Strategic Sector Selector

Waiting for Godot

In the third quarter of 2022, global equities resumed their slide with no end in sight after a brief period of hope during the summer. Waiting for a recovery at the moment feels like waiting for Godot. Global central banks remain steadfast in their determination to defeat inflation even if that causes a severe economic slowdown. In our view, a recession looks increasingly likely in the next 12 months and therefore we maintain our exposure to defensive sectors, especially consumer staples and healthcare. We retain some exposure to early cyclicals in case inflation and interest rates surprise on the downside and the market recovery starts sooner than we currently expect. We make only two changes rotating out of late cyclicals further by downgrading construction & materials to Underweight to increase our allocation to early cyclicals by upgrading consumer products & services to Overweight.

Changes in allocations:

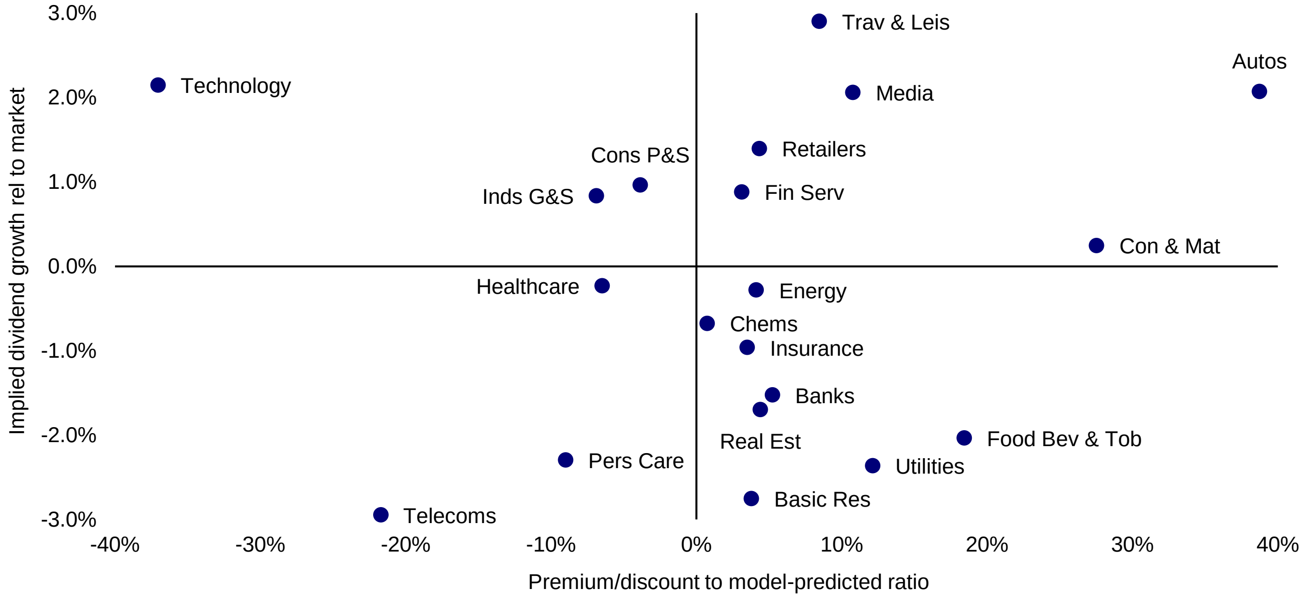
- Upgrades: consumer products & services (N to OW)
- Downgrades: construction & materials (N to UW)

	Most favoured	Least favoured
Sector	US healthcare US technology	European travel & leisure European energy

Sectors where we expect the best returns:

- Healthcare: exposure to moderating rate expectations, defensive sector, strong pricing power
- Real estate: high yield, attractive relative valuations, decent dividend growth prospects
- 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

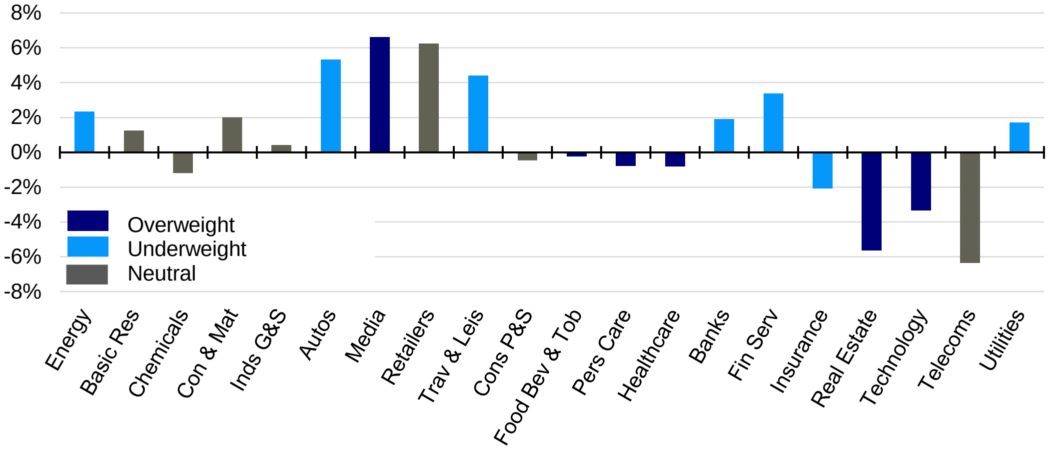
Table of contents

Summary and conclusions

Since the last time

The third quarter of 2022 was a quarter of two halves: the hope of a moderation of central bank hawkishness spurred a rally in global equities until mid-August, when bearishness resumed and the MSCI All Country World index ended Q3 4.7% lower on a total return basis (in local currency terms). Most central banks indicated that they were not deviating from their current path until inflation moderates and reinforced this message by large rate hikes. Labour markets in the developed world remained tight, but sentiment indicators painted a worrying picture for the road ahead. Concerns of a global recession drove commodity prices lower, albeit they stayed high compared to historical averages. However, this is yet to feed into lower consumer price inflation, alongside declining money supply growth and an easing of supply chain pressures.

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



Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2022 and 30th September 2022. Colours indicate allocations in period considered. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Despite a decline in global equities, **Figure 2** suggests that the hope of a recovery stayed alive. This either means that investors increasingly look through recessionary concerns or that equities have yet to reach a cyclical trough. Early cyclicals, such as consumer discretionary outperformed alongside financials. Although we were Overweight the best performer (media), our defensive stance did not pay dividends in Q3. Interestingly, the worst performers were telecommunications and real estate (sectors with exposure to the value factor), where concerns over demand growth and high rates drove underperformance.

Asset allocation backdrop

Perhaps the most striking feature of our forecasts is that we now expect major developed world central banks (except the BOJ) to continue tightening aggressively, perhaps into the first half of 2023 (see **Figure 3** for our market targets for major benchmarks). As well as having a direct depressing effect upon financial asset returns, we think this also increases the risk of recession at a time when economies are already struggling due to the squeeze on real incomes. Importantly, though we believe short maturity bond yields will be forced up by the rise in policy rates, we suspect that long yields will be depressed by the worsening economic outlook. Hence, we expect further flattening/inversion of yield curves (see The Big Picture for the full details).

Equities have fallen a lot this year, but our analysis suggests those declines were due to rising bond yields, with no allowance for a potential fall in profits. We slightly reduced the allocation to equities to 37% from the previous 40% (versus the Neutral 45%). We are wary of reducing the allocation by too much given the recent market decline.

We have long extolled the virtues of cash as a diversifying asset, but recent rate hikes mean that it now also offers reasonable compensation. Hence, we boosted the allocation to 8% from the previous 5% (versus a Neutral 2.5%). We also maintained the Overweight allocation to government bonds, the fixed income asset class upon which we expect the best returns. Yields have risen and we think there is a possibility of declines in long maturity yields over the next 12 months, though we expect short yields to rise sharply as central banks tighten (yield curves flattening). We made no changes to the allocations to credit categories and continue to favour investment grade (Overweight) over high yield (zero allocation). Though we think that yield spreads versus government bonds will widen for both categories, we worry that HY defaults will rise, which reduces the HY return projections.

Our forecasts suggest real estate will be the most remunerative asset over the next 12 months and we have maintained the Overweight 10% allocation (versus the Neutral 8%). Commodities have recently lost some of the gains made in the early part of the year and we think decelerating economies will put further downward pressure upon the cyclical raw materials (energy and industrial metals). Given that we believe prices remain high in real terms (except for agriculture), we have maintained a zero allocation to the asset class, including gold.

From a regional perspective, we continue to prefer EM assets. This is partly because we find them to be relatively cheap but also as a hedge in case we are wrong about being in the contraction phase of the cycle. Finally, we consider two alternatives to our central case. In a scenario where inflation stays higher for longer than we expect, we would favour defensive assets even more than we do. On the other hand, if inflation falls surprisingly quickly, we would switch to favouring cyclical assets, with an even greater emphasis on EM.

