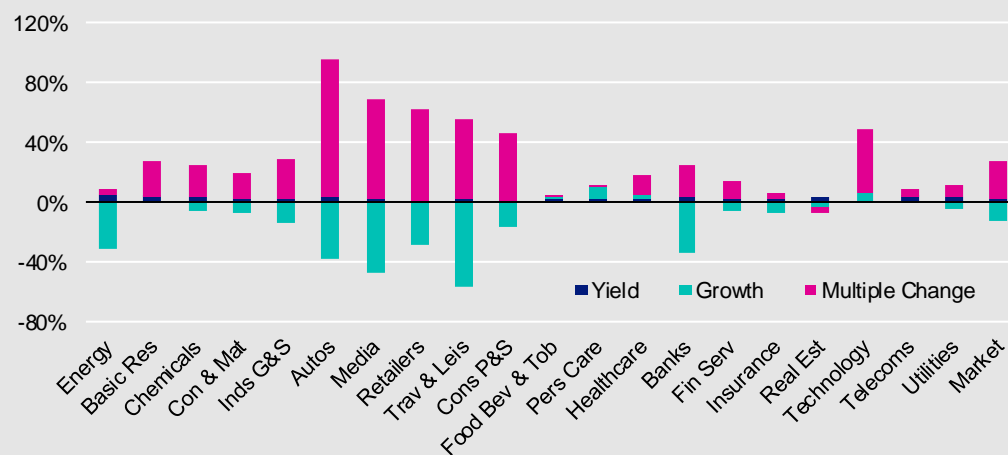
Decomposed returns – Global

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



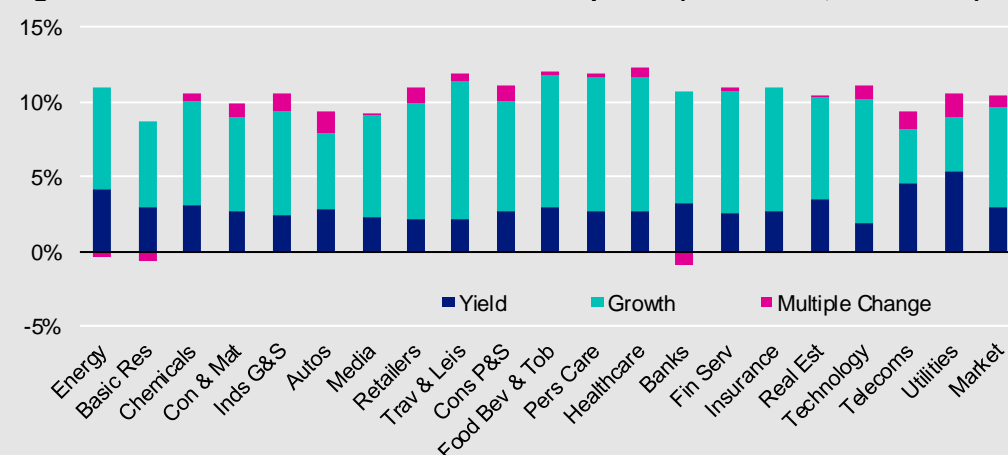
- Apart from basic resources and technology, only defensive sectors raised their dividend in 2020
- The only sector that had negative sentiment (multiple contraction) was real estate

Figure 13 – Global rolling 12-month total returns decomposed



- Sentiment, or the change in multiple, was the main driver of returns for most sectors in 2020
- Only two sectors had yields above 4%: energy and banks

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	0.45	0.16	0.24		0.76	
Real Copper	-0.01		-0.01	0.02	-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			0.99		2.85	-4.64
10y Yield				-6.72	15.67	-15.91
CPI		-3.24	-4.52		-12.75	12.01
Net Debt/EBITDA			-0.06	0.08	0.16	
ROE		-1.03	1.27	0.80	-3.21	

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	-1.15					
Real Copper	0.01	-0.01		-0.01	0.00	
Consumer Confidence	0.01	0.01	0.01	0.00	0.00	-0.01
Manufacturing Confidence		-0.02	-0.01	-0.01	0.00	0.01
IP	-2.72	-1.46	-0.91	0.79	0.25	-4.64
10y Yield					1.06	-15.91
CPI	11.95	12.95	8.33	8.51	-1.51	12.01
Net Debt/EBITDA	-0.19	-0.10	0.07	0.21	0.02	
ROE	-3.92	-2.03	-1.50		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	0.49			0.19	0.70		
Real Copper	-0.01	0.00	0.01		-0.01	0.00	
Consumer Confidence	0.01	0.00	0.00		0.00	0.00	-0.01
Manufacturing Confidence	0.00		0.00		0.00	0.02	0.01
IP	-2.89	-0.48	1.03	-0.36	1.30	-2.06	-4.64
10y Yield	-2.25	5.65	2.53	-3.05	6.43	-3.74	-15.91
CPI	12.57	-2.36	-1.88	2.46	-3.61		12.01
Net Debt/EBITDA	-0.05	-0.01		0.00	-0.20	0.09	
ROE		0.74	-2.49		-2.16	0.68	

