

Strategic Sector Selector

A difficult balancing act

Global equities retreated in the first quarter of 2022 in the face of higher inflation and the war in Ukraine. The US Federal Reserve has become even more hawkish despite the increasing threat of a significant slowdown in economic growth. Despite these headwinds, we think the global economy will muddle through, but we now expect less growth and more inflation than at the beginning of the year. We continue to believe in a balanced sector allocation to both early- and late-cyclicals and growth and value factors, although volatility may remain high in the short term. However, our interest rate expectations imply a more favourable environment for the growth factor and therefore we tilt our allocations slightly to reflect that. We increase our allocations to media and downgrade real estate both to Neutral. We also raise healthcare to Overweight to reflect elevated risks to the economic cycle. Finally, we believe that valuations of the energy sector reflect most of the upside from high oil prices and reduce our allocation to Underweight.

Changes in allocations:

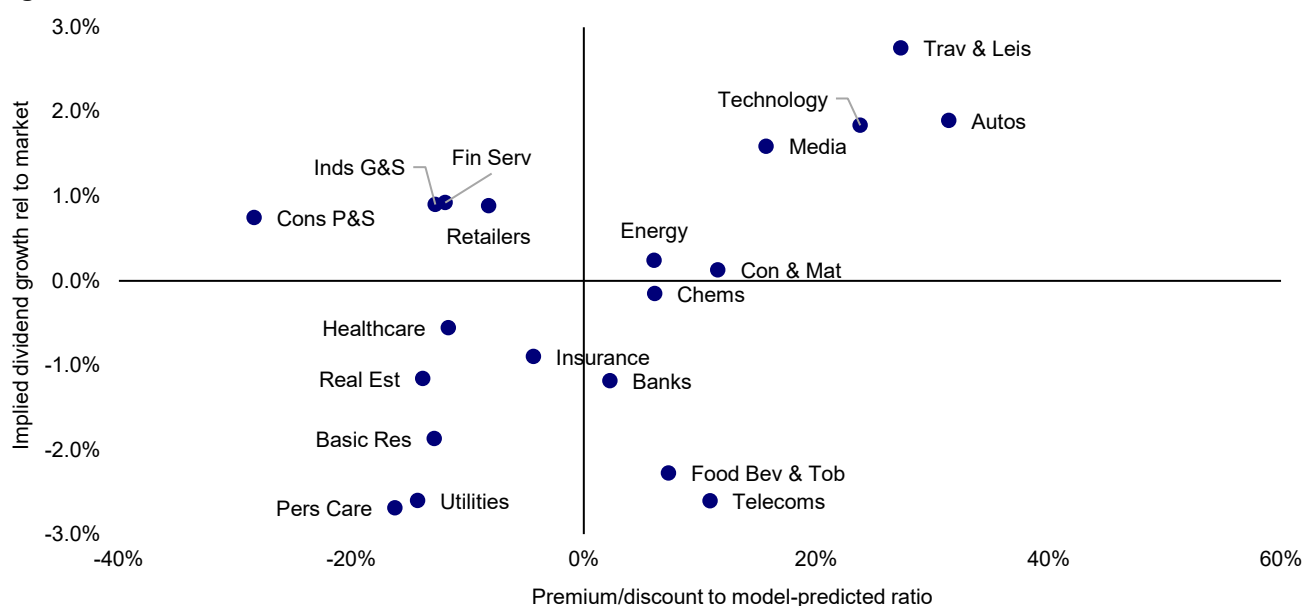
- Upgrades: media (UW to N), healthcare (N to OW)
- Downgrades: energy (N to UW), real estate (OW to N)

	Most favoured	Least favoured
Sector	US travel & leisure European basic resources	US automobiles & parts European banks

Sectors where we expect the best returns:

- Basic resources: high yield, undervalued, play on infrastructure investment and green transition
- Travel & leisure: exposure to late-cyclicals, play on pent-up demand for services and travel
- Technology: resilient demand for products and services, high margins, exposure to growth factor

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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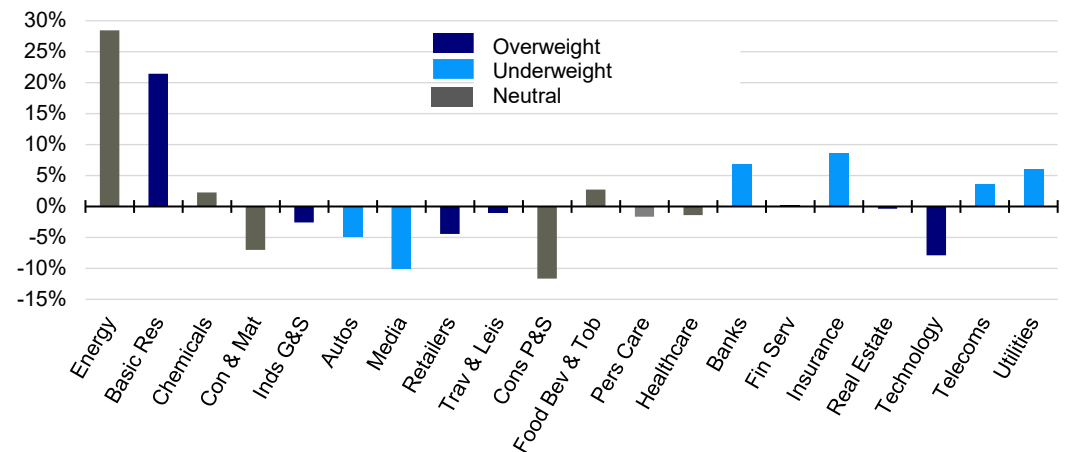
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Summary and conclusions

Since the last time

The pandemic may have started fading into the background, but markets have had to grapple with the war in Ukraine adding to uncertainty, boosting commodity prices and consequently inflation. The first rate hike by the US Federal Reserve prompted a sigh of relief, but rate expectations and concerns about economic growth have since increased. Global equities fell by 4.4% in the first quarter of 2022 on a total return basis (using the MSCI All Country World index in local currency).

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



Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2021 and 31st March 2022. Colours indicate allocations in period considered. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Figure 2 illustrates the difficulty of positioning for the triple threat of war, higher inflation and slower economic growth. Most cyclical sectors underperformed, apart from those boosted by high commodity prices (mainly energy and basic resources) and higher rate expectations (banks and insurance). Non-healthcare-related defensives (food, beverage & tobacco, telecommunications and utilities) also outperformed reflecting increased uncertainty. Our allocations were positioned for a different investment environment, so we missed out on the best performing sector, but were Overweight the second best: basic resources. Although most of our Overweights underperformed the market (except basic resources) and most of our Underweights outperformed (except autos and media), we can draw some consolation from some of the relative calls we got right: industrial goods & services outperformed construction & materials within industrials, and we were Overweight the two best performing sectors within consumer discretionary.

Asset allocation backdrop

We were already expecting less global growth in 2022 and a peaking of inflation around mid-year. Given our base case of a long “war of attrition”, we now expect even less growth, partly because of trade impacts and partly due to the squeeze on real incomes coming from higher commodity prices. On balance, we expect global GDP to be 0.5%-1.0% lower than it would otherwise have been, taking it closer to 3% growth (rather than the 4% we had been expecting – see [The Big Picture](#) for the full details). Russia’s invasion of Ukraine presents major central bankers with a dilemma. We expect major central banks to raise rates but less rapidly than currently assumed by markets (**Figure 3**).

In determining our Model Asset Allocation, we follow the optimisation results where they are clear cut, except that we chose to reduce real estate (REITS) to a neutral 8%, rather than go Underweight because we think it could offer some mitigation if inflation turns out much higher than expected. High Yield (HY) is also reduced to an Underweight 2%, rather than going all the way to zero, just in case there is a quicker resolution to the war than we expect.

Having taken the equities allocation down to Neutral in November, we raised it back to an Overweight 50%. We think the rise in dividend yields (and decline in price-earnings ratios) may have been overdone in most regions and expect a slight decline (though not in the US). This, added to the expectation of modest dividend growth is enough to generate double-digit total returns everywhere but the US. We think the best returns will come in the UK and EM.

We took Investment Grade (IG) to the maximum 20% allowed to take advantage of the higher fixed income yields that exist. We expect little change in IG spreads versus government yields, whereas we think HY spreads could widen further, and we expect more defaults due to slowing economies. By definition, we are maximum allocated to all IG regions but expect the best returns in EM. We maintained the Minimum allocation to government bonds, within which EM is the only region that is Overweight.

The war in Ukraine has contributed to the gains in commodity prices but in our base case we assume they consolidate at slightly lower levels. Having missed the recent gain in commodities we stuck to the zero allocation, rather than chasing performance.