Figure 3 – Market forecasts

	Current (30/09/22)	Forecast 12-month
Central Bank Rates		
US	3.25	4.00
Eurozone	0.75	1.50
China	4.35	4.00
Japan	-0.10	0.00
UK	2.25	4.25
10y Bond Yields		
US	3.80	3.30
Eurozone	2.11	1.40
China	2.78	3.00
Japan	0.25	0.20
UK	4.10	3.15
Exchange Rates/US$		
EUR/USD	0.98	1.10
USD/CNY	7.12	6.70
USD/JPY	144.77	125.00
GBP/USD	1.12	1.25
USD/CHF	0.98	0.90
Equity Indices		
S&P 500	3586	3700
Euro Stoxx 50	3318	3300
FTSE A50	12908	14600
Nikkei 225	25937	29000
FTSE 100	6894	7150
Commodities (US$)		
Brent/barrel	89	80
Gold/ounce	1674	1600
Copper/tonne	7683	7200

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 model sector allocations

The forces battering global equity markets – the rise in energy prices, the war in Ukraine, rising interest rates and falling real wages – showed few signs of letting up during Q3. Although oil prices fell, natural gas prices remained high and volatile, while rising interest rates and high inflation have started exposing some of the leverage in the global financial system, from concerns about the solvency of developing economies, through vulnerabilities in the banking system and margin calls faced by European utility companies and UK pension funds. After a brief rally in the summer based on a hope that the cyclical peak in central bank target rates may be closer than previously expected, global stocks resumed their slide towards pricing in a recession.

If investors were hoping for a dovish turn in monetary policy, they were bitterly disappointed after the Jackson Hole meeting of officials of the US Federal Reserve. They remained committed to fighting inflation even if higher interest rates push the US economy into recession. The sense that something will break was reinforced after the new UK government presented its “mini budget” of tax cuts, which pushed gilt yields higher and sterling lower so violently that the Bank of England had to step in to stabilise the situation (and forcing change upon the UK government).

We think that central banks have not finished tightening, especially in the developed world (except Japan), but we expect peak rates within the next six months, perhaps followed by a brief pause before cutting rates again depending on how severe the global economic slowdown proves to be. Therefore, we retained our defensive stance in our model asset allocation. In our view, remaining relatively defensive also makes sense in our sector strategy, while we keep an eye out for a potential turning point in the market cycle. Bear markets are typically shorter than bull markets, although we think there is a risk of further downside despite a 22% drop from a 4th January 2022 peak to the end of September (using the MSCI All-Country World index). Therefore, we make only minimal changes to our model sector allocation.

Falling house prices, the squeeze on real incomes and higher mortgage rates seem to us like the ingredients of a perfect storm for the **construction & materials** sector. We are also concerned that higher costs of labour and materials will put pressure on their profit margins. The sector looks overvalued on our multiple regression model and its implied dividend growth rate is above that of the market. We think that those valuations are far from reflecting the risk of a potential recession and therefore downgrade the sector to **Underweight** from Neutral.

We balance this move by upgrading **consumer products & services** to **Overweight** from Neutral. This allows us to maintain our exposure to cyclical sectors in case we are wrong about the peak in interest rates and the length of a potential economic downturn they may trigger. We may be too early in our tentative shift towards early cyclicals, but the sector is relatively well diversified, and it has been the third worst performer year-to-date (after media and technology). The sector is also the least expensive within consumer discretionary on our models and that may provide some risk-mitigation, in our view.

The best and worst of the rest

Despite the recent production cuts announced by OPEC+, we think that the economic slowdown driven by high inflation and rising rates will drive oil prices lower in the next year. 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 stay **Underweight**.

We keep our **Neutral** allocation to **basic resources** (which has outperformed year-to-date), partly because the sector no longer appears cheap on our multiple regression model. Although it is the second cheapest using implied perpetual dividend growth, we think that reflects the cyclical peak in dividends in the last 12 months. The next year looks more challenging after prices of industrial metals dropped mostly driven by recessionary concerns in the developed world and Chinese lockdowns, so pay-outs may be less generous, thereby restricting dividend growth. We believe the sector will play a major role in supplying materials for the “green transition” and infrastructure investment, but we would wait for a more appropriate entry point within the economic cycle.

Chemicals should be boosted by higher prices for its products, but we think it may struggle to outperform in the current economic environment, because its input costs have been surging, too. We maintain our **Neutral** allocation, considering that it looks close to fair value on our multiple regression model. Its implied dividend growth may now be lower than that of the market, but that may not fully reflect concerns of the impending economic slowdown. One of its main input costs has risen with oil prices trading above $90 per barrel, while potential gas rationing in Europe may force some producers to shut down or reduce operations.

We also keep **industrial goods & services** at **Neutral**, a sector we still feel can provide a diversified exposure including aerospace & defence, payment systems, vehicle manufacturers and logistics providers. However, as the cycle turns, we are concerned that margin pressures will dent profitability despite mooted increases in defence spending. Although the sector will provide the tools for infrastructure and green projects, in our view, we think that economic concerns may delay those projects. We also expect softer demand and falling transportation rates for logistics providers in the near term as supply chain bottlenecks ease, while demand in aerospace manufacturing may be lower as long as airline traffic is constrained by labour shortages. Our preferred valuation measures also give us mixed messages: the sector seems undervalued on our multiple regression model but overvalued on implied perpetual dividend growth.

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 (its implied real dividend growth rate is 4.7%) and we are concerned that slowing economic growth presents risks that are not reflected in valuations. As demand slows, while production is finally ramped up after supply chain pressures ease could lead to a glut of unsold cars.

Media has been the worst performing sector year-to-date and therefore we think it is worth considering as a contrarian idea despite challenging valuations, thus we maintain our **Overweight** allocation. We believe that the sector may provide a cheaper alternative to going out if consumer finances become more constrained. It also offers us exposure to the growth factor and a potential market recovery in case we are wrong about how protracted this environment of rising rates and slowing growth proves to be.

Retailers may face labour cost pressures and a squeeze on consumer incomes, but as we approach the cyclical peak in interest rates, we value its exposure to the growth factor. It also has a good mix between staples (in the form of food retail and discount store) and discretionary, which may limit downside. Although its implied dividend growth looks high to us, its valuation is close to “fair value” on our multiple regression model. We stay **Neutral**.

Unfortunately, the “great reopening” following COVID-19 restrictions turned out to be less enthusiastic than we expected, thus we keep our **Underweight** allocation to **travel & leisure**. Any boost from pent-up demand seems to be restricted by labour shortages, while we believe the future also presents too many headwinds at the moment: labour shortages may persist for longer and labour costs could rise at the same time, high fuel costs will remain an issue, and demand may soften as consumers retreat if the economy slows further or higher costs start eating into their disposable income.

At this stage of the cycle, assuming our interest rate expectations are proven correct, we believe that defensive growth offers an attractive way to hedge against further equity market volatility and an inflation undershoot (however unlikely it may look at the moment). Therefore, we stay **Overweight** both **food, beverage & tobacco** and **personal care, drug & grocery stores**. Despite their outperformance year-to-date, their valuations do not look too stretched. While food, beverage & tobacco trades at a premium to the relative dividend yield implied by our multiple regression model, personal care, drug & grocery stores is at a discount and both sectors have an implied perpetual dividend growth rate close to 0%.

We find **healthcare** attractive for similar reasons and we believe it makes sense to keep our **Overweight** allocation. As a growth sector, it suffered in the early parts of 2022 as the Fed became increasingly hawkish. Although the sector's valuations look close to fair value on both of our models, we are positive on its relative outlook if expectations of monetary tightening move closer to our forecasts as the year progresses.

We remain concerned about the profitability of **banks** and therefore stick to our **Underweight** allocation. Loan growth has remained sluggish, as consumers reduced savings rates to increase spending, rather than taking on more debt. We also believe that yield curves will remain flat or inverted for most of the next 12 months reducing margins. Profits may suffer if loan loss reserves need to be increased, while the M&A and capital raising cycle will stay depressed until financial market volatility decreases. The sector looks overvalued on our multiple regression model, although its implied perpetual dividend growth is still below that of the market.

A slowing economy transitioning from late-cycle to end-of-cycle and inflation eating into disposable incomes signals more difficult times ahead for the **financial services** sector, in our view. It also trades at a slight premium compared to the dividend yield implied by our multiple regression model. Assuming financial market volatility remains high and there will be less demand for their products, we would prefer to wait for those valuations to come down. We stay **Underweight**.

We also keep our **Underweight** to **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 close to "fair value", we are concerned that it will underperform as the economy slows.

We maintain **real estate** at an **Overweight** allocation. It seems close to "fair value" on our multiple regression model, but its implied perpetual dividend growth of 0.8% looks attractive compared to the market. It also gives us exposure to the value factor, while its reliable dividends could be a hedge against potential further downside.

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 it is now the most undervalued sector on our multiple regression model. We value its 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.

We keep our **Neutral** allocation to **telecommunications**. Its valuations may look attractive on both implied perpetual dividend growth and our multiple regression model, but concerns about underwhelming subscriber growth may keep pressure on the sector.