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

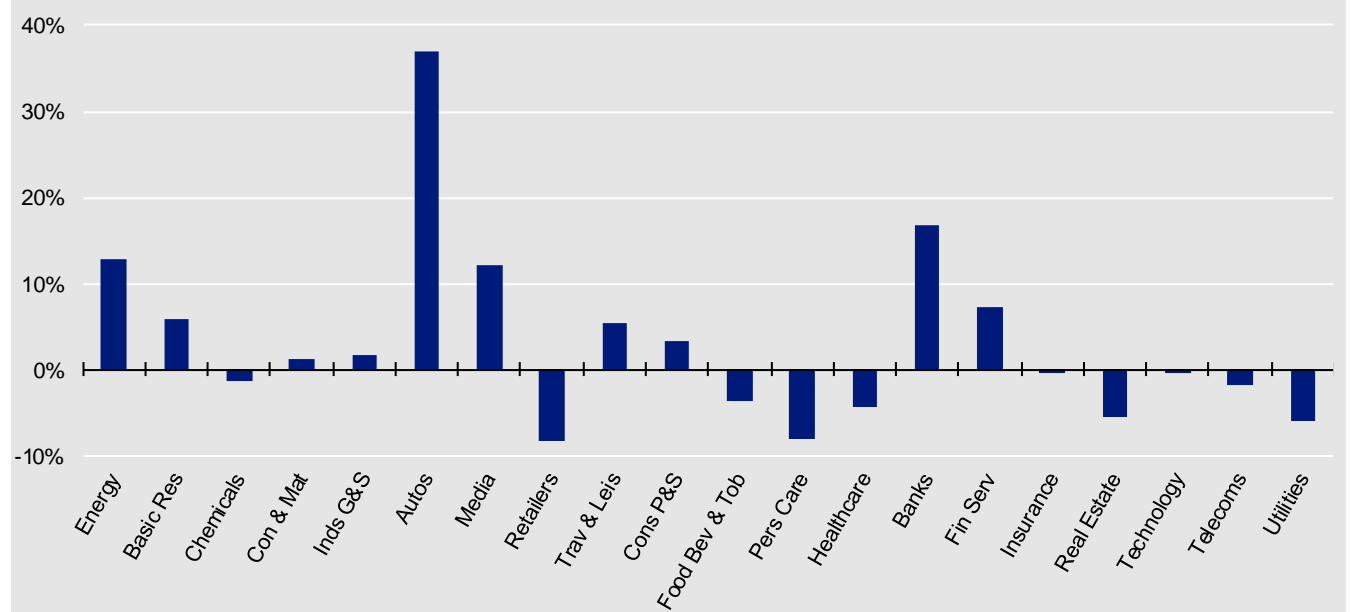
Figure 18 – Regression coefficients of Global financial sectors

	Banks	Financial Services	Insurance	Real Estate	Market
Real Oil	0.76	-0.27			
Real Copper	-0.01	0.00		-0.02	
Consumer Confidence	0.01	0.00	0.00	0.01	-0.01
Manufacturing Confidence	-0.01	-0.02		-0.03	0.01
IP	-2.92	1.73	-0.74	3.75	-4.64
10y Yield	-9.21	1.61	-3.23	3.31	-15.91
CPI	4.21				12.01
ROE	4.15	0.65	-0.50	-3.77	

