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Global Quantitative Insights

Style Leadership Remains Elusive as Momentum Reasserts

CITI'S TAKE

September style performance reinforced a key theme of recent months, Value's rotation has been meaningful, but not yet durable. Despite supportive macro conditions earlier in the year, Value has struggled to extend leadership globally, while Momentum and Growth have recovered some lost ground and factor leadership has become increasingly inconsistent. Narrowing valuation spreads, elevated crowding and weakening breadth argue against extrapolating the first-half Value trade too aggressively. While higher energy prices and further yield normalisation could continue to provide intermittent support for Value, we view the upside as increasingly region-specific rather than global in nature. As such, we retain a selective preference for Growth in our global style recommendations.

Style Performance – Rotation Without a Durable Leader — September's style performance highlights a market struggling to establish a durable leadership regime. While Value benefited from Q1 strength and the July momentum unwind, subsequent performance has lacked persistence. Momentum factors have rebounded, Value performance has become increasingly fragmented across regions, and both Pure Value and Pure Growth have generated weak returns. The result is a more volatile factor backdrop with declining persistence and growing uncertainty around the durability of Value leadership.

Valuations and Crowding: Diminishing Asymmetry for Value — While the macro backdrop remains supportive of Value, the trade no longer benefits from the same degree of valuation and positioning asymmetry. Crowding has increased within Value, and the valuation gap. More importantly, the valuation gap between the cheapest Value stocks and the highest-growth companies has narrowed. As the relative valuation discount has compressed, the forward-looking valuation tailwind that previously supported Value has diminished.

Elevated Dispersion Amplifies Active Positioning — Cross-sectional return dispersion across styles and industries has risen considerably while correlations have fallen, increasing the opportunity but equally the risk associated with active positioning. Current estimates suggest style exposures carry roughly 70% greater return sensitivity than normal, with industry exposures even higher. With Value-Growth leadership unresolved, crowding risks persistent and mixed macro signals, elevated dispersion argues for disciplined risk management rather than aggressive factor concentration.

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See Appendix A-1 for Analyst Certification, Important Disclosures and Research Analyst Affiliations.

Style Review

September's month-to-date (Figure 1) style returns reveal a factor landscape in which clean style leadership has become notably elusive. Quintile long short style performance was led by a recovery for Price Momentum, up +3.7% globally, and positive across all regions except Japan, representing a meaningful recovery from the sharp unwind witnessed in late June/early July. Earnings Momentum improved with the global long/short spreads generating +2.7% MTD and have been particularly strong +5.4% in the US. Beyond the Momentum complex, however, the picture is one of compressed and directionless returns.

Value is fractionally negative at the global level (-0.7%), weak in the US (-5.2%) while posting modest gains in Japan (+4.0%) and Europe (+1.5%) — a divergence that speaks to genuinely distinct macroeconomic backdrops rather than a coherent global style regime.

Quality (-0.6%) and Low Risk (-0.8%) continue to underperform, with the latter suffering a particularly acute -5.2% decline in the US. Critically, with sector and country (and other style) effects stripped away via a pure style framework (Figure 2), both Pure Value and Growth performance remain weak, suggesting that latent sector or country beta have had little influence on returns. The sole exception remains Momentum, which retains a positive pure return of +2.2% globally and +3.6% in Europe, indicating genuine factor alpha rather than a sector-driven artefact.

Figure 1. MTD – Global Styles Performance – Momentum Recovers, as Value Fades

	World	EM	USA	Europe	Japan	AC Asia Ex Japan
Value	-0.7%	1.0%	-5.2%	1.5%	4.0%	-0.5%
Growth	-0.3%	-0.9%	3.5%	-1.6%	-5.2%	-0.7%
Low Risk	-0.8%	0.7%	-5.2%	1.8%	0.8%	1.8%
Size	1.9%	1.6%	4.9%	1.4%	2.3%	1.6%
Quality	-0.61%	0.5%	-0.4%	-0.7%	-1.6%	0.3%
Price Momentum	3.7%	3.3%	3.2%	4.8%	-0.8%	2.8%
Earnings Momentum	2.7%	1.1%	5.4%	1.9%	-4.4%	1.1%

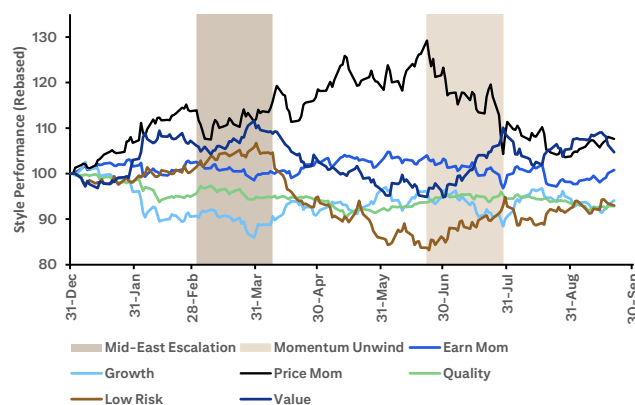
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Source: Citi Research, MSCI

Figure 2. MTD – Pure Styles – Leadership Patterns Disappear

	World	EM	USA	Europe	Japan	AC Asia Ex Japan
Value	-0.8%	0.7%	-3.0%	-0.2%	2.0%	0.3%
Growth	-0.4%	-0.1%	0.1%	-1.1%	-2.5%	-0.4%
Low Risk	-1.5%	1.1%	-4.0%	1.2%	0.4%	1.2%
Size	1.7%	0.7%	2.8%	-0.2%	3.1%	1.1%
Quality	-1.4%	-0.9%	-1.7%	-1.0%	-0.1%	-1.0%
Price Momentum	2.2%	1.3%	2.1%	3.6%	-0.6%	1.3%
Earnings Momentum	1.0%	0.9%	1.2%	0.2%	-0.9%	0.8%

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Source: Citi Research, MSCI

Figure 3. MSCI World – Style Leadership Remains Unclear



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Source: Citi Research, MSCI

Figure 4. 2026 YTD Style Performance by Region

	World	EM	USA	Europe	Japan	AC Asia Ex Japan
Value	4.2%	-2.1%	-6.1%	11.8%	6.6%	-7.1%
Growth	-6.2%	8.3%	-2.0%	-9.0%	-1.3%	9.8%
Low Risk	-8.0%	-9.5%	-14.7%	-1.0%	-20.9%	-7.0%
Size	1.4%	1.4%	7.8%	-1.5%	11.9%	1.7%
Quality	-6.2%	-5.0%	-5.0%	-5.7%	-16.5%	-5.2%
Price Momentum	6.9%	22.5%	3.6%	3.7%	0.3%	23.7%
Earnings Momentum	0.7%	17.0%	1.7%	0.1%	-5.6%	21.5%

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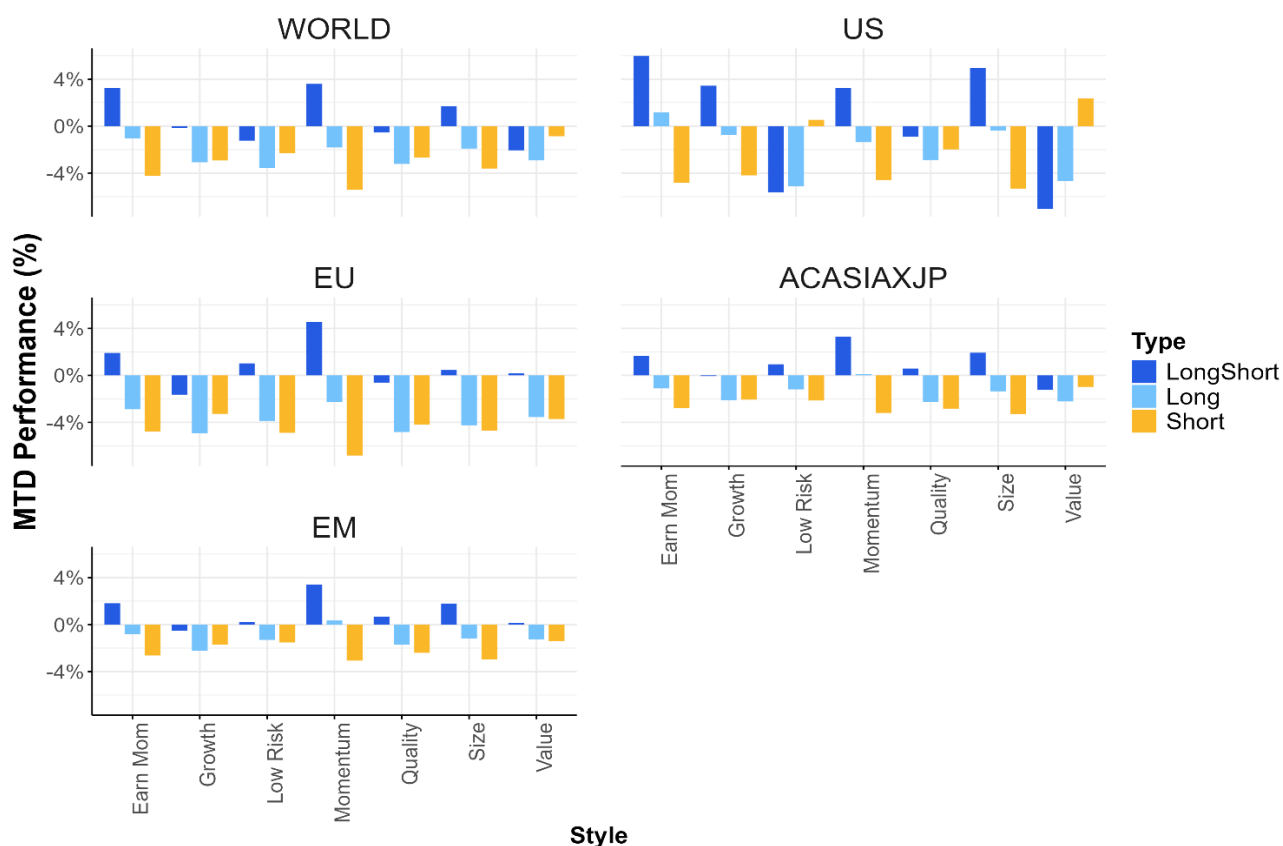
Year-to-date returns (Figure 32, Figure 4) paints a more complicated picture. At the global level, Price Momentum still leads all styles with a +6.9% return (despite the momentum crash), though this masks extreme regional heterogeneity: EM Price

Momentum has recovered a large degree of losses and is up +22.5% YTD while the US momentum retains a modest +3.6%. Value presents the most striking regional divergence: European Value has delivered a robust +11.8% YTD, while US Value is deeply negative at -6.1% YTD.

Japan Value (+6.6%) continues to benefit from the Bank of Japan's rate normalisation backdrop and improving corporate governance. The secular underperformers YTD are unambiguous: Low Risk (-8.0%) and Quality (-6.2%) are the worst-performing styles globally as the risk-on environment and steepening yield curves have actively penalised defensives.

The long-run MSCI World style chart (Figure 3) contextualises the year's journey so far: Q1 was characterised by unambiguous Value leadership, April-May saw a violent Momentum unwind driven by the AI-capex re-rating, and the subsequent recovery has left the factor landscape in a volatile but near directionless consolidation into September — and consistent with a late-cycle environment in which macro cross-currents are increasingly difficult for clean systematic factor allocation.

Figure 5. Long/Short Decomposition: Short Book Carrying the Load (MTD)

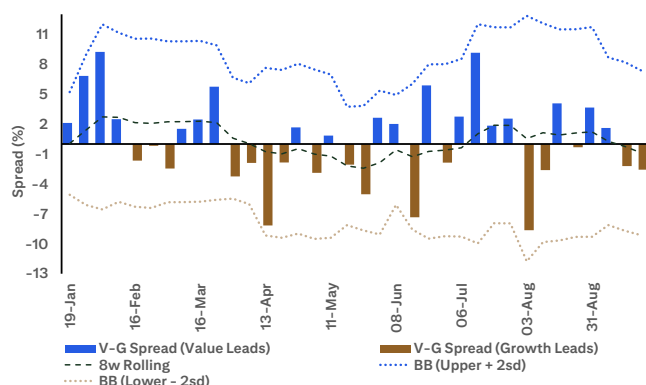


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Source: Citi Research, MSCI

Equally interesting for September has been the long/short quintile performance breakdown (Figure 5). Across almost every style and region, long-side returns are conspicuously absent, with the short side providing the primary source of factor return.

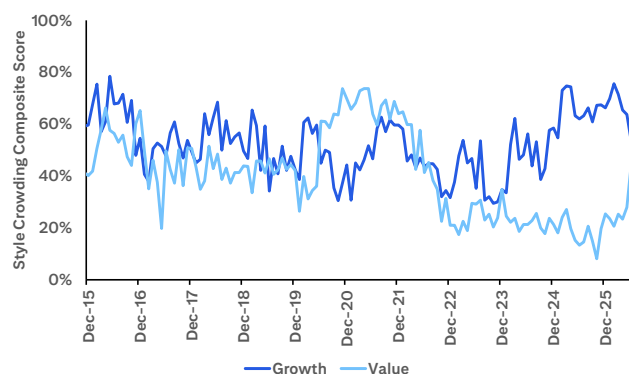
In the US, the Value long/short spread of approximately -3.0% is almost entirely attributable to long-side weakness. Low Risk tells a similar story in the US, where long-side exposure to low-volatility stocks has been a significant drag as the market has rotated toward higher-beta names. This dynamic — in which factors are generating returns predominantly through short legs rather than long legs suggests that systematic strategies are profiting from the underperformance of stocks that should in theory be unattractive, rather than from the appreciation of fundamentally sound positions. The partial exception is Size, where long-side exposure to large-cap names is contributing positively globally (+2.8% in the US long-short). For Momentum, the long/short decomposition is more balanced in Europe and EM — lending structural credibility to the factor's current rebound — though in the US the recovery is also partially short-driven, warranting caution over its durability.

Figure 6. Choppy Value/Growth Leadership but Volatility is easing



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Source: Citi Research, MSCI

Figure 7. Crowding in Growth remains a concern



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The weekly Value-Growth spread (Figure 6) tells the story of Value rotation that has merged twice but has yet to produce a meaningful sustained regime in 2026. Q1 2026 saw an unambiguous bid for Value. April then delivered a sharp reversal: risk-on sentiment and an AI-capex re-rating drove the V-G spread down to a YTD trough. The subsequent correction saw July's spread exploded to +9.1%, as crowded Momentum and Growth longs were forcibly unwound.

Yet what is most instructive about the post-July period is precisely what has not happened. Rather than consolidating at elevated levels consistent with prior durable Value rotation episodes, the spread has since oscillated either side of zero in a choppy, alternating pattern (Figure 6).

This pattern is consistent with previous rotation episodes in which Value failed to sustain leadership: the structural conditions for a durable regime shift — simultaneous broad earnings delivery, a sustained re-steepening of yield curves, and a meaningful reduction in Growth crowding — have not cohesively aligned.