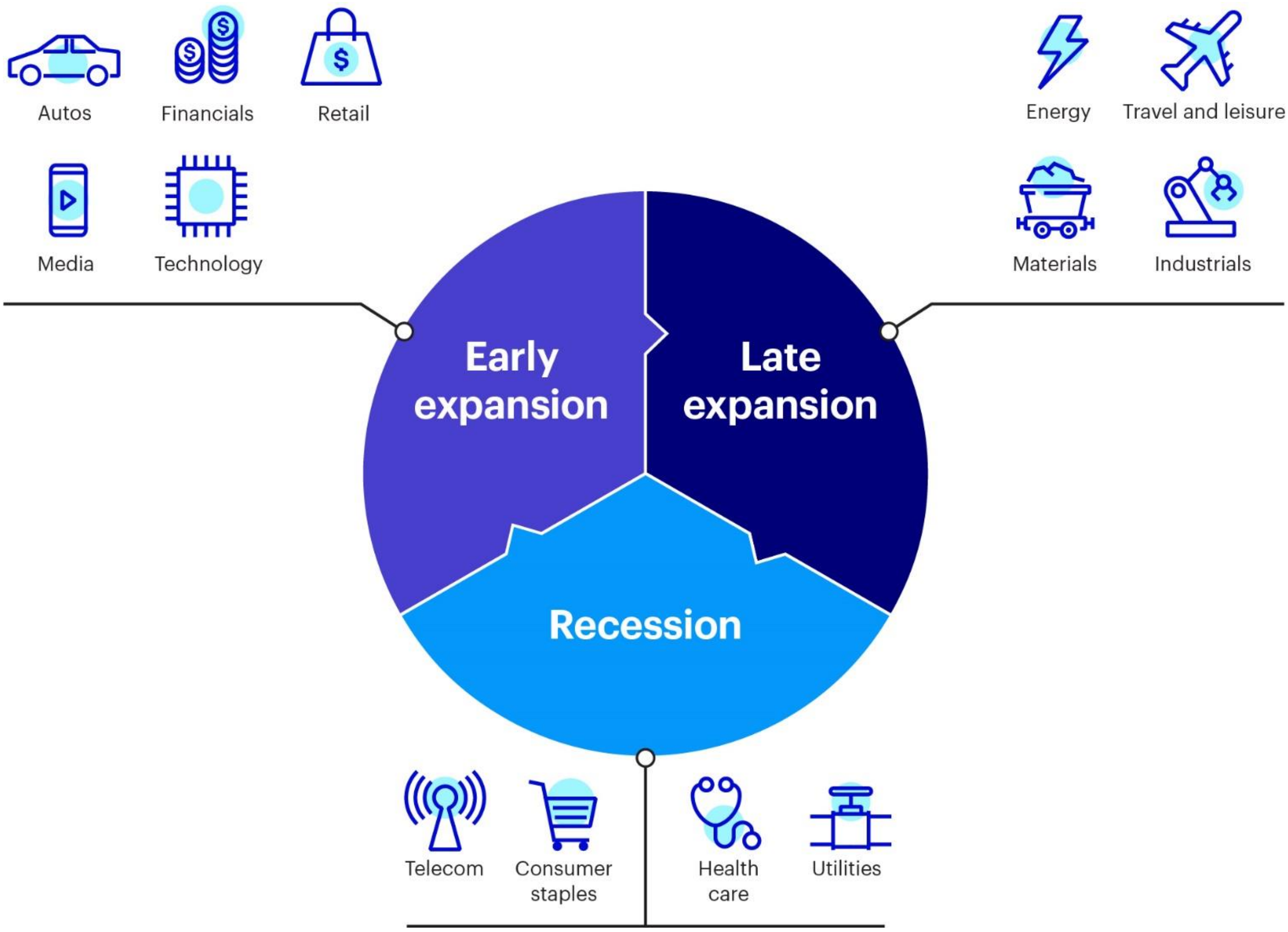
We also keep **utilities Underweight**, because we think they will struggle to outperform even if equity market volatility remains high. We are especially worried about utilities if margins are squeezed further by high input prices and investment costs, while regulators keep consumer charges under control.

Figure 4 – Model allocations for Global sectors

	Neutral	Invesco	Preferred Region
Energy	**8.3%**	**Underweight**	**US**
Basic Materials	**4.3%**	**Neutral**	**Europe**
Basic Resources	2.4%	Neutral	Europe
Chemicals	1.9%	Neutral	Japan
Industrials	**12.4%**	**Neutral**	**US**
Construction & Materials	1.5%	Underweight ↓	US
Industrial Goods & Services	10.9%	Neutral	US
Consumer Discretionary	**14.5%**	**Neutral**	**US**
Automobiles & Parts	3.0%	Underweight	Europe
Media	1.0%	Overweight	US
Retailers	5.0%	Neutral	US
Travel & Leisure	1.9%	Underweight	US
Consumer Products & Services	3.5%	Overweight ↑	Europe
Consumer Staples	**6.7%**	**Overweight**	**US**
Food, Beverage & Tobacco	4.4%	Overweight	US
Personal Care, Drug & Grocery Stores	2.2%	Overweight	US
Healthcare	**10.4%**	**Overweight**	**US**
Financials	**15.5%**	**Underweight**	**Japan**
Banks	7.6%	Underweight	Japan
Financial Services	5.0%	Underweight	EM
Insurance	2.9%	Underweight	US
Real Estate	**3.3%**	**Overweight**	**EM**
Technology	**17.4%**	**Overweight**	**US**
Telecommunications	**3.5%**	**Neutral**	**Japan**
Utilities	**3.8%**	**Underweight**	**US**

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

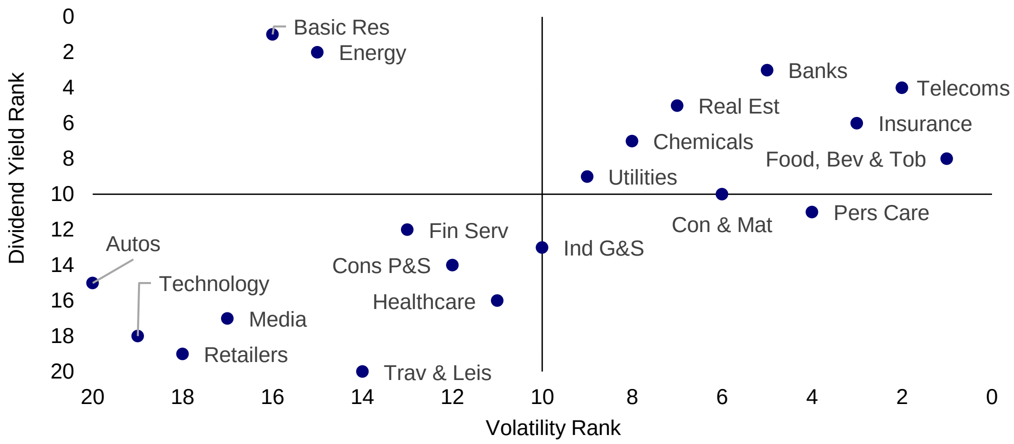
Figure 5 – Economic cycle and main sector allocation decisions



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

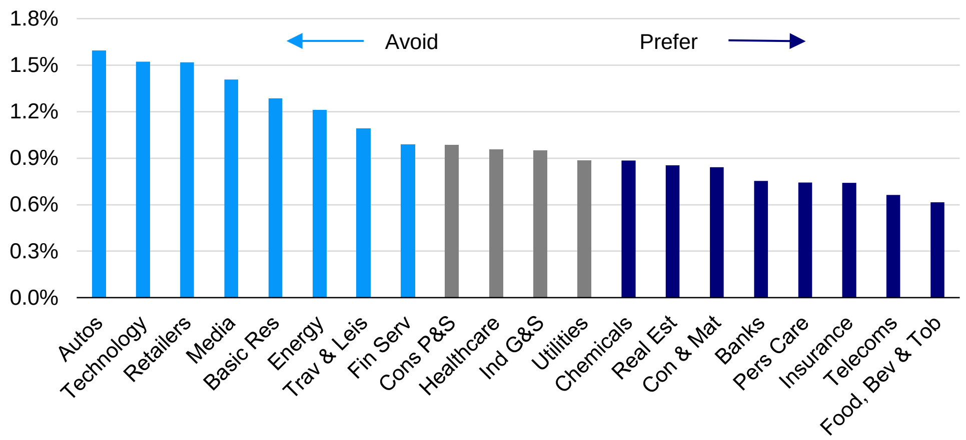
Systematic strategy – Global

Figure 6 – Global sectors ranked by volatility and dividend yield



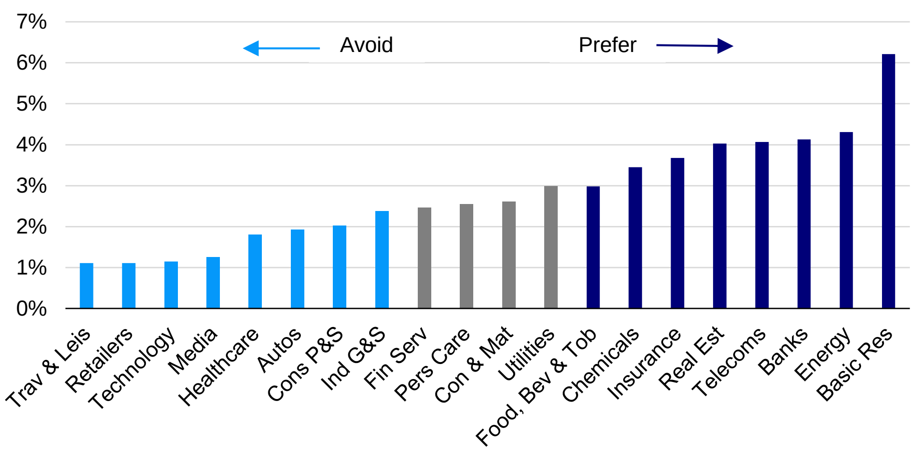
- A purely systematic approach would favour sectors in the top right corner: telecoms, food, beverage & tobacco and insurance
- The approach would avoid sectors in the bottom left, such as autos, retailers, or technology