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

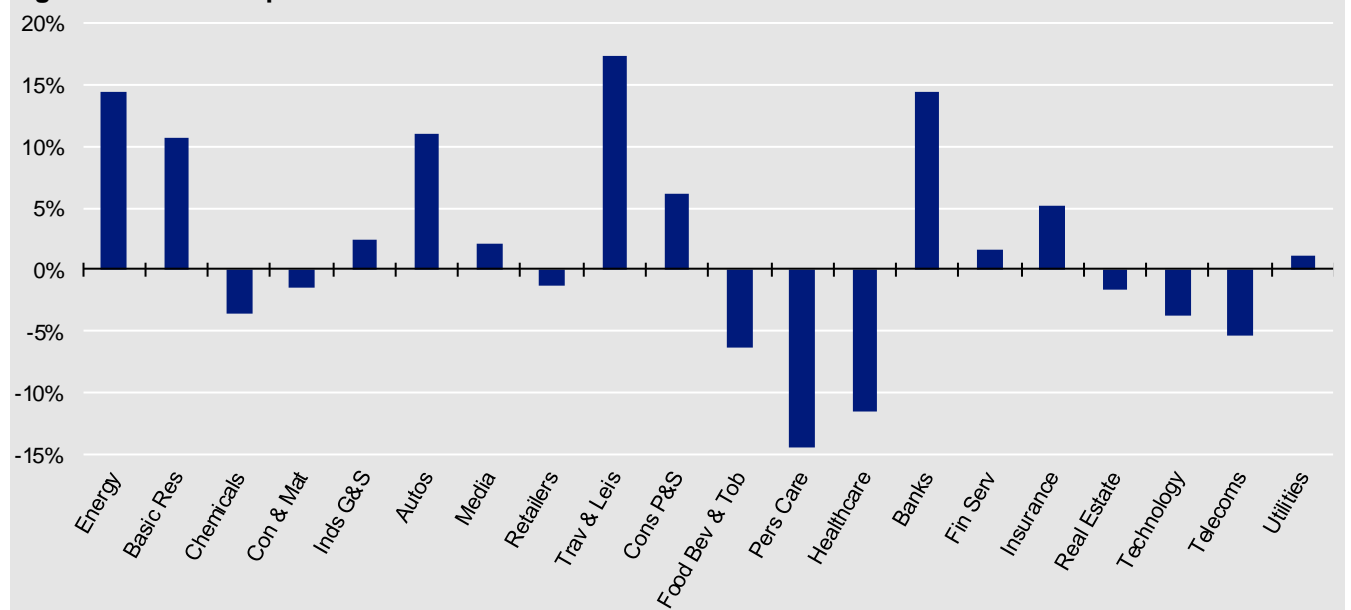
Appendix 2: Sector returns by region

Figure 19 – 3m US sector returns relative to market



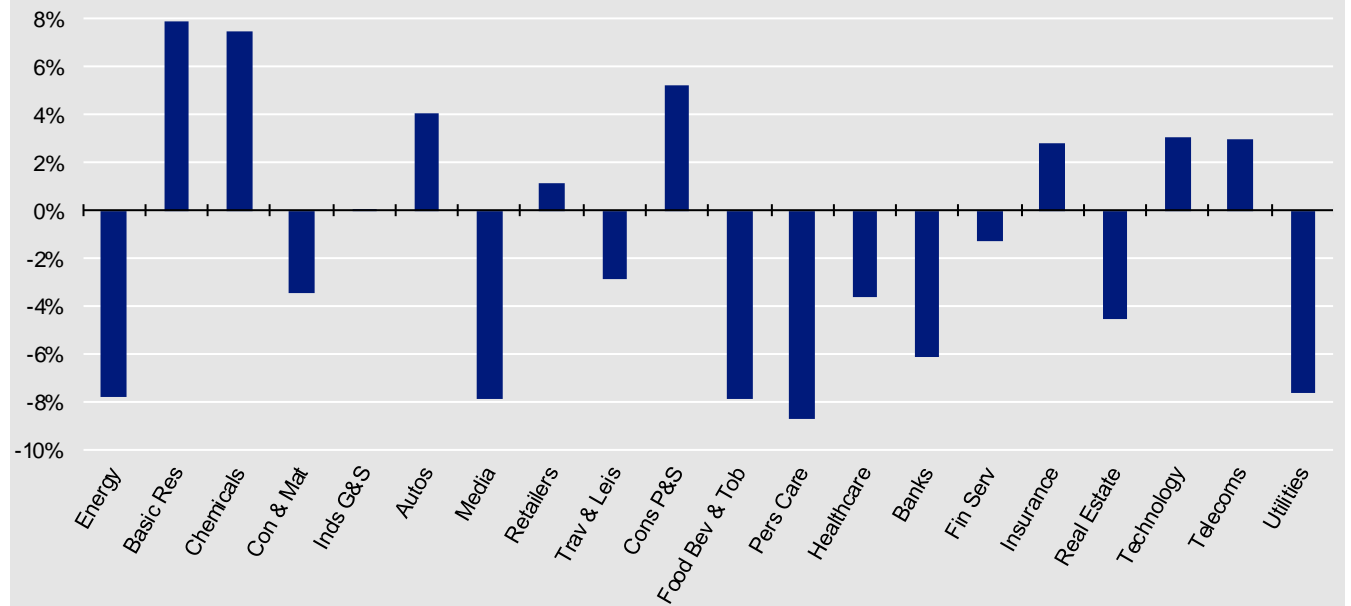
Notes: See appendices for methodology and disclaimers. Returns shown between 30th September 2020 and 31st December 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 20 – 3m European sector returns relative to market