Cash remains our defensive asset of choice and we kept it at the maximum allocation (low returns, low volatility and low correlation place it on the efficient frontier). We have been surprised by how well gold has performed given the rise in treasury yields and the dollar. We assume it has benefitted from a geopolitical risk premium but still believe it will weaken as yields continue to rise. Hence, we maintained a zero allocation.

From a regional perspective, we continue to prefer the assets of the UK and EM. We find the assets of both are relatively cheap, while benefitting from high commodity prices.

Figure 3 – Market forecasts

	Current (31/03/22)	Forecast 12-month
Central Bank Rates		
US	0.50	1.75
Eurozone	-0.50	-0.25
China	4.35	4.00
Japan	-0.10	-0.10
UK	0.75	2.00
10y Bond Yields		
US	2.33	2.50
Eurozone	0.51	0.20
China	2.82	3.00
Japan	0.21	0.15
UK	1.59	2.20
Exchange Rates/US\$		
EUR/USD	1.11	1.15
USD/CNY	6.34	6.60
USD/JPY	121.68	110.00
GBP/USD	1.31	1.40
USD/CHF	0.93	0.90
Equity Indices		
S&P 500	4530	4500
Euro Stoxx 50	3903	4250
FTSE A50	13751	15000
Nikkei 225	27821	28500
FTSE 100	7516	8350
Commodities (US\$)		
Brent/barrel	107	90
Gold/ounce	1941	1700
Copper/tonne	10368	10000

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

As the COVID-19 pandemic faded into the background (except in China and other parts of Asia), equity market focus shifted to how far major developed market central banks would have to raise rates to bring inflation under control. At one end is the European Central Bank (ECB) that has started tapering asset purchases but has not really committed itself to raising rates imminently. The Bank of England (BOE) raised rates for the third time at its most recent meeting in March but shifted its language to a more dovish tone. The US Federal Reserve (Fed) has been the most hawkish this year suggesting that it would prefer to raise rates rapidly to a neutral level (currently estimated to be around 2.0%-2.5%) implying perhaps two 50 basis point hikes in 2022. They have also committed to a faster rate of Quantitative Tightening (QT) than in the last cycle. The war in Ukraine may have thrown these plans into jeopardy threatening a more pronounced slowdown of economic growth than we expected at the start of the year. Inflation is likely to remain high at the same time putting central banks in a tight spot. How they navigate this environment will be crucial for equity sector returns although we are somewhat sceptical that they will be able to raise rates as fast as markets currently price in.

The other major theme this year will be the war in Ukraine, in our view. We think there are three broad scenarios and financial markets will remain driven by how likely each one looks at the time. If the war escalates, there is an energy crisis, or monetary policy settings become too restrictive, the global economy could be pushed into recession. In this case, we think a flight to safety would imply continued outperformance by defensive sectors. On the other hand, a quick resolution to the crisis would boost hopes for a reacceleration of economic growth and a quicker moderation of inflation if energy prices normalise, in our view, favouring consumer discretionary, technology and industrials. Before war broke out in Ukraine, our base case for 2022 was slowing economic growth and high, but moderating inflation. A prolonged war, which we believe markets have priced in for the moment, has similar implications, but would mean a more pronounced decrease in global GDP growth and more persistent inflation, in our opinion.

Based on our expectation of a “war of attrition”, we believe oil prices will be lower in a year’s time. That implies rockier times ahead for the **energy** sector, the best performing sector in the last 12 months, even if recent returns lagged commodity prices. We are concerned about its valuation being at a premium versus what our multiple regression model implies, considering the potentially lower demand if global economic growth slows significantly. We think energy security concerns will also accelerate plans to phase out hydrocarbons and we therefore reduce our allocation to **Underweight**.

By contrast, the worst performing sector in the last 12 months has been **media**. After a boost to subscriber growth during pandemic-related lockdowns, concerns about slowing take-up drove their underperformance. It was also hit by multiple compression as rate expectations rose. Based on our rate expectations, investors may have overreacted to the threat, but its relatively rich valuations could be a headwind. We upgrade the sector to **Neutral**.

We think the economic cycle is still intact and recession is not around the corner, but the risk of a more pronounced slowdown is higher. Thus, we believe it makes sense to slightly raise our allocation to defensives by upgrading **healthcare** to **Overweight**. As a growth sector, it suffered year-to-date as the Fed has become increasingly hawkish. The sector’s valuations look attractive on both of our models, and we are positive on its relative outlook if expectations of monetary tightening move closer to our forecasts as the year progresses.

Finally, we reduce **real estate** to **Neutral** from **Overweight** following our change of allocation in the latest [The Big Picture](#). The sector has mildly underperformed in the last 12 months and also year-to-date despite being both what we consider a value sector and a source of reliable dividends. However, we are now less positive about its dividend growth prospects in the future. Although its valuations remain undemanding, we believe the risk of a more significant economic slowdown may be too much of a headwind.

The best and worst of the rest

We keep faith with **basic resources**, whose valuations we think look attractive: it has a discount versus the relative dividend yield implied by our multiple regression model and its implied perpetual dividend growth is negative. Although we do not expect positive returns from industrial metals in the next 12 months, we think their prices will remain elevated especially if the war in Ukraine drags on. We also expect the sector to be crucial in providing key ingredients to both infrastructure investments and the “green transition”. Recent outperformance can continue and therefore we stay **Overweight**.

Chemicals was one of the sectors we deemed to have been well-positioned for resilience during the pandemic, but we think it may struggle to outperform 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 around \$100 per barrel and we think environmental concerns are resuming as consumers emerge from “survival mode”, thus reducing the demand for plastic products.

Industrial goods & services will provide the tools for infrastructure and green projects in our view, and therefore we stay **Overweight**. Its valuations look attractive on our multiple regression model, and we believe that it provides a diversified exposure including aerospace & defence, payment systems, vehicle manufacturers and logistics providers. Margin pressures remain a significant risk through the commodity price channel, but we think that healthy demand and pricing power will compensate for that, not to mention that the sector is also a supplier to the mining industry. Increasing militarisation after Russia’s invasion could boost defence equipment manufacturers, while infrastructure investment and the green transition could be a source of healthy demand for others. We expect logistics providers to have strong demand in the next 12 months even if supply chain bottlenecks ease and transportation rates fall, while aerospace manufacturers may be boosted by increasing airline traffic and demand for new aircraft.

Although **automobiles & parts** underperformed year-to-date, we feel it is prudent to remain **Underweight**. It remains one of the most richly valued sectors on our models and supply chain pressures do not look to be easing in the near future. We doubt the sector will achieve its currently implied 3.5% perpetual real dividend growth, especially if China struggles to tame its Omicron wave.

We are more positive on the more consumer-facing sectors, such as **retailers**, which was somewhat left behind in the “reflation trade”, perhaps due its high exposure to the online channel. It also looks a touch overvalued for that reason but continued economic growth will support the sector, in our view, although higher wage costs may put pressure on their margins. Nevertheless, we keep our **Overweight** allocation.

Assuming no new variant of COVID-19 emerges that is more dangerous than the ones currently in circulation, we expect the world to open up further. This would boost **travel & leisure**, which we keep **Overweight** after relatively resilient performance year-to-date despite rising oil prices and increased geopolitical risks. Although its valuations do not appear cheap, we think it would be one of the biggest beneficiaries of improving sentiment as we emerge from the Northern hemisphere winter.

We maintain our **Neutral** allocation to **consumer products & services**, even though it has been the worst performing sector year-to-date. We think the sector would struggle to outperform in an environment of moderating economic growth, high inflation, a preference for experiences over goods, and going out over staying in. Its valuations may no longer appear rich, but we would prefer to wait for a more supportive macroeconomic environment to consider increasing our allocation.

We remain concerned about the profitability of **banks** and therefore stick to our **Underweight** allocation. Loan growth has remained sluggish, especially in the US, which may be partly driven by consumers reducing savings rates to increase spending, rather

than taking on more debt. Although we expect treasury yields to climb higher in the next 12 months, we believe that we may have seen the majority of yield curve steepening. Profits are still driven by loan loss reserve releases in the US and UK, while the M&A and capital raising cycle seems to be turning. In our view, the sector is no longer cheap on our multiple regression model, although its implied perpetual dividend growth is still below that of the market.

We stay **Overweight financial services** as we expect markets to move into a more settled phase as the year progresses, while broad economic growth may still be enough to provide them with more customers seeking investment products. Although its valuations are higher than that of banks and insurance, we prefer not to be too exposed to changes in the yield curve and sluggish loan demand in banks, or natural disasters and increasing healthcare costs in insurance.

We also keep our **Underweight in insurance**, which we expect to be exposed to risk from natural disasters and could struggle to generate adequate returns if our forecasts for financial markets play out in the next 12 months. Although its valuations seem attractive, we are concerned that that will not be enough for sustained outperformance in a mid-cycle environment.