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



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

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

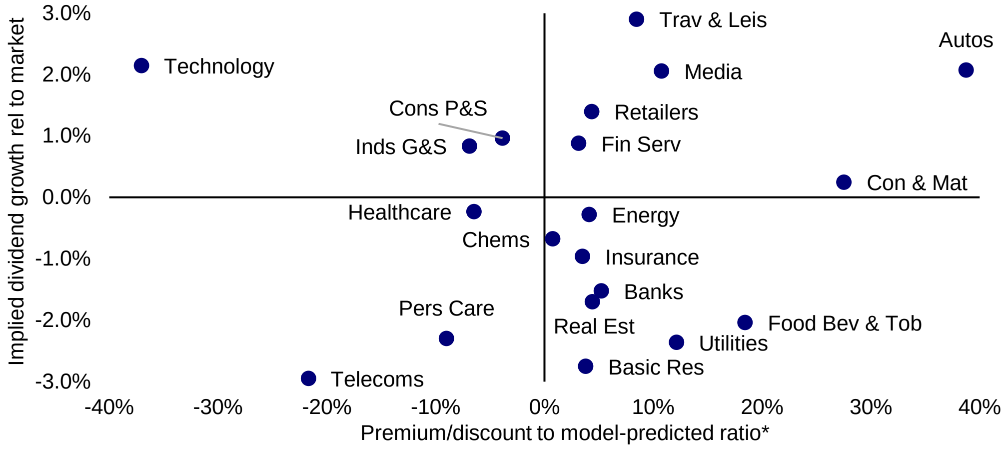


- Basic resources, energy and banks look the cheapest based on their dividend yield
- The lowest yielding sectors include travel & leisure, retailers and technology

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

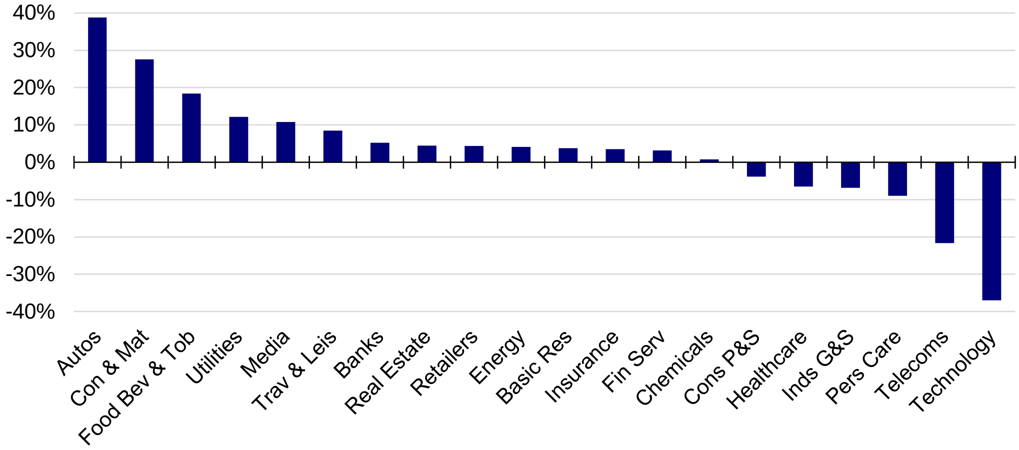
Valuations – Global

Figure 9 – Global sectors valuation matrix



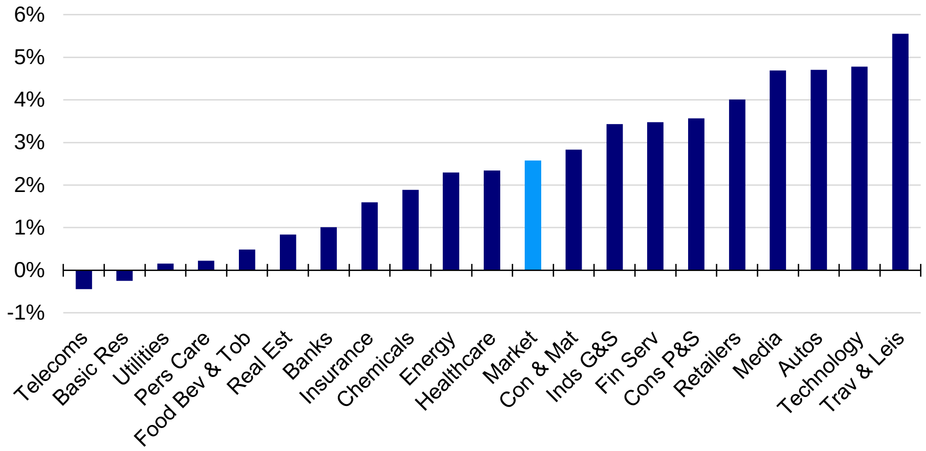
- Sectors in the top right corner look overvalued on both measures, while those in the bottom left appear undervalued
- This approach would avoid, for example, autos, travel & leisure and media
- Telecoms, personal care and healthcare look better value

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



- Autos, construction & materials and food, beverage & tobacco look the most overvalued versus our model
- Technology, telecoms and personal care seem the most undervalued versus our model-predicted ratios

Figure 11 – Global implied perpetual real dividend growth

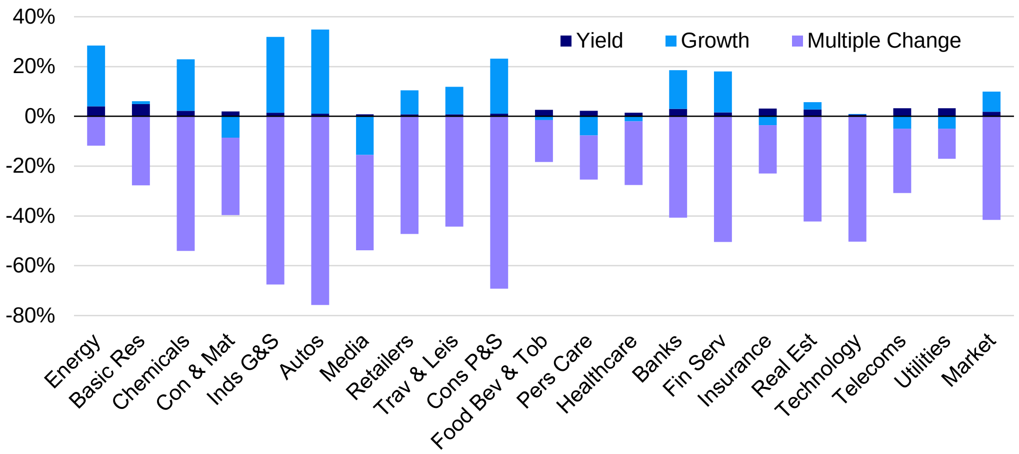


- Shows the future real growth required to justify current prices
- Travel & leisure appears priced for over 5% real growth in dividends (expensive)
- Two sectors appear priced for negative growth (cheap)

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

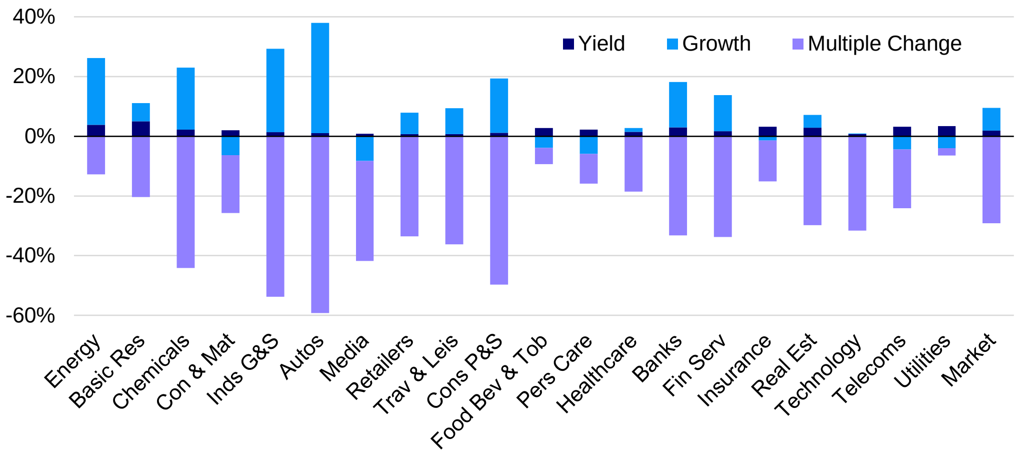
Decomposed returns – Global

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



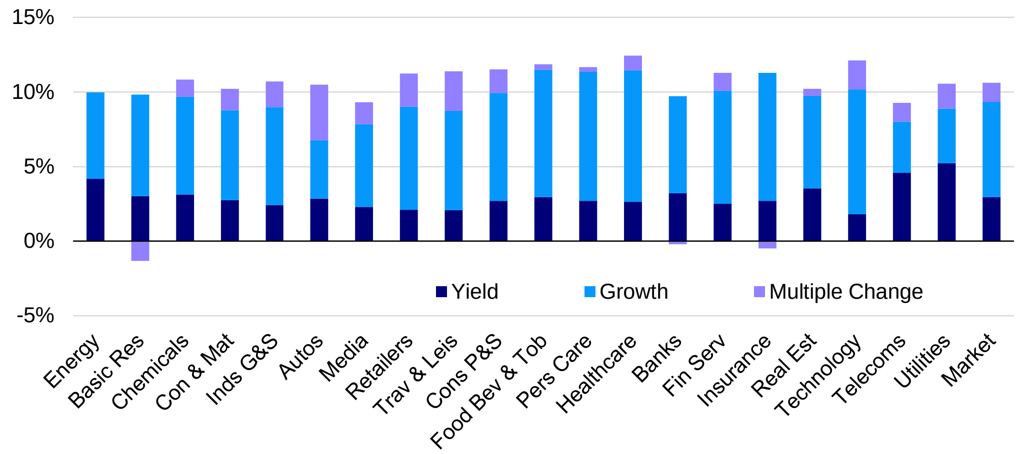
- Autos, industrial goods & services and energy have had the highest dividend growth so far in 2022
- All sectors had a fall in sentiment (multiple contraction)