The European market is a notable exception to this global equivocation. European Value's +11.8% YTD return, underpinned by a more value-oriented market composition in Financials and Energy, [a hawkish PMI backdrop](#), and a structurally lower exposure to the AI-capex theme, has produced a regime that looks more durable than the global picture. For European quant investors, the signal is cleaner;

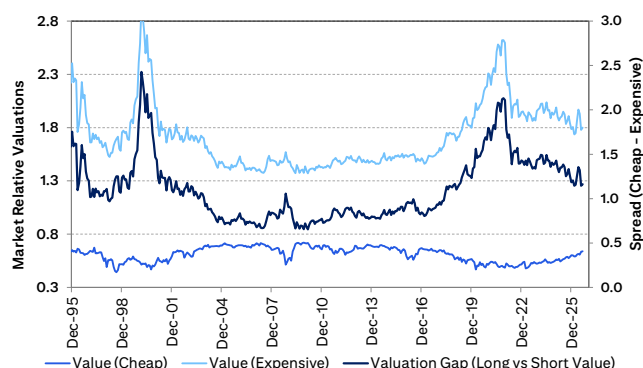
for global allocators, the take-away from Figure 6 is one of caution: the rotation has been meaningful but incomplete.

Leveraging our style crowding model, we assess how crowding levels in Value and Growth have evolved through the recent rotation period ([Searching for Alpha: Style Crowding in Asia - Getting Ahead of the Crowd](#)). The late June/July rotation led to significant step down for crowding within Growth, but levels have since recovered, while Value has seen a significant rebound towards the highest levels seen in almost 5 years but has since marginally eased.

Style crowding (Figure 7) provides an important forward-looking dimension to the style rotation debate. Our style crowding measures confirm that the June/July unwind delivered a genuine, if partial, de-crowding of Growth positioning — but the subsequent recovery has been swift. Growth crowding has retraced but recovered and remains elevated, suggesting that the structural overhang of concentrated positioning in Growth has not been resolved by a single month of spread widening. This is not without precedent: in prior rotation episodes — most notably the Value recovery of Q4 2022 — crowding in Growth remained sticky for extended periods even as the factor underperformed. What is more striking, however, is the behaviour of Value crowding. Rather than declining — as one might expect if investors were actively rotating out of Value following its relative underperformance from April-May — Value crowding has rebounded sharply and is now approaching its highest levels in nearly five years, having only marginally eased in recent weeks.

This dynamic is a double-edged signal: on one hand, it reflects genuine investor conviction in the Value thesis and validates the narrative of a structural rotation; on the other, it introduces a meaningful crowding risk to Value itself. Taken together, the crowding data implies that the rotation has been substantive but remains unfinished — Growth has not been sufficiently unwound, and Value's elevated crowding introduces its own fragility.

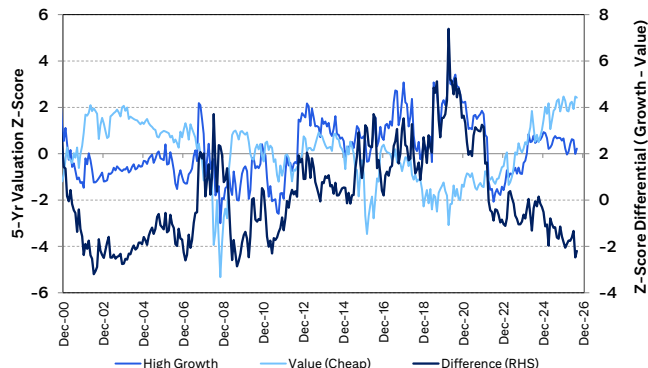
Figure 8. Valuation convergence leaves fewer mispriced opportunities between Cheap and Expensive names



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Source: Citi Research, MSCI

Figure 9. Valuations - Cheapest Value stocks close the gap on top Growth names



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Source: Citi Research, MSCI

While the macro narrative has been supportive of Value in 2026, the valuation evidence (Figure 8, Figure 9) paints a more cautionary picture for Value investors. Figure 8 illustrates the long-run market-relative valuations of the cheapest and most expensive quintiles for Value. While the absolute valuation gap between cheap and expensive stocks remains wide by historical standards, spreads are

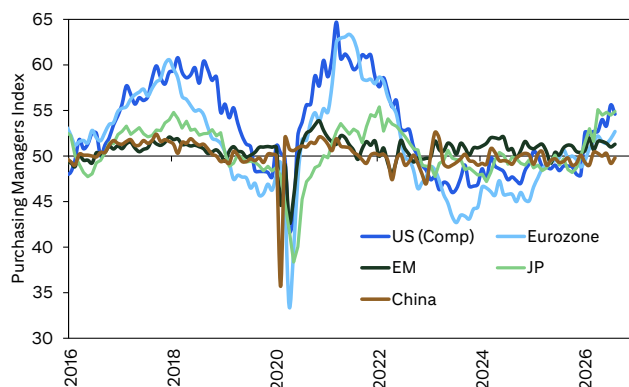
narrowing from long run peaks, leaving meaningfully fewer mispriced opportunities.

Figure 9 sharpens this argument considerably. Plotting the 5-year normalised valuation for the highest-growth stocks against the cheapest value stocks, the z-score differential — which peaked in 2021 has since collapsed. In other words, the valuation premium that Growth commands over the cheapest Value names is a fraction of what it once was.

The cheapest value stocks have closed a substantial portion of the relative valuation gap with the top growth cohort, reducing the forward-looking valuation tailwind that may would sustain Value outperformance. The current environment, on a pure valuation basis, is therefore less supportive of a renewed Value bid and arguably more amenable to a selective return to Growth, particularly in segments where the quality of earnings growth justifies the now-narrower valuation premium.

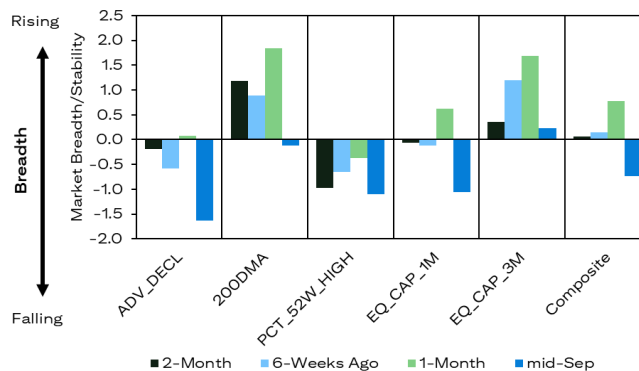
While market continue to perform strongly, the macroeconomic backdrop is turning more contentious. In Europe and parts of Asia (Japan), PMIs indicators point towards economies that continuing to see a healthy expansion ([European Economics – Eurozone: All-Around Hawkish PMIs](#)), elsewhere the narrative is less clear-cut. US composite PMI momentum though positive has been falling and is flat across China and EM (Figure 10). Taken in combination with a rising and higher rate environment, the economic backdrop suggests one of a late-cycle backdrop, where restrictive financial conditions could outweigh growth momentum.

Figure 10. PMIs – still expanding but losing steam



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Source: Citi Research, S&P, Bloomberg

Figure 11. US – the broadening window closes



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Source: Citi Research, FactSet, Bloomberg, MSCI

Global PMIs remain within expansionary range, however, an PMI momentum has been decelerating in some regions, while China and Emerging Markets been flat. This pattern expansion persisting but losing velocity. Taken in combination with a rising and higher rate environment in which restrictive financial conditions may exert structural drag, the macro backdrop is increasingly one in which cyclical Value factors could struggle. Figure 11 outlines a composite breadth signal which had been firmly positive as recently as August, has turned negative at mid-September, with every component now pointing in the same direction: narrowing.

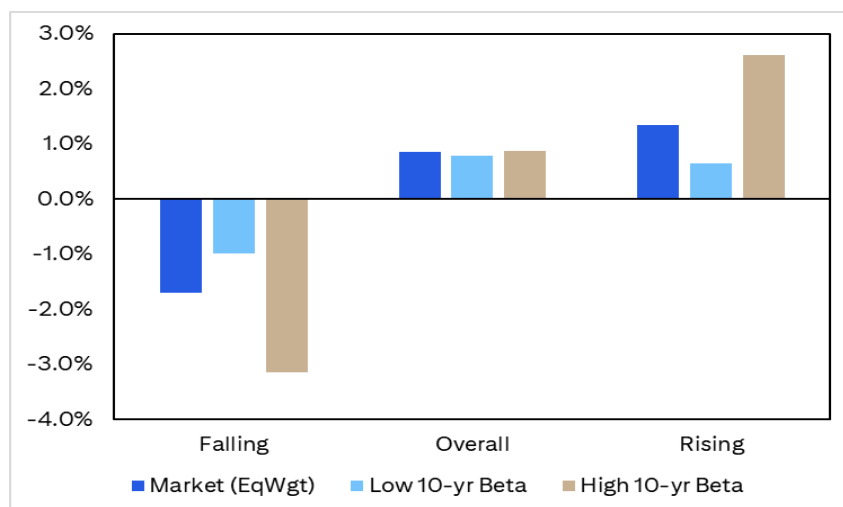
The top-down late-cycle macro thesis finds compelling bottom-up corroboration in our analysis of US rate sensitivity using our proprietary RAM risk model. With the 10-year US Treasury yield crossing the 5% threshold and the Federal Reserve

delivering a hawkish 25bps rate hike, interest rate risk has become another defining axis of stock-level return dispersion.

Equally this raises questions on the impact of the rate cycle on Growth stock valuations and what it means for forward looking returns.

To better understand the possible implications, we simulate the performance of a strategy ranking constituents within quintiles by their exposure to rates (using 10-year rate sensitivity), where the High Rate-Beta quintile captures stocks that historically outperform in a rising yield environment with the low beta being those potentially negatively exposed and backtesting in a monthly rebalanced portfolio from December 1999 to August 2026 across classified rate regimes¹.

Figure 12. Positive Rate-Beta stocks outperform, but not complete capitulation of shorts.



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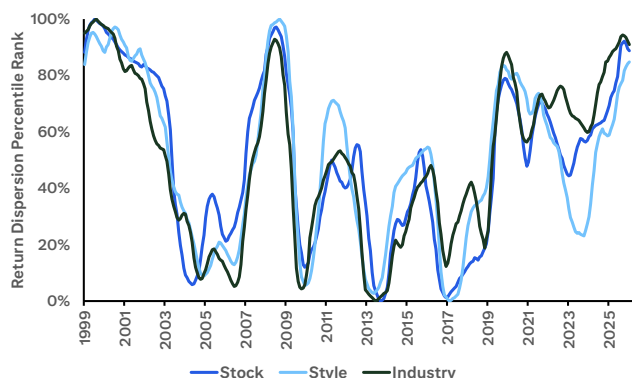
Source: Citi Research, MSCI

High Rate-Beta equities have surged, generating average returns that approximately double the broader market, with outperformance almost exclusively from the long leg (Figure 12) In the prevailing rising rate regime, positive rate-beta stocks outperform on the long leg, while long-duration Growth names experience headwinds consistent with their sensitivity to yield moves.

The underperformance is measured rather than extreme or complete capitulation, and perhaps not so severe as to eliminate the structural earnings premium that quality Growth companies could command.

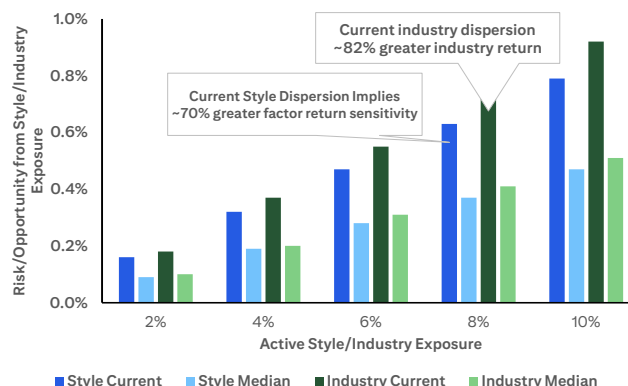
¹ Regimes are dynamically classified using a 2-year rolling standard deviation of month-over-month rate changes, defining periods as "Rising" or "Falling" when monthly rate changes exceed +1.0 SD or fall below -1.0 SD, respectively.

Figure 13. Cross Sectional Dispersion rises – opportunity or trap



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Source: Citi Research, MSCI

Figure 14. Active style and industry exposures carry substantially greater performance implications than normal.



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Source: Citi Research, MSCI

The final and operationally consequential observation for active investors² concerns the level of cross-sectional return dispersion² observed across stocks, styles and industries in recent weeks. Figure 13 presents the dispersion characteristics as a percentile rank relative to its own history.

The spread of returns between winners and losers within each category is also a determinant of how much active factor tilts can contribute to, or detract from, relative portfolio performance. At present, both style and industry dispersion stand at approximately 1.7x and 1.8x their respective historical median levels, placing them near the upper end of the percentile distribution observed since 1999.

Figure 14 translates this elevated dispersion estimate towards portfolio risk terms. A 10% active exposure to a style factor currently generates approximately 79bps of relative performance for a one standard deviation factor move, compared with only 47bps under median historical conditions — a ~70% increase in factor return sensitivity.

Industry exposures exhibit a similarly elevated profile, with current dispersion implying ~82% greater return contribution relative to historical norms. While this environment could well be regarded as profitable for accurate style/industry selection. The same rule applies symmetrically on the downside: for an incorrectly positioned style or industry exposure — whether intentional or an unintended by-product of stock selection — carries materially greater performance consequences than in a typical environment.

In the context of the style uncertainty documented throughout this report — a Value-Growth spread that has twice failed to establish a sustained regime, crowding risks that cut in both directions, and a macro backdrop that is transitioning rather than decisively turning, the elevated dispersion environment argues powerfully against concentrated or aggressive factor tilts.

The confluence of evidence across style performance, factor dynamics, valuation, macro, breadth and dispersion presents a coherent and mutually reinforcing case

² Cross-sectional dispersion is proxied by the cross-sectional standard deviation of 12-week rolling stock/style/industry return volatility, smoothed using an HP filter

for retaining a pro-Growth style preference at the global level. While continued yield curve steepening could prove a headwind for Growth, we don't think this alone is decisive enough to warrant a change of view.

While there are potential regional pockets for Value outperformance. The case for Value as a global recommendation shows greater risks. A late-cycle macro environment where market breadth is starting to narrow once again, and restrictive financial conditions are beginning to assert themselves and a weakening value narrative leave the style less favourable.

The principal caveat to this view is geographic: Europe remains a structurally distinct Value regime, where hawkish PMI dynamics, a more value-oriented sector composition in Financials and Energy, and limited AI-capex exposure have produced Value leadership that appears more durable than the global picture. We remain constructive on Growth and Neutral on Value globally, while recognising the European exception. However, elevated dispersion, persistent crowding risks and evolving market leadership reinforce a key lesson of the current regime: precision in factor selection is likely to be rewarded more consistently than conviction alone, favouring measured rather than aggressive style tilts.

