# Strategic Sector Selector
## Staying the course

Global equity markets posted strong returns in 2021 Q1 after a double-digit rise in the final quarter of last year despite a renewed rise in infection rates in Europe, South Asia and South America. We think the improving economic picture and a large fiscal stimulus package in the US alongside an accelerating vaccination programme were the main drivers. However, these also reignited concerns about rising inflation and higher rates prompting a rotation into late-cycle sectors. In our view, this may be premature, and we do not expect rates to rise in the next 12 months. Therefore, we remain Overweight most consumer discretionary sectors, which we view as the main beneficiaries of a gradual reopening in the next 6-9 months. We only make small adjustments to our model allocation by reducing energy to Underweight and raising basic resources to Neutral to account for the change in their relative value. We also close our Underweight in retailers as we expect their prospects to improve and downgrade banks to Underweight as we believe most of their potential margin improvement may have been priced in. Finally, we retain our Overweights in food, beverage & tobacco and technology as defensive hedges.

**Changes in allocations:**

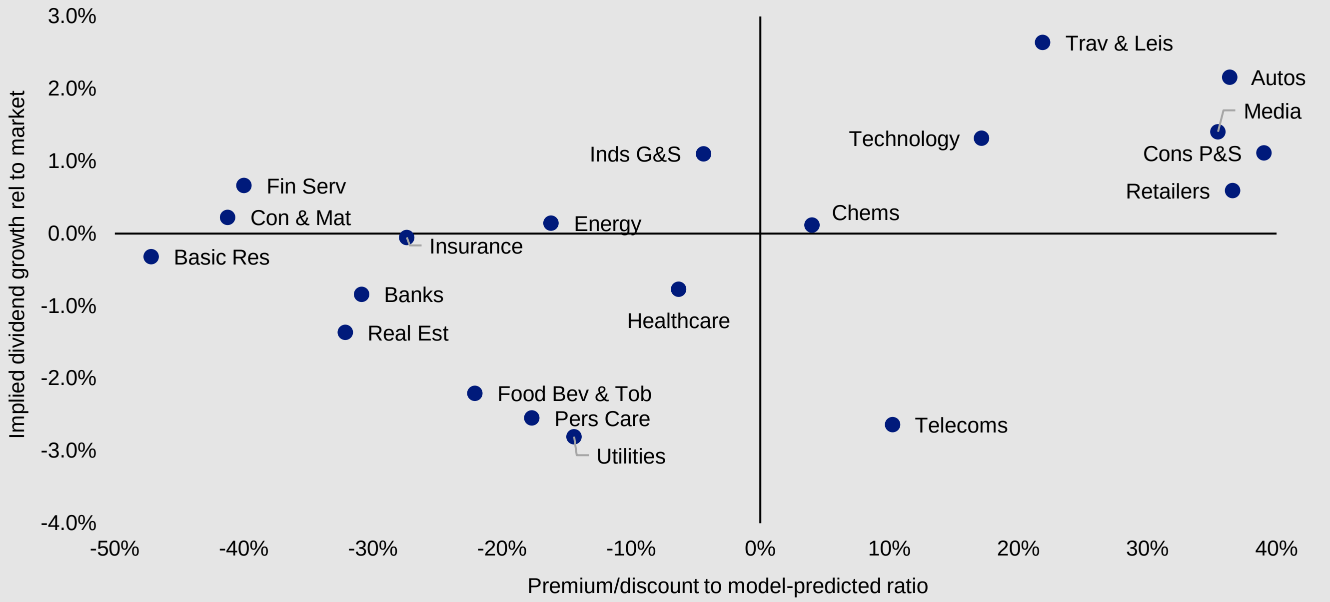
- Upgrades: basic resources, retailers (UW to N)
- Downgrades: energy, banks (N to UW)

| | Most favoured | Least favoured |
|---|---|---|
| **Sector** | EM real estate<br>European travel & leisure | US automobiles & parts<br>European banks |

**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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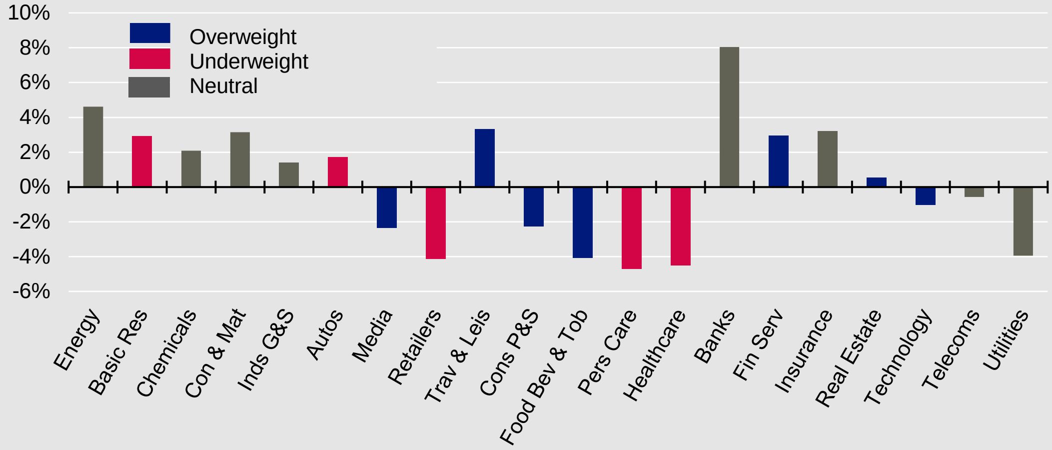
## Summary and conclusions

### Since the last time

We feared a slowdown in the global economic recovery in the first quarter of 2021, but it motored on, led by the US, where an accelerating vaccination campaign allowed a gradual reopening. Despite some volatility, the MSCI All-Country World Index returned 6% in local currency terms in Q1 after an impressive Q4 rally. Global COVID-19 case numbers and fatalities decreased, although they started to rise again in Continental Europe, South Asia and South America towards the end of the quarter. Countries with relatively high vaccination rates may continue to enjoy an accelerating recovery, while the rest of the world, especially Emerging Markets could lag, and new variants remain a threat.

**Figure 2 – 3m Global sector returns relative to market in USD**




Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2020 and 31st March 2021. Colours indicate allocations in period considered. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

**Figure 2** shows that what we consider late-cycle sectors and financials dominated in Q1 boosted by investors positioning for higher inflation, rising global bond yields and a steepening US yield curve. This goes some way to explaining why banks were the best performers and why resource-related sectors did well (we were Neutral most of them) and why defensives underperformed. Despite the strengthening recovery, most consumer discretionary sectors underperformed, although we feel vindicated after upgrading travel & leisure as it outperformed in Q1.

### Asset allocation backdrop

Given the successful vaccine rollouts in parts of the developed world, we believe the global economy will show solid growth in 2021, partly as a function of a rebound from deep recession, partly due to a gradual release of pent-up demand and also due to fiscal support (especially in the US). At the same time, we expect major central banks to continue providing generous support (via low interest rates and asset purchases). 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 (see The Big Picture for the full details).

We think the most likely problem is that markets have priced in a lot of recovery. If we are to remain positive about cyclical assets, we need to become even more aggressive in our assumptions about growth and future spreads/valuation multiples. We are happy to do this, given that we now feel more comfortable about the global recovery (helped recently by news that Congress had approved President Biden's $1.9trn fiscal package), but it has the downside of forcing us to accept that government bond yields will rise more than we previously thought.

In determining our Model Asset Allocation, we follow the optimisation results where they are clear cut, except that we have chosen to reduce commodities to a Neutral 2%, rather than go all the way to zero. Though we feel that commodity prices are high (except agriculture), we suspect the economic cycle may push them higher. The flip side of that reduction to commodities is to add marginally to government bonds, while remaining Underweight. Cash remains our defensive asset of choice (low returns but also low volatility and low correlation to other assets). We think gold will struggle in an environment of rising yields and a strengthening dollar and believe that IG yields are too low to mitigate against the rise in benchmark government yields (both are zero-weighted).

Among cyclical assets, we favour real estate and then equities, largely based on valuations. Real estate may suffer a loss of demand for office and retail space as a result of Covid-19 but we find the yields to be attractive (a lot of bad news is in the price, in our opinion) and expect growth to resume as economies recover. The allocation to equities is unchanged at an Overweight 50% but we have reduced Japan and China (we think the latter will continue to suffer as bond yields rise), while the UK is boosted (based on valuations and the exposure to resource and financial stocks). We remain Neutral on HY but are now focused entirely on the US rather than Europe (based on the view that dollar strength will help our unhedged positions). From a regional perspective, we remain Overweight European and EM assets and Underweight the US but have reduced the extent of the deviations from neutral.