Figure 13 – Global rolling 12-month total returns decomposed



- Only one sector had positive total returns: energy
- Five sectors had a yield above 3%: energy, basic resources, insurance, telecoms and utilities

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		-0.18				
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		0.55	0.89		3.01	-5.06
10y Yield	-2.75	-2.18		-5.92	12.57	-11.44
CPI	4.63	1.43	-2.75	-2.29	-7.09	
Net Debt/EBITDA			-0.08		0.14	
ROE	-1.48	-0.78	1.31	0.64	-3.46	

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	-1.58	-1.19				
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	-1.68		-0.82	0.85	0.26	-5.06
10y Yield	-2.17	-6.86	0.98			-11.44
CPI	11.71	33.13	7.60	8.23	0.50	
Net Debt/EBITDA	-0.11	-0.17	0.06	0.20	0.03	
ROE	-2.94	-3.47	-1.61		0.64	

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	1.06		0.18	0.38	1.01	0.40	
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		-0.01	0.02	0.01
IP	-3.40	-0.67	0.85	-0.59	1.22	-1.98	-5.06
10y Yield	3.89	6.80	3.17	-1.03	6.31	-1.41	-11.44
CPI		-4.65	-4.69	-2.15	-4.59	-3.31	
Net Debt/EBITDA	-0.08	0.00	0.24		-0.10	0.09	
ROE		0.84		0.65	-1.45	0.69	

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

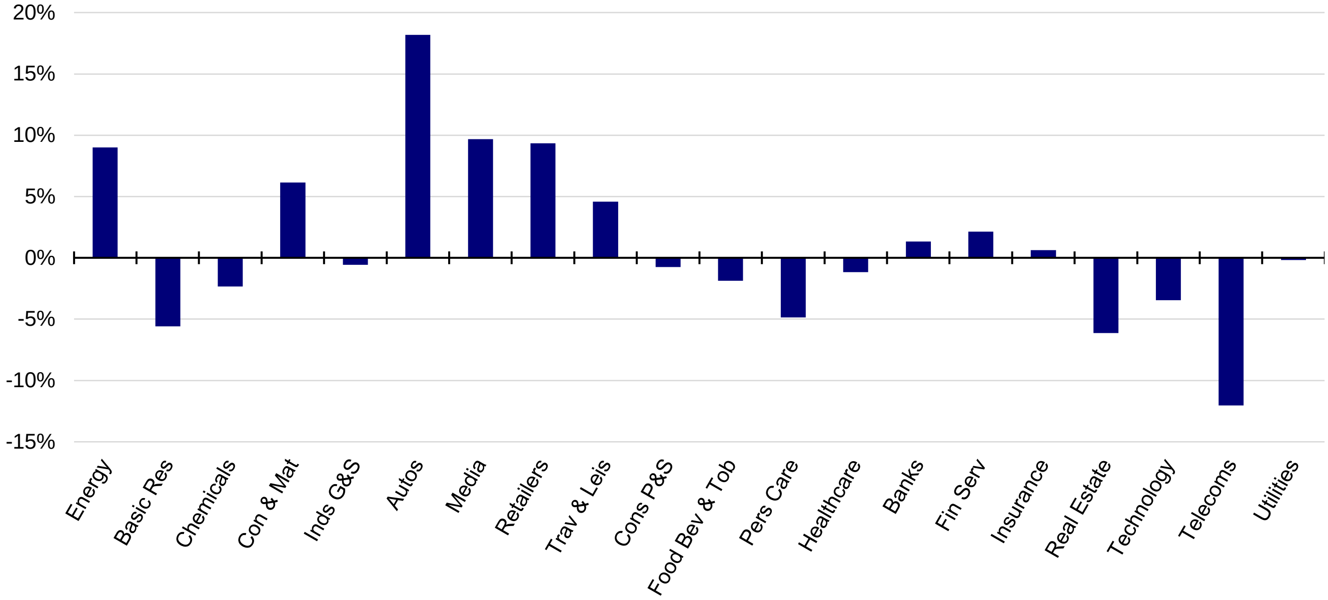
Figure 18 – Regression coefficients of Global financial sectors

	Banks	Financial Services	Insurance	Real Estate	Market
Real Oil	0.40	-0.32	-0.47	0.49	
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	-2.26	1.57		3.50	-5.06
10y Yield	-10.18		-6.97	3.18	-11.44
CPI	6.28		10.15		
ROE	4.32	0.56	-1.12	-3.92	

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

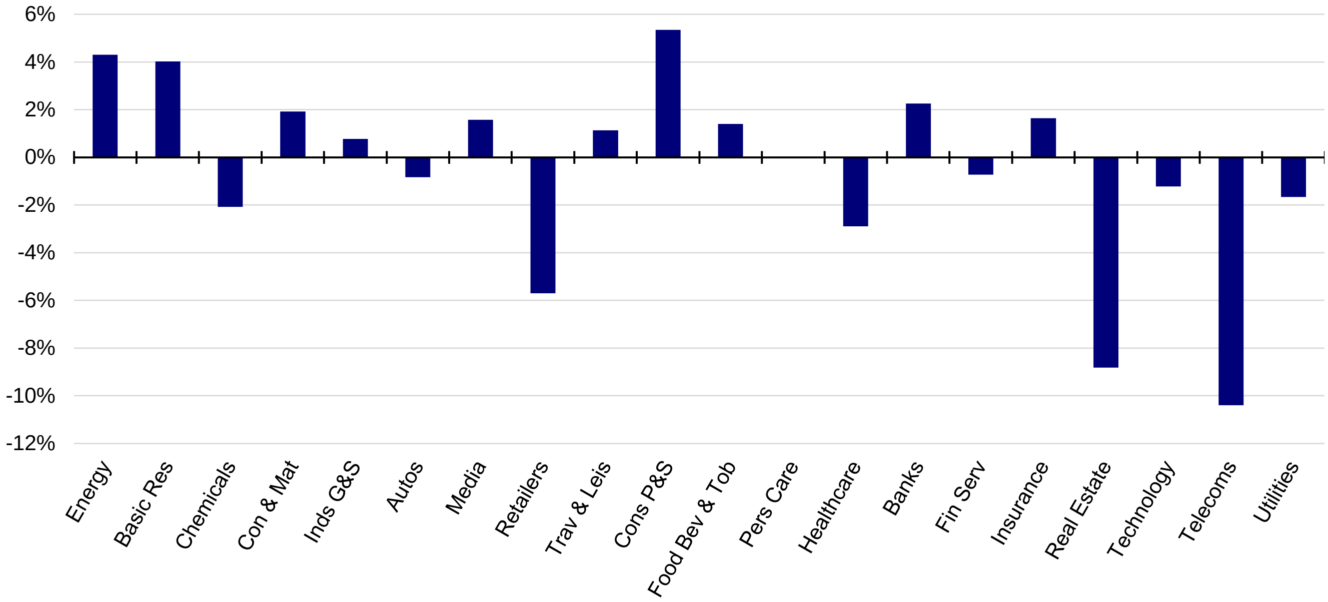
Appendix 2: Sector returns by region

Figure 19 – 3m US sector returns relative to market



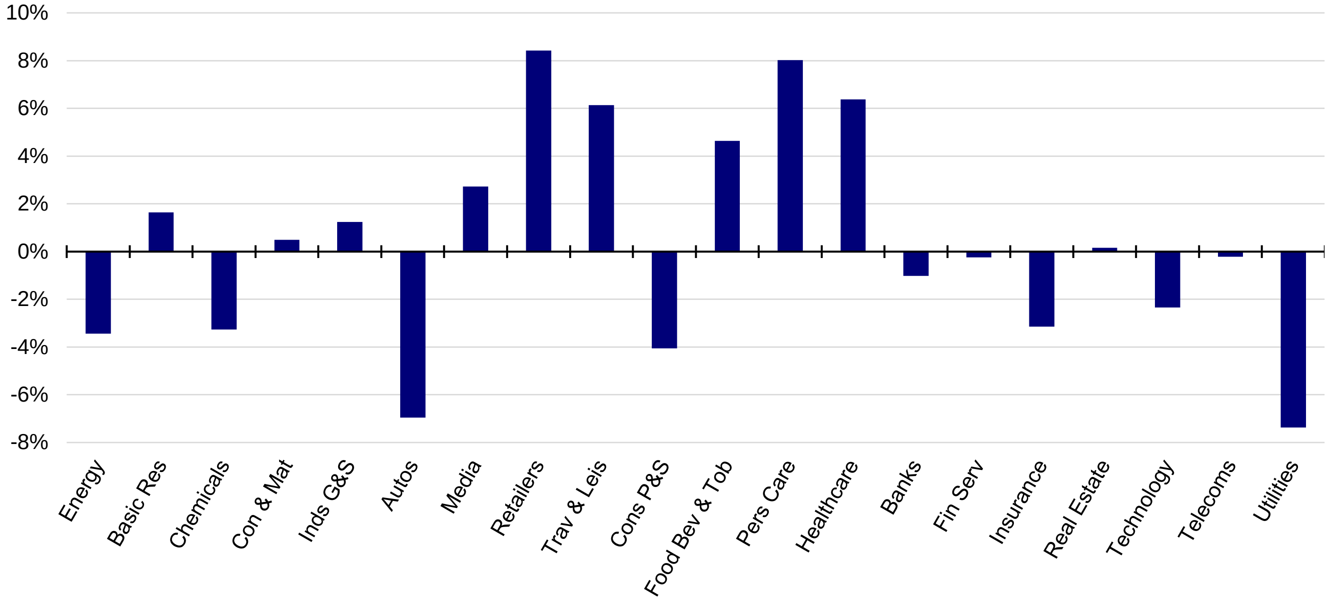
Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2022 and 30th September 2022. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Figure 20 – 3m European sector returns relative to market