Figure 15. Current Style Recommendations

	Style Recommendations
Value	Neutral
Growth	OW
Price Momentum	OW once style leadership established
Quality	UW
Low Risk	UW
Estimates Momentum	Neutral

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Source: Citi Research

Developed Markets

Developed Markets: Factor Performance and Volatility

Figure 16. Factor Performance and Volatility

Period	Date	MSCI World	Value	Growth	Low Risk	Size	Quality	PMOM	EMOM
Monthly Performance	Sep-25	3.3%	-0.7%	1.8%	-2.8%	1.9%	0.3%	3.6%	2.3%
	Oct-25	2.0%	-1.1%	1.9%	-4.5%	2.0%	-0.2%	1.5%	0.1%
	Nov-25	0.3%	6.6%	-4.2%	3.1%	-0.5%	-1.0%	1.3%	-0.1%
	Dec-25	0.8%	4.1%	0.3%	-2.1%	0.1%	-0.9%	0.6%	0.0%
	Jan-26	2.3%	3.0%	-4.0%	-0.4%	-0.3%	-1.7%	6.8%	1.6%
	Feb-26	0.8%	4.1%	-5.7%	2.0%	-0.8%	-3.5%	6.5%	0.7%
	Mar-26	-6.3%	2.6%	-3.5%	3.7%	1.2%	0.0%	-1.5%	-2.9%
	Apr-26	9.6%	-6.4%	4.3%	-11.2%	2.6%	-1.0%	5.8%	3.1%
	May-26	4.6%	-5.5%	4.8%	-8.4%	1.1%	-2.5%	1.4%	-0.6%
	Jun-26	-0.7%	-2.3%	0.6%	-1.0%	1.9%	3.7%	2.6%	1.1%
Quarterly Performance	Jul-26	0.5%	15.0%	-6.3%	9.1%	-5.7%	0.4%	-10.2%	-3.8%
	Aug-26	2.6%	-2.6%	4.2%	0.5%	0.0%	-1.1%	-6.8%	-1.6%
	Sep-23	-3.4%	9.9%	1.1%	-0.6%	0.2%	0.4%	0.6%	1.0%
	Dec-23	11.5%	-5.6%	-2.3%	-7.0%	-0.8%	-1.9%	-2.4%	-5.5%
	Mar-24	9.0%	-1.4%	2.5%	-1.3%	9.4%	7.1%	14.6%	5.2%
	Jun-24	2.8%	0.2%	0.4%	0.4%	2.4%	0.9%	0.9%	0.2%
	Sep-24	6.5%	0.1%	-0.8%	1.4%	-4.7%	-0.8%	-2.0%	-1.7%
	Dec-24	-0.1%	-5.1%	10.3%	-1.8%	6.8%	5.0%	9.1%	6.4%
	Mar-25	-1.7%	12.4%	-6.6%	7.1%	-1.0%	-2.0%	2.7%	1.9%
	Jun-25	11.6%	-2.9%	10.8%	-8.1%	-2.7%	-0.9%	4.2%	2.7%
Annualized Vol over a Month	Sep-25	7.4%	6.2%	1.5%	-4.0%	1.8%	-1.4%	4.3%	4.2%
	Dec-25	3.2%	9.7%	-2.1%	-3.6%	1.6%	-2.1%	3.5%	0.0%
	Mar-26	-3.5%	10.0%	-12.6%	5.3%	0.1%	-5.1%	12.0%	-0.6%
	Jun-26	13.9%	-13.6%	10.0%	-19.5%	5.7%	0.1%	10.1%	3.6%
	Sep-25	6.5%	7.9%	7.8%	8.3%	7.8%	5.1%	8.3%	6.4%
	Oct-25	11.8%	9.8%	10.3%	12.0%	7.6%	4.3%	11.8%	7.3%
	Nov-25	13.0%	11.3%	10.6%	10.7%	6.1%	4.7%	13.0%	8.8%
	Dec-25	7.5%	10.8%	9.4%	8.5%	6.1%	3.4%	8.6%	5.9%
	Jan-26	8.5%	14.0%	12.5%	12.3%	6.8%	4.6%	11.0%	8.2%
	Feb-26	11.3%	17.4%	19.5%	12.8%	9.9%	10.3%	19.0%	13.2%
Annualized Vol over a Quarter	Mar-26	16.4%	14.0%	13.4%	13.1%	8.1%	8.7%	20.0%	8.4%
	Apr-26	13.2%	13.7%	15.6%	17.1%	8.5%	4.6%	19.0%	8.6%
	May-26	9.7%	10.8%	10.5%	18.9%	7.6%	7.9%	18.5%	10.4%
	Jun-26	14.5%	20.1%	18.5%	23.7%	10.2%	5.2%	26.9%	11.8%
	Jul-26	10.9%	16.8%	17.7%	20.2%	11.8%	7.9%	37.0%	15.7%
	Aug-26	8.6%	18.1%	15.3%	17.3%	6.6%	5.1%	17.6%	12.9%
	Sep-23	10.1%	9.3%	5.9%	8.3%	6.5%	6.0%	7.8%	5.6%
	Dec-23	10.7%	9.1%	4.7%	14.2%	9.4%	9.8%	13.1%	9.1%
	Mar-24	8.9%	11.3%	6.8%	8.7%	5.8%	5.9%	10.2%	6.0%
	Jun-24	9.1%	11.0%	6.6%	8.6%	6.4%	5.7%	8.2%	4.9%
Annualized Vol over a Quarter	Sep-24	14.9%	12.5%	8.7%	13.1%	9.1%	7.1%	12.8%	10.8%
	Dec-24	10.2%	14.1%	8.2%	7.4%	9.3%	8.2%	11.5%	6.6%
	Mar-25	13.7%	15.4%	12.5%	12.6%	10.9%	7.4%	12.8%	8.1%
	Jun-25	17.8%	18.9%	8.5%	18.8%	15.6%	8.0%	14.7%	11.5%
	Sep-25	8.0%	9.6%	8.4%	9.6%	8.2%	5.5%	11.0%	7.5%
	Dec-25	11.2%	10.6%	10.0%	10.8%	6.7%	4.2%	11.1%	7.2%
	Mar-26	12.8%	15.0%	15.2%	12.6%	8.4%	8.4%	17.5%	10.2%
	Jun-26	13.1%	15.7%	15.4%	20.8%	8.9%	6.5%	22.0%	10.6%

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Source: Citi Research, MSCI

Developed World: Last Month's Style Leaders and Laggards

Figure 17. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, Last Month

	Quantile Perf.	Pure Perf.	US	Europe	AsiaPac ex Japan	Japan
Valuation	-2.6%	-0.2%	-3.5%	-2.0%	-5.7%	-0.0%
Earnings Yield - 12 month forward	1.4%		-1.4%	0.3%	1.9%	1.8%
Earnings Yield- 12 month historical	0.4%		-0.9%	-0.6%	0.8%	0.0%
Cash Flow To Price	-0.4%		-1.1%	-1.0%	-7.7%	-2.2%
Dividend Yield	-4.1%		-7.5%	-2.4%	-3.1%	-0.2%
Book to Price Ratio	-0.8%		-1.4%	-1.4%	-3.4%	0.5%
Sales to Price Ratio	-4.3%		-3.8%	-3.2%	-11.9%	-1.5%
EBITDA / EV	-1.1%		-4.1%	-0.8%	-5.1%	-1.3%
Sales / EV	-3.5%		-3.2%	-2.1%	-10.9%	-0.3%
Growth	4.2%	2.5%	3.1%	2.4%	6.9%	0.4%
Earnings Growth (12 month forward)	4.0%		2.3%	2.2%	2.8%	3.7%
SB Growth-Value Score	3.2%		3.1%	2.0%	8.0%	2.0%
One Year Sales Growth	4.6%		4.7%	2.0%	8.3%	-1.3%
Long Term Earnings Growth	3.3%		1.4%	3.6%	10.1%	1.3%
One Year EPS Growth	1.6%		0.2%	0.6%	4.9%	-2.5%
One Year DPS Growth (based on LTM)	0.1%		-4.3%	0.5%	4.9%	-2.0%
Low Risk	0.5%	0.9%	-0.1%	1.6%	-2.4%	-2.5%
Debt to Equity (Inverted)	6.6%		6.2%	3.4%	12.6%	-1.4%
Earnings Stability	-0.2%		-1.5%	1.4%	4.4%	-1.0%
Beta against MSCI AC World	-2.2%		-1.1%	-1.0%	-6.4%	-0.8%
Beta against MSCI Country Index	-1.2%		-2.6%	1.3%	-1.7%	0.9%
Size (Market Cap)	0.0%	0.7%	1.1%	-2.2%	-2.3%	0.1%
Quality	-1.1%	-1.8%	-2.1%	-0.3%	-3.6%	0.4%
Earnings Certainty	-6.7%		-5.7%	-3.1%	-6.8%	-5.7%
Return on Equity	-1.5%		-5.6%	0.7%	1.8%	-0.1%
Net Profit Margin on Sales	2.0%		-1.6%	2.9%	9.4%	-1.5%
Margin Growth	0.8%		0.3%	0.4%	-5.0%	0.1%
Earnings Quality (Accruals) (Inverted)	0.2%		-0.0%	1.6%	0.2%	5.3%
Balance Sheet Quality (NOA) (Inverted)	1.1%		4.3%	-0.6%	1.7%	-0.8%
Price Momentum	-6.8%	-5.3%	-10.2%	-2.3%	-6.0%	-1.3%
3 months	-4.5%		-4.3%	-2.2%	-4.6%	1.2%
12 months	-5.3%		-8.6%	-1.9%	-2.0%	-2.9%
First 11 months	-4.8%		-8.6%	-1.4%	-1.8%	-1.7%
Estimates Momentum	-1.6%	1.0%	-2.1%	0.1%	-1.6%	-1.0%
1 Month Change in Earnings Forecast	1.0%		1.5%	1.5%	1.5%	3.7%
Earnings Revision	-2.4%		-2.7%	-0.8%	-4.1%	0.9%
Sales Revisions	-3.1%		-4.7%	0.2%	-3.3%	0.6%
Cash Revisions	-1.4%		-2.3%	-1.4%	-5.7%	0.6%

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Source: Citi Research, MSCI, IBES, Worldscoop, Datastream

Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See Appendix for more information.

Developed World: LTM Leaders and Laggards

Figure 18. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, LTM

	Quantile Perf.	Pure Perf.	US	Europe	AsiaPac ex Japan	Japan
Valuation	6.4%	5.9%	1.1%	11.9%	33.5%	2.5%
Earnings Yield - 12 month forward	10.6%		3.4%	8.5%	28.4%	9.0%
Earnings Yield- 12 month historical	8.2%		3.2%	10.8%	25.5%	-6.1%
Cash Flow To Price	6.6%		0.8%	10.6%	32.6%	-6.8%
Dividend Yield	6.2%		6.0%	4.2%	22.1%	-4.4%
Book to Price Ratio	6.0%		6.3%	8.0%	14.8%	-2.8%
Sales to Price Ratio	1.8%		-3.2%	12.3%	12.5%	-15.8%
EBITDA / EV	2.9%		-6.5%	11.3%	27.0%	-11.8%
Sales / EV	3.2%		-3.3%	12.6%	11.5%	-21.8%
Growth	-6.0%	2.4%	-5.3%	-7.7%	-19.5%	4.1%
Earnings Growth (12 month forward)	-0.9%		3.2%	-6.1%	-13.9%	22.9%
SB Growth-Value Score	-0.8%		-4.7%	-3.7%	-4.2%	7.2%
One Year Sales Growth	-2.5%		-8.2%	-8.7%	-13.0%	10.8%
Long Term Earnings Growth	-5.0%		-7.4%	-2.4%	-18.3%	1.2%
One Year EPS Growth	-1.2%		0.4%	-0.5%	-10.0%	-8.1%
One Year DPS Growth (based on LTM)	1.6%		-4.9%	2.5%	-8.7%	6.5%
Low Risk	-6.8%	-7.1%	-9.5%	-2.2%	11.6%	-21.7%
Debt to Equity (Inverted)	5.1%		10.2%	0.2%	-4.4%	2.3%
Earnings Stability	-7.9%		-6.2%	-7.0%	-14.3%	-6.3%
Beta against MSCI AC World	-4.7%		-10.2%	-1.7%	8.0%	-21.3%
Beta against MSCI Country Index	-7.2%		-11.6%	-0.9%	22.7%	-23.2%
Size (Market Cap)	-0.4%	3.0%	2.7%	-2.0%	-2.2%	9.6%
Quality	-5.6%	-3.4%	-4.2%	-5.2%	-14.8%	-15.5%
Earnings Certainty	-13.5%		-16.9%	-8.8%	-9.3%	-13.9%
Return on Equity	-6.0%		-8.0%	-5.4%	-6.4%	2.0%
Net Profit Margin on Sales	-6.3%		-4.8%	-10.9%	-12.3%	-13.2%
Margin Growth	-1.2%		3.1%	-6.2%	-13.2%	-19.6%
Earnings Quality (Accruals) (Inverted)	-1.0%		-4.9%	-3.6%	-5.5%	15.3%
Balance Sheet Quality (NOA) (Inverted)	2.4%		-1.1%	7.7%	-12.8%	-14.5%
Price Momentum	3.2%	3.9%	0.5%	-1.0%	2.4%	1.4%
3 months	-3.9%		-5.0%	-4.9%	8.1%	8.8%
12 months	8.0%		6.0%	1.9%	6.5%	-2.5%
First 11 months	8.7%		7.7%	3.7%	3.2%	-0.2%
Estimates Momentum	-2.4%	1.5%	-4.0%	-1.8%	-7.0%	-1.1%
1 Month Change in Earnings Forecast	-1.9%		-1.9%	-2.7%	-7.7%	7.7%
Earnings Revision	-2.1%		-1.9%	-0.5%	-7.8%	-0.3%
Sales Revisions	2.0%		1.6%	7.1%	-15.6%	-0.8%
Cash Revisions	-2.8%		0.1%	-7.8%	-24.9%	-9.4%

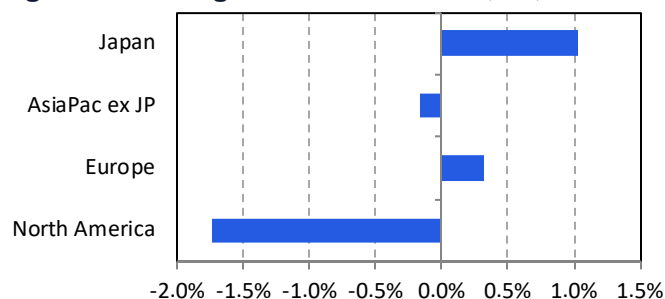
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Source: Citi Research, MSCI, IBES, Worldscoop, Datastream

Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See Appendix for more information.