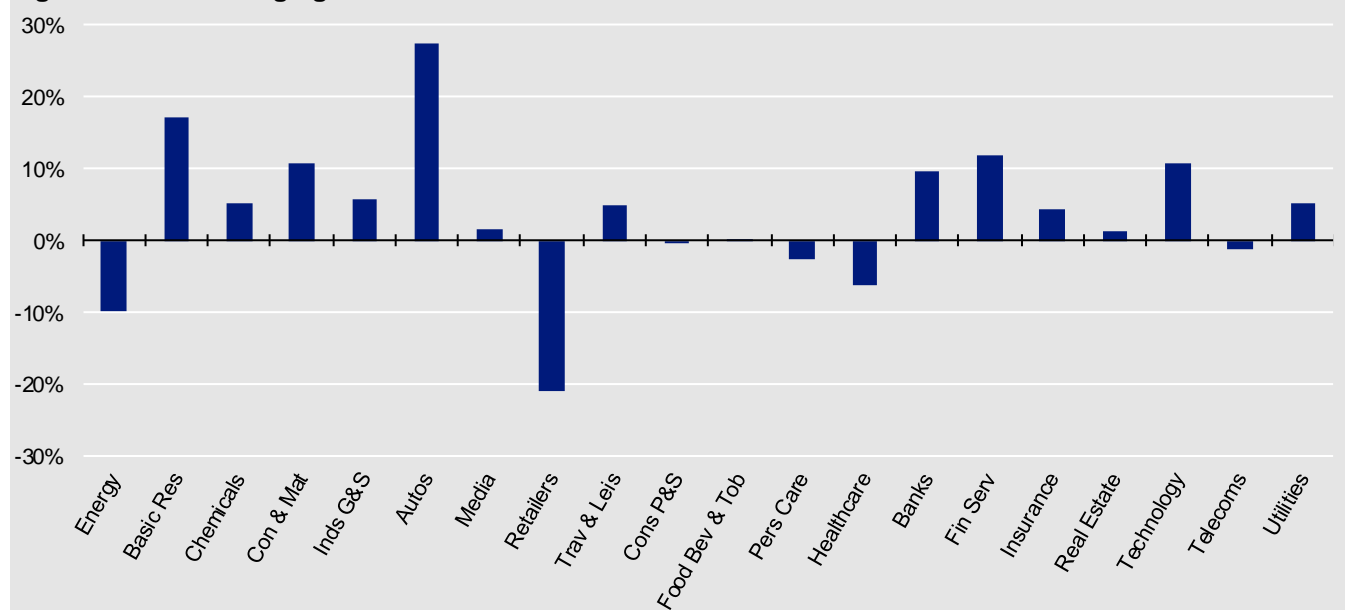
Notes: See appendices for methodology and disclaimers. Returns shown between 30th September 2020 and 31st December 2020. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

Figure 21 – 3m Japanese sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th September 2020 and 31st December 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 September 2020 and 31st December 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	34.0	14.3	3.2	4.4	3.8	0.4	1.5	1.7	-0.5	6.7	6.1	0.3
Basic Materials	26.3	16.8	2.0	2.7	2.7	0.0	1.9	1.8	0.3	9.8	7.2	1.6
Basic Resources	21.7	17.1	0.8	3.0	2.8	0.2	1.8	1.7	0.2	8.9	7.3	0.8
Chemicals	36.0	16.9	3.9	2.4	2.9	-0.6	2.1	2.0	0.4	11.3	7.4	2.5
Industrials	30.3	18.0	2.6	1.5	2.3	-1.1	3.0	2.1	2.1	12.7	9.1	2.1
Construction & Mat.	22.5	16.6	1.4	2.1	2.5	-0.7	2.0	1.8	0.4	9.6	8.9	0.2
Industrial G&S	31.8	18.5	2.8	1.4	2.2	-1.1	3.2	2.2	2.3	13.2	9.1	2.3
Consumer Disc.	41.1	18.4	4.5	0.9	2.3	-1.7	3.9	2.1	3.6	14.2	8.3	3.8
Automobiles & Parts	37.1	15.0	2.8	1.3	2.7	-1.2	1.7	1.5	0.6	7.7	5.3	2.4
Media	39.9	21.4	2.5	0.7	2.1	-1.8	3.9	2.4	2.0	15.5	9.4	1.6
Retailers	39.4	20.9	3.1	0.7	1.9	-1.5	7.9	3.4	4.1	21.2	13.3	2.6
Travel & Leisure	76.6	22.0	7.0	0.9	1.9	-1.3	3.9	2.5	2.1	11.1	8.8	1.2
Consumer Prod & Serv	37.5	19.0	4.2	0.9	2.4	-2.4	4.6	2.1	4.1	17.5	10.6	2.9
Consumer Staples	24.6	16.6	1.6	2.6	2.5	0.0	3.6	2.9	1.0	13.5	10.8	1.0
Food, Bev & Tobacco	25.0	18.2	1.4	2.7	2.7	0.0	3.3	2.8	0.8	14.0	11.0	1.1
Personal Care	23.9	20.3	0.6	2.3	2.4	-0.2	4.3	3.1	1.3	12.7	10.4	0.8
Healthcare	32.0	19.8	2.2	1.5	2.4	-1.1	4.8	3.4	1.2	18.8	12.9	1.5
Financials	15.6	15.8	0.0	2.7	2.7	0.0	1.1	1.5	-1.0	5.6	5.7	0.0
Banks	13.7	14.5	-0.2	3.1	3.0	0.2	0.9	1.4	-1.2	4.9	6.5	-0.8
Financial Services	18.0	18.4	-0.1	2.2	2.3	-0.1	1.2	1.4	-0.5	9.4	7.8	0.7
Insurance	17.2	16.1	0.2	2.5	2.4	0.0	1.4	1.7	-0.5	4.4	4.0	0.4
Real Estate	19.1	19.2	0.0	3.5	3.2	0.3	1.4	1.4	-0.1	15.1	13.4	0.6
Technology	37.1	24.1	1.2	0.8	1.6	-0.9	6.9	3.0	3.7	23.5	11.3	3.0
Telecommunications	19.6	17.5	0.3	3.3	4.3	-0.5	2.0	2.6	-0.6	5.6	6.4	-0.3
Utilities	21.2	14.3	1.8	3.1	4.9	-1.0	1.8	1.6	0.5	7.8	5.5	1.6
Market	27.1	17.0	2.1	1.9	2.7	-0.9	2.4	2.0	0.9	10.9	7.7	1.9