**Figure 3 – Market forecasts**

| | Current (31/03/21) | 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 | 1.75 | 2.00 |
| Eurozone | -0.33 | 0.10 |
| China | 3.20 | 3.50 |
| Japan | 0.09 | 0.15 |
| UK | 0.88 | 1.10 |
| **Exchange Rates/US$** | | |
| EUR/USD | 1.17 | 1.15 |
| USD/CNY | 6.55 | 6.80 |
| USD/JPY | 110.72 | 112.00 |
| GBP/USD | 1.38 | 1.35 |
| USD/CHF | 0.94 | 0.98 |
| **Equity Indices** | | |
| S&P 500 | 3973 | 3900 |
| Euro Stoxx 50 | 3919 | 4000 |
| FTSE A50 | 17267 | 19000 |
| Nikkei 225 | 29179 | 29000 |
| FTSE 100 | 6714 | 7300 |
| **Commodities (US$)** | | |
| Brent/barrel | 64 | 70 |
| Gold/ounce | 1705 | 1500 |
| Copper/tonne | 8788 | 9750 |

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

The rotation out of "pandemic winners" and into potential "recovery winners" impacted the broad market less than we feared and allowed global equities to generate a 6% total return in the first quarter of 2021. Momentum carried the "reflation trade" over from the previous quarter as the prospect of economic reopening in large parts of the world seemed nearer. Despite supply issues, the vaccine roll-out accelerated in the US, UK and even in the European Union. However, we worry that as case numbers bottomed out and started rising towards the end of the quarter, the recovery may take longer than currently priced in by the markets. Nevertheless, we think the $1.9tn fiscal programme agreed in the US and plans for a large infrastructure package will provide a big enough boost to ensure that economic momentum will not reverse in the next 12 months at least in the US.

We are now more confident in the recovery than in the autumn and think commodity prices can rise further. We think this is reflected in the rise in bond yields as investors have started positioning for higher inflation. However, we believe that beyond the short term, inflation will remain anchored and therefore think that most of the increase in yields is behind us alongside most of the steepening of the US yield curve. This kind of environment has favoured late-cycle sectors in the past and based on our multiple regression model, they could be due a re-rating. However, we think that the rate of improvement in the global economy will slow as we progress through the year after the initial snap-back and base effects fade. Therefore, we leave our allocations largely intact favouring mostly early-cyclicals.

Our upgraded commodities view suggests we may have underestimated the potential upside in resource-related sectors. Nevertheless, if the outperformance of these sectors is at least partly connected to worries about higher inflation, then we would struggle to be too enthusiastic about them. Although we raised our commodity price forecasts in our most recent The Big Picture, we believe that our allocation to these sectors are broadly appropriate. However, after the change in their valuations in the last three months, basic resources seems more attractive to us than energy, so we upgrade **basic resources** to **Neutral** and reduce our allocation to **energy** to **Underweight**. In our view, the oil price rise will moderate as several one-off supply risks recede and US shale comes back online, while basic resources looks cheaper on both our multiple regression model and on implied dividend growth.

We also downgrade **banks** to **Underweight**, with recent returns mainly driven by yield curve steepening, a rebalancing out of technology and technology-like stocks into value and a restarting of dividend payments. We think that most of the rise in yields may be behind us and also expect consumers and corporates to become more cautious after an initial surge of spending as economies reopen. Nevertheless, we think that spending boost will help **retailers** to generate better returns, and therefore we close our Underweight and upgrade the sector to **Neutral**. In our view, the recent de-rating will moderate or reverse allowing the sector to keep up with the market.

### The best and worst of the rest

**Chemicals** was one of the sectors we deemed to have been well-positioned for resilience during the pandemic, but we think it may lose steam in the recovery, thus we maintain our **Neutral** allocation. 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 $60 per barrel and we think environmental concerns will resume once consumers emerge from "survival mode" reducing the demand for plastic products.

We believe our **Neutral** allocation to **industrial goods & services** remains appropriate. We think the mellowing of trade relations between the US and China has been priced into sector valuations. It trades close to the fair value suggested by our multiple regression model and its implied dividend growth looks high. We also believe that the US-Sino relationship will not revert to its pre-Trump state as political attitudes have shifted on both sides.

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 the sector will achieve its currently implied 4.3% perpetual real dividend growth, although it may continue to outperform for a while as long as central bank support continues and investors accord the sector technology-like valuations.

We also maintain **Overweight** allocations to **travel & leisure** and **consumer products & services**. 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 release of pent-up demand as we look forward to a return towards normality in the second half of 2021.

Despite its underperformance since the market trough in March 2020, we keep our **Overweight** allocation to **food, beverage & tobacco**. Valuations look undemanding, and if rates stay low for an extended period, those valuations could be supported. We prefer to maintain some exposure to defensives and also like that their businesses may be boosted by a potential recovery.

As the sentiment around the pandemic shifts from emergency to more business-as-usual with the rollout of vaccines, we keep **healthcare Underweight**. Although its valuations look somewhat attractive, we think the risk posed by 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.

**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 central banks are unlikely to raise rates within our forecast horizon (the next 12 months), and even if they do, 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 could be a sign of complacency, but depressed valuations – dividend yields have priced in sub-1% real perpetual 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 maintain 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.

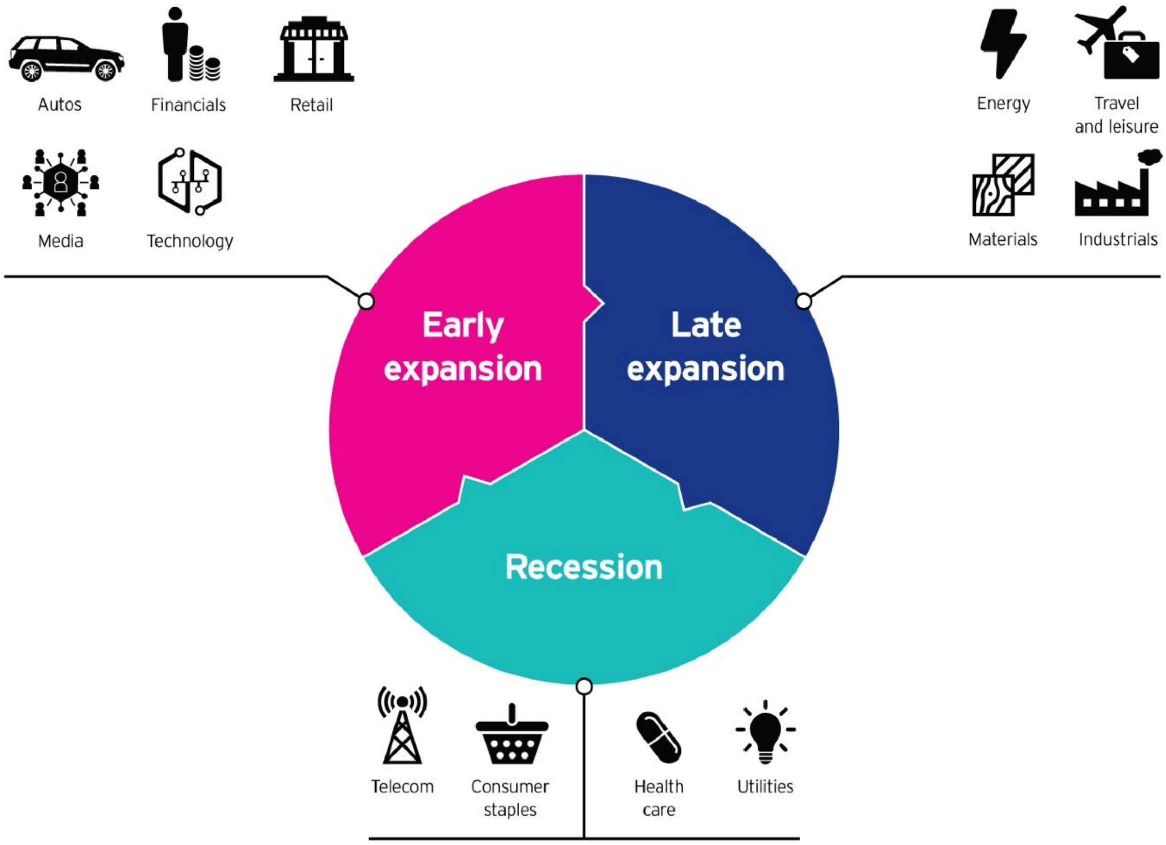
Defensive value sectors, such as **telecommunications** and **utilities** have had attractive valuations using implied perpetual dividend growth for as long as we can remember, but they have underperformed in the past decade in a market driven by more buoyant growth names. Nevertheless, their high dividend yields may still provide decent returns relative to sovereign or corporate bonds. They could also be boosted by increased spending on connectivity and the transition to a greener economy, which may allow them to keep up with the market. We stick with a **Neutral** allocation to both.