Our tilt towards cyclical sectors would not be complete, in our view, without keeping our allocation to defensives lower across the board. We still prefer defensive growth as a hedge in case economic growth and inflation undershoots expectations and maintain **consumer staples** at **Neutral**. We also keep **telecommunications** and **utilities Underweight**, because we think they will struggle to keep up with the more cyclical sectors in the market. We are especially worried about utilities if margins are squeezed further by high input prices and investment costs, while regulators keep consumer charges under control.

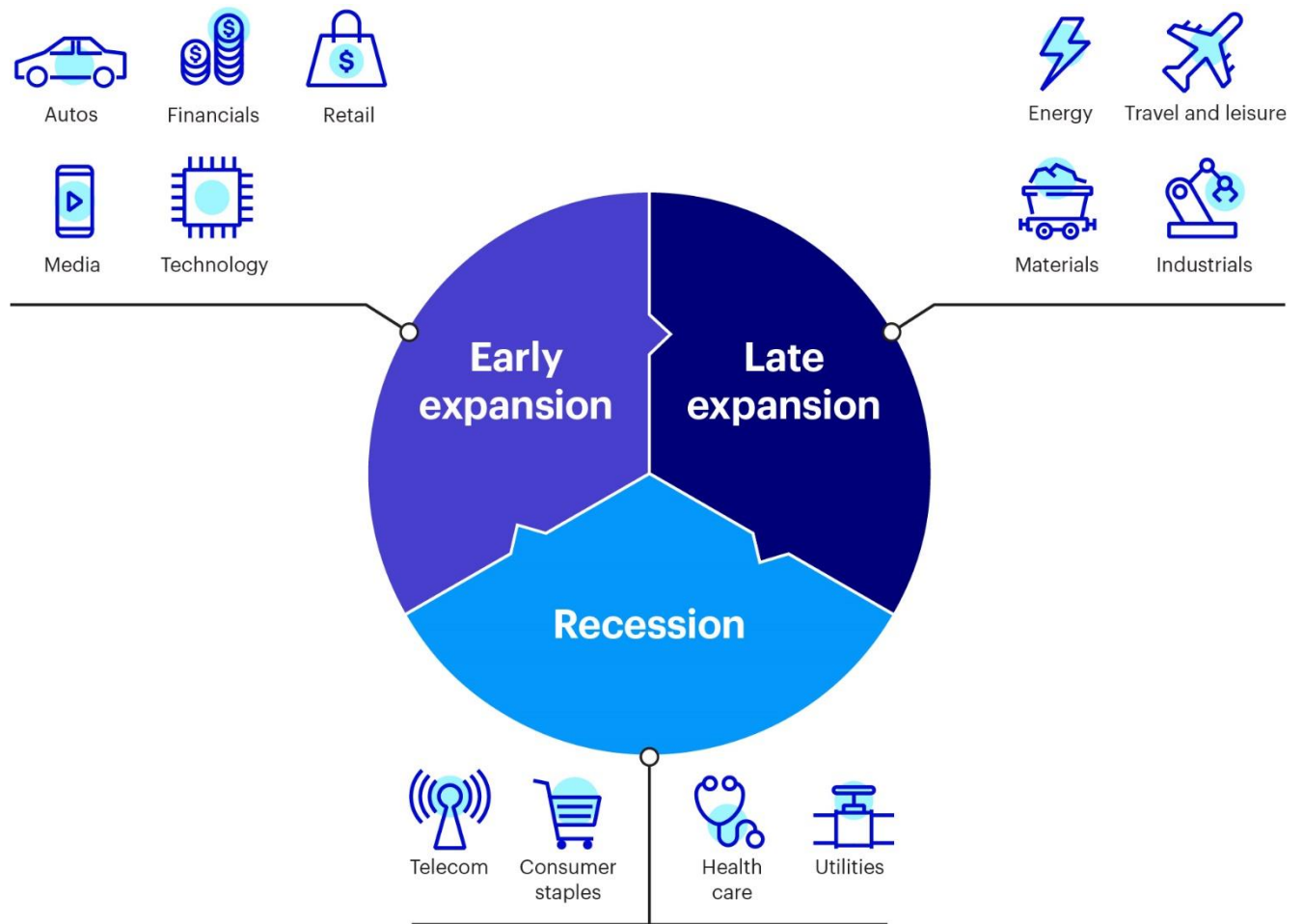
Finally, we maintain our **Overweight** allocation to **technology**, which we think will continue to benefit from the structural trends accelerated and amplified by the COVID-19 crisis. Valuations look rich on implied perpetual dividend growth, but they are nowhere near the extremes of the tech bubble. We suspect the changing composition of the sector played a part in reducing its volatility and cyclicity, thus making it an unexpected defensive. Also, we value the high margins and solid cash generation in a time of increasing cost pressures. While rising interest rates present a threat of further multiple compression, the sector's price/earnings ratio has decreased substantially since its peak in early 2021.

Figure 4 – Model allocations for Global sectors

	Neutral	Invesco	Preferred Region
Energy	7.1%	Underweight ↓	US
Basic Materials	4.7%	Overweight	Europe
Basic Resources	2.8%	Overweight	Europe
Chemicals	1.9%	Neutral	US
Industrials	12.4%	Overweight	US
Construction & Materials	1.5%	Neutral	EM
Industrial Goods & Services	10.9%	Overweight	US
Consumer Discretionary	14.9%	Neutral	US
Automobiles & Parts	3.1%	Underweight	Japan
Media	1.1%	Neutral ↑	EM
Retailers	5.1%	Overweight	US
Travel & Leisure	1.9%	Overweight	US
Consumer Products & Services	3.7%	Neutral	Japan
Consumer Staples	6.0%	Neutral	US
Food, Beverage & Tobacco	4.0%	Neutral	US
Personal Care, Drug & Grocery Stores	2.0%	Neutral	US
Healthcare	9.8%	Overweight ↑	US
Financials	15.2%	Underweight	Japan
Banks	7.5%	Underweight	Japan
Financial Services	5.0%	Overweight	Japan
Insurance	2.7%	Underweight	US
Real Estate	3.4%	Neutral ↓	EM
Technology	19.4%	Overweight	US
Telecommunications	3.6%	Underweight	Japan
Utilities	3.3%	Underweight	Europe

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

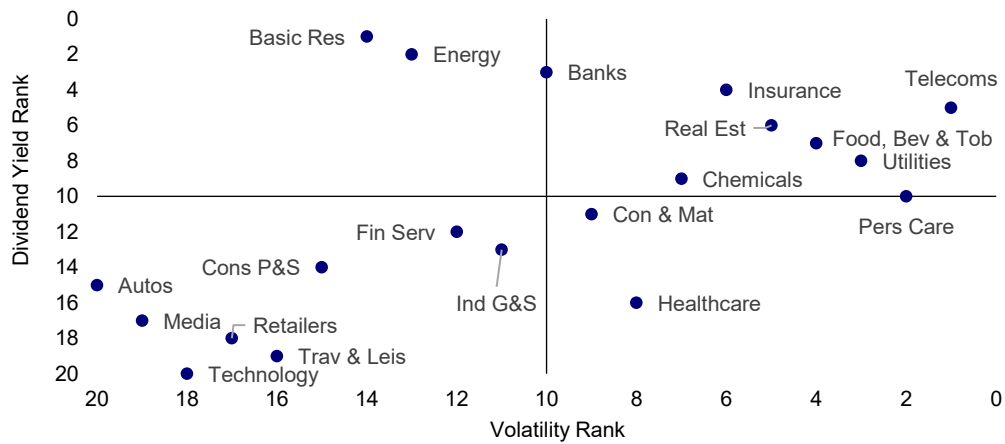
Figure 5 – Economic cycle and main sector allocation decisions