Developed World: Macro Factor Sensitivities³: Regional

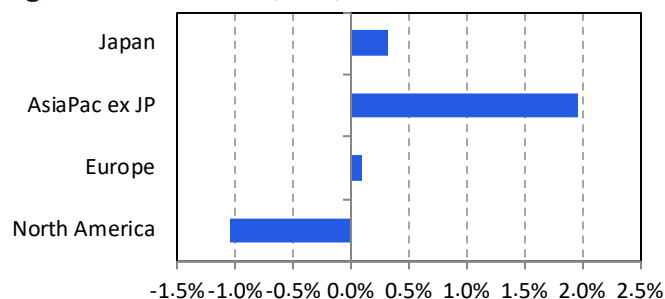
Figure 19. GDP Weighted Global Bond Yield (G10)



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Source: Citi Research, MSCI

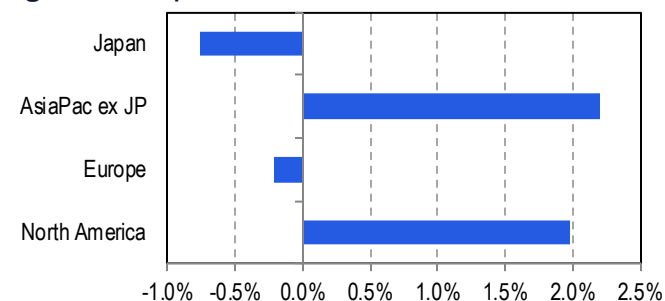
Figure 21. Commodities (GSCI)



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Source: Citi Research, MSCI

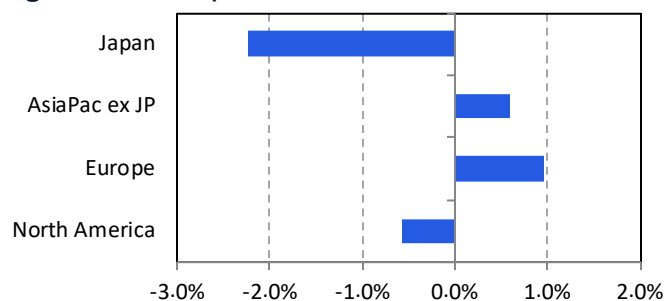
Figure 23. YEN per USD



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Source: Citi Research, MSCI

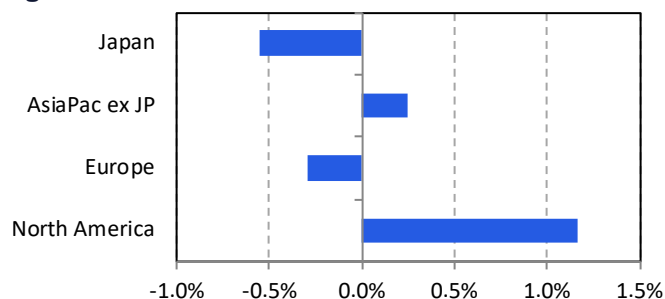
Figure 25. Credit Spreads



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Source: Citi Research, MSCI

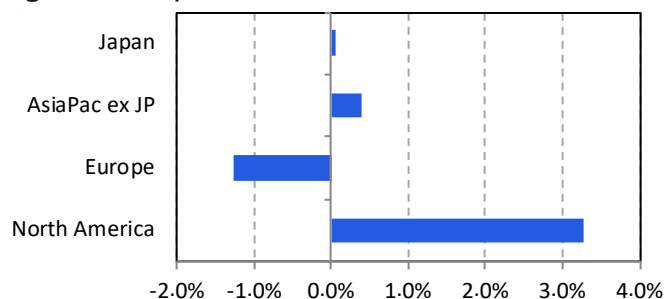
Figure 20. Oil



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Source: Citi Research, MSCI

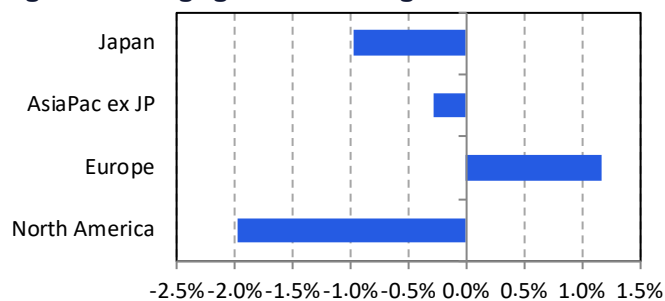
Figure 22. EUR per USD



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Source: Citi Research, MSCI

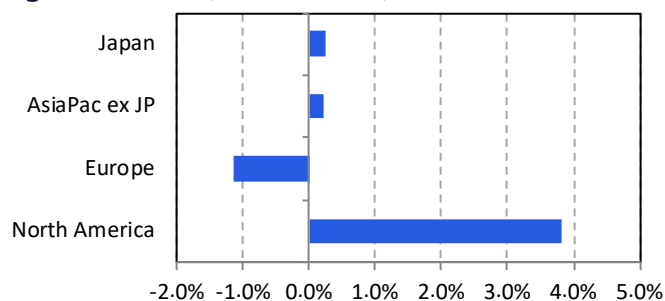
Figure 24. Emerging Market Sovereign Bond Yield



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Source: Citi Research, MSCI

Figure 26. Market (MSCI AC World)



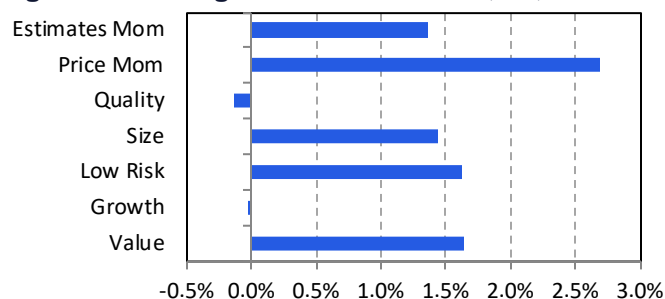
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Source: Citi Research, MSCI

³ The above charts illustrate predicted *relative returns* from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

Developed World: Macro Factor Sensitivities⁴: Styles

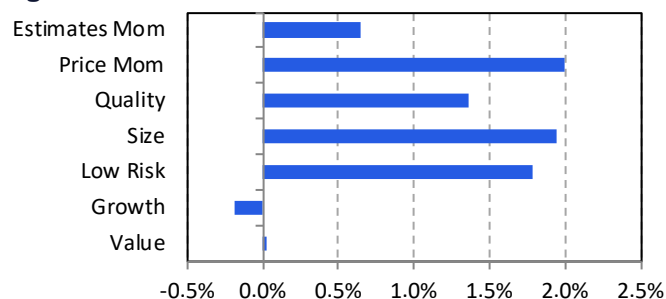
Figure 27. GDP Weighted Global Bond Yield (G10)



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Source: Citi Research

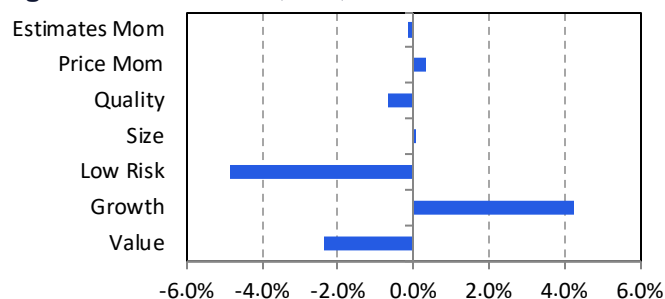
Figure 28. Oil



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Source: Citi Research

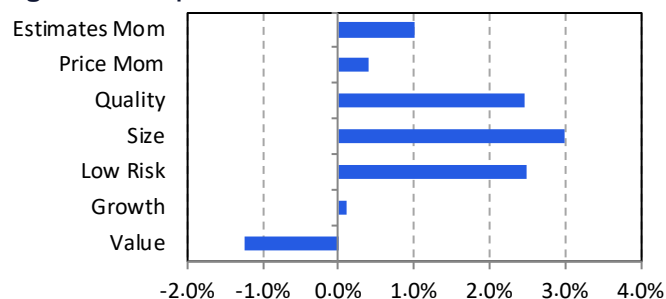
Figure 29. Commodities (GSCI)



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Source: Citi Research

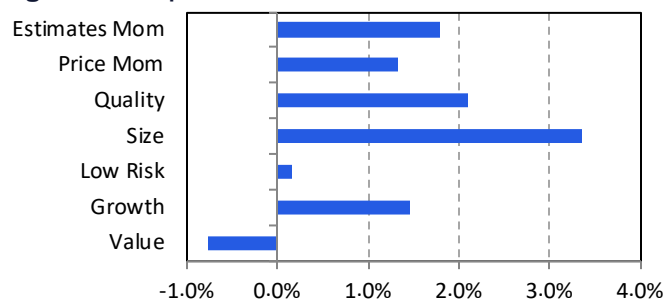
Figure 30. EUR per USD



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Source: Citi Research

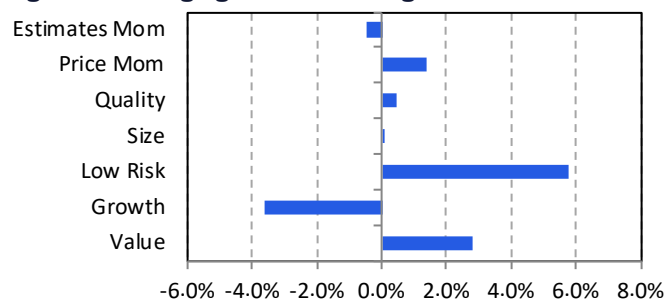
Figure 31. YEN per USD



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Source: Citi Research

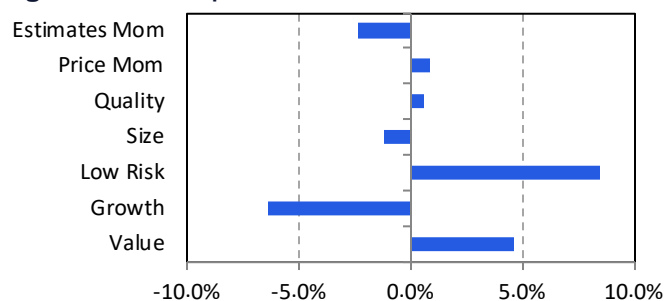
Figure 32. Emerging Market Sovereign Bond Yield



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Source: Citi Research

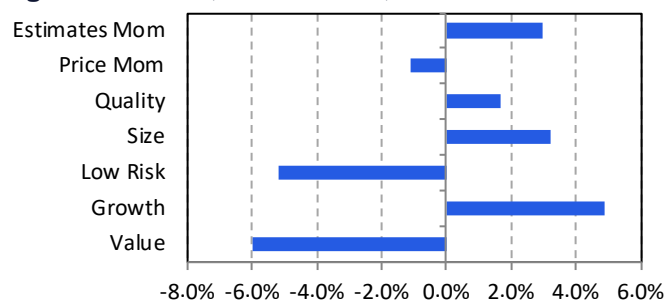
Figure 33. Credit Spreads



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Source: Citi Research, MSCI

Figure 34. Market (MSCI AC World)



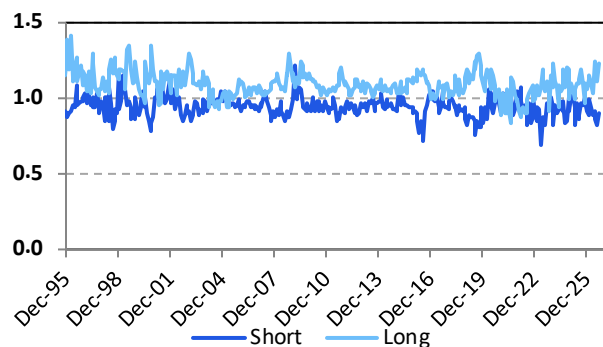
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Source: Citi Research

⁴ The above charts illustrate predicted *relative returns* from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

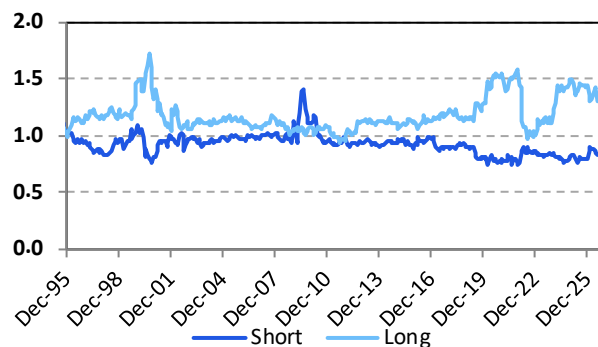
Developed World: Relative Style Valuations

Figure 35. Estimates Momentum



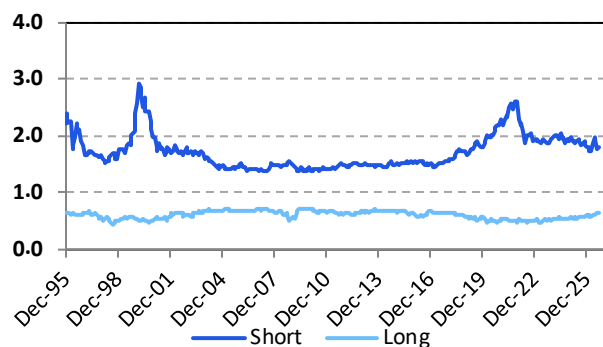
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 36. Growth



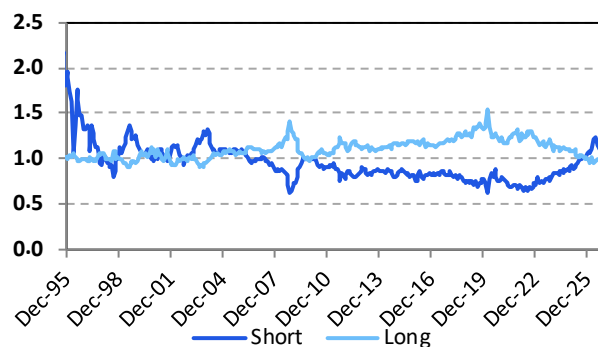
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 37. Value



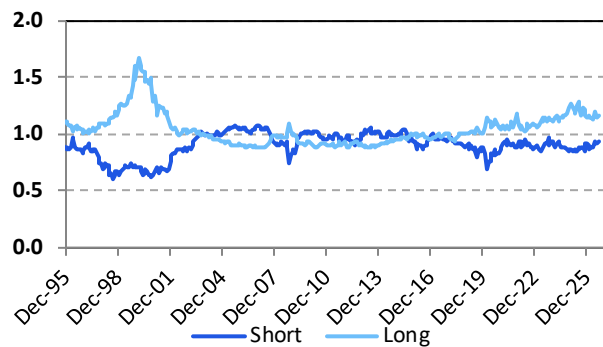
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 38. Low Risk



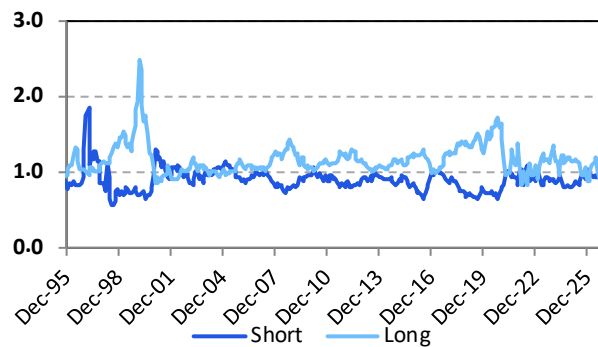
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Figure 39. Size



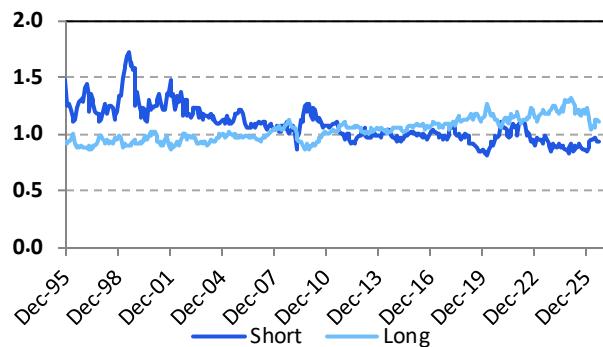
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 40. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 41. Quality

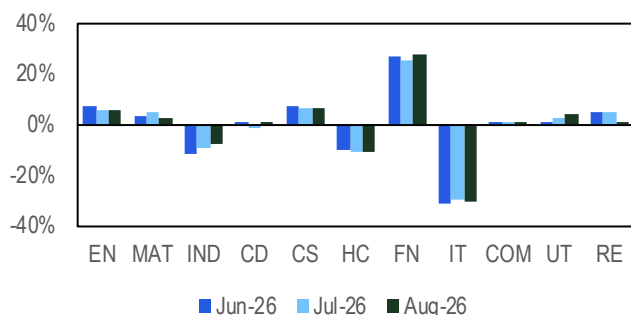


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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Relative style valuations calculated using median 12-month forward P/E of the respective long and short style quintiles relative to the benchmark median.