**Figure 4 – Model allocations for Global sectors**

| | Neutral | Invesco | | Preferred Region |
|---|---|---|---|---|
| **Energy** | **6.1%** | **Underweight** | ↓ | **US** |
| **Basic Materials** | **4.5%** | **Neutral** | ↑ | **Europe** |
| Basic Resources | 2.5% | Neutral | ↑ | Europe |
| Chemicals | 2.0% | Neutral | | US |
| **Industrials** | **12.9%** | **Neutral** | | **US** |
| Construction & Materials | 1.6% | Neutral | | Europe |
| Industrial Goods & Services | 11.3% | Neutral | | US |
| **Consumer Discretionary** | **16.2%** | **Overweight** | | **US** |
| Automobiles & Parts | 2.8% | Underweight | | Japan |
| Media | 1.3% | Overweight | | US |
| Retailers | 5.8% | Neutral | ↑ | US |
| Travel & Leisure | 2.2% | Overweight | | US |
| Consumer Products & Services | 4.0% | Overweight | | EM |
| **Consumer Staples** | **6.3%** | **Overweight** | | **Japan** |
| Food, Beverage & Tobacco | 4.1% | Overweight | | Japan |
| Personal Care, Drug & Grocery Stores | 2.2% | Underweight | | Europe |
| **Healthcare** | **9.8%** | **Underweight** | | **Europe** |
| **Financials** | **14.7%** | **Neutral** | | **Japan** |
| Banks | 7.4% | Underweight | ↓ | Japan |
| Financial Services | 3.8% | Overweight | | US |
| Insurance | 3.4% | Neutral | | Europe |
| **Real Estate** | **3.4%** | **Overweight** | | **EM** |
| **Technology** | **18.9%** | **Overweight** | | **US** |
| **Telecommunications** | **4.0%** | **Neutral** | | **Europe** |
| **Utilities** | **3.2%** | **Neutral** | | **Europe** |

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

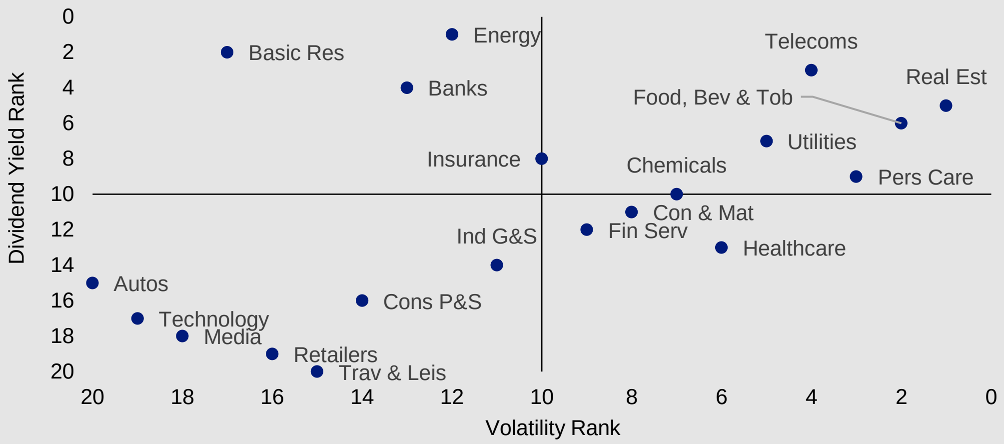
**Figure 5 – Economic cycle and main sector allocation decisions**




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.
Source: Invesco

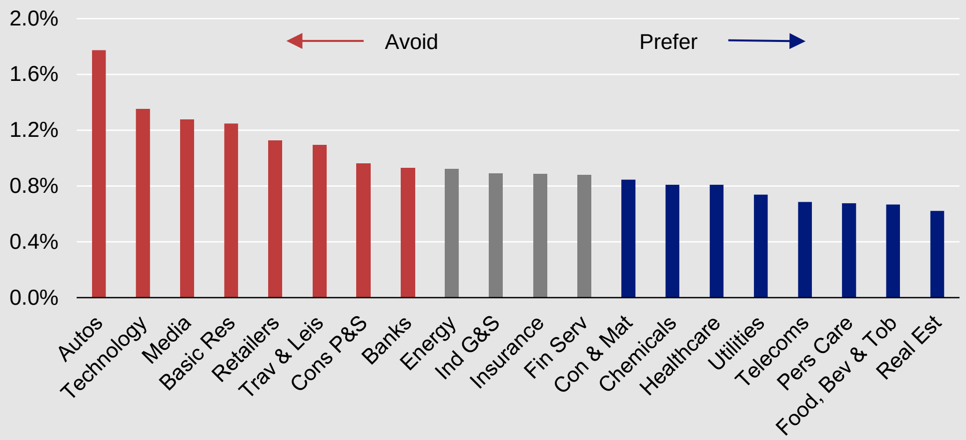
## Systematic strategy – Global

### Figure 6 – Global sectors ranked by volatility and dividend yield



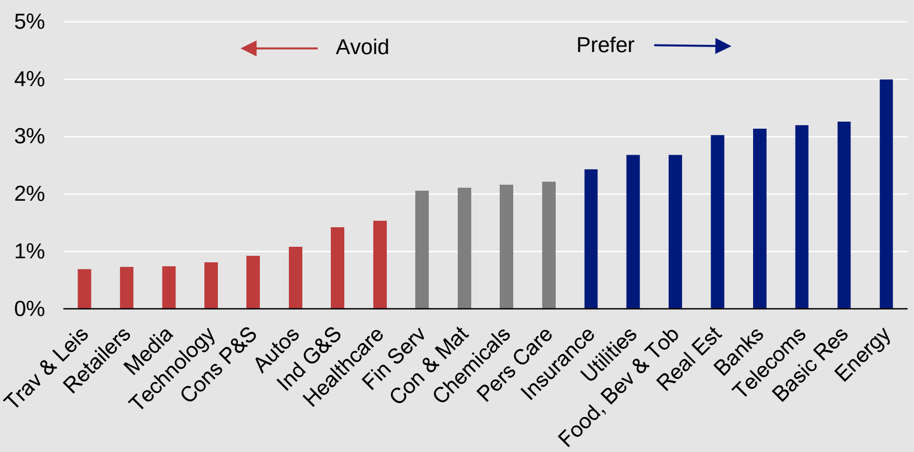

- A purely systematic approach would favour sectors in the top right corner: telecoms, food, beverage & tobacco and real estate
- The approach would avoid sectors in the bottom left, such as technology, retailers, or media

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




- The daily returns of autos, technology and media were the most volatile in the past 3 months
- Real estate, food, beverage & tobacco and personal care, were the least volatile

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

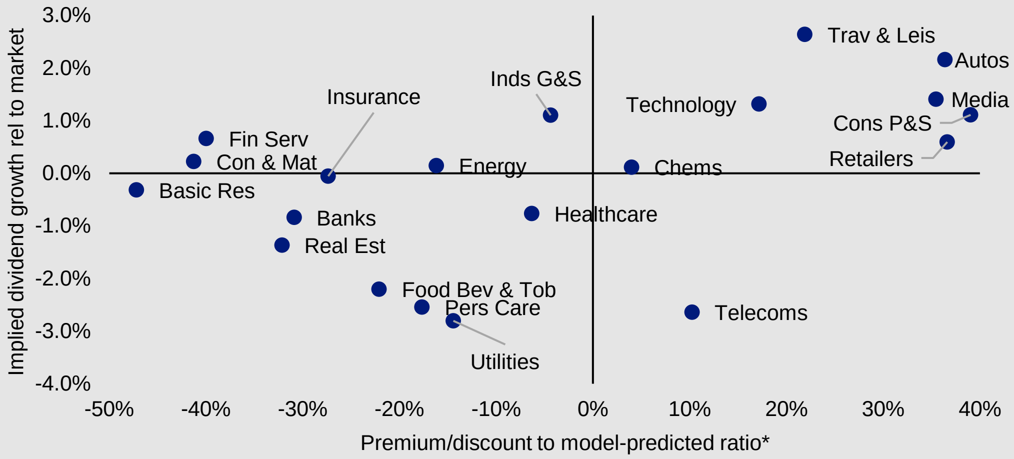



- Energy, basic resources and telecoms look the cheapest based on their dividend yield
- The lowest yielding sectors include travel & leisure, retailers and media