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

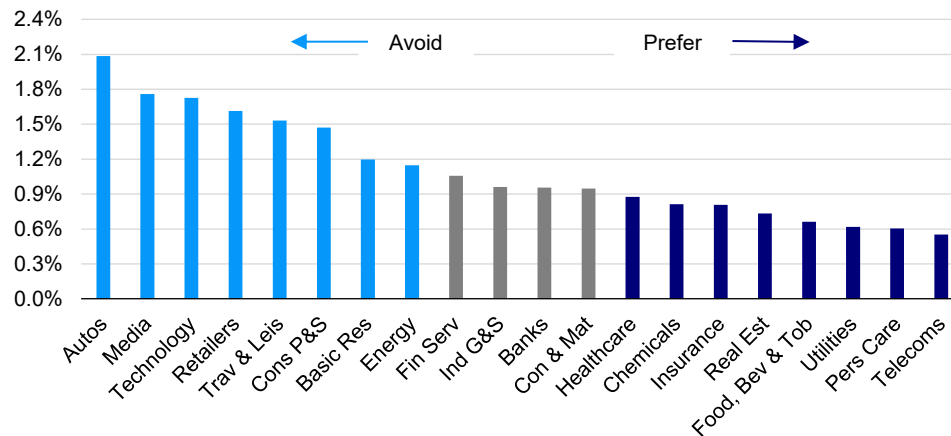
Systematic strategy – Global

Figure 6 – Global sectors ranked by volatility and dividend yield



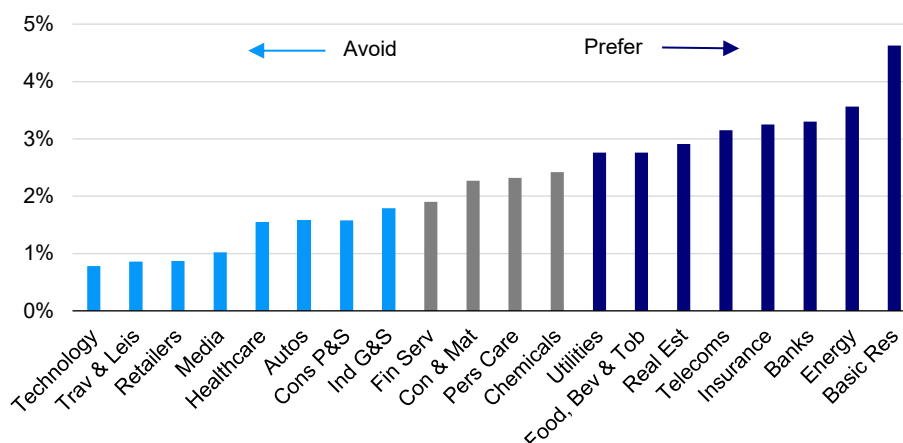
- A purely systematic approach would favour sectors in the top right corner: telecoms, food, beverage & tobacco and utilities
- The approach would avoid sectors in the bottom left, such as autos, media, or technology

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



- The daily returns of autos, media and technology were the most volatile in the past 3 months
- Telecoms, personal care, and utilities were the least volatile

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

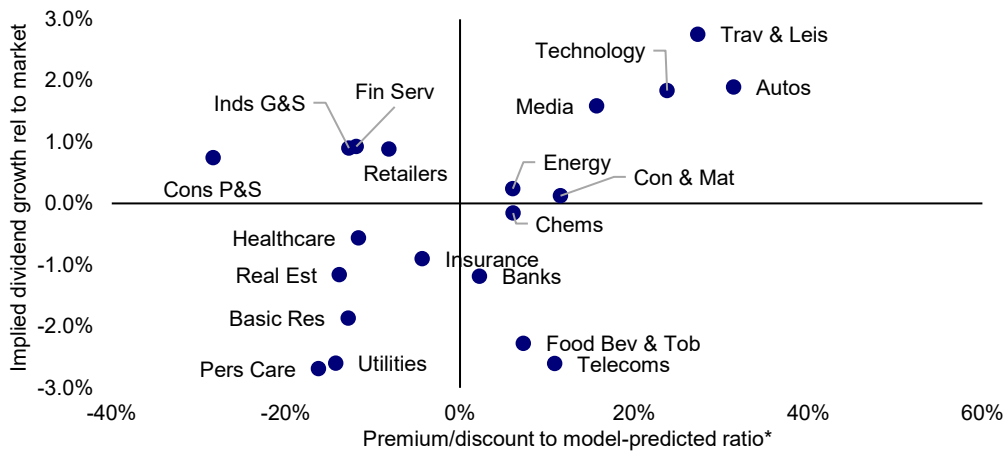


- Basic resources, energy and banks look the cheapest based on their dividend yield
- The lowest yielding sectors include technology, travel & leisure and retailers

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

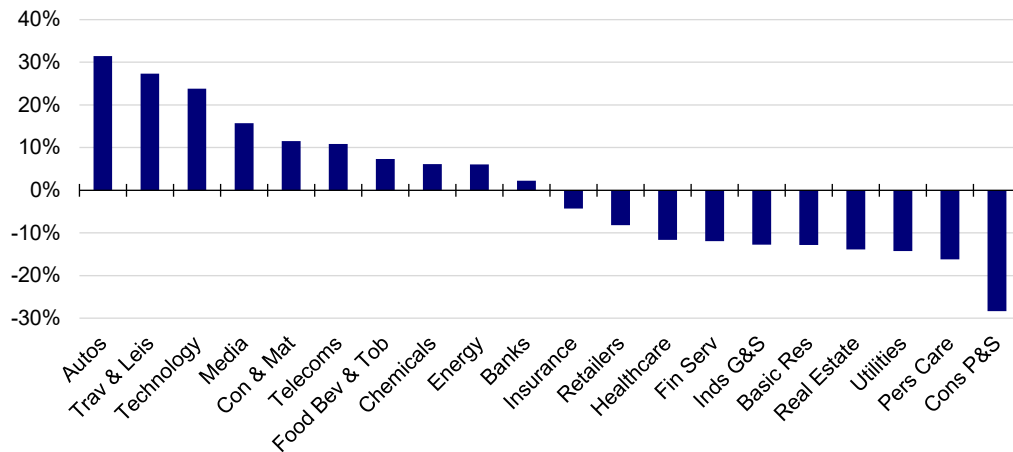
Valuations – Global

Figure 9 – Global sectors valuation matrix



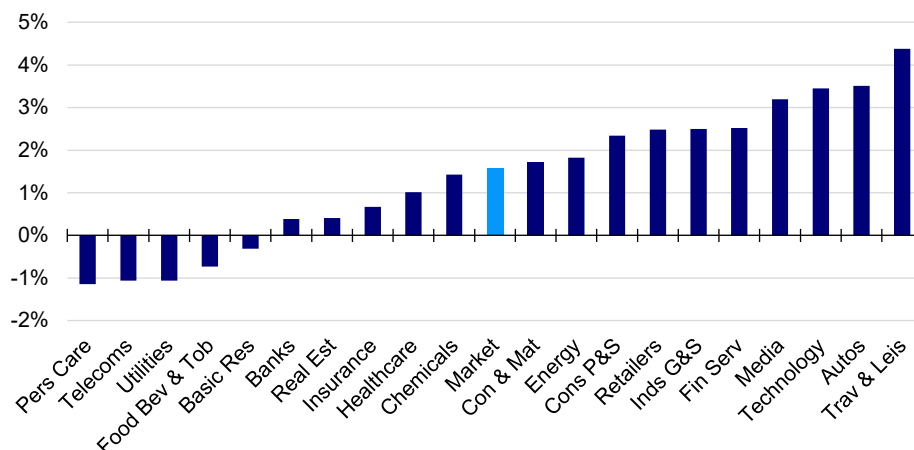
- Sectors in the top right corner look overvalued on both measures, while those in the bottom left appear undervalued
- This approach would avoid, for example, autos, travel & leisure and technology
- Personal care, basic resources and utilities look better value

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



- Autos, travel & leisure and technology look the most overvalued versus our model
- Consumer products & services, personal care and utilities seem the most undervalued versus our model-predicted ratios

Figure 11 – Global implied perpetual real dividend growth

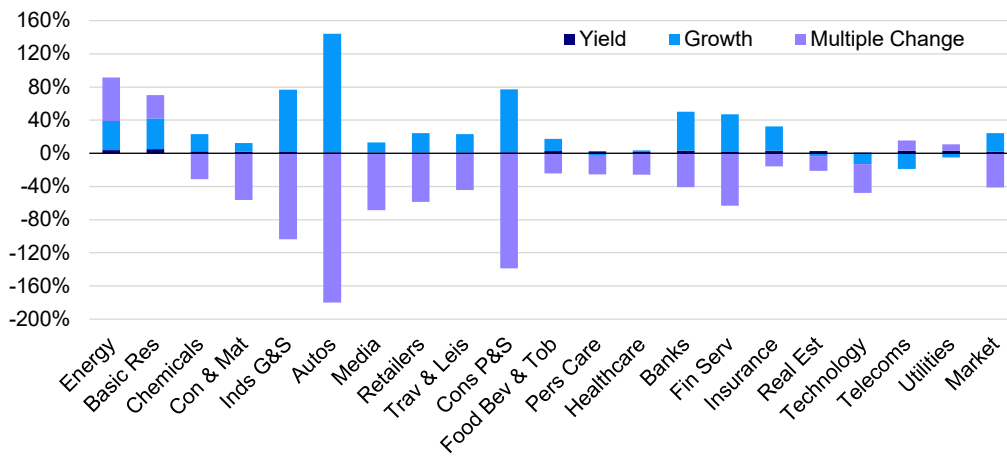


- Shows the future real growth required to justify current prices
- Autos appears priced for over 4% real growth in dividends (expensive)
- Five sectors appear priced for negative growth (cheap)