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

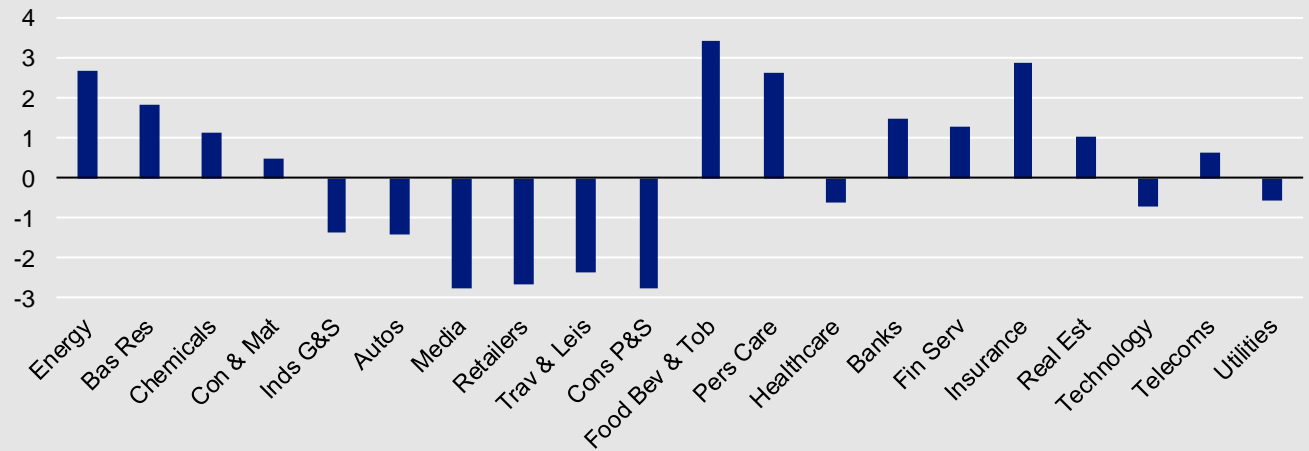
Figure 24 – Global cyclically-adjusted valuations