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

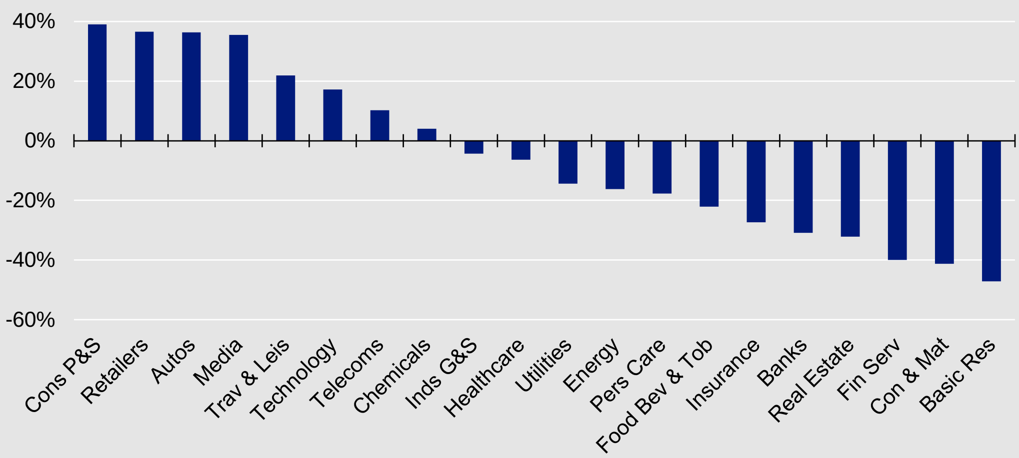
## Valuations – Global

### Figure 9 – Global sectors valuation matrix



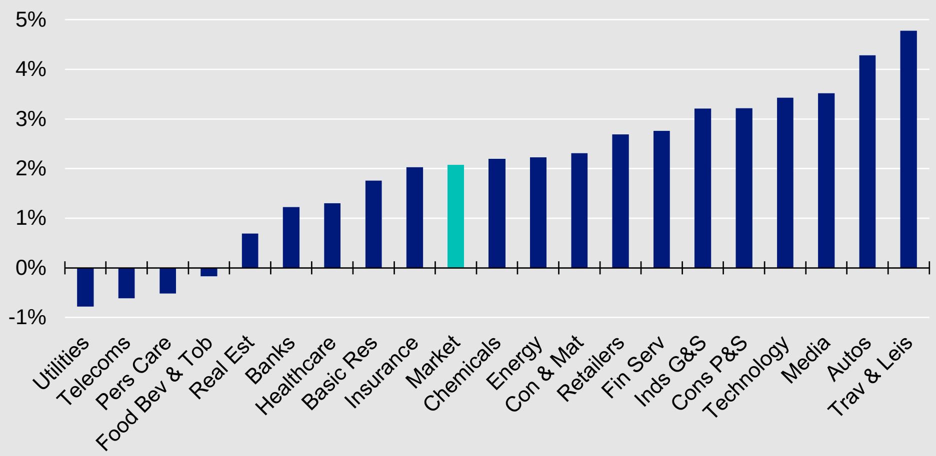

- Sectors in the top right corner look overvalued on both measures, while those in the bottom left appear undervalued
- This approach would avoid, for example, travel & leisure, media, and autos
- Food, beverage & tobacco, personal care, and real estate look better value

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




- Consumer products & services, retailers and autos look the most overvalued versus our model
- Basic resources, construction and financial services seem the most undervalued versus our model-predicted ratios

### Figure 11 – Global implied perpetual real dividend growth

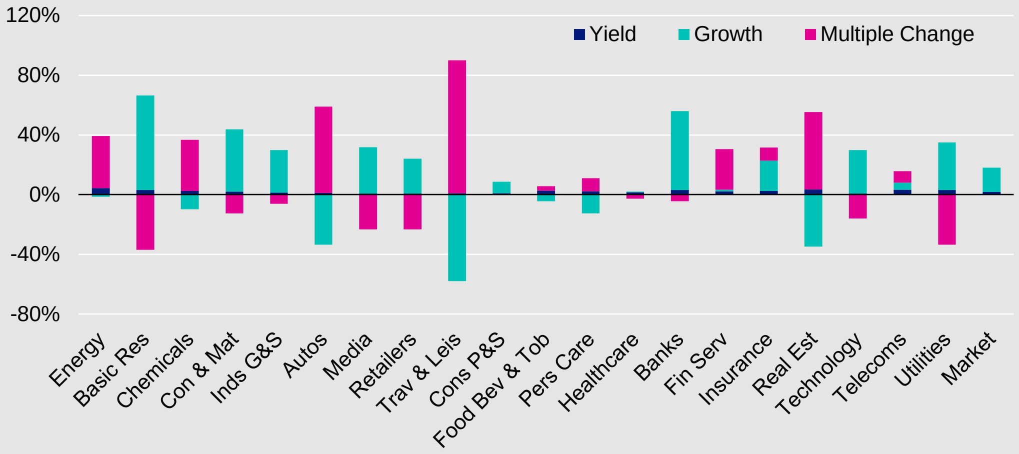



- Shows the future real growth required to justify current prices
- Autos appears priced for over 4% real growth in dividends (expensive)
- Four sectors appear priced for negative growth (cheap)

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

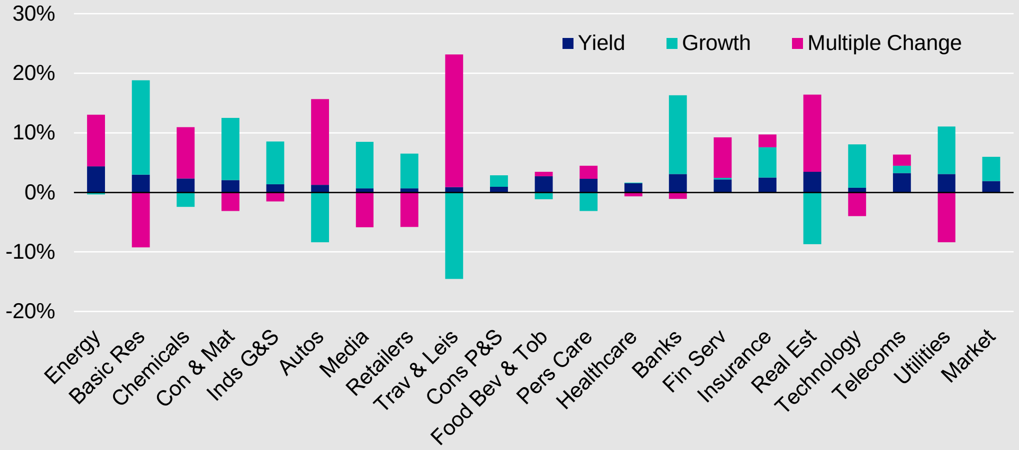
## Decomposed returns – Global

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



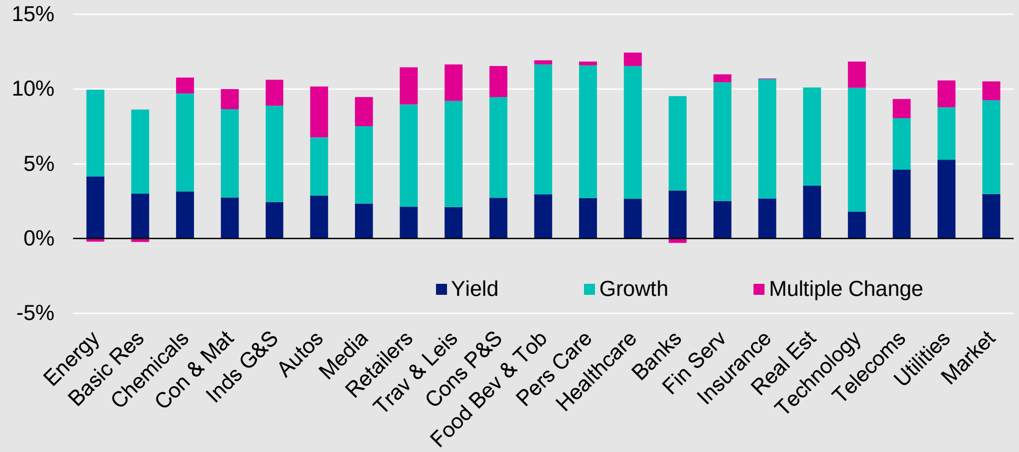

- Basic resources, construction and banks have grown their dividend by double-digits in 2021
- Travel & leisure, autos and real estate had the biggest rise in sentiment (multiple expansion)

**Figure 13 – Global rolling 12-month total returns decomposed**




- Yield was the main driver of returns for most defensive sectors in the last 12 months
- Only energy had a yield above 4%

**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 real estate

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** | 0.37 | | 0.23 | | 0.70 | |
| **Real Copper** | -0.01 | 0.00 | -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 | | 2.87 | -4.77 |
| **10y Yield** | | | | -6.62 | 15.64 | -15.17 |
| **CPI** | | -3.40 | -4.51 | | -12.55 | 10.16 |
| **Net Debt/EBITDA** | | | -0.06 | 0.08 | 0.17 | |
| **ROE** | | -0.90 | 1.28 | 0.80 | -3.14 | |

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** | -1.17 | | | | | |
| **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** | -2.64 | -1.54 | -0.91 | 0.71 | 0.25 | -4.77 |
| **10y Yield** | | | | | 1.02 | -15.17 |
| **CPI** | 11.77 | 13.60 | 8.56 | 9.04 | -1.45 | 10.16 |
| **Net Debt/EBITDA** | -0.16 | -0.12 | 0.07 | 0.22 | 0.02 | |
| **ROE** | -3.77 | -2.21 | -1.55 | | 0.67 | |