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

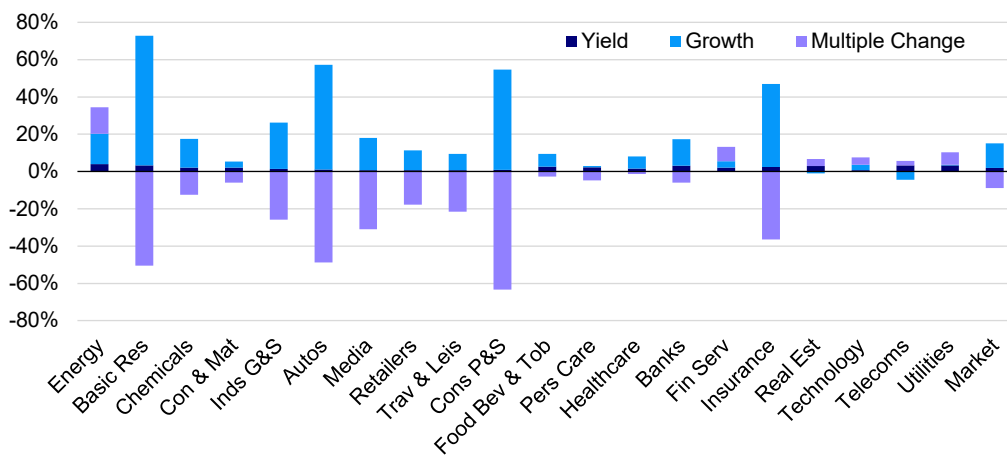
Decomposed returns – Global

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



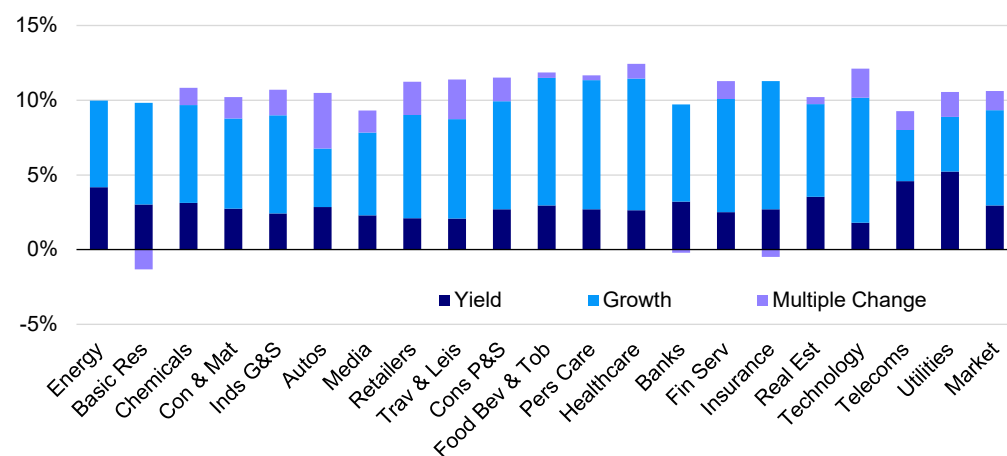
- Five sectors had declining dividends in 2022: personal care, real estate, technology, telecoms and utilities
- Four sectors had a rise in sentiment (multiple expansion): energy, basic resources, telecoms and utilities

Figure 13 – Global rolling 12-month total returns decomposed



- Only four sectors re-rated (multiple expansion) while having positive dividend growth: energy, financial services, technology and utilities
- 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 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		-0.19				
Real Copper		0.00	0.00	0.02	-0.01	
Consumer Confidence	0.00	0.00	0.00	0.00	0.00	-0.01
Manufacturing Confidence		0.01	0.01	0.01	-0.01	0.01
IP		0.56	0.84		3.18	-5.15
10y Yield	-3.16	-1.94		-5.97	12.56	-11.12
CPI	5.67		-2.98		-5.04	
Net Debt/EBITDA		0.04	-0.08		0.18	
ROE	-1.42	-0.68	1.22	0.63	-3.29	

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	-1.61	-1.25				
Real Copper	0.01			-0.01	0.00	
Consumer Confidence	0.01	0.01	0.01	0.00	0.00	-0.01
Manufacturing Confidence		-0.03	-0.01	-0.01	0.00	0.01
IP	-1.67		-0.81	0.89	0.28	-5.15
10y Yield	-2.94	-6.53			0.61	-11.12
CPI	13.75	31.54	7.98	11.06		
Net Debt/EBITDA	-0.12	-0.16	0.07	0.22	0.03	
ROE	-3.04	-3.34	-1.54		0.66	

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	1.01		0.19	0.35	1.03	0.41	
Real Copper	-0.01	0.00	0.00		-0.01		
Consumer Confidence	0.01	0.00	0.00	0.00	0.00	0.00	-0.01
Manufacturing Confidence			0.00		0.00	0.02	0.01
IP	-3.35	-0.60	0.93	-0.58	1.08	-2.01	-5.15
10y Yield	2.72	6.80	3.82	-1.59	6.68	-1.56	-11.12
CPI		-4.32	-5.22		-5.27	-3.12	
Net Debt/EBITDA	-0.07	0.00	0.24		-0.12	0.09	
ROE		0.87		0.64	-1.55	0.65	

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

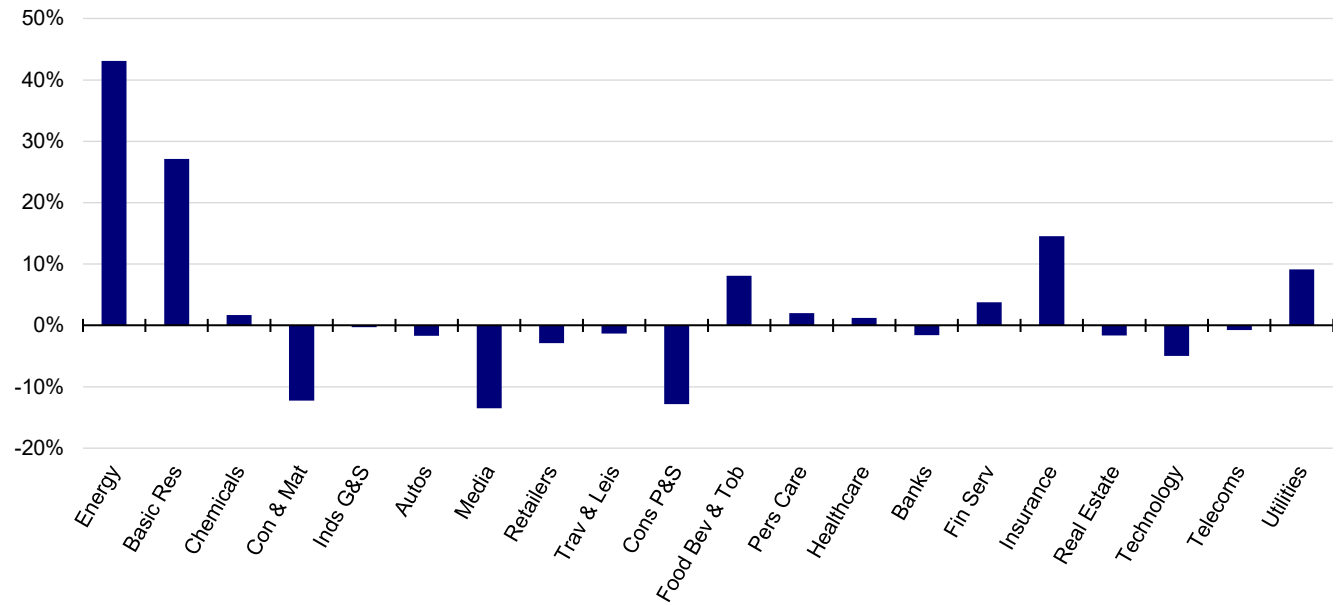
Figure 18 – Regression coefficients of Global financial sectors

	Banks	Financial Services	Insurance	Real Estate	Market
Real Oil	0.37	-0.32	-0.48		
Real Copper	-0.01	0.00	0.01	-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	-2.15	1.62	0.52	3.52	-5.15
10y Yield	-10.54		-7.07	2.48	-11.12
CPI	7.30		10.62	3.58	
ROE	4.25	0.54	-1.14	-3.84	