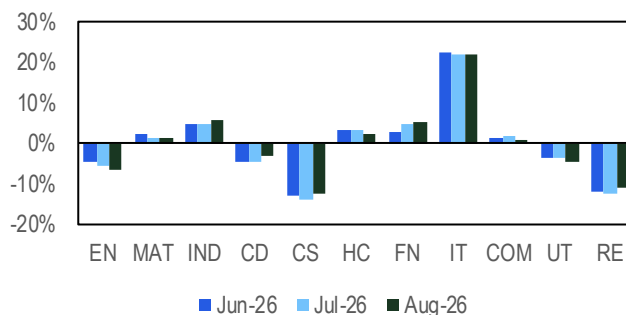
Developed World: Net Sector Weights

Figure 42. Value



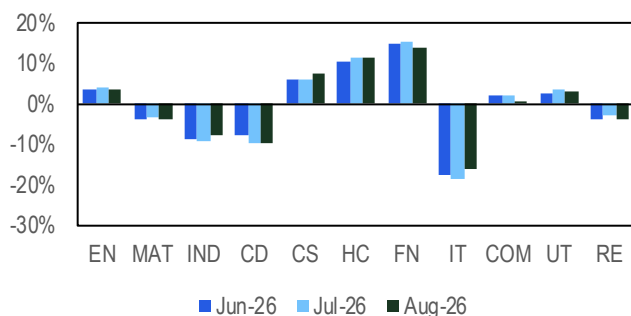
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Source: Citi Research, MSCI

Figure 43. Growth



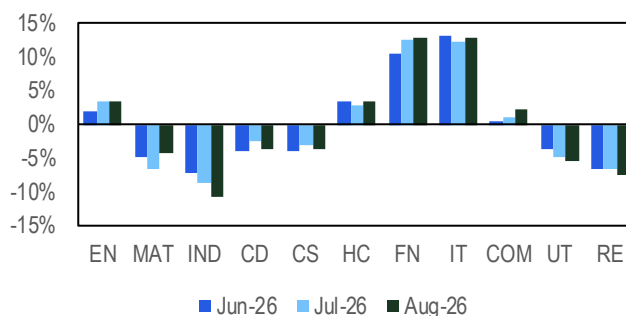
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Source: Citi Research, MSCI

Figure 44. Low Risk



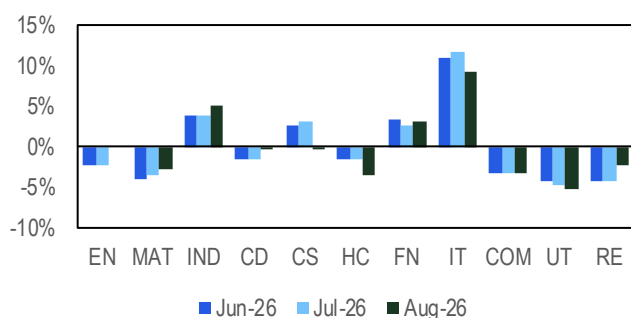
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Source: Citi Research, MSCI

Figure 45. Size



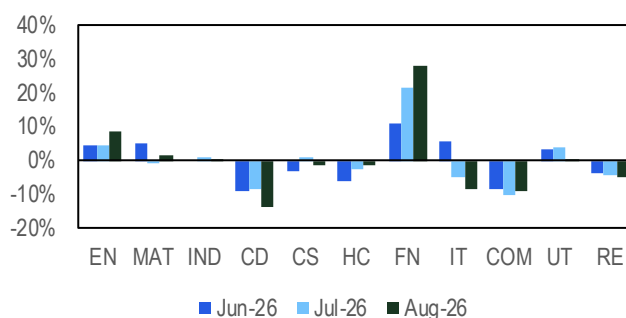
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Source: Citi Research, MSCI

Figure 46. Quality



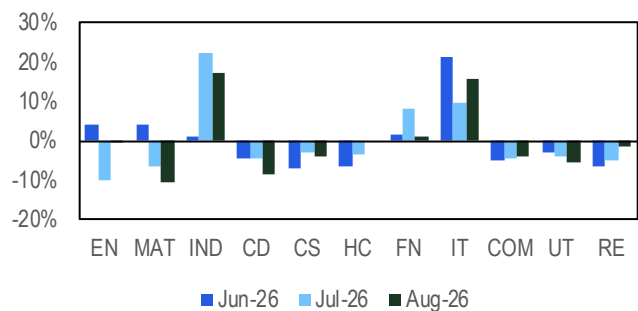
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Source: Citi Research, MSCI

Figure 47. Price Momentum



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Source: Citi Research, MSCI

Figure 48. Estimates Momentum



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Source: Citi Research, MSCI

Emerging Markets

Emerging Markets: Factor Performance and Volatility

Figure 49. Factor Performance and Volatility

Period	Date	MSCI EM	Value	Growth	Low Risk	Size	Quality	PMOM	EMOM
Monthly Performance	Sep-25	7.2%	-2.9%	2.9%	-3.6%	0.3%	-2.6%	1.2%	3.6%
	Oct-25	4.2%	2.4%	-1.2%	-3.8%	1.0%	-1.8%	-1.0%	1.1%
	Nov-25	-2.4%	4.1%	-2.7%	-0.1%	0.8%	3.2%	1.6%	-1.8%
	Dec-25	3.0%	1.0%	2.1%	-2.1%	1.8%	0.4%	3.1%	4.0%
	Jan-26	8.9%	1.8%	0.2%	-7.5%	-1.4%	-3.5%	7.5%	3.5%
	Feb-26	5.5%	0.6%	-1.2%	-3.1%	-0.1%	-2.1%	6.0%	1.9%
	Mar-26	-13.0%	7.9%	-5.4%	4.8%	-1.8%	2.6%	-7.2%	-2.7%
	Apr-26	14.7%	-12.7%	13.5%	-6.0%	3.9%	-3.8%	14.0%	9.1%
	May-26	9.7%	-2.5%	3.7%	-3.1%	4.7%	-1.6%	7.2%	1.6%
	Jun-26	-1.4%	-10.5%	6.3%	1.7%	3.4%	0.3%	9.9%	5.8%
Quarterly Performance	Jul-26	-3.0%	26.1%	-16.4%	5.1%	-9.4%	4.5%	-25.4%	-11.9%
	Aug-26	3.4%	-7.9%	11.2%	-1.3%	0.9%	-1.8%	11.8%	8.4%
	Sep-23	-2.8%	7.0%	-3.5%	0.1%	1.8%	4.7%	5.9%	1.6%
	Dec-23	7.9%	0.2%	-2.5%	-9.7%	1.0%	-0.4%	8.3%	1.1%
	Mar-24	2.4%	6.1%	0.4%	3.0%	4.4%	9.3%	9.8%	6.2%
	Jun-24	5.1%	6.4%	-2.2%	-0.2%	4.6%	6.4%	12.0%	6.3%
	Sep-24	8.9%	2.1%	2.1%	6.2%	-8.1%	-3.8%	-25.4%	-7.6%
	Dec-24	-7.8%	1.8%	-0.6%	7.9%	2.4%	5.0%	6.7%	6.6%
	Mar-25	3.0%	7.5%	2.4%	-6.4%	-2.9%	1.1%	-3.9%	0.9%
	Jun-25	12.2%	3.3%	6.8%	-5.5%	-0.9%	0.6%	-1.6%	5.3%
Annualized Vol over a Month	Sep-25	10.9%	-5.9%	7.6%	-2.2%	-2.0%	-9.2%	6.2%	12.7%
	Dec-25	4.8%	7.6%	-1.8%	-5.9%	3.6%	1.8%	3.7%	3.3%
	Mar-26	-0.1%	10.5%	-6.4%	-6.1%	-3.2%	-3.1%	5.8%	2.6%
	Jun-26	24.1%	-23.9%	25.1%	-7.3%	12.5%	-5.1%	34.3%	17.3%
	Sep-25	10.2%	14.3%	9.6%	8.0%	5.3%	7.5%	10.4%	8.1%
	Oct-25	13.8%	13.1%	11.1%	7.2%	4.2%	5.4%	12.0%	11.0%
	Nov-25	17.5%	9.2%	7.8%	7.8%	3.7%	5.9%	11.1%	7.5%
	Dec-25	9.6%	11.2%	6.6%	5.9%	3.8%	5.1%	6.8%	6.8%
	Jan-26	13.4%	14.5%	8.8%	12.2%	5.9%	8.6%	9.9%	7.0%
	Feb-26	18.4%	12.8%	9.2%	12.3%	4.4%	12.3%	17.7%	9.1%
Annualized Vol over a Quarter	Mar-26	32.3%	15.8%	13.9%	13.0%	7.3%	10.3%	16.8%	8.6%
	Apr-26	26.5%	16.8%	18.2%	13.9%	4.3%	8.5%	12.2%	7.6%
	May-26	23.2%	17.7%	16.5%	16.2%	7.6%	11.0%	16.3%	11.5%
	Jun-26	32.3%	28.0%	23.3%	12.1%	9.5%	11.4%	25.2%	14.3%
	Jul-26	34.9%	29.8%	30.7%	13.1%	16.1%	10.3%	42.7%	20.9%
	Aug-26	16.8%	29.3%	23.5%	8.8%	6.4%	9.8%	18.9%	16.7%
	Sep-23	12.7%	8.4%	7.3%	7.6%	5.3%	4.7%	10.0%	4.4%
	Dec-23	13.6%	10.1%	7.7%	10.7%	6.9%	7.2%	13.8%	8.8%
	Mar-24	11.5%	12.3%	10.4%	10.7%	16.2%	8.1%	24.8%	5.8%
	Jun-24	13.0%	11.4%	6.7%	11.0%	12.0%	8.0%	17.8%	10.5%
Annualized Vol over a Quarter	Sep-24	16.5%	10.1%	7.8%	16.7%	17.0%	7.8%	38.2%	11.9%
	Dec-24	10.4%	14.7%	8.3%	11.8%	5.3%	9.0%	15.8%	11.2%
	Mar-25	14.5%	10.8%	6.1%	9.5%	6.5%	7.6%	8.6%	5.5%
	Jun-25	14.6%	8.1%	6.0%	8.0%	6.1%	6.7%	7.6%	5.6%
	Sep-25	10.7%	12.7%	9.5%	7.3%	5.8%	7.6%	8.5%	7.0%
	Dec-25	14.2%	11.6%	9.1%	7.2%	4.0%	5.7%	10.4%	9.1%
	Mar-26	23.9%	14.5%	10.9%	13.2%	6.0%	10.7%	15.8%	8.3%
	Jun-26	27.3%	21.7%	19.1%	14.3%	7.6%	10.5%	18.9%	11.6%

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Source: Citi Research, MSCI

Emerging Markets: Last Month's Style Leaders and Laggards

Figure 50. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, Last Month

	Quantile Perf.	Pure Perf.	Brazil	India	China	South Africa	Latin America	Emerging Europe	Emerging Asia
Valuation	-7.9%	-0.2%	-1.7%	-3.4%	-10.8%	11.6%	-4.8%	3.3%	-9.0%
Earnings Yield - 12 month forward	-5.2%		-3.8%	-3.2%	-7.3%	20.0%	-0.4%	7.1%	-5.0%
Earnings Yield- 12 month historical	-6.8%		-4.4%	-3.0%	-9.0%	23.9%	-1.3%	6.9%	-7.8%
Cash Flow To Price	-7.2%		-0.0%	-2.1%	-9.0%	-8.8%	-3.8%	1.1%	-7.7%
Dividend Yield	-7.2%		-0.1%	-2.5%	-7.4%	-2.1%	-3.8%	-0.8%	-7.3%
Book to Price Ratio	-7.0%		-5.5%	-2.3%	-10.9%	-12.9%	-4.6%	0.2%	-8.9%
Sales to Price Ratio	-7.8%		1.4%	-1.1%	-10.3%	-19.8%	-1.8%	5.3%	-8.2%
EBITDA / EV	-9.8%		-3.6%	-2.1%	-12.4%	-16.7%	-1.5%	0.2%	-10.9%
Sales / EV	-7.6%		0.6%	-0.8%	-11.8%	-19.8%	-2.3%	7.5%	-8.1%
Growth	11.2%	4.9%	-1.1%	5.4%	11.8%	23.3%	4.0%	5.3%	11.2%
Earnings Growth (12 month forward)	11.3%		-0.7%	2.7%	10.1%	4.6%	-1.6%	5.2%	11.8%
SB Growth-Value Score	-0.3%		3.8%	0.0%	2.3%	3.5%	1.9%	-3.0%	0.1%
One Year Sales Growth	7.2%		-0.8%	4.3%	10.3%	8.3%	6.0%	-0.1%	7.9%
Long Term Earnings Growth	14.1%		0.3%	4.7%	15.9%	31.1%	2.9%	7.2%	15.1%
One Year EPS Growth	6.0%		-1.0%	4.9%	8.3%	14.2%	5.1%	6.6%	6.0%
One Year DPS Growth (based on LTM)	4.9%		-2.8%	0.8%	6.5%	32.2%	4.1%	8.8%	4.6%
Low Risk	-1.3%	0.8%	-0.8%	4.1%	2.8%	-13.3%	-2.5%	-2.1%	-2.0%
Debt to Equity (Inverted)	3.1%		-3.7%	3.3%	0.0%	15.3%	0.2%	7.2%	2.5%
Earnings Stability	0.1%		-6.7%	3.6%	2.5%	-11.7%	-6.6%	-1.1%	0.9%
Beta against MSCI AC World	-11.6%		2.0%	-2.8%	-9.7%	-16.2%	-1.8%	-1.9%	-13.4%
Beta against MSCI Country Index	4.0%		4.7%	2.4%	7.6%	-28.4%	1.4%	-8.0%	6.0%
Size (Market Cap)	0.9%	-2.1%	2.1%	-1.0%	1.9%	5.7%	0.6%	2.2%	0.9%
Quality	-1.8%	-1.3%	-2.9%	1.1%	-1.9%	-7.6%	1.7%	-0.8%	-1.8%
Earnings Certainty	-7.8%		-3.4%	0.1%	-8.1%	-15.7%	-1.8%	-8.6%	-8.3%
Return on Equity	0.1%		1.4%	-0.6%	0.3%	4.0%	3.8%	-0.3%	0.2%
Net Profit Margin on Sales	0.3%		-1.2%	-1.0%	0.9%	10.9%	5.2%	0.0%	-0.1%
Margin Growth	1.8%		1.1%	3.4%	1.6%	1.2%	5.0%	6.1%	1.9%
Earnings Quality (Accruals) (Inverted)	2.1%		1.6%	2.1%	-1.1%	9.2%	2.1%	3.6%	1.1%
Balance Sheet Quality (NOA) (Inverted)	-2.6%		4.2%	5.1%	-8.9%	-0.6%	1.8%	1.0%	-4.3%
Price Momentum	11.8%	4.9%	-1.1%	4.9%	18.2%	-10.3%	-0.0%	-0.2%	14.8%
3 months	0.8%		-3.5%	3.2%	7.7%	-19.6%	-5.3%	-6.8%	2.7%
12 months	12.7%		-2.9%	4.2%	17.5%	-1.6%	2.1%	3.7%	15.7%
First 11 months	12.6%		-2.9%	4.9%	16.9%	-2.2%	2.1%	3.7%	15.6%
Estimates Momentum	8.4%	1.1%	-4.7%	0.7%	9.6%	-32.5%	1.2%	-8.9%	11.7%
1 Month Change in Earnings Forecast	8.3%		1.2%	3.8%	9.3%	-23.6%	2.4%	-10.0%	11.0%
Earnings Revision	6.6%		-3.2%	2.3%	4.2%	-28.8%	2.1%	-9.0%	9.2%
Sales Revisions	7.1%		-5.6%	-0.4%	7.0%	-28.3%	4.5%	-9.2%	9.8%
Cash Revisions	2.6%		-6.8%	1.7%	-0.1%	-35.6%	-6.2%	-12.3%	4.9%

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Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See appendix for more information.

Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Emerging Markets: LTM Leaders and Laggards

Figure 51. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, LTM

	Quantile Perf.	Pure Perf.	Brazil	India	China	South Africa	Latin America	Emerging Europe	Emerging Asia
Valuation	-2.2%	6.3%	35.0%	-11.1%	-19.8%	24.1%	15.2%	25.5%	-5.9%
Earnings Yield - 12 month forward	-0.7%		28.4%	-9.1%	-14.5%	17.2%	28.2%	11.2%	-1.1%
Earnings Yield- 12 month historical	-4.5%		22.3%	-10.8%	-13.3%	23.5%	24.6%	15.0%	-5.6%
Cash Flow To Price	1.8%		18.3%	-11.4%	-10.6%	45.8%	3.1%	39.9%	-0.7%
Dividend Yield	0.2%		29.3%	-11.2%	-13.5%	1.8%	23.0%	16.1%	-2.8%
Book to Price Ratio	-1.6%		23.8%	-12.2%	-17.5%	7.0%	10.6%	18.5%	-7.8%
Sales to Price Ratio	-5.9%		31.4%	-10.3%	-21.7%	15.7%	4.6%	31.9%	-9.5%
EBITDA / EV	-0.4%		4.8%	-9.6%	-15.7%	20.1%	16.5%	34.2%	-2.0%
Sales / EV	-5.7%		10.4%	-7.6%	-22.6%	15.3%	-5.8%	29.6%	-7.8%
Growth	8.9%	8.7%	-10.7%	19.5%	8.7%	-18.9%	-5.8%	-12.0%	11.4%
Earnings Growth (12 month forward)	11.0%		-10.5%	4.9%	-3.9%	-35.0%	-5.7%	-4.5%	15.7%
SB Growth-Value Score	-11.5%		3.3%	7.9%	-2.3%	-22.0%	-12.0%	-13.7%	-9.5%
One Year Sales Growth	18.5%		-2.5%	21.6%	25.3%	-30.8%	15.0%	-14.5%	23.4%
Long Term Earnings Growth	14.3%		-19.2%	21.7%	8.5%	-10.7%	-10.9%	-7.4%	18.9%
One Year EPS Growth	8.3%		-17.0%	17.8%	9.9%	9.3%	-4.1%	4.5%	10.6%
One Year DPS Growth (based on LTM)	7.3%		-6.8%	-0.4%	7.2%	-24.0%	-5.0%	6.2%	8.7%
Low Risk	-9.6%	2.5%	3.6%	4.0%	9.1%	-12.2%	-0.9%	-4.2%	-7.9%
Debt to Equity (Inverted)	10.7%		2.9%	7.0%	-0.7%	0.8%	6.1%	-1.4%	13.0%
Earnings Stability	3.9%		-16.5%	11.9%	12.6%	-20.8%	-7.1%	-10.2%	8.1%
Beta against MSCI AC World	-27.6%		25.8%	-0.4%	-11.6%	-1.7%	4.5%	-6.9%	-30.9%
Beta against MSCI Country Index	-1.1%		10.5%	-9.7%	15.4%	-16.5%	-5.9%	-3.3%	0.2%
Size (Market Cap)	-0.4%	-0.7%	11.2%	-8.2%	2.4%	-2.0%	12.5%	-1.4%	-1.6%
Quality	-5.6%	0.5%	-8.4%	-2.2%	-2.7%	0.8%	6.3%	-5.4%	-5.9%
Earnings Certainty	-13.9%		-0.9%	-7.3%	-2.1%	-21.0%	1.9%	-11.6%	-14.2%
Return on Equity	8.4%		-0.6%	3.6%	14.3%	-12.7%	9.7%	-12.0%	12.3%
Net Profit Margin on Sales	6.6%		-8.2%	3.1%	18.5%	-27.9%	11.2%	-24.4%	10.9%
Margin Growth	1.6%		-5.9%	9.2%	3.5%	14.4%	15.4%	12.8%	1.5%
Earnings Quality (Accruals) (Inverted)	1.5%		-5.0%	-3.7%	-6.3%	20.7%	5.7%	2.5%	-4.3%
Balance Sheet Quality (NOA) (Inverted)	-12.7%		-21.0%	5.3%	-30.1%	-7.3%	5.5%	0.7%	-18.2%
Price Momentum	18.5%	10.6%	-7.5%	-2.3%	1.7%	-0.6%	1.8%	-1.5%	19.5%
3 months	-2.3%		-19.8%	0.5%	-18.6%	-5.9%	-14.9%	-11.4%	-1.6%
12 months	21.2%		-1.4%	0.9%	11.4%	2.6%	10.2%	2.7%	24.2%
First 11 months	22.9%		0.5%	-0.0%	15.3%	-9.1%	8.1%	1.4%	26.2%
Estimates Momentum	14.9%	1.6%	-12.8%	-7.4%	0.4%	-48.1%	4.7%	-12.2%	19.5%
1 Month Change in Earnings Forecast	16.9%		8.6%	10.3%	0.4%	-39.0%	12.3%	-15.0%	22.2%
Earnings Revision	11.1%		7.1%	-11.5%	-1.6%	-42.3%	8.4%	-18.0%	13.1%
Sales Revisions	14.9%		-12.8%	-10.3%	2.1%	-58.0%	3.4%	-33.3%	20.7%
Cash Revisions	7.6%		-9.5%	-5.5%	1.7%	-54.7%	-6.0%	-25.9%	13.4%

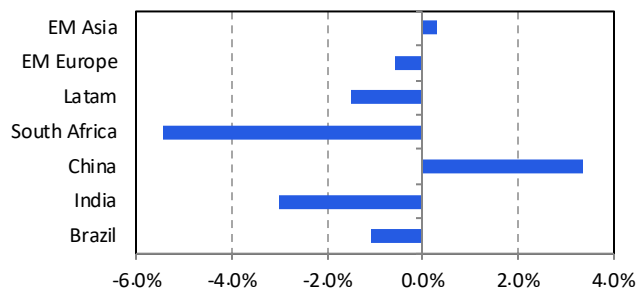
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Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See appendix for more information.

Source: Citi Research, MSCI, IBES, Worldscope, Datastream

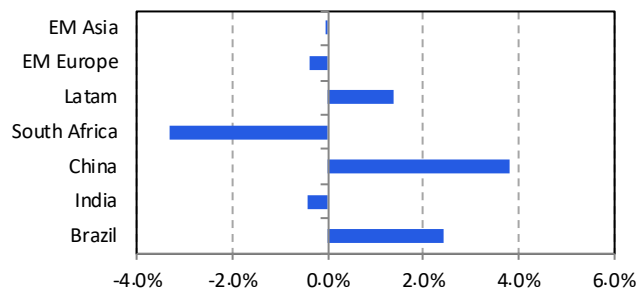
Emerging Markets: Macro Factor Sensitivities⁵: Countries/Regions

Figure 52. GDP Weighted Global Bond Yield (G10)



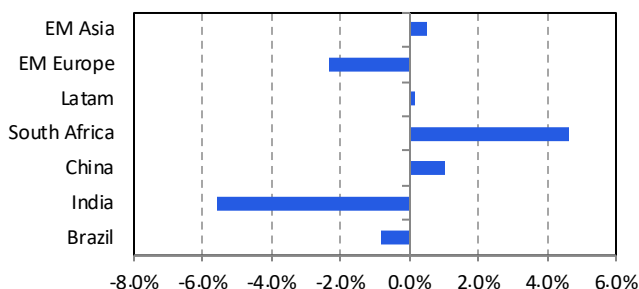
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Source: Citi Research, MSCI

Figure 53. Oil



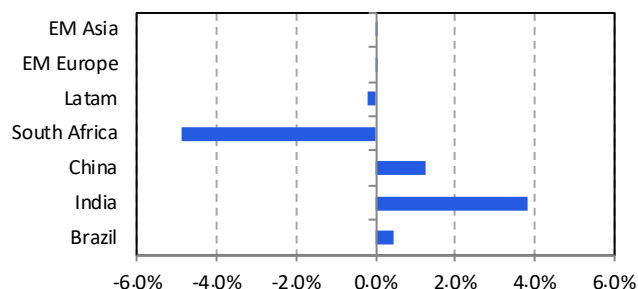
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Source: Citi Research, MSCI

Figure 54. Commodities (GSCI)



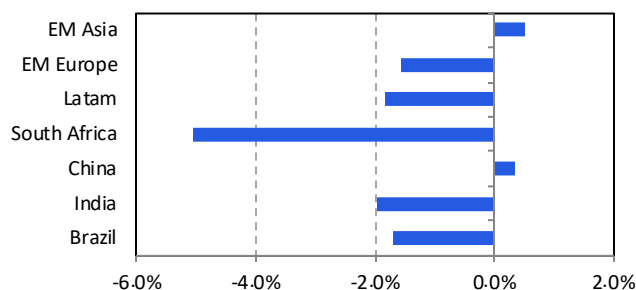
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Source: Citi Research, MSCI

Figure 55. EUR per USD



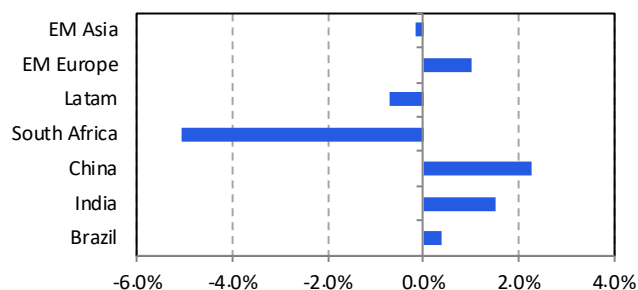
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Source: Citi Research, MSCI

Figure 56. YEN per USD



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Source: Citi Research, MSCI

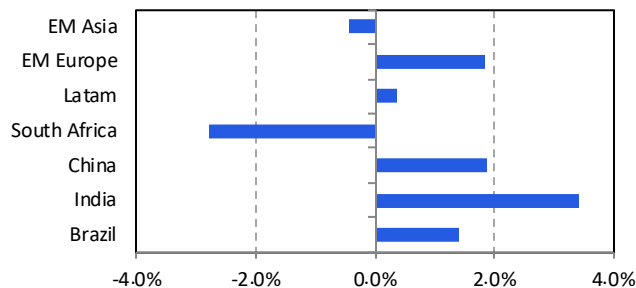
Figure 57. Emerging Market Sovereign Bond Yield



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Source: Citi Research, MSCI

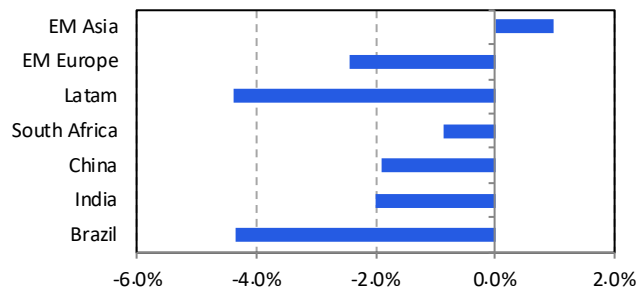
⁵ The above charts illustrate predicted *relative returns* from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

Figure 58. Credit Spreads



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Source: Citi Research, MSCI

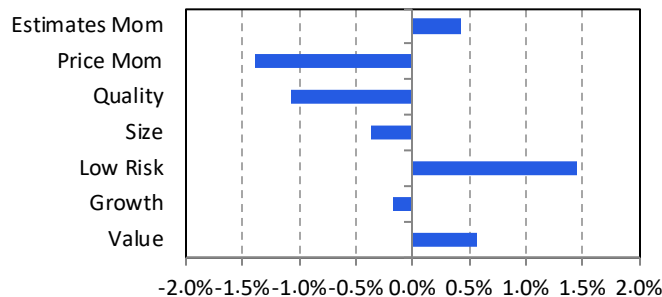
Figure 59. Market (MSCI AC World)



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Source: Citi Research, MSCI

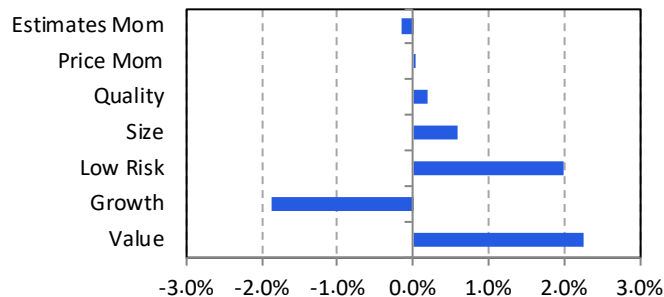
Emerging Markets: Macro Factor Sensitivities⁶: Styles

Figure 60. GDP Weighted Global Bond Yield (G10)



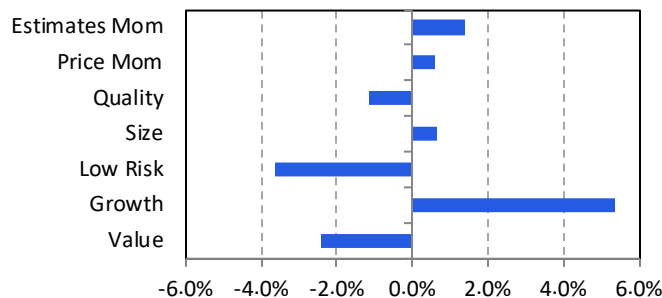
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 61. Oil



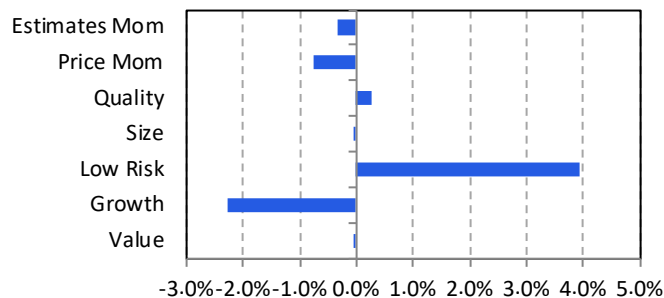
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 62. Commodities (GSCI)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