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** | 0.55 | | | 0.24 | 0.77 | | |
| **Real Copper** | -0.01 | 0.00 | 0.01 | | -0.01 | | |
| **Consumer Confidence** | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.01 |
| **Manufacturing Confidence** | 0.00 | | 0.00 | | -0.01 | 0.02 | 0.01 |
| **IP** | -2.92 | -0.45 | 1.11 | -0.41 | 1.39 | -2.03 | -4.77 |
| **10y Yield** | -1.85 | 5.82 | 2.78 | -2.60 | 7.06 | -3.44 | -15.17 |
| **CPI** | 12.09 | -2.52 | -2.21 | 1.74 | -4.45 | | 10.16 |
| **Net Debt/EBITDA** | -0.05 | -0.01 | 0.09 | | -0.18 | 0.09 | |
| **ROE** | | 0.85 | -2.25 | 0.56 | -1.86 | 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

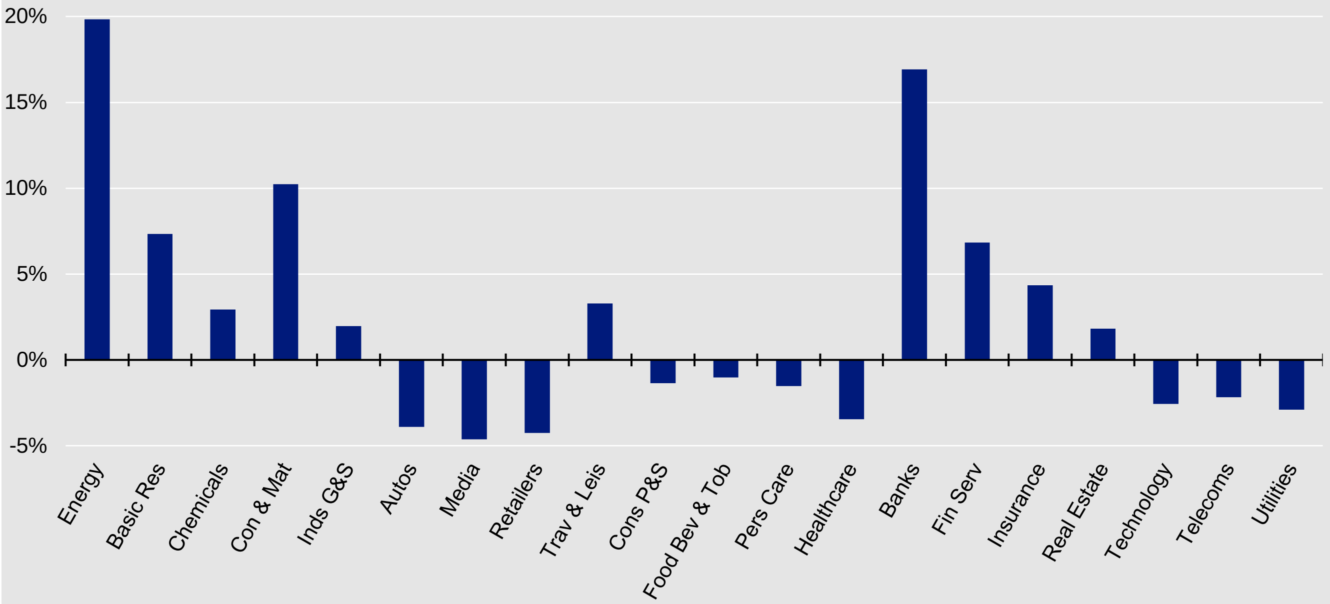
**Figure 18 – Regression coefficients of Global financial sectors**

| | Banks | Financial Services | Insurance | Real Estate | Market |
|---|---|---|---|---|---|
| **Real Oil** | 0.67 | -0.35 | | | |
| **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 | 0.00 | -0.03 | 0.01 |
| **IP** | -2.95 | 1.72 | -0.73 | 3.89 | -4.77 |
| **10y Yield** | -9.71 | | -3.52 | | -15.17 |
| **CPI** | 4.55 | | | | 10.16 |
| **ROE** | 4.15 | 0.60 | -0.52 | -4.25 | |

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

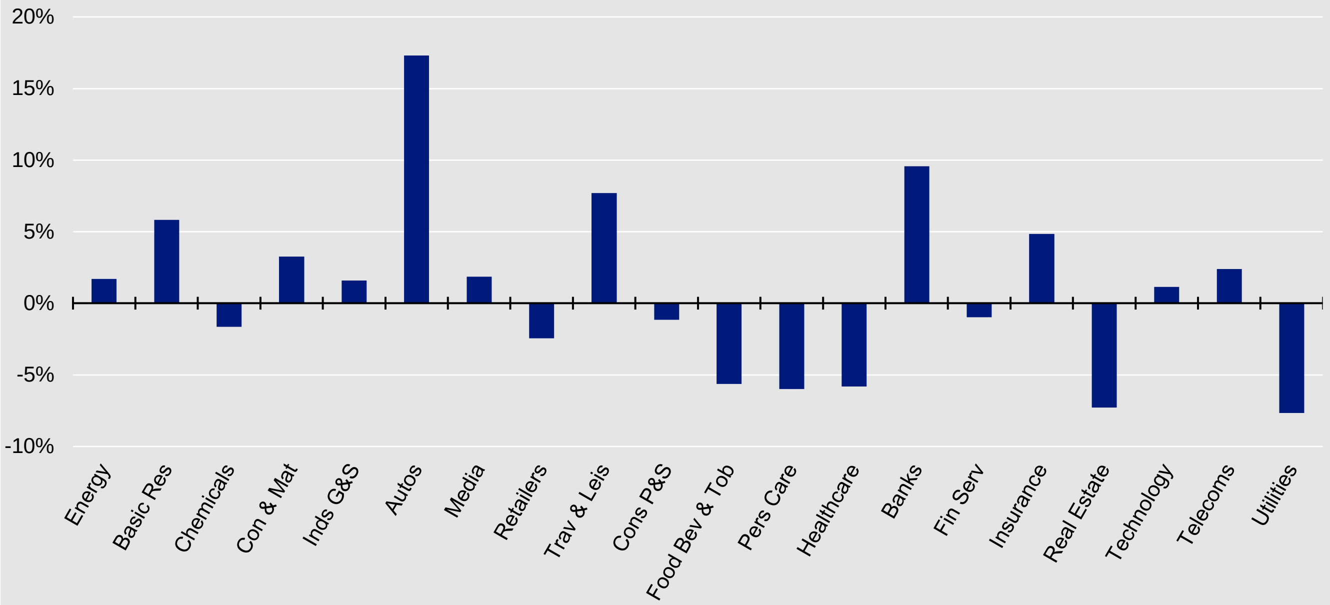
## Appendix 2: Sector returns by region

**Figure 19 – 3m US sector returns relative to market**



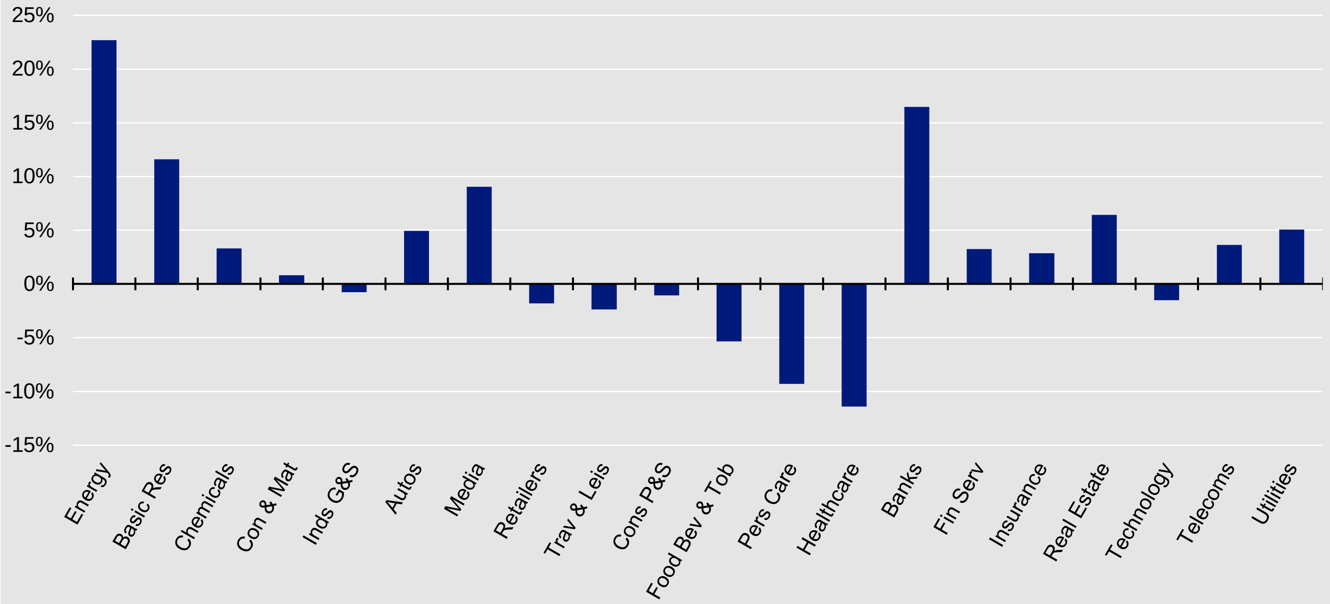

Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2020 and 31st March 2021. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