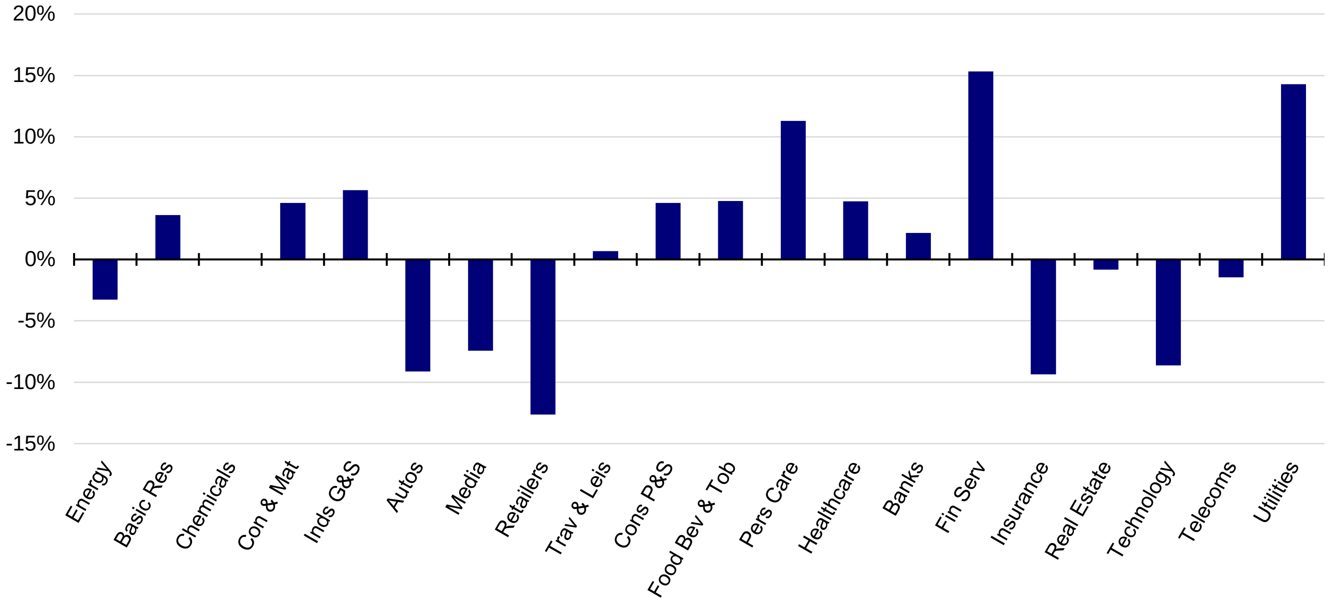
Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2022 and 30th September 2022. **Past performance is not a guarantee of future results.** Source: Refinitiv Datastream and Invesco

Figure 21 – 3m Japanese sector returns relative to market



Notes: See appendices for methodology and disclaimers. Returns shown between 30th June 2022 and 30th September 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 30th June 2022 and 30th September 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	**9.9**	**14.6**	**-0.7**	**4.3**	**3.8**	**0.4**	**2.3**	**1.8**	**0.8**	**7.5**	**6.3**	**0.6**
Basic Materials	**8.2**	**16.7**	**-1.8**	**5.0**	**2.7**	**2.8**	**1.6**	**1.8**	**-0.4**	**5.2**	**7.2**	**-1.2**
Basic Resources	7.0	16.9	-1.6	6.2	2.9	3.6	1.5	1.7	-0.5	4.2	7.2	-1.5
Chemicals	10.7	17.1	-1.2	3.5	2.9	0.7	1.9	2.0	-0.2	7.4	7.6	-0.1
Industrials	**14.1**	**18.2**	**-0.9**	**2.4**	**2.3**	**0.2**	**2.4**	**2.1**	**0.6**	**9.7**	**9.2**	**0.3**
Construction & Mat.	13.8	16.7	-0.7	2.6	2.5	0.1	1.7	1.8	-0.2	8.7	9.1	-0.1
Industrial G&S	14.1	18.7	-0.9	2.4	2.2	0.2	2.6	2.2	0.8	9.9	9.2	0.4
Consumer Disc.	**19.3**	**18.8**	**0.1**	**1.5**	**2.2**	**-0.9**	**3.0**	**2.1**	**1.7**	**11.1**	**8.6**	**1.4**
Automobiles & Parts	13.3	15.1	-0.2	1.9	2.6	-0.6	1.6	1.5	0.3	7.4	5.4	1.6
Media	11.7	21.6	-1.3	1.3	2.1	-1.0	2.0	2.4	-0.6	11.1	9.9	0.3
Retailers	27.6	21.3	1.0	1.1	1.9	-0.9	4.9	3.3	1.8	12.6	13.3	-0.2
Travel & Leisure	27.4	23.4	0.4	1.1	1.9	-0.9	5.3	2.5	3.1	17.1	9.4	2.4
Consumer Prod & Serv	18.8	19.3	-0.1	2.0	2.4	-0.6	3.2	2.2	1.4	11.8	10.8	0.4
Consumer Staples	**18.8**	**16.8**	**0.4**	**2.8**	**2.5**	**0.3**	**3.1**	**2.9**	**0.3**	**12.1**	**10.8**	**0.5**
Food, Bev & Tobacco	18.7	18.4	0.1	3.0	2.7	0.4	3.0	2.8	0.3	12.7	11.0	0.6
Personal Care	19.1	20.4	-0.2	2.6	2.4	0.1	3.5	3.2	0.4	11.3	10.5	0.3
Healthcare	**21.4**	**20.1**	**0.2**	**1.8**	**2.3**	**-0.7**	**3.9**	**3.3**	**0.5**	**14.2**	**12.7**	**0.4**
Financials	**10.9**	**15.7**	**-1.0**	**3.5**	**2.7**	**1.0**	**1.0**	**1.4**	**-1.0**	**5.9**	**5.7**	**0.2**
Banks	8.9	14.4	-1.1	4.1	3.0	1.3	0.9	1.4	-1.0	5.4	6.3	-0.5
Financial Services	15.7	18.3	-0.5	2.5	2.3	0.3	1.0	1.5	-1.1	10.7	8.9	0.6
Insurance	11.8	15.9	-0.8	3.7	2.5	1.6	1.3	1.7	-0.7	3.8	3.8	0.0
Real Estate	12.8	19.2	-1.1	4.0	3.2	1.0	1.2	1.4	-0.7	13.8	13.6	0.0
Technology	**19.2**	**24.2**	**-0.5**	**1.1**	**1.6**	**-0.5**	**4.7**	**3.1**	**1.4**	**13.4**	**11.5**	**0.5**
Telecommunications	**12.8**	**17.4**	**-0.6**	**4.1**	**4.3**	**-0.1**	**1.7**	**2.6**	**-0.8**	**4.5**	**6.1**	**-0.7**
Utilities	**18.7**	**14.5**	**1.1**	**3.5**	**4.8**	**-0.7**	**1.8**	**1.6**	**0.4**	**7.2**	**5.6**	**1.1**
Market	**14.5**	**17.2**	**-0.6**	**2.6**	**2.7**	**-0.1**	**2.1**	**2.0**	**0.2**	**8.9**	**7.7**	**0.7**

Notes: *in standard deviations from historical average. Mat. = materials. G&S = goods & services. Disc. = discretionary. Prod & Serv = products & services. Bev = beverage. Data starts on 1st January 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