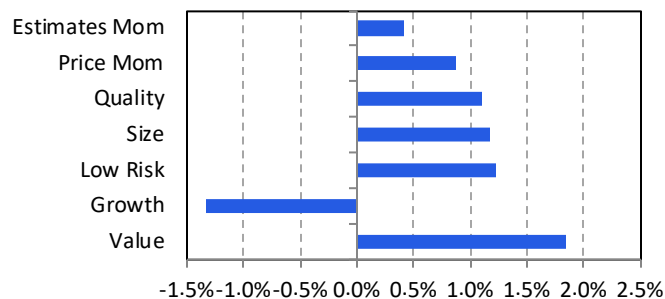
Figure 63. EUR per USD



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

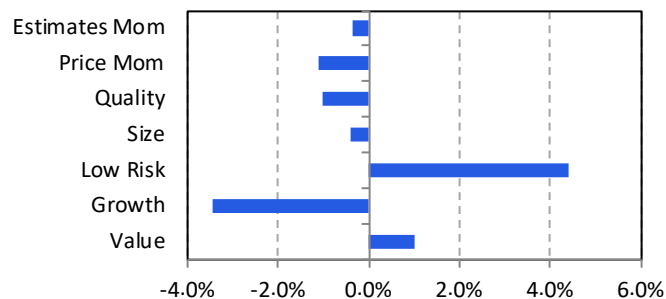
⁶ The above charts illustrate predicted long/short style returns from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

Figure 64. YEN per USD



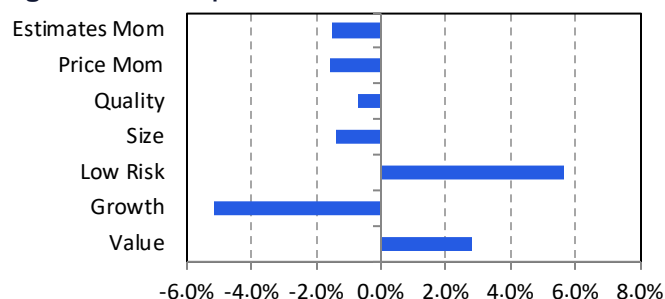
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 65. Emerging Market Sovereign Bond Yield



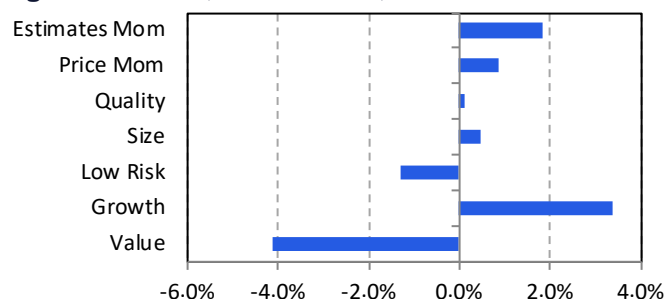
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 66. Credit Spreads



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

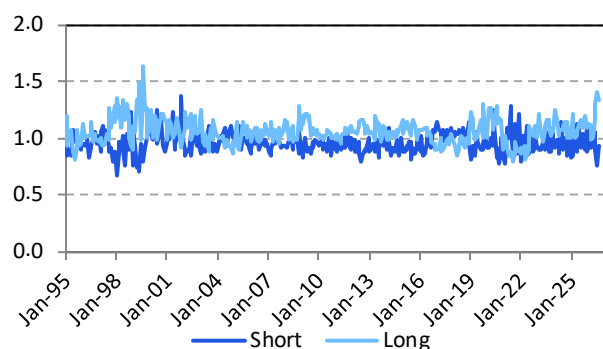
Figure 67. Market (MSCI AC World)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

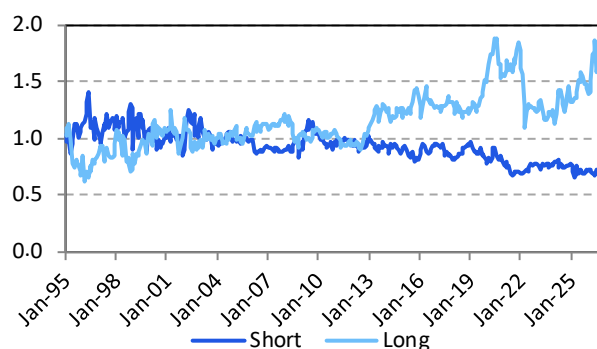
Emerging Markets: Relative Style Valuations

Figure 68. Estimates Momentum



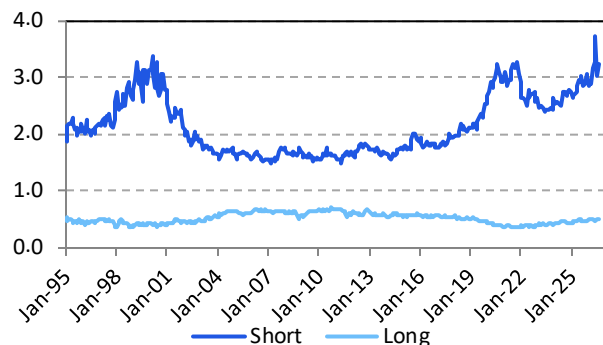
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 69. Growth



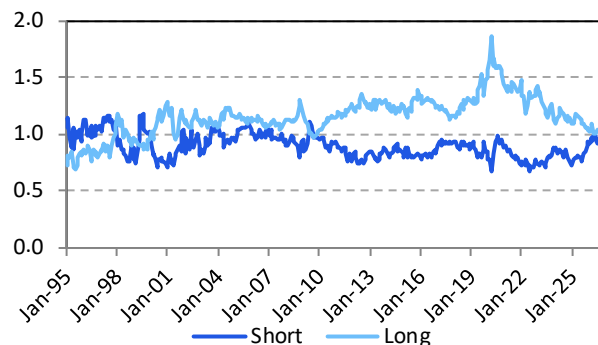
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 70. Value



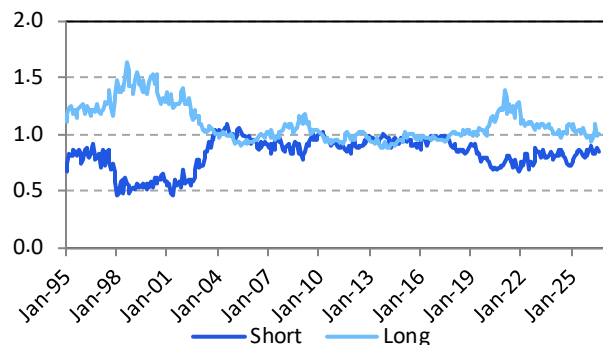
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 71. Low Risk



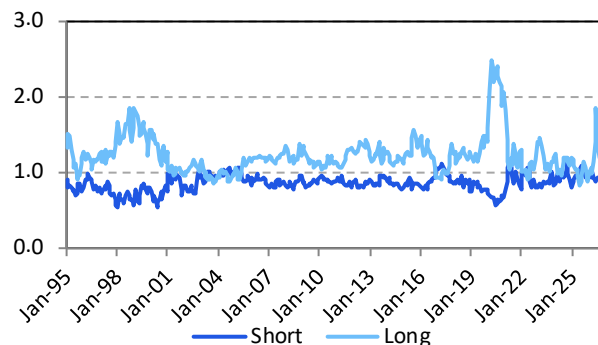
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 72. Size



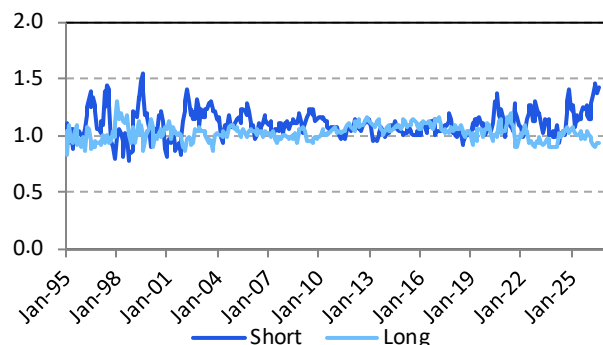
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 73. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

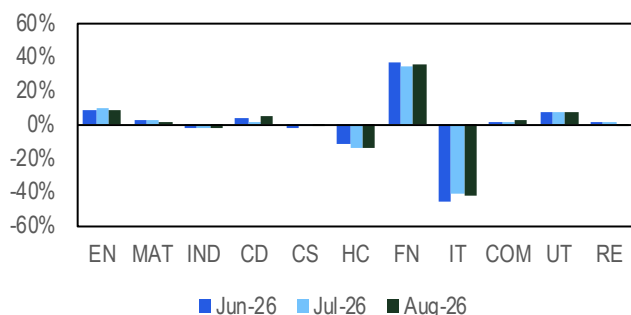
Figure 74. Quality



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Relative style valuations calculated using median 12-month forward P/E of the respective long and short style quintiles relative to the benchmark median.

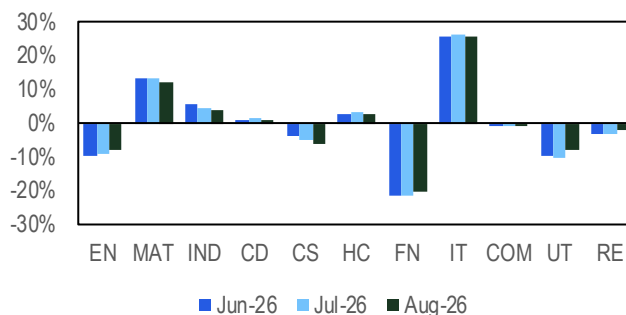
Emerging Markets: Net Sector Weights

Figure 75. Value



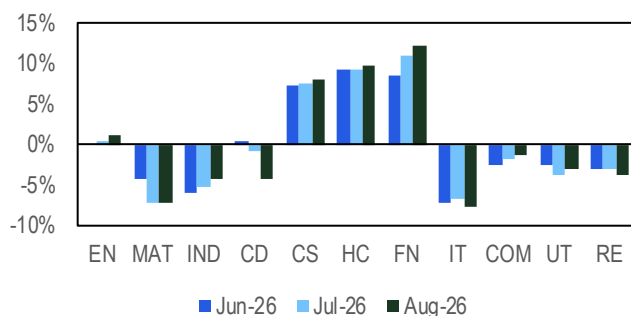
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Source: Citi Research, MSCI

Figure 76. Growth



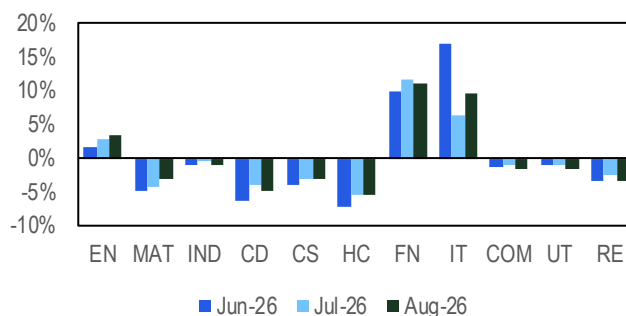
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Source: Citi Research, MSCI

Figure 77. Low Risk



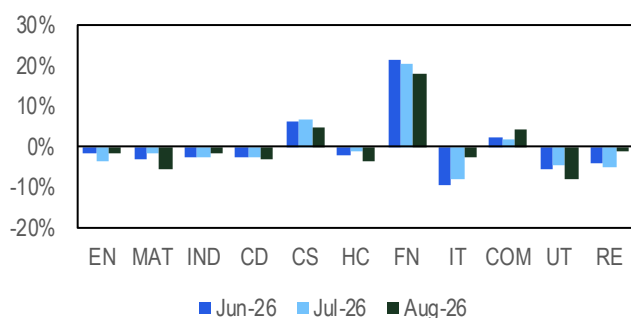
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Source: Citi Research, MSCI

Figure 78. Size



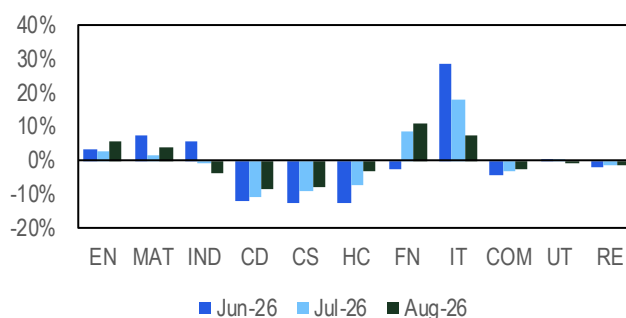
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Source: Citi Research, MSCI

Figure 79. Quality



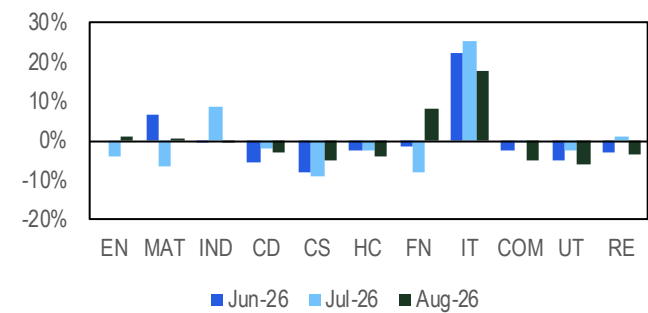
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Source: Citi Research, MSCI