**Figure 20 – 3m European sector returns relative to market**



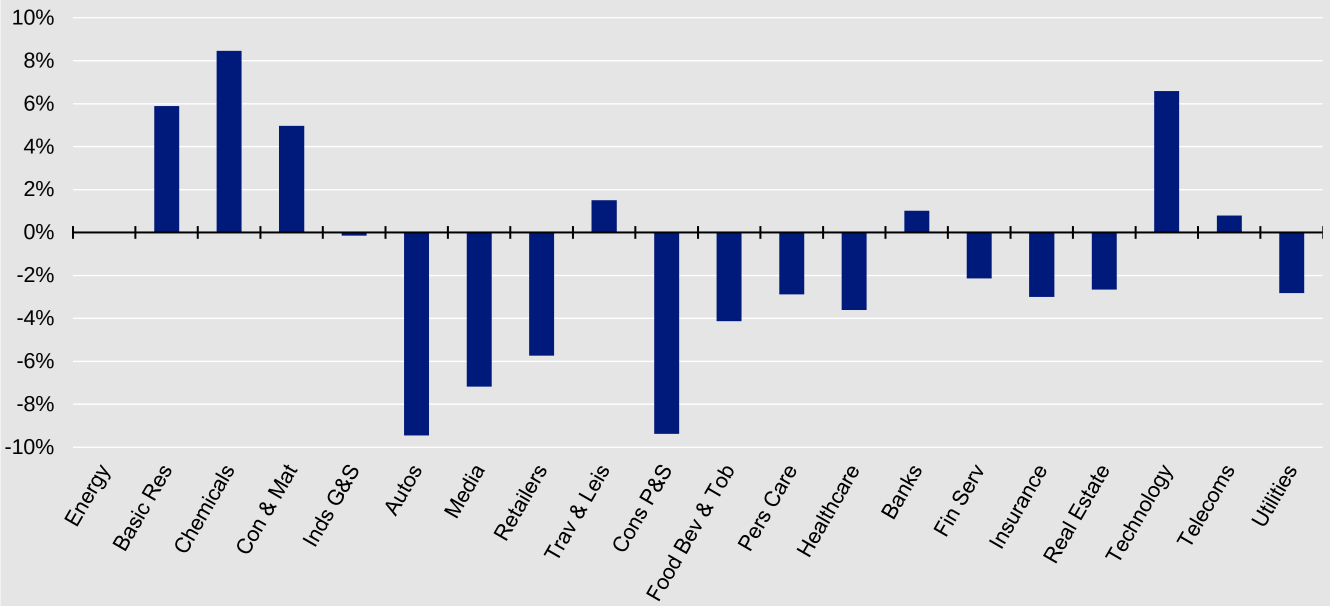

Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2020 and 31st March 2021. Past performance is not a guarantee of future results. Source: Refinitiv Datastream and Invesco

**Figure 21 – 3m Japanese sector returns relative to market**




Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2020 and 31st March 2021. 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 31st December 2020 and 31st March 2021. 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** | **42.7** | **14.5** | **4.4** | **4.0** | **3.8** | **0.1** | **1.8** | **1.7** | **0.1** | **10.0** | **6.1** | **2.1** |
| **Basic Materials** | **24.4** | **16.8** | **1.6** | **2.8** | **2.7** | **0.1** | **2.1** | **1.8** | **0.7** | **10.2** | **7.2** | **1.9** |
| Basic Resources | 19.4 | 17.1 | 0.4 | 3.3 | 2.8 | 0.5 | 2.0 | 1.7 | 0.5 | 8.7 | 7.3 | 0.7 |
| Chemicals | 36.6 | 17.0 | 3.8 | 2.2 | 2.9 | -0.8 | 2.4 | 2.0 | 1.0 | 13.1 | 7.5 | 3.6 |
| **Industrials** | **19.7** | **18.0** | **0.4** | **1.5** | **2.3** | **-1.1** | **3.2** | **2.1** | **2.6** | **14.4** | **9.1** | **2.9** |
| Construction & Mat. | 23.0 | 16.6 | 1.5 | 2.1 | 2.5 | -0.6 | 2.3 | 1.8 | 1.1 | 11.2 | 9.0 | 0.8 |
| Industrial G&S | 19.3 | 18.5 | 0.2 | 1.4 | 2.2 | -1.1 | 3.4 | 2.2 | 2.8 | 15.0 | 9.1 | 3.2 |
| **Consumer Disc.** | **40.1** | **18.5** | **4.1** | **0.8** | **2.3** | **-1.8** | **4.2** | **2.2** | **3.9** | **15.9** | **8.4** | **4.5** |
| Automobiles & Parts | 33.1 | 15.1 | 2.3 | 1.1 | 2.6 | -1.3 | 1.9 | 1.5 | 1.2 | 9.0 | 5.4 | 3.3 |
| Media | 42.8 | 21.5 | 2.8 | 0.7 | 2.1 | -1.7 | 3.8 | 2.4 | 1.9 | 13.3 | 9.4 | 1.0 |
| Retailers | 36.2 | 21.0 | 2.5 | 0.7 | 1.9 | -1.5 | 7.4 | 3.4 | 3.6 | 19.7 | 13.2 | 2.1 |
| Travel & Leisure | 108.4 | 22.4 | 9.3 | 0.7 | 1.9 | -1.5 | 5.7 | 2.5 | 4.2 | 21.1 | 8.9 | 5.2 |
| Consumer Prod & Serv | 37.6 | 19.1 | 4.0 | 0.9 | 2.4 | -2.3 | 4.8 | 2.2 | 4.2 | 19.3 | 10.6 | 3.5 |
| **Consumer Staples** | **25.8** | **16.6** | **1.8** | **2.5** | **2.5** | **0.0** | **3.7** | **2.9** | **1.1** | **13.4** | **10.8** | **1.0** |
| Food, Bev & Tobacco | 25.4 | 18.3 | 1.4 | 2.7 | 2.7 | 0.0 | 3.4 | 2.8 | 0.9 | 14.2 | 11.0 | 1.1 |
| Personal Care | 26.4 | 20.3 | 1.0 | 2.2 | 2.4 | -0.2 | 4.3 | 3.1 | 1.2 | 12.2 | 10.4 | 0.7 |
| **Healthcare** | **32.1** | **19.9** | **2.2** | **1.5** | **2.4** | **-1.1** | **4.7** | **3.4** | **0.9** | **17.8** | **12.9** | **1.3** |
| **Financials** | **16.3** | **15.8** | **0.1** | **2.7** | **2.7** | **0.0** | **1.2** | **1.5** | **-0.7** | **6.7** | **5.7** | **0.7** |
| Banks | 15.0 | 14.5 | 0.1 | 3.1 | 3.0 | 0.2 | 1.0 | 1.4 | -0.9 | 6.3 | 6.3 | 0.0 |
| Financial Services | 19.7 | 18.4 | 0.2 | 2.1 | 2.3 | -0.3 | 1.3 | 1.5 | -0.3 | 11.5 | 8.7 | 1.1 |
| Insurance | 16.2 | 16.1 | 0.0 | 2.4 | 2.4 | 0.0 | 1.5 | 1.7 | -0.3 | 5.2 | 4.0 | 1.2 |
| **Real Estate** | 22.0 | 19.3 | 0.5 | 3.0 | 3.2 | -0.3 | 1.5 | 1.4 | 0.1 | 16.6 | 13.5 | 1.1 |
| **Technology** | **35.6** | **24.2** | **1.1** | **0.8** | **1.6** | **-0.8** | **6.9** | **3.0** | **3.6** | **22.5** | **11.3** | **2.7** |
| **Telecommunications** | **18.8** | **17.5** | **0.2** | **3.2** | **4.3** | **-0.5** | **2.2** | **2.6** | **-0.4** | **5.7** | **6.3** | **-0.2** |
| **Utilities** | **22.9** | **14.3** | **2.2** | **3.4** | **4.9** | **-0.8** | **1.8** | **1.6** | **0.6** | **7.6** | **5.5** | **1.5** |
| **Market** | **25.8** | **17.1** | **1.8** | **1.9** | **2.7** | **-0.9** | **2.6** | **2.0** | **1.2** | **12.0** | **7.7** | **2.5** |