	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	9.5	19.0	-1.2	5.3	2.8	2.6	0.9	2.6	-1.6	4.2	8.8	-1.4
Basic Materials	21.8	23.2	-0.2	2.0	1.9	0.3	2.1	2.4	-0.5	9.8	9.6	0.1
Basic Resources	19.7	21.4	-0.2	2.2	2.1	0.1	1.7	2.3	-0.5	8.5	9.2	-0.2
Chemicals	23.0	24.5	-0.3	2.0	1.9	0.2	2.5	2.7	-0.5	11.3	10.4	0.5
Industrials	27.5	26.5	0.2	1.4	1.5	-0.2	3.3	3.0	0.6	14.9	12.7	0.9
Construction & Mat.	22.7	24.0	-0.1	1.8	1.9	-0.1	2.2	2.4	-0.3	11.5	11.5	0.0
Industrial G&S	28.4	27.3	0.2	1.3	1.4	-0.3	3.6	3.0	1.2	15.6	12.5	1.5
Consumer Disc.	31.4	26.9	0.9	1.2	1.4	-0.9	4.2	3.0	2.9	15.9	11.5	2.6
Automobiles & Parts	18.2	19.0	-0.2	1.4	1.7	-0.6	2.0	2.0	0.1	8.7	6.5	1.8
Media	33.1	30.2	0.3	1.1	1.4	-1.0	4.3	3.3	0.9	17.4	13.0	1.2
Retailers	44.9	31.8	2.2	0.8	1.1	-1.1	8.0	4.8	3.4	26.0	19.9	1.4
Travel & Leisure	25.2	34.6	-0.9	1.4	1.1	0.7	4.2	3.5	0.8	12.1	13.1	-0.3
Consumer Prod & Serv	34.9	28.4	1.4	1.3	1.6	-1.1	4.8	3.0	4.1	20.9	15.1	3.1
Consumer Staples	22.4	22.6	-0.1	1.9	1.6	0.7	4.1	3.9	0.3	16.2	14.6	0.7
Food, Bev & Tobacco	26.3	28.4	-0.4	2.0	1.6	1.1	3.9	4.2	-0.7	16.3	16.5	-0.1
Personal Care	30.5	31.8	-0.2	1.7	1.4	0.6	4.5	4.9	-0.4	16.1	16.3	-0.1
Healthcare	39.2	31.2	1.3	1.2	1.4	-0.8	5.8	5.2	0.5	23.3	19.9	1.0
Financials	15.1	23.8	-0.8	2.6	2.0	0.8	1.3	2.0	-1.2	6.3	7.3	-0.6
Banks	11.3	21.3	-1.1	3.6	2.3	1.2	1.0	1.9	-1.4	5.1	8.3	-1.3
Financial Services	23.9	29.7	-0.4	1.5	1.5	-0.1	1.6	1.9	-0.6	12.1	10.1	0.9
Insurance	17.6	24.2	-0.7	2.1	1.6	0.7	1.7	2.4	-0.9	5.5	5.3	0.2
Real Estate	16.0	27.0	-0.8	3.0	2.5	0.6	1.5	1.7	-0.5	16.3	16.9	-0.2
Technology	54.5	38.3	0.7	0.6	0.9	-0.8	8.8	4.5	1.9	31.0	17.9	1.4
Telecommunications	16.9	23.3	-0.6	3.9	3.0	0.7	2.2	3.4	-1.0	5.9	8.1	-0.7
Utilities	19.3	18.5	0.2	3.2	3.5	-0.3	1.7	2.0	-0.6	7.2	6.9	0.2
Market	24.2	24.8	-0.1	1.8	1.8	-0.1	2.7	2.8	-0.2	11.8	10.6	0.7