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

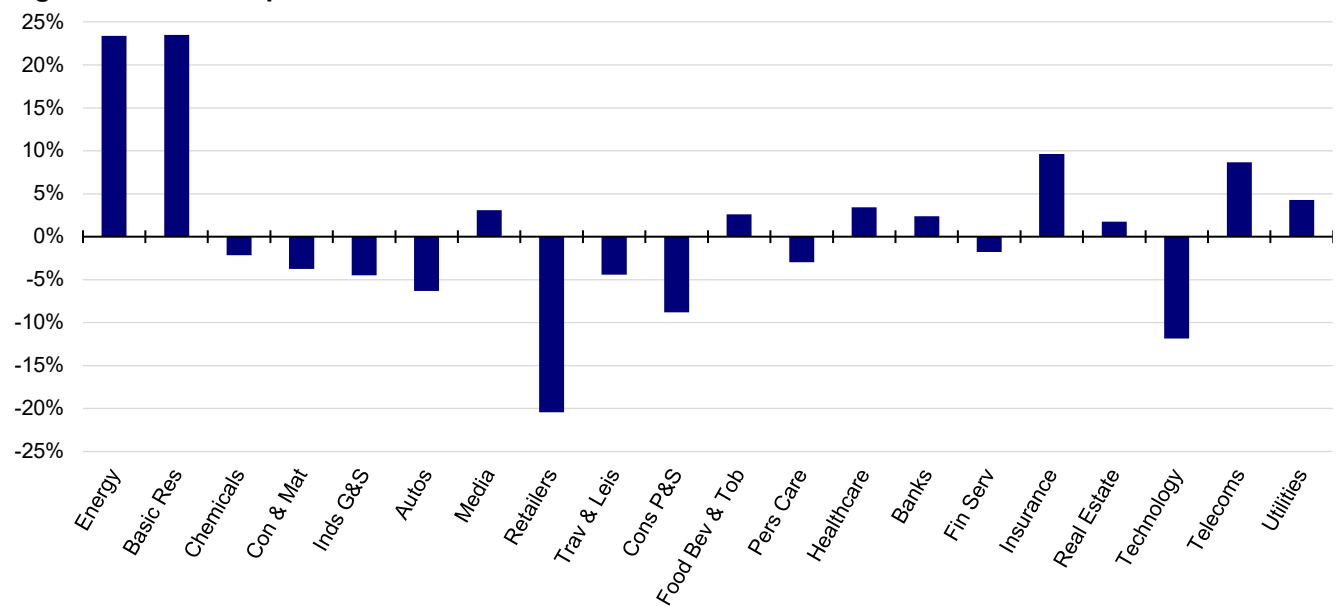
Appendix 2: Sector returns by region

Figure 19 – 3m US sector returns relative to market



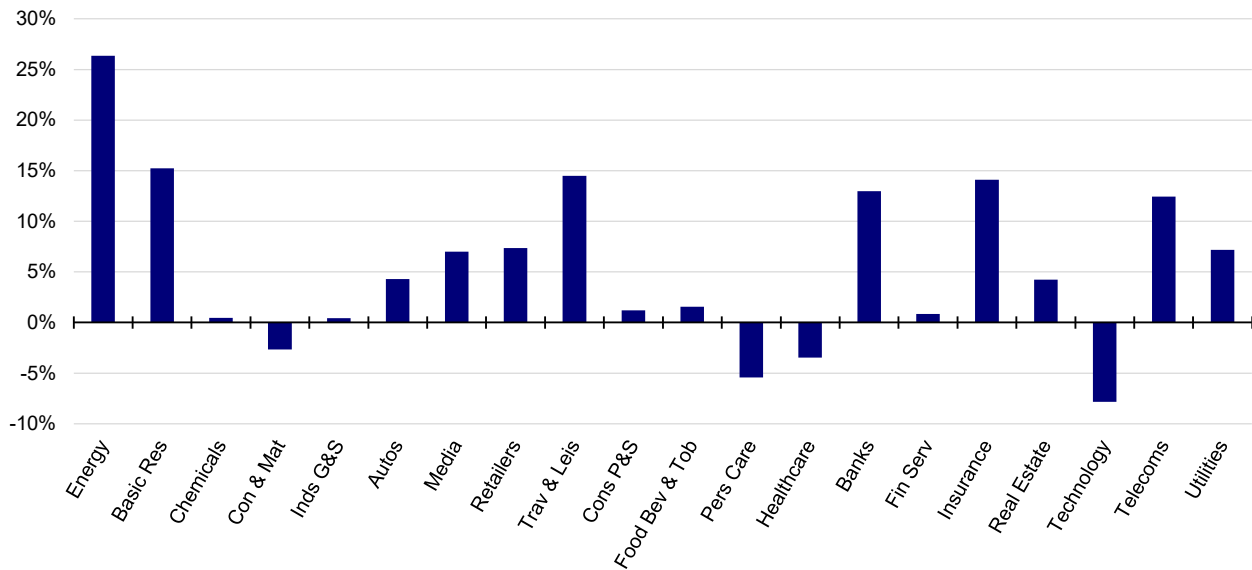
Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2021 and 31st March 2022. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Figure 20 – 3m European sector returns relative to market



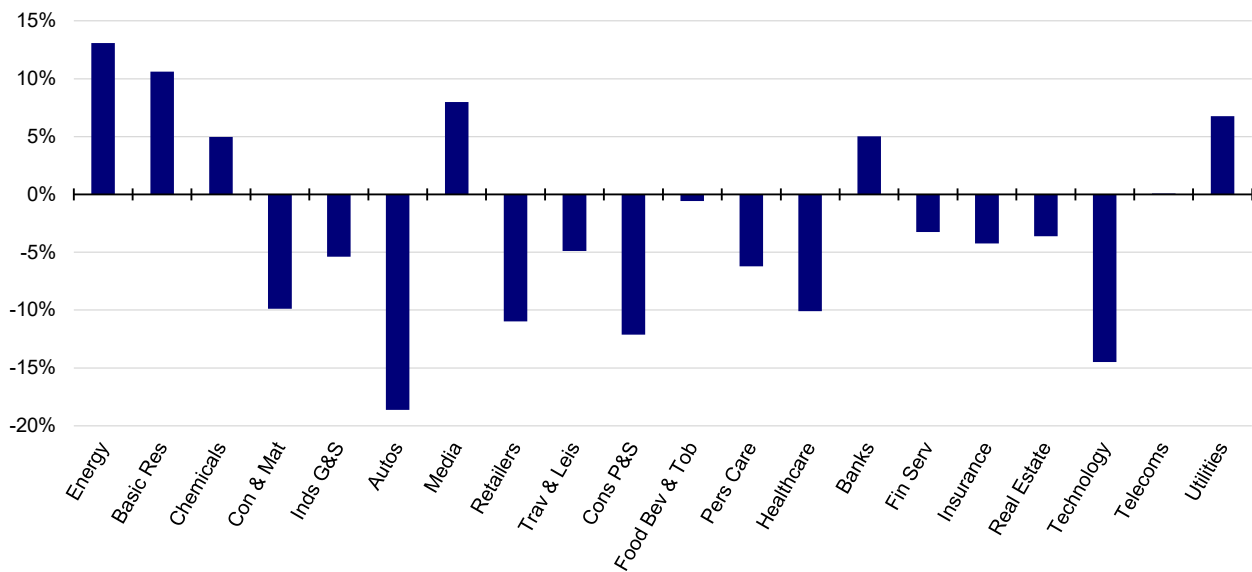
Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2021 and 31st March 2022. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Figure 21 – 3m Japanese sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 31st December 2021 and 31st March 2022. **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 2021 and 31st March 2022. **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	15.7	14.6	0.2	3.6	3.8	-0.2	2.3	1.8	0.9	8.6	6.3	1.2
Basic Materials	11.3	16.8	-1.2	3.7	2.7	1.3	2.1	1.8	0.7	7.3	7.3	0.0
Basic Resources	9.7	17.0	-1.2	4.6	2.8	2.0	2.0	1.7	0.7	6.5	7.3	-0.4
Chemicals	15.0	17.2	-0.4	2.4	2.9	-0.5	2.3	2.0	0.7	8.9	7.5	0.9
Industrials	18.7	18.2	0.1	1.9	2.3	-0.6	3.0	2.1	1.9	12.7	9.2	1.9
Construction & Mat.	16.5	16.7	0.0	2.3	2.5	-0.4	2.1	1.8	0.5	10.2	9.0	0.5
Industrial G&S	19.0	18.7	0.1	1.8	2.2	-0.6	3.2	2.2	2.1	13.1	9.3	2.0
Consumer Disc.	22.4	18.7	0.7	1.2	2.2	-1.3	3.6	2.2	2.7	13.3	8.5	2.6
Automobiles & Parts	15.2	15.1	0.0	1.6	2.6	-0.9	2.0	1.5	1.5	8.7	5.4	3.0
Media	15.1	21.7	-0.9	1.0	2.1	-1.3	2.8	2.4	0.6	13.9	9.6	1.1
Retailers	28.3	21.2	1.1	0.9	1.9	-1.3	6.1	3.4	2.3	15.6	13.2	0.8
Travel & Leisure	48.1	23.3	2.2	0.9	1.9	-1.3	4.3	2.4	2.7	20.1	9.2	3.5
Consumer Prod & Serv	21.9	19.3	0.5	1.6	2.4	-1.2	4.1	2.2	2.6	14.3	10.6	1.5
Consumer Staples	21.6	16.8	0.9	2.6	2.5	0.1	3.5	2.9	0.8	13.3	10.8	0.9
Food, Bev & Tobacco	20.6	18.4	0.5	2.8	2.7	0.1	3.2	2.8	0.7	13.8	11.0	1.0
Personal Care	24.1	20.4	0.6	2.3	2.4	-0.1	4.0	3.2	0.9	12.4	10.5	0.7
Healthcare	24.7	20.1	0.8	1.6	2.3	-1.0	4.5	3.4	0.9	16.6	12.8	1.0
Financials	11.1	15.7	-1.0	2.8	2.7	0.1	1.2	1.5	-0.6	6.7	5.7	0.7
Banks	10.2	14.4	-0.9	3.3	3.0	0.4	1.1	1.4	-0.7	6.2	6.3	-0.1
Financial Services	12.8	18.3	-1.0	1.9	2.3	-0.6	1.2	1.5	-0.5	12.6	9.2	1.2
Insurance	11.1	16.0	-1.0	3.3	2.5	1.1	1.5	1.7	-0.4	4.1	3.7	0.5
Real Estate	16.4	19.2	-0.5	2.9	3.2	-0.4	1.5	1.4	0.3	17.8	13.6	1.5
Technology	24.5	24.3	0.0	0.8	1.6	-0.9	6.2	3.0	2.7	19.2	11.5	1.9
Telecommunications	13.9	17.4	-0.4	3.2	4.3	-0.5	2.1	2.6	-0.5	5.2	6.1	-0.4
Utilities	21.2	14.5	1.7	3.1	4.8	-0.9	1.9	1.6	0.9	7.6	5.6	1.5
Market	17.6	17.2	0.1	2.1	2.7	-0.7	2.5	2.0	1.1	10.8	7.8	1.7