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

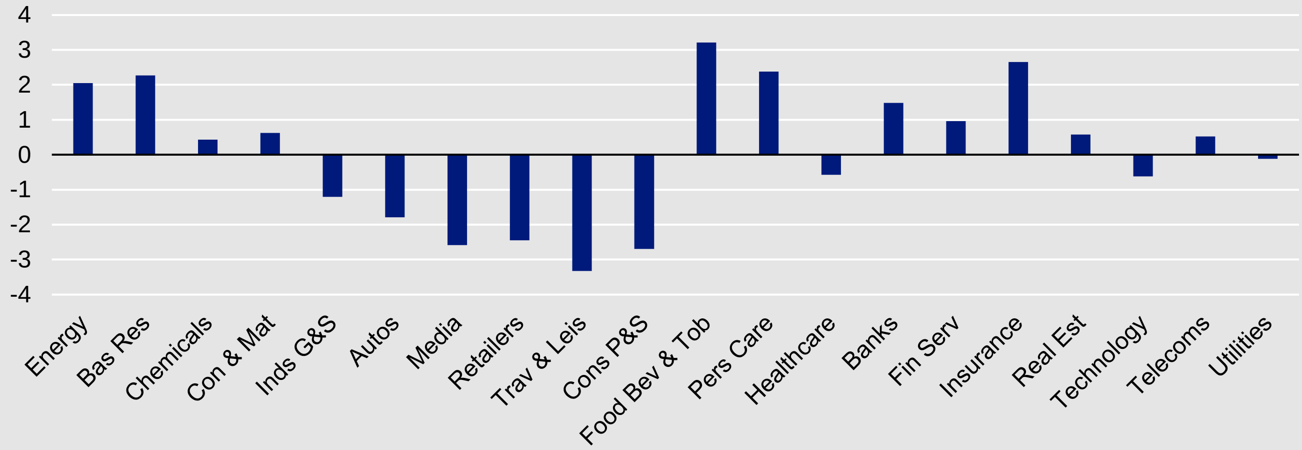
### Figure 24 – Global cyclically-adjusted valuations

| | 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** | **10.6** | **18.9** | **-1.1** | **4.9** | **2.8** | **2.1** | **1.0** | **2.6** | **-1.5** | **4.7** | **8.6** | **-1.3** |
| **Basic Materials** | **23.3** | **23.2** | **0.0** | **1.9** | **1.9** | **0.1** | **2.2** | **2.4** | **-0.3** | **10.4** | **9.6** | **0.3** |
| Basic Resources | 21.3 | 21.4 | 0.0 | 2.1 | 2.1 | 0.0 | 1.9 | 2.3 | -0.4 | 9.1 | 9.2 | 0.0 |
| Chemicals | 24.5 | 24.5 | 0.0 | 1.9 | 1.9 | 0.0 | 2.6 | 2.7 | -0.2 | 12.0 | 10.4 | 0.9 |
| **Industrials** | **28.8** | **26.5** | **0.4** | **1.3** | **1.5** | **-0.4** | **3.5** | **3.0** | **0.9** | **15.8** | **12.7** | **1.2** |
| Construction & Mat. | 24.3 | 24.0 | 0.0 | 1.7 | 1.9 | -0.3 | 2.3 | 2.4 | -0.1 | 12.3 | 11.6 | 0.2 |
| Industrial G&S | 29.6 | 27.3 | 0.4 | 1.3 | 1.4 | -0.5 | 3.8 | 3.0 | 1.6 | 16.4 | 12.5 | 1.9 |
| **Consumer Disc.** | **32.2** | **27.0** | **1.0** | **1.1** | **1.4** | **-1.0** | **4.3** | **3.0** | **2.9** | **16.3** | **11.7** | **2.5** |
| Automobiles & Parts | 19.3 | 19.0 | 0.1 | 1.4 | 1.7 | -0.7 | 2.1 | 2.0 | 0.4 | 9.3 | 6.6 | 2.0 |
| Media | 33.7 | 30.2 | 0.4 | 1.1 | 1.4 | -1.1 | 4.3 | 3.3 | 0.9 | 16.3 | 13.1 | 0.9 |
| Retailers | 44.6 | 31.9 | 2.1 | 0.9 | 1.1 | -1.1 | 7.9 | 4.8 | 3.2 | 25.1 | 19.7 | 1.2 |
| Travel & Leisure | 27.5 | 34.5 | -0.7 | 1.3 | 1.1 | 0.4 | 4.6 | 3.5 | 1.2 | 13.5 | 13.0 | 0.1 |
| Consumer Prod & Serv | 35.4 | 28.5 | 1.5 | 1.3 | 1.6 | -1.2 | 4.9 | 3.0 | 3.9 | 21.3 | 15.1 | 3.2 |
| **Consumer Staples** | **22.2** | **22.6** | **-0.1** | **1.9** | **1.6** | **0.8** | **4.0** | **3.9** | **0.2** | **16.0** | **14.6** | **0.6** |
| Food, Bev & Tobacco | 26.1 | 28.3 | -0.5 | 2.0 | 1.6 | 1.2 | 3.8 | 4.2 | -0.8 | 16.1 | 16.5 | -0.2 |
| Personal Care | 29.9 | 31.8 | -0.3 | 1.7 | 1.4 | 0.7 | 4.5 | 4.9 | -0.4 | 15.7 | 16.3 | -0.2 |
| **Healthcare** | **38.6** | **31.3** | **1.2** | **1.2** | **1.4** | **-0.7** | **5.7** | **5.3** | **0.3** | **22.6** | **19.9** | **0.8** |
| **Financials** | **16.4** | **23.7** | **-0.7** | **2.4** | **2.0** | **0.5** | **1.4** | **2.0** | **-1.0** | **6.8** | **7.2** | **-0.3** |
| Banks | 12.6 | 21.2 | -0.9 | 3.2 | 2.3 | 0.8 | 1.1 | 1.9 | -1.2 | 5.7 | 8.0 | -1.0 |
| Financial Services | 25.2 | 29.6 | -0.3 | 1.4 | 1.5 | -0.2 | 1.7 | 2.0 | -0.5 | 13.4 | 11.1 | 0.9 |
| Insurance | 18.8 | 24.1 | -0.6 | 1.9 | 1.6 | 0.5 | 1.8 | 2.4 | -0.8 | 5.9 | 5.3 | 0.6 |
| **Real Estate** | 16.7 | 26.9 | -0.8 | 2.9 | 2.5 | 0.5 | 1.6 | 1.7 | -0.4 | 17.0 | 17.0 | 0.0 |
| **Technology** | **55.2** | **38.4** | **0.8** | **0.6** | **0.9** | **-0.8** | **8.9** | **4.6** | **1.9** | **31.1** | **18.1** | **1.4** |
| **Telecommunications** | **17.5** | **23.2** | **-0.6** | **3.8** | **3.0** | **0.6** | **2.4** | **3.3** | **-0.8** | **6.0** | **8.0** | **-0.7** |
| **Utilities** | **19.4** | **18.5** | **0.2** | **3.2** | **3.5** | **-0.3** | **1.7** | **2.0** | **-0.6** | **7.2** | **6.9** | **0.2** |
| **Market** | **25.1** | **24.8** | **0.1** | **1.7** | **1.8** | **-0.2** | **2.8** | **2.8** | **-0.1** | **12.2** | **10.6** | **0.9** |

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 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

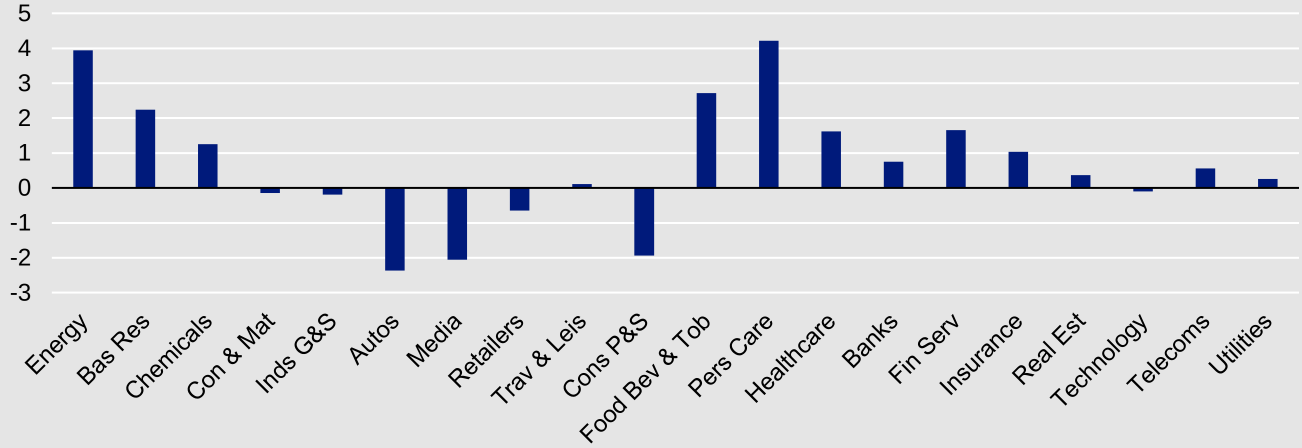
## Appendix 4: Sector valuations by region