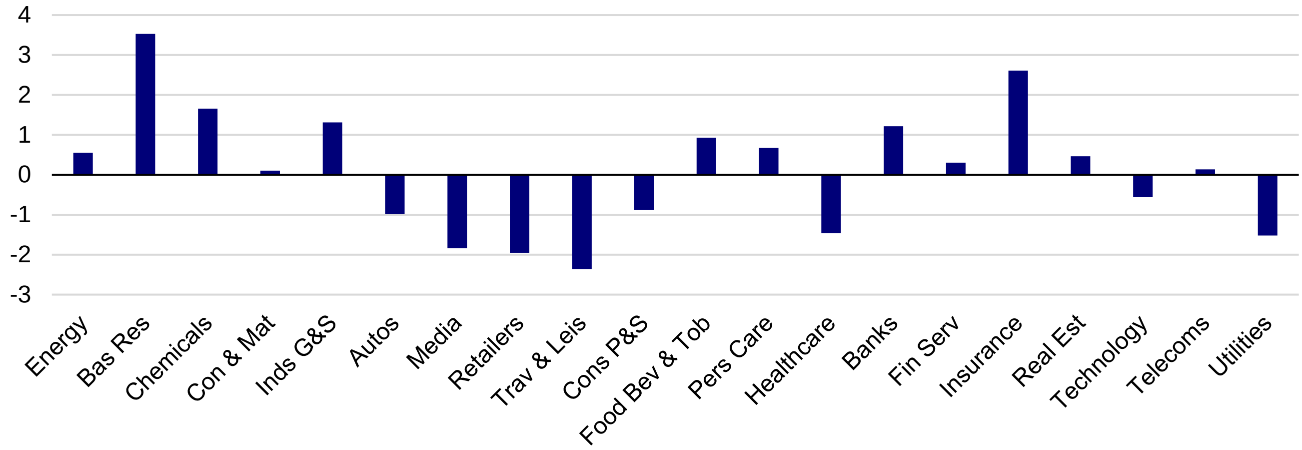
Figure 24 – Global cyclically-adjusted valuations

	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	**14.2**	**18.7**	**-0.6**	**4.1**	**2.8**	**1.3**	**1.5**	**2.7**	**-1.0**	**6.5**	**8.7**	**-0.7**
Basic Materials	**17.0**	**23.2**	**-0.8**	**2.8**	**1.9**	**1.7**	**1.7**	**2.4**	**-1.0**	**7.5**	**9.8**	**-1.0**
Basic Resources	15.8	21.4	-0.7	3.0	2.1	1.2	1.4	2.3	-0.8	6.5	9.3	-0.8
Chemicals	18.4	24.4	-1.2	2.5	1.9	1.4	2.0	2.7	-1.5	8.9	10.6	-1.0
Industrials	**21.1**	**26.6**	**-0.9**	**1.8**	**1.5**	**1.1**	**2.5**	**3.0**	**-0.8**	**11.4**	**12.9**	**-0.6**
Construction & Mat.	17.9	23.9	-0.6	2.3	1.9	0.7	1.7	2.3	-0.8	9.3	11.7	-0.6
Industrial G&S	21.6	27.3	-1.0	1.8	1.4	1.1	2.7	3.0	-0.6	11.8	12.7	-0.4
Consumer Disc.	**22.0**	**27.1**	**-1.0**	**1.6**	**1.4**	**0.5**	**2.8**	**3.0**	**-0.6**	**11.1**	**11.8**	**-0.4**
Automobiles & Parts	15.0	19.0	-0.9	1.8	1.7	0.1	1.5	2.0	-1.4	6.9	6.7	0.2
Media	18.7	30.2	-1.4	1.8	1.4	1.1	2.3	3.4	-0.8	9.6	13.5	-1.1
Retailers	30.5	32.2	-0.3	1.2	1.1	0.2	4.9	4.8	0.1	16.9	19.8	-0.7
Travel & Leisure	20.0	34.2	-1.4	1.8	1.1	1.7	2.9	3.4	-0.6	10.1	13.1	-1.1
Consumer Prod & Serv	22.6	28.6	-1.3	1.8	1.6	0.9	3.3	3.1	0.3	13.4	15.4	-0.9
Consumer Staples	**19.3**	**22.6**	**-0.8**	**2.4**	**1.6**	**1.9**	**3.3**	**3.9**	**-1.1**	**13.5**	**14.6**	**-0.5**
Food, Bev & Tobacco	23.0	28.3	-1.1	2.4	1.6	2.1	3.2	4.2	-2.1	14.1	16.3	-1.3
Personal Care	23.6	31.6	-1.2	2.2	1.4	1.9	3.6	4.9	-1.4	12.4	16.3	-1.6
Healthcare	**31.1**	**31.5**	**-0.1**	**1.5**	**1.4**	**0.2**	**4.6**	**5.2**	**-0.6**	**17.9**	**19.6**	**-0.5**
Financials	**13.1**	**23.5**	**-1.0**	**3.0**	**2.0**	**1.2**	**1.1**	**1.9**	**-1.4**	**5.7**	**7.2**	**-0.9**
Banks	10.5	20.9	-1.1	3.8	2.3	1.3	0.9	1.8	-1.4	5.5	7.9	-1.1
Financial Services	18.5	29.5	-0.7	1.8	1.5	0.4	1.2	2.0	-1.3	8.9	11.3	-0.9
Insurance	14.6	23.9	-1.0	2.6	1.6	1.6	1.4	2.4	-1.2	4.1	4.9	-0.9
Real Estate	12.7	26.5	-1.0	3.9	2.5	1.6	1.1	1.7	-1.3	13.0	17.0	-1.1
Technology	**34.3**	**39.0**	**-0.2**	**0.8**	**0.9**	**-0.1**	**6.0**	**4.7**	**0.5**	**19.8**	**18.6**	**0.1**
Telecommunications	**13.3**	**23.0**	**-1.0**	**4.7**	**3.0**	**1.4**	**1.8**	**3.4**	**-1.3**	**4.3**	**7.7**	**-1.1**
Utilities	**18.4**	**18.6**	**0.0**	**3.4**	**3.5**	**-0.1**	**1.6**	**2.0**	**-0.8**	**6.7**	**6.9**	**-0.1**
Market	**19.5**	**24.8**	**-0.9**	**2.2**	**1.8**	**0.9**	**2.1**	**2.8**	**-1.2**	**9.3**	**10.6**	**-0.7**

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

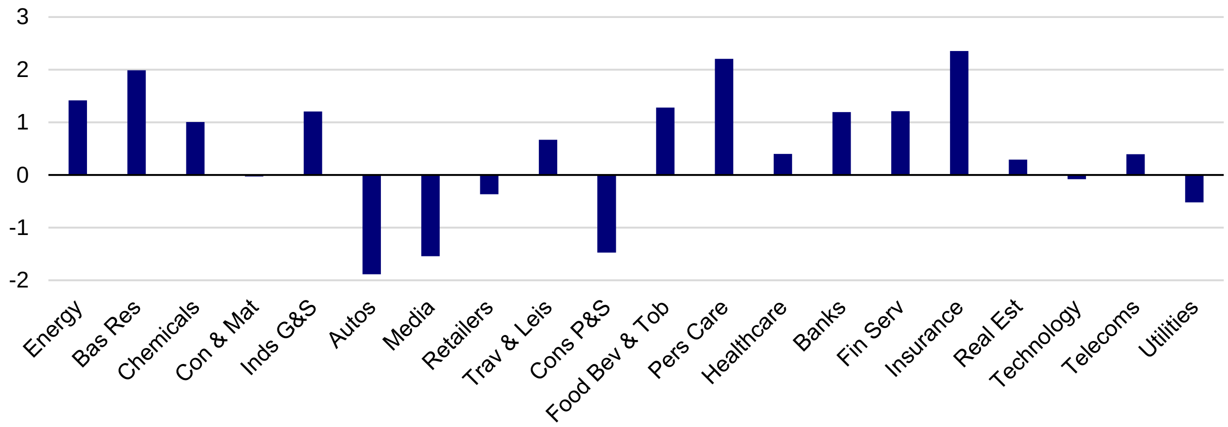
Appendix 4: Sector valuations by region

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



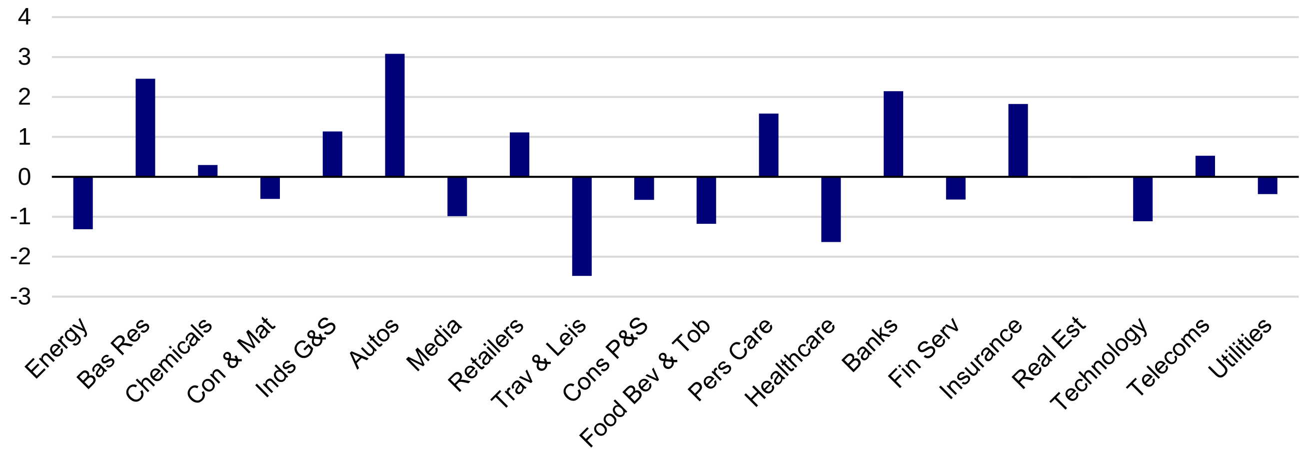
Notes: See appendices for methodology and disclaimers. Source: Refinitiv Datastream and Invesco