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 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

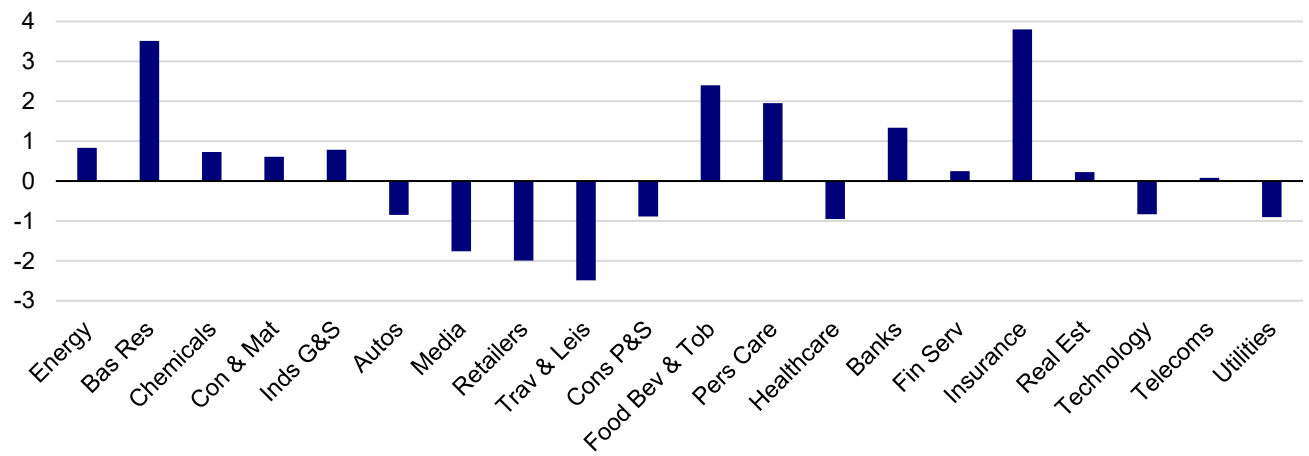
Figure 24 – Global cyclically-adjusted valuations

	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	15.3	18.8	-0.5	3.7	2.8	0.9	1.6	2.7	-0.9	7.1	8.7	-0.5
Basic Materials	24.9	23.2	0.2	1.9	1.9	0.0	2.3	2.4	-0.2	10.8	9.8	0.4
Basic Resources	24.3	21.5	0.3	2.0	2.1	-0.3	2.1	2.3	-0.2	10.0	9.4	0.2
Chemicals	24.8	24.5	0.1	1.9	1.9	0.0	2.6	2.7	-0.3	11.6	10.6	0.6
Industrials	27.9	26.6	0.2	1.4	1.5	-0.2	3.3	3.0	0.5	15.1	12.9	0.9
Construction & Mat.	23.1	24.0	-0.1	1.8	1.9	-0.1	2.2	2.4	-0.2	11.8	11.5	0.1
Industrial G&S	28.7	27.4	0.2	1.3	1.4	-0.3	3.5	3.0	1.0	15.7	12.7	1.4
Consumer Disc.	29.2	27.1	0.4	1.2	1.4	-0.7	3.7	3.0	1.5	14.6	11.8	1.5
Automobiles & Parts	20.1	19.0	0.3	1.3	1.7	-0.8	2.1	2.0	0.3	9.5	6.7	1.9
Media	28.3	30.3	-0.2	1.2	1.4	-0.5	3.4	3.3	0.0	14.3	13.2	0.3
Retailers	39.4	32.2	1.1	0.9	1.1	-0.8	7.1	4.9	2.1	21.9	19.7	0.5
Travel & Leisure	24.9	34.3	-0.9	1.4	1.1	0.8	3.5	3.5	0.1	12.3	12.9	-0.2
Consumer Prod & Serv	30.4	28.7	0.4	1.4	1.6	-0.6	4.3	3.1	2.1	17.5	15.2	1.1
Consumer Staples	22.3	22.6	-0.1	2.0	1.6	1.0	3.9	3.9	0.0	15.7	14.6	0.5
Food, Bev & Tobacco	26.6	28.3	-0.4	2.1	1.6	1.2	3.8	4.2	-0.9	16.3	16.3	0.0
Personal Care	27.9	31.7	-0.6	1.9	1.4	1.1	4.2	4.9	-0.8	14.7	16.3	-0.7
Healthcare	38.3	31.5	1.1	1.2	1.4	-0.7	5.6	5.2	0.4	21.9	19.8	0.7
Financials	17.1	23.6	-0.6	2.3	2.0	0.4	1.4	2.0	-0.9	7.7	7.3	0.2
Banks	13.4	21.0	-0.8	3.0	2.3	0.6	1.2	1.8	-1.0	6.9	8.0	-0.5
Financial Services	24.9	29.6	-0.3	1.3	1.5	-0.3	1.7	2.0	-0.6	15.3	12.1	1.3
Insurance	19.0	24.0	-0.5	2.0	1.6	0.6	1.8	2.4	-0.7	5.0	4.8	0.2
Real Estate	17.1	26.7	-0.7	2.9	2.5	0.4	1.6	1.7	-0.4	17.6	17.0	0.2
Technology	51.7	38.9	0.6	0.6	0.9	-0.7	8.6	4.7	1.6	29.5	18.5	1.2
Telecommunications	17.2	23.1	-0.6	3.7	3.0	0.6	2.3	3.3	-0.8	5.5	7.7	-0.7
Utilities	21.2	18.6	0.6	3.0	3.5	-0.6	1.9	2.0	-0.3	7.7	6.9	0.6
Market	25.5	24.8	0.1	1.7	1.8	-0.2	2.8	2.8	-0.1	12.6	10.7	1.0