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

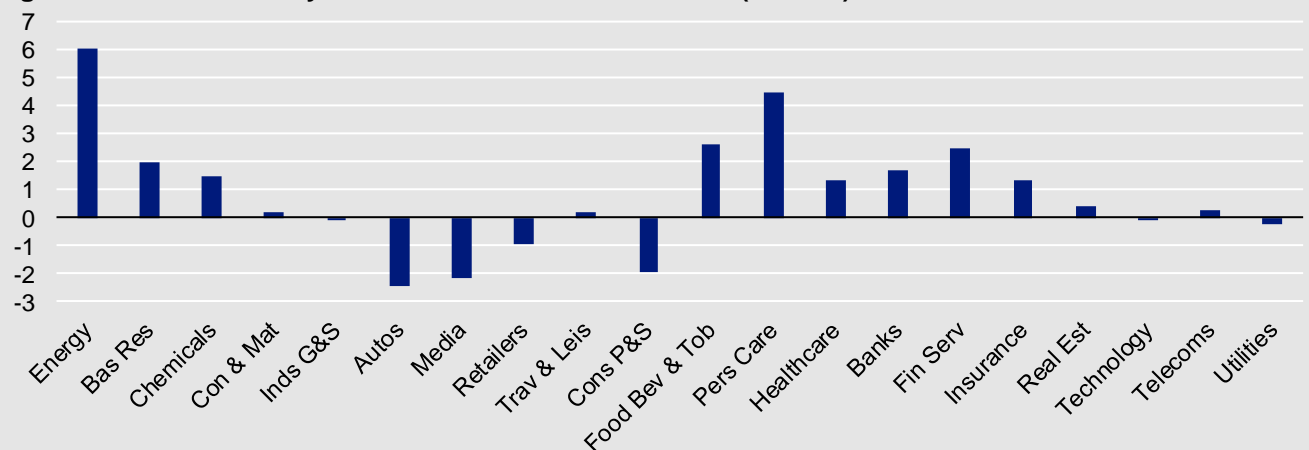
Appendix 4: Sector valuations by region

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



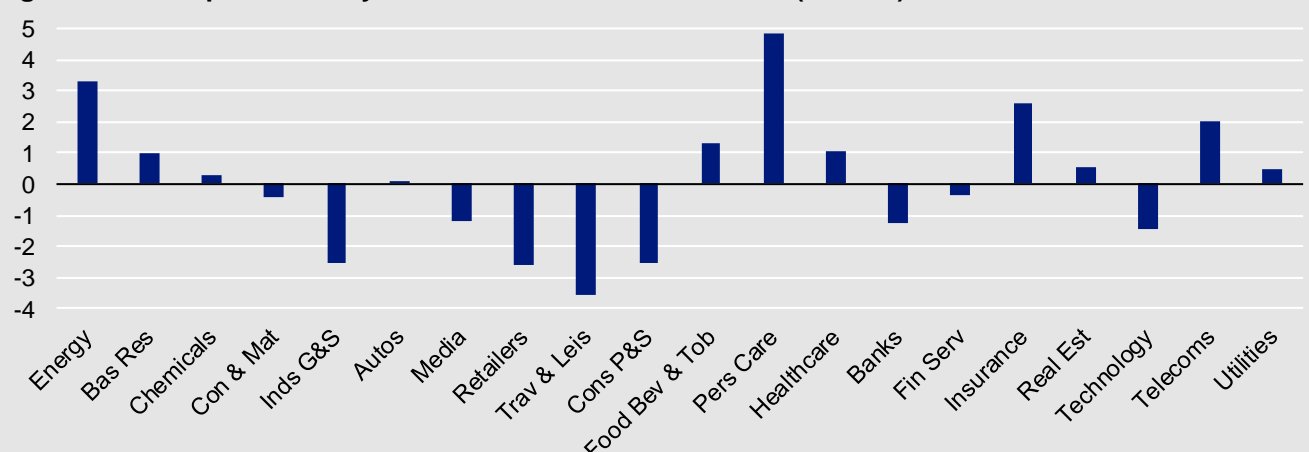
Notes: See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

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



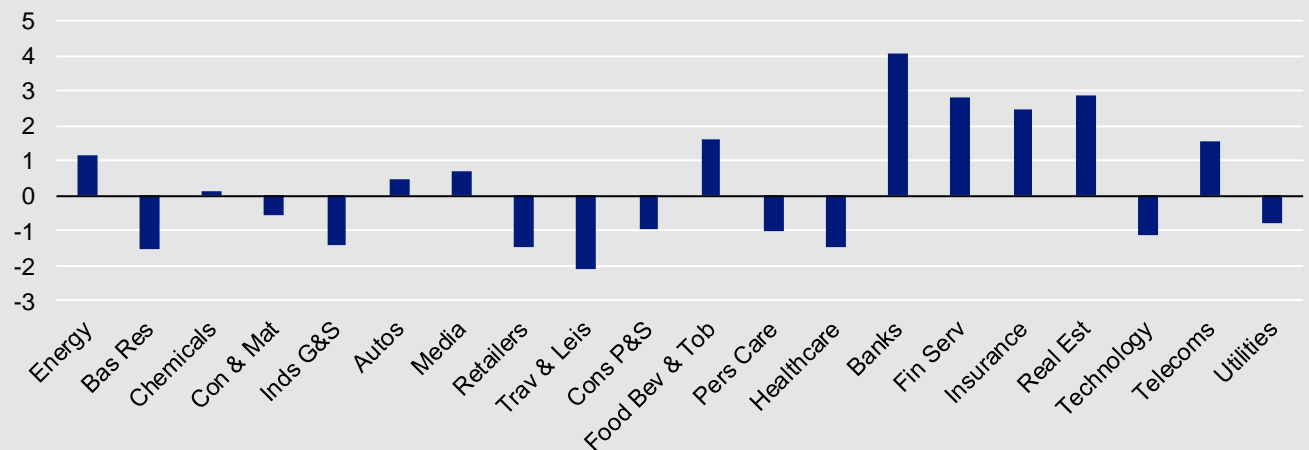
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream US Total Market Index. Source: Refinitiv Datastream and Invesco