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



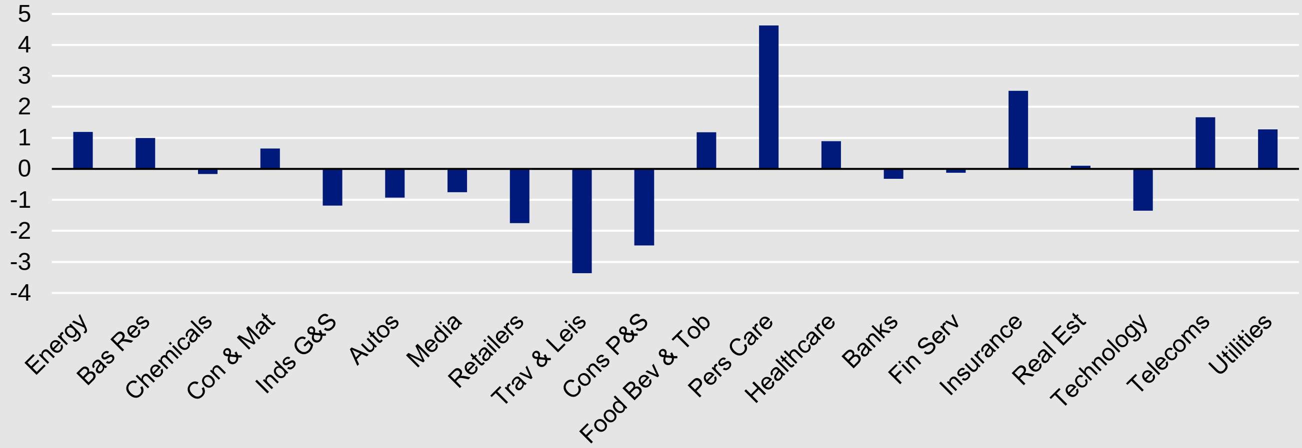

Notes: See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

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



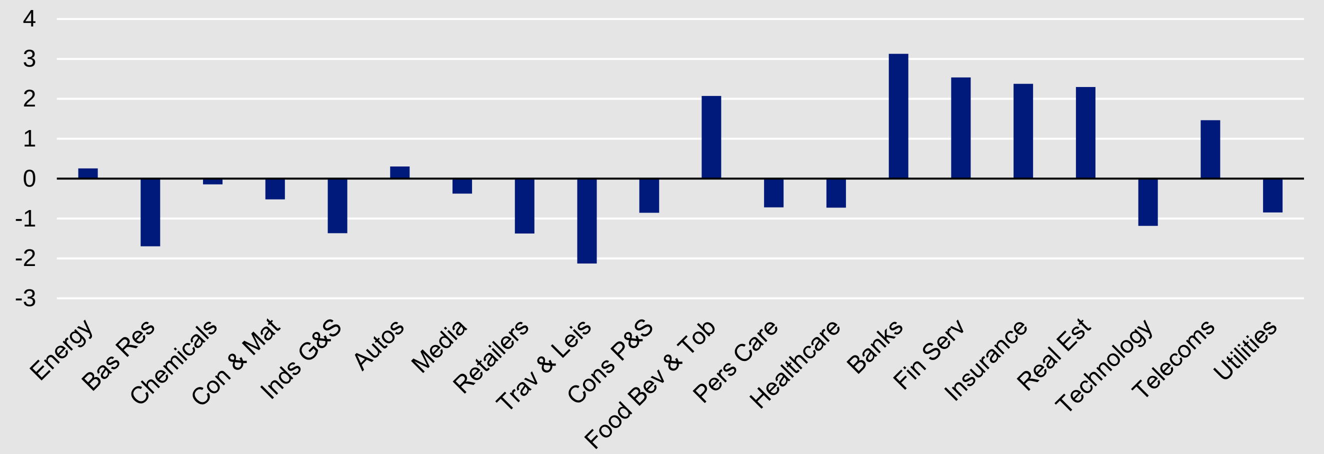

Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream US Total Market Index. Source: Refinitiv Datastream and Invesco

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



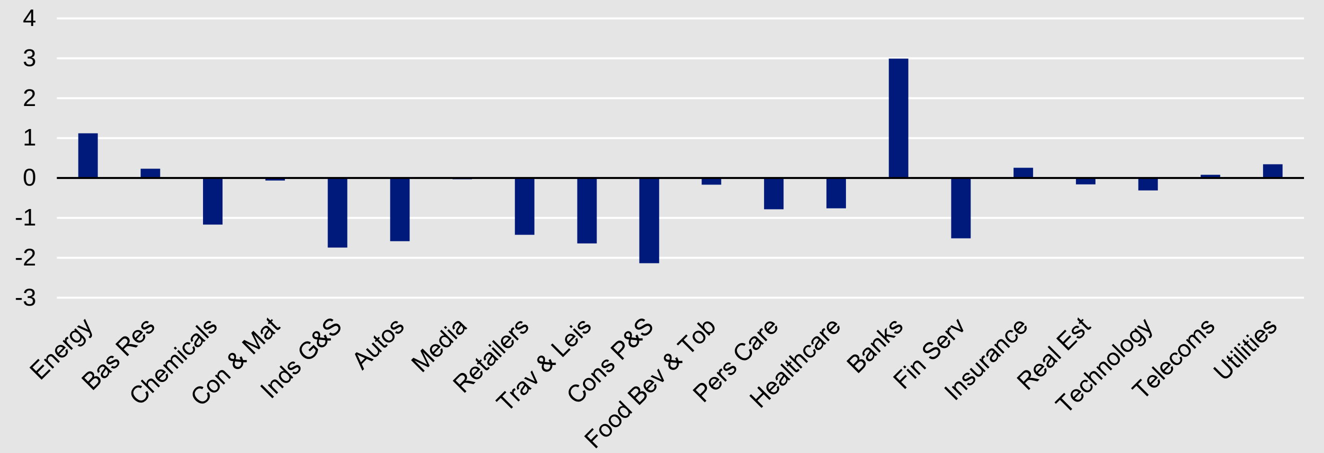

Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Europe Ex-Emerging Total Market Index. Source: Refinitiv Datastream and Invesco

**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 31/03/2021 | Global | | | | |
|---|---|---|---|---|---|
| | **3m** | **YTD** | **12m** | **5y*** | **10y*** |
| **Energy** | **4.6** | **4.6** | **-4.7** | **-8.8** | **-10.1** |
| **Basic Materials** | **2.5** | **2.5** | **18.4** | **1.5** | **-4.6** |
| Basic Resources | 2.9 | 2.9 | 25.9 | 3.8 | -7.9 |
| Chemicals | 2.1 | 2.1 | 10.2 | -0.6 | -1.7 |
| **Industrials** | **1.6** | **1.6** | **5.7** | **0.7** | **0.3** |
| Construction & Materials | 3.2 | 3.2 | 6.5 | -2.6 | -2.9 |
| Industrial Goods & Services | 1.4 | 1.4 | 5.6 | 1.3 | 0.8 |
| **Consumer Discretionary** | **-1.6** | **-1.6** | **10.0** | **0.6** | **2.5** |
| Automobiles & Parts | 1.7 | 1.7 | 52.1 | 2.1 | 1.1 |
| Media | -2.4 | -2.4 | 6.1 | -1.0 | 2.5 |
| Retailers | -4.1 | -4.1 | -1.1 | 2.6 | 3.9 |
| Travel & Leisure | 3.3 | 3.3 | 9.3 | -3.9 | 0.5 |
| Consumer Products & Services | -2.3 | -2.3 | 10.2 | 1.1 | 3.0 |
| **Consumer Staples** | **-4.3** | **-4.3** | **-17.9** | **-5.2** | **-0.9** |
| Food, Beverage & Tobacco | -4.1 | -4.1 | -17.1 | -6.4 | -1.3 |
| Personal Care, Drug & Grocery Stores | -4.7 | -4.7 | -19.3 | -4.8 | 0.2 |
| **Healthcare** | **-4.5** | **-4.5** | **-14.0** | **0.2** | **4.5** |
| **Financials** | **5.5** | **5.5** | **0.1** | **-1.8** | **-2.1** |
| Banks | 8.0 | 8.0 | -0.7 | -3.1 | -4.7 |
| Financial Services | 2.9 | 2.9 | 5.9 | 2.5 | 2.0 |
| Insurance | 3.2 | 3.2 | -5.6 | -2.2 | -0.1 |
| **Real Estate** | **0.5** | **0.5** | **-13.9** | **-5.1** | **-2.0** |
| **Technology** | **-1.0** | **-1.0** | **13.7** | **12.3** | **8.7** |
| **Telecommunications** | **-0.6** | **-0.6** | **-13.5** | **-6.5** | **-3.0** |
| **Utilities** | **-4.0** | **-4.0** | **-16.1** | **-3.2** | **-3.3** |

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 Price = Dividend/(Discount Factor - Growth), then Growth = Discount Factor – Dividend Yield. The Discount Factor is equal to Risk Free Rate + (Beta x 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 March 2021 unless stated otherwise. This publication is updated quarterly.*

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