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

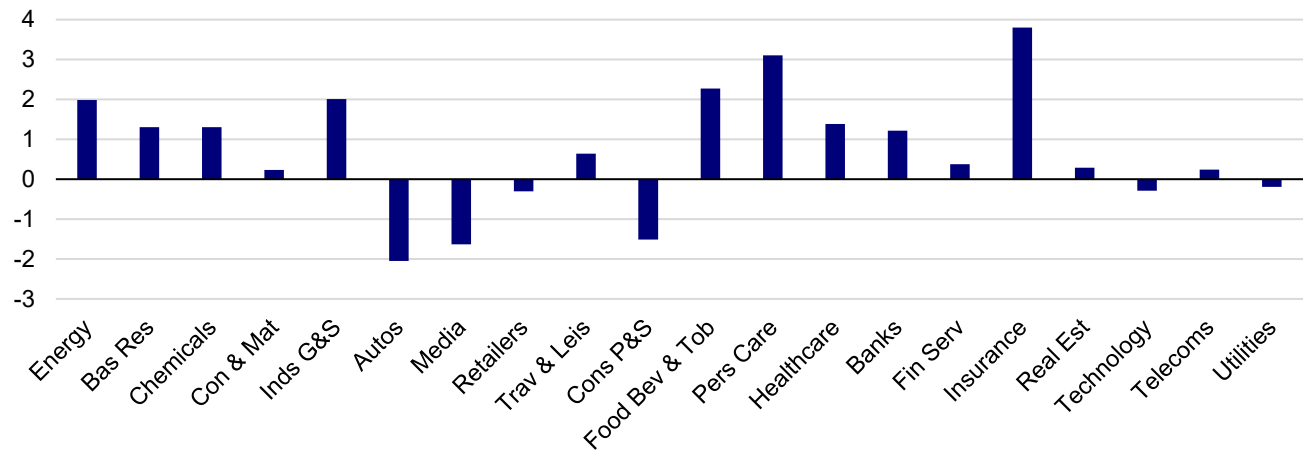
Appendix 4: Sector valuations by region

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



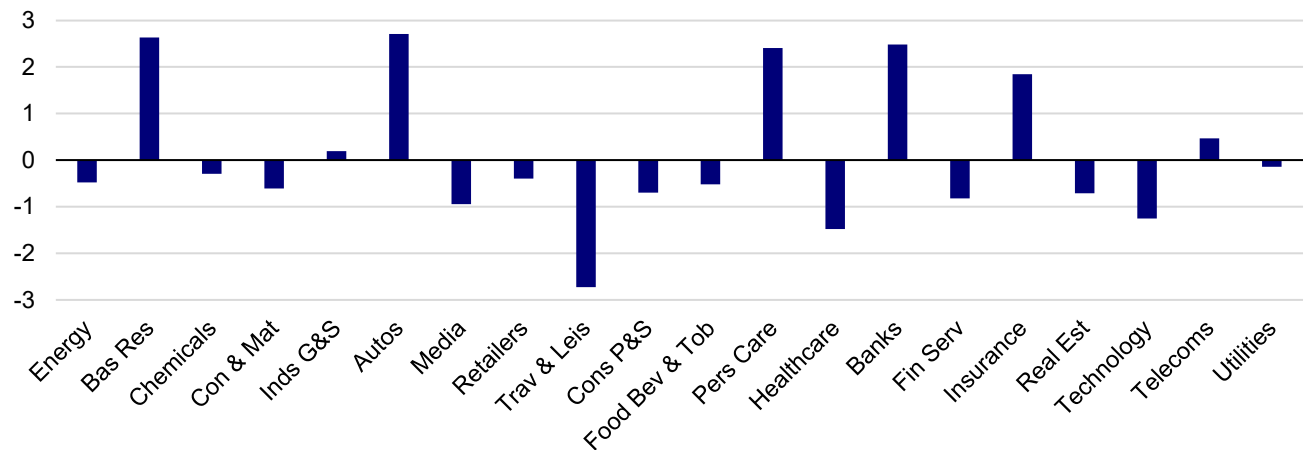
Notes: See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

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



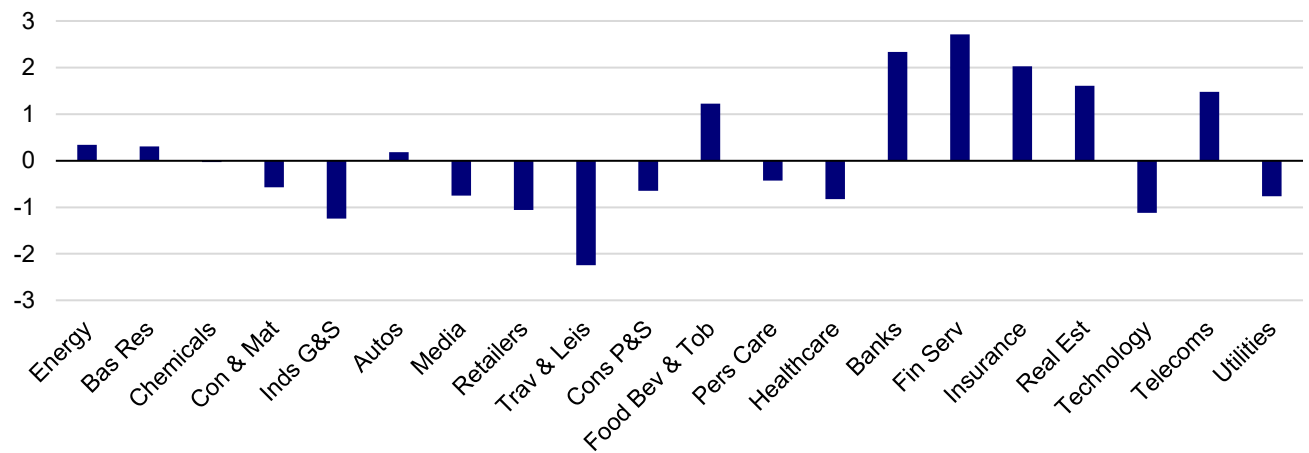
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream US Total Market Index. Source: Refinitiv Datastream and Invesco

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



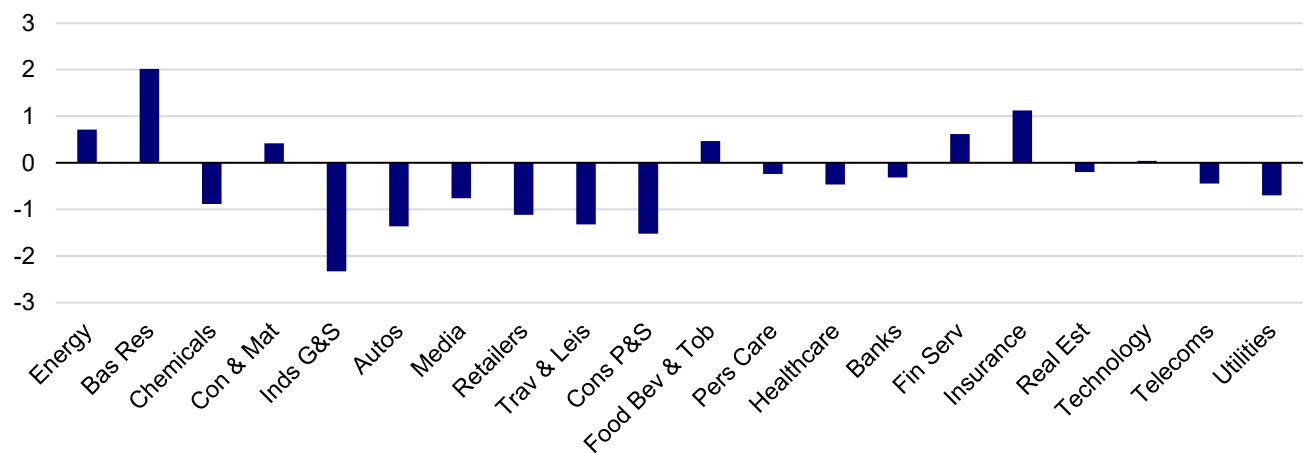
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Europe Ex-Emerging Total Market Index. Source: Refinitiv Datastream and Invesco

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 31/03/2022	Global				
	3m	YTD	12m	5y*	10y*
Energy	28.4	28.4	27.5	-5.0	-7.1
Basic Materials	12.9	12.9	8.0	1.3	-2.2
Basic Resources	21.4	21.4	15.3	3.3	-3.9
Chemicals	2.3	2.3	-1.0	-1.6	-1.4
Industrials	-3.1	-3.1	-5.7	-1.1	0.1
Construction & Materials	-7.0	-7.0	-6.5	-3.9	-2.4
Industrial Goods & Services	-2.6	-2.6	-5.6	-0.6	0.5
Consumer Discretionary	-6.5	-6.5	-11.4	-1.1	0.3
Automobiles & Parts	-4.9	-4.9	2.1	3.0	1.1
Media	-10.1	-10.1	-18.2	-4.5	0.3
Retailers	-4.4	-4.4	-12.1	1.4	1.4
Travel & Leisure	-1.0	-1.0	-17.3	-6.2	-2.4
Consumer Products & Services	-11.6	-11.6	-13.9	-1.8	0.1
Consumer Staples	1.2	1.2	-2.4	-4.8	-2.2
Food, Beverage & Tobacco	2.7	2.7	0.5	-4.4	-2.5
Personal Care, Drug & Grocery Stores	-1.6	-1.6	-7.8	-4.2	-1.5
Healthcare	-1.4	-1.4	0.4	1.3	3.3
Financials	5.0	5.0	5.2	-1.7	-0.8
Banks	6.9	6.9	4.8	-4.3	-3.0
Financial Services	0.3	0.3	6.4	2.9	2.8
Insurance	8.7	8.7	4.8	-1.4	1.0
Real Estate	-0.4	-0.4	-0.6	-3.5	-2.0
Technology	-7.9	-7.9	1.1	10.8	7.5
Telecommunications	3.6	3.6	-4.9	-5.6	-3.6
Utilities	6.0	6.0	4.0	-1.3	-2.2

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 March 2022 unless stated otherwise. This publication is updated quarterly.

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