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



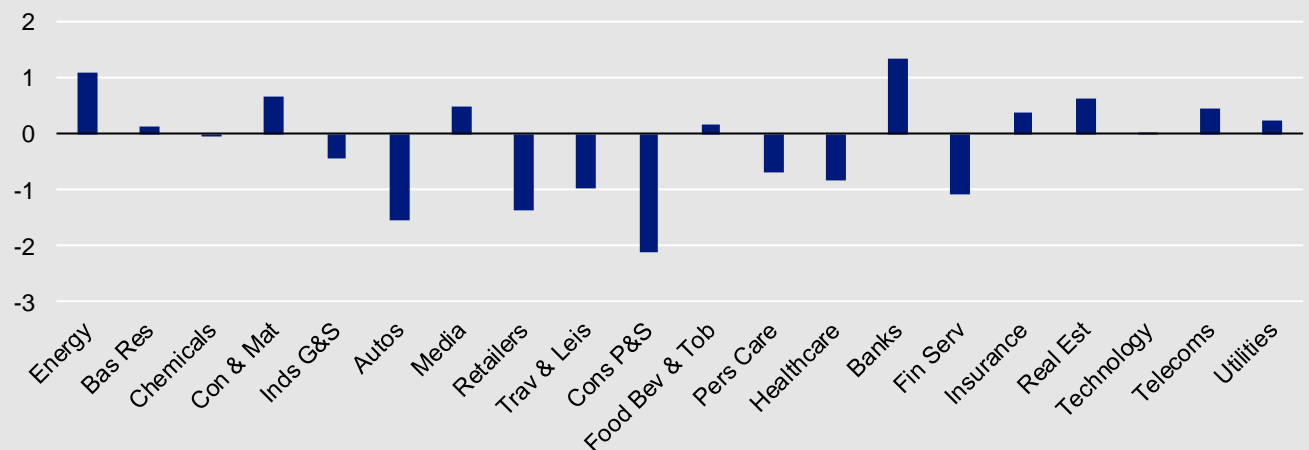
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Europe Ex-Emerging Total Market Index. Source: Refinitiv Datastream and Invesco

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 31/12/2020	Global				
	3m	YTD	12m	5y*	10y*
Energy	-2.1	-33.6	-33.6	-8.7	-9.8
Basic Materials	5.8	7.3	7.3	2.0	-5.0
Basic Resources	9.3	10.9	10.9	6.3	-8.6
Chemicals	1.6	3.1	3.1	-1.0	-1.7
Industrials	1.6	-0.8	-0.8	0.8	0.3
Construction & Materials	2.1	-2.6	-2.6	-2.4	-2.9
Industrial Goods & Services	1.5	-0.5	-0.5	1.3	0.8
Consumer Discretionary	0.5	10.7	10.7	1.0	2.4
Automobiles & Parts	19.2	36.6	36.6	0.2	0.6
Media	8.4	4.4	4.4	-0.2	3.1
Retailers	-11.0	15.8	15.8	3.5	4.0
Travel & Leisure	4.8	-14.5	-14.5	-4.3	-0.5
Consumer Products & Services	4.9	13.4	13.4	2.3	2.9
Consumer Staples	-5.6	-7.4	-7.4	-4.1	-0.7
Food, Beverage & Tobacco	-3.8	-9.4	-9.4	-5.0	-1.1
Personal Care, Drug & Grocery Stores	-9.1	-3.8	-3.8	-3.2	0.3
Healthcare	-5.8	3.0	3.0	-0.3	5.0
Financials	7.0	-15.5	-15.5	-3.8	-2.6
Banks	10.9	-21.6	-21.6	-6.3	-5.4
Financial Services	5.3	-6.0	-6.0	1.0	1.6
Insurance	2.3	-13.8	-13.8	-3.3	-0.3
Real Estate	-4.7	-16.9	-16.9	-4.5	-2.3
Technology	0.4	29.2	29.2	12.9	8.6
Telecommunications	-2.5	-4.7	-4.7	-5.3	-2.8
Utilities	-1.7	-6.6	-6.6	-1.0	-3.1

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 31st December 2020 unless stated otherwise. This publication is updated quarterly.

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Authors

Paul Jackson
Global Head of Asset Allocation Research
Telephone +44(0)20 3370 1172
paul.jackson@invesco.com
London, EMEA

Andr as Vig
Multi-Asset Strategist
Telephone +44(0)20 3370 1152
andras.vig@invesco.com
London, EMEA

Global Market Strategy Office

Kristina Hooper
Chief Global Market Strategist
Kristina.Hooper@invesco.com
New York, Americas

Brian Levitt
Global Market Strategist, Americas
Brian.Levitt@invesco.com
New York, Americas

Talley L ger
Investment Strategist, Equities
Talley.Leger@invesco.com
New York, Americas

Ashley Oerth
Investment Strategy Analyst
Ashley.Oerth@invesco.com
London, EMEA

Arnab Das
Global Market Strategist
Arnab.Das@invesco.com
London, EMEA

Luca Tobagi, CFA*
Product Director / Investment Strategist
Luca.Tobagi@invesco.com
Milan, EMEA

Paul Jackson
Global Head of Asset Allocation Research
paul.jackson@invesco.com
London, EMEA

Andr as Vig
Multi-Asset Strategist
andras.vig@invesco.com
London, EMEA

David Chao
Global Market Strategist, Asia Pacific
David.Chao@invesco.com
Hong Kong, Asia Pacific

Tomo Kinoshita
Global Market Strategist, Japan
Tomo.Kinoshita@invesco.com
Tokyo, Asia Pacific

* Affiliated member

Telephone calls may be recorded.