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



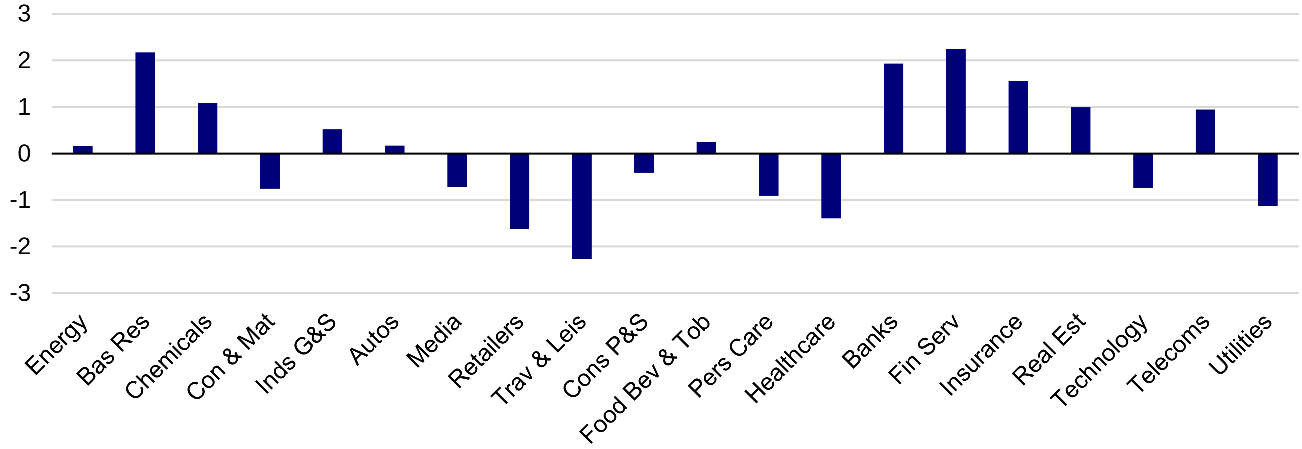
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream US Total Market Index. Source: Refinitiv Datastream and Invesco

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



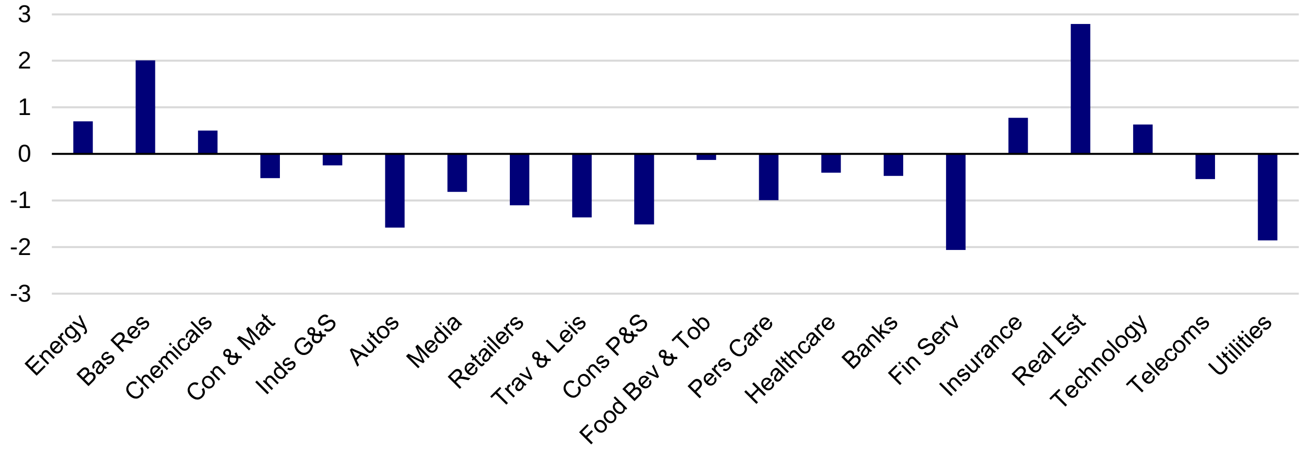
Notes: See appendices for methodology and disclaimers. The local benchmark is the Datastream Europe Ex-Emerging Total Market Index. Source: Refinitiv Datastream and Invesco

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



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

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



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

Appendix 4: Performance tables

Figure 30 – Global equity sector total returns relative to market

Data as at 30/09/2022	Global				
	3m	**YTD**	**12m**	**5y***	**10y***
Energy	**2.3**	**47.9**	**42.1**	**-1.0**	**-5.6**
Basic Materials	**0.2**	**5.4**	**6.1**	**-0.3**	**-2.4**
Basic Resources	1.2	9.5	12.9	1.4	-4.1
Chemicals	-1.2	0.5	-1.7	-2.4	-1.4
Industrials	**0.6**	**-4.0**	**-5.6**	**-1.8**	**0.3**
Construction & Materials	2.0	-6.1	-5.1	-3.5	-2.0
Industrial Goods & Services	0.4	-3.7	-5.7	-1.5	0.7
Consumer Discretionary	**4.1**	**-8.9**	**-9.6**	**-1.3**	**0.0**
Automobiles & Parts	5.3	-8.9	-1.5	1.4	1.7
Media	6.6	-21.0	-26.5	-5.3	-1.8
Retailers	6.2	-4.9	-7.2	1.9	0.8
Travel & Leisure	4.4	-0.7	-8.7	-6.3	-2.1
Consumer Products & Services	-0.5	-14.1	-13.3	-2.3	-0.2
Consumer Staples	**-0.4**	**13.0**	**13.2**	**-2.6**	**-1.0**
Food, Beverage & Tobacco	-0.2	15.6	16.3	-1.6	-1.7
Personal Care, Drug & Grocery Stores	-0.8	8.2	7.5	-1.6	-1.0
Healthcare	**-0.8**	**5.4**	**5.0**	**2.7**	**3.1**
Financials	**1.6**	**6.3**	**4.5**	**-1.6**	**-0.7**
Banks	1.9	9.4	5.9	-4.1	-2.6
Financial Services	3.4	-0.8	-0.2	2.0	2.8
Insurance	-2.1	11.4	9.5	-1.0	1.1
Real Estate	**-5.6**	**-5.2**	**-4.1**	**-4.5**	**-3.3**
Technology	**-3.4**	**-17.5**	**-13.7**	**7.6**	**6.7**
Telecommunications	**-6.4**	**3.6**	**-2.0**	**-4.3**	**-4.2**
Utilities	**1.7**	**17.4**	**20.6**	**1.1**	**-1.0**

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 30th September 2022 unless stated otherwise. This publication is updated quarterly.

Important information

This document is intended only for investors in Hong Kong, for Institutional Investors and/or Accredited Investors in Singapore, for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China, for certain specific Qualified Institutions and/or Sophisticated Investors only in Taiwan, for Qualified Professional Investors in Korea, for certain specific institutional investors in Brunei, for Qualified Institutional Investors and/ or certain specific institutional investors in Thailand, for certain specific institutional investors in Malaysia upon request, for certain specific institutional investors in Indonesia and for qualified buyers in Philippines for informational purposes only. This document is not an offering of a financial product and should not be distributed to retail clients who are resident in jurisdiction where its distribution is not authorized or is unlawful. Circulation, disclosure, or dissemination of all or any part of this document to any unauthorized person is prohibited.

This document may contain statements that are not purely historical in nature but are "forward-looking statements," which are based on certain assumptions of future events. Forward-looking statements are based on information available on the date hereof, and Invesco does not assume any duty to update any forward-looking statement. Actual events may differ from those assumed. There can be no assurance that forward-looking statements, including any projected returns, will materialize or that actual market conditions and/or performance results will not be materially different or worse than those presented.

All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. Investment involves risk. Please review all financial material carefully before investing. The opinions expressed are based on current market conditions and are subject to change without notice. These opinions may differ from those of other Invesco investment professionals.

The distribution and offering of this document in certain jurisdictions may be restricted by law. Persons into whose possession this marketing material may come are required to inform themselves about and to comply with any relevant restrictions. This does not constitute an offer or solicitation by anyone in any jurisdiction in which such an offer is not authorised or to any person to whom it is unlawful to make such an offer or solicitation.

This document is issued in the following countries:

- in Hong Kong by Invesco Hong Kong Limited景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong. This document has not been reviewed by the Securities and Futures Commission.
- in Singapore by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.
- in Taiwan by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). Invesco Taiwan Limited is operated and managed independently.

Authors

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

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

Global Market Strategy Office

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

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

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

Talley Léger
Investment Strategist, Equities
talley.leger@invesco.com
New York, Americas

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

Adam Burton
Senior Economist
adam.burton@invesco.com
London, EMEA

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

András Vig
Multi-Asset Strategist
andras.vig@invesco.com
London, EMEA

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

Thomas Wu
Market Strategies Analyst, Asia Pacific
thomas.wu@invesco.com
Hong Kong, Asia Pacific

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

Cyril Birks
Global Thought Leadership Intern
cyril.birks@invesco.com
London, EMEA

Telephone calls may be recorded.

20221017-2515949-AP