Figure 80. Price Momentum



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Source: Citi Research, MSCI

Figure 81. Estimates Momentum



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Source: Citi Research, MSCI

US

US: Factor Performance and Volatility

Figure 82. Factor Performance and Volatility

Period	Date	MSCI US	Value	Growth	Low Risk	Size	Quality	PMOM	EMOM
Monthly Performance	Sep-25	3.7%	-2.8%	1.4%	-3.5%	4.4%	0.2%	5.7%	3.4%
	Oct-25	2.4%	-4.1%	5.8%	-2.5%	3.7%	-0.6%	2.5%	1.3%
	Nov-25	0.0%	6.2%	-6.0%	4.0%	-1.5%	0.5%	-1.1%	-2.5%
	Dec-25	0.0%	3.0%	1.2%	-2.0%	1.2%	0.4%	-3.4%	-1.8%
	Jan-26	1.3%	5.7%	-8.4%	-0.3%	0.9%	-1.8%	4.4%	-1.4%
	Feb-26	-0.9%	4.9%	-9.3%	2.7%	0.4%	-1.3%	2.6%	-2.1%
	Mar-26	-4.9%	3.3%	-0.1%	2.4%	0.9%	-0.4%	1.4%	-1.9%
	Apr-26	10.5%	-10.5%	6.6%	-14.5%	0.5%	-4.3%	8.1%	1.7%
	May-26	5.3%	-11.0%	11.1%	-9.9%	2.9%	-1.2%	3.0%	3.0%
	Jun-26	-0.9%	-1.6%	0.6%	-0.7%	1.3%	3.1%	6.5%	1.3%
Quarterly Performance	Jul-26	-0.1%	16.7%	-7.1%	12.9%	-5.2%	4.0%	-13.1%	-2.4%
	Aug-26	2.8%	-3.5%	3.1%	-0.1%	1.1%	-2.1%	-10.2%	-2.1%
	Sep-23	-3.1%	7.7%	3.3%	0.2%	1.8%	2.3%	0.1%	-0.5%
	Dec-23	11.9%	-2.8%	-0.3%	-9.2%	-4.3%	-6.6%	-3.1%	-8.2%
	Mar-24	10.4%	3.3%	2.4%	-0.8%	4.4%	3.4%	13.9%	5.8%
	Jun-24	4.0%	-3.8%	2.0%	1.9%	8.0%	0.9%	4.8%	4.0%
	Sep-24	5.9%	2.7%	-2.1%	-0.1%	-3.7%	0.9%	-1.9%	-1.3%
	Dec-24	2.8%	-8.5%	12.5%	-4.2%	0.6%	2.1%	5.8%	6.7%
	Mar-25	-4.5%	9.4%	-8.8%	9.5%	3.3%	0.4%	-2.5%	-1.2%
	Jun-25	11.4%	-15.2%	17.3%	-11.9%	6.0%	1.8%	3.4%	0.1%
Annualized Vol over a Month	Sep-25	8.1%	1.9%	0.3%	-6.6%	3.5%	-0.1%	2.3%	2.6%
	Dec-25	2.4%	4.9%	0.7%	-0.6%	3.4%	0.3%	-2.0%	-3.0%
	Mar-26	-4.5%	14.5%	-17.0%	4.9%	2.3%	-3.5%	8.6%	-5.3%
	Jun-26	15.3%	-21.6%	19.2%	-23.5%	4.7%	-2.5%	18.6%	6.1%
	Sep-25	11.6%	11.6%	10.8%	10.8%	9.4%	5.5%	10.2%	8.9%
	Oct-25	146.6%	14.2%	14.1%	17.9%	9.3%	6.9%	13.0%	8.8%
	Nov-25	12.7%	18.1%	18.8%	18.0%	12.8%	6.9%	17.0%	15.2%
	Dec-25	11.6%	17.1%	16.8%	13.0%	7.0%	7.4%	14.0%	9.6%
	Jan-26	13.3%	22.3%	19.3%	17.4%	8.2%	8.5%	17.4%	13.6%
	Feb-26	17.5%	24.7%	30.9%	18.2%	15.7%	11.4%	22.3%	19.0%
Annualized Vol over a Quarter	Mar-26	16.9%	19.4%	20.3%	19.2%	10.0%	6.3%	29.0%	11.3%
	Apr-26	23.5%	21.9%	20.4%	20.5%	9.3%	7.2%	22.0%	10.1%
	May-26	23.6%	20.5%	15.3%	28.1%	10.8%	11.3%	28.4%	12.5%
	Jun-26	24.1%	35.6%	28.9%	36.3%	19.2%	8.3%	39.4%	21.3%
	Jul-26	30.8%	30.2%	28.9%	31.1%	18.9%	8.2%	48.3%	20.3%
	Aug-26	30.3%	25.8%	21.6%	27.5%	8.7%	10.0%	24.5%	19.4%
	Sep-23	11.2%	14.5%	10.7%	12.1%	7.1%	9.0%	12.3%	9.0%
	Dec-23	12.1%	12.4%	9.0%	18.0%	16.1%	15.6%	16.5%	12.7%
	Mar-24	10.9%	16.0%	11.4%	9.5%	8.7%	8.4%	15.0%	7.5%
	Jun-24	10.2%	16.5%	11.3%	10.9%	8.1%	6.8%	13.2%	8.1%
Annualized Vol over a Quarter	Sep-24	16.6%	15.5%	14.5%	16.6%	10.0%	7.0%	13.6%	11.4%
	Dec-24	12.7%	16.6%	13.3%	10.5%	7.5%	6.6%	15.4%	9.9%
	Mar-25	16.5%	20.0%	21.1%	16.2%	10.8%	6.1%	17.6%	13.4%
	Jun-25	26.2%	10.8%	13.2%	23.4%	9.0%	7.6%	20.2%	12.4%
	Sep-25	8.7%	15.1%	13.6%	12.9%	11.9%	6.9%	19.6%	9.6%
	Dec-25	13.1%	16.3%	16.9%	16.7%	10.0%	7.3%	14.9%	11.4%
	Mar-26	14.6%	22.4%	24.3%	17.8%	11.7%	8.7%	23.5%	15.1%
	Jun-26	14.0%	27.8%	23.0%	30.1%	14.1%	9.5%	31.4%	15.8%

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Source: Citi Research, MSCI

US: Last Month's Style Leaders and Laggard

Figure 83. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, Last Month

	Quantile Perf.	Pure Perf.	Cons Disc	Cons Staples	Energy	Financials	Health Care	Industrial	Info Tech	Materials	Telcos	Utils
Valuation	-3.5%	-2.1%	-14.5%	4.5%	4.1%	-6.9%	-5.1%	7.8%	-0.6%	0.5%	0.7%	-11.3%
Earnings Yield - 12 month forward	-1.4%		-12.9%	4.4%	1.2%	-7.4%	-3.2%	8.5%	-1.6%	15.0%	-2.1%	-12.0%
Earnings Yield- 12 month historical	-0.9%		-7.5%	4.4%	1.6%	-7.9%	-3.3%	6.1%	3.0%	15.2%	3.9%	-12.1%
Cash Flow To Price	-1.1%		-9.4%	4.6%	-1.6%		-3.0%	7.0%	6.3%	7.9%	0.2%	-8.5%
Dividend Yield	-7.5%		-1.6%	6.7%	-3.4%	-6.6%	-0.8%	4.6%	-0.2%	-7.3%	5.5%	1.2%
Book to Price Ratio	-1.4%		-3.7%	3.7%	-1.4%	-5.7%	-3.1%	4.7%	0.0%	3.9%	-0.9%	-4.8%
Sales to Price Ratio	-3.8%		-7.3%	3.2%	14.3%		-11.1%	3.9%	1.6%	-13.0%	0.8%	-10.7%
EBITDA / EV	-4.1%		-6.5%	4.6%	2.8%		-3.6%	6.3%	-10.8%	3.8%	-3.9%	-7.4%
Sales / EV	-3.2%		-6.0%	1.1%	14.3%		-10.8%	2.9%	0.9%	-8.6%	2.3%	-5.8%
Growth	3.1%	-0.5%	1.1%	-13.3%	-4.7%	8.5%	5.1%	-4.2%	-4.8%	5.1%	0.7%	-5.4%
Earnings Growth (12 month forward)	2.3%		5.5%	3.6%	7.7%	8.9%	2.1%	-5.5%	-2.2%	3.4%	-7.4%	2.6%
SB Growth-Value Score	3.1%		9.6%	-3.8%	-1.4%	7.9%	0.7%	-1.0%	6.1%	-13.7%	-6.3%	0.3%
One Year Sales Growth	4.7%		0.5%	-5.1%	-7.1%		2.0%	-5.2%	5.9%	8.1%	4.5%	2.1%
Long Term Earnings Growth	1.4%		-4.2%	-12.0%	-2.4%	5.0%	3.8%	-3.6%	-4.4%	11.4%	-3.3%	-1.0%
One Year EPS Growth	0.2%		-3.2%	-12.2%	1.0%	1.2%	-4.1%	-2.8%	-1.9%	19.5%	-2.9%	-11.1%
One Year DPS Growth (based on LTM)	-4.3%		-2.6%	-6.7%	2.0%	2.7%	0.8%	-4.1%	-4.5%	-7.2%	-2.0%	-1.8%
Low Risk	-0.1%	1.6%	2.1%	-4.8%	-11.2%	-6.9%	2.7%	1.7%	11.1%	14.6%	2.5%	1.8%
Debt to Equity (Inverted)	6.2%		3.7%	-1.2%	-6.4%		1.7%	-1.2%	14.0%	9.9%	-7.3%	8.4%
Earnings Stability	-1.5%		-3.9%	-6.0%	-5.1%	2.6%	-0.3%	0.3%	0.6%	6.2%	-1.4%	-0.9%
Beta against MSCI AC World	-1.1%		4.4%	-5.0%	-4.2%	-8.3%	1.0%	4.3%	13.2%	-4.1%	3.7%	1.6%
Beta against MSCI Country Index	-2.6%		-0.4%	-4.2%	-6.0%	-9.1%	0.6%	5.0%	5.6%	1.4%	2.4%	1.6%
Size (Market Cap)	1.1%	0.5%	3.8%	-6.0%	6.0%	1.5%	2.9%	-4.8%	-5.8%	4.2%	-1.2%	-0.0%
Quality	-2.1%	-2.7%	-0.2%	-0.7%	-3.4%	-6.5%	1.8%	0.9%	-5.3%	8.0%	0.9%	-2.5%
Earnings Certainty	-5.7%		-7.4%	-4.4%	-9.9%	-5.7%	-4.8%	3.7%	-4.5%	-14.6%	-8.0%	-0.1%
Return on Equity	-5.6%		-3.4%	-6.4%	3.8%	-1.2%	-2.2%	-2.1%	-18.6%	-1.1%	-6.3%	-1.5%
Net Profit Margin on Sales	-1.6%		-1.7%	-4.7%	-10.5%		3.8%	0.4%	-13.2%	13.1%	-7.4%	3.9%
Margin Growth	0.3%		2.3%	3.2%	5.0%	-8.4%	3.2%	0.9%	-7.1%	7.4%	-12.5%	4.5%
Earnings Quality (Accruals) (Inverted)	-0.0%		3.9%	3.6%	3.9%		-0.8%	-1.0%	-6.0%	4.4%	10.9%	4.7%
Balance Sheet Quality (NOA) (Inverted)	4.3%		4.4%	-1.6%	7.0%		7.9%	-2.9%	11.7%	1.9%	6.4%	-8.6%
Price Momentum	-10.2%	-8.0%	-4.1%	-4.4%	7.8%	-6.8%	-3.7%	-6.3%	-20.7%	-10.9%	-9.2%	-6.3%
3 months	-4.3%		-0.3%	0.6%	4.3%	-4.8%	-3.9%	1.2%	-2.4%	-14.5%	-5.8%	-4.2%
12 months	-8.6%		-9.3%	-2.6%	6.5%	-5.4%	-2.5%	-9.8%	-25.4%	3.5%	-10.1%	-2.9%
First 11 months	-8.6%		-9.7%	-2.6%	11.9%	-4.9%	-1.6%	-9.6%	-24.5%	2.4%	-10.0%	-3.3%
Estimates Momentum	-2.1%	2.1%	3.6%	-0.9%	13.7%	2.5%	3.0%	-2.3%	-15.8%	-6.1%	6.2%	-1.2%
1 Month Change in Earnings Forecast	1.5%		5.1%	1.7%	7.0%	5.5%	1.8%	-1.8%	-9.4%	-6.0%	-0.6%	-1.6%
Earnings Revision	-2.7%		-3.1%	-1.8%	13.1%	-1.2%	-2.2%	-4.6%	-17.5%	-9.7%	0.5%	4.4%
Sales Revisions	-4.7%		4.3%	-1.5%	5.8%		2.3%	-4.7%	-17.3%	-4.9%	-0.4%	1.7%
Cash Revisions	-2.3%		2.8%	1.8%	13.1%		-1.8%	-1.6%	-10.4%	-1.3%	-9.6%	-2.8%

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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See appendix for more information

US: LTM Leaders and Laggards

Figure 84. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, LTM

	Quantile Perf.	Pure Perf.	Cons Disc	Cons Staples	Energy	Financials	Health Care	Industrials	Info Tech	Materials	Telcos	Utils
Valuation	1.1%	7.2%	-1.2%	6.2%	18.4%	12.4%	25.3%	-8.0%	-1.4%	51.6%	30.1%	4.1%
Earnings Yield - 12 month forward	3.4%		5.2%	-3.1%	0.8%	9.2%	33.2%	-9.9%	-12.5%	31.1%	25.6%	0.1%
Earnings Yield- 12 month historical	3.2%		5.8%	4.0%	4.1%	10.2%	26.7%	-15.5%	-13.2%	35.7%	34.0%	3.7%
Cash Flow To Price	0.8%		8.6%	9.5%	-10.5%		8.5%	-7.5%	0.8%	90.5%	29.2%	6.7%
Dividend Yield	6.0%		18.8%	9.0%	3.3%	12.2%	23.4%	-8.5%	8.6%	20.3%	16.8%	23.5%
Book to Price Ratio	6.3%		-9.1%	-0.0%	-19.9%	8.6%	16.5%	-6.6%	7.0%	37.4%	32.1%	13.8%
Sales to Price Ratio	-3.2%		-3.4%	2.0%	55.5%		7.0%	-0.6%	18.0%	31.6%	45.7%	-0.1%
EBITDA / EV	-6.5%		1.7%	8.4%	12.5%		6.4%	-10.4%	-18.7%	59.3%	52.8%	3.3%
Sales / EV	-3.3%		-1.3%	1.3%	55.3%		12.6%	-3.7%	18.9%	31.2%	42.1%	3.8%
Growth	-5.3%	0.7%	-11.7%	-6.1%	-3.2%	-2.4%	-27.8%	10.4%	-3.5%	-14.0%	-25.8%	-9.0%
Earnings Growth (12 month forward)	3.2%		-6.9%	12.8%	3.4%	-2.0%	-18.9%	18.7%	33.8%	4.9%	-23.9%	-9.5%
SB Growth- Value Score	-4.7%		2.3%	-3.8%	-5.8%	1.6%	-14.2%	-9.6%	-25.3%	-2.9%	-22.8%	-15.5%
One Year Sales Growth	-8.2%		-11.0%	-4.4%	-22.5%		-9.6%	-0.2%	11.4%	3.2%	-38.2%	8.4%
Long Term Earnings Growth	-7.4%		-10.4%	-5.2%	6.8%	5.5%	-27.7%	1.2%	2.3%	-30.6%	-16.9%	-3.5%
One Year EPS Growth	0.4%		-3.9%	-2.1%	7.3%	-10.6%	-23.0%	4.6%	20.3%	5.2%	8.9%	-17.8%
One Year DPS Growth (based on LTM)	-4.9%		0.4%	4.9%	43.7%	3.3%	-20.7%	1.9%	-23.8%	-15.0%	-0.3%	-8.7%
Low Risk	-9.5%	-8.3%	4.7%	-5.4%	-30.7%	4.5%	-1.6%	-19.3%	-37.2%	-5.8%	-6.9%	16.6%
Debt to Equity (Inverted)	10.2%		-2.8%	-4.5%	-19.2%		14.5%	-5.5%	3.4%	19.9%	-4.1%	2.1%
Earnings Stability	-6.2%		-1.1%	2.1%	-1.4%	7.8%	-29.3%	-8.8%	-32.8%	-26.8%	-2.0%	10.0%
Beta against MSCI AC World	-10.2%		-2.7%	-15.2%	-0.9%	5.6%	19.8%	-21.7%	-38.0%	-1.4%	27.0%	8.4%
Beta against MSCI Country Index	-11.6%		-9.0%	-13.9%	-5.2%	6.9%	6.9%	-18.1%	-20.6%	13.3%	24.6%	16.6%
Size (Market Cap)	2.7%	3.2%	1.6%	-3.1%	10.5%	-8.7%	-3.2%	7.7%	-1.3%	-23.9%	4.4%	-5.5%
Quality	-4.2%	-3.0%	19.7%	9.7%	14.5%	-7.4%	-19.8%	1.3%	-15.7%	-1.0%	9.2%	12.7%
Earnings Certainty	-16.9%		16.9%	-9.8%	-23.9%	5.0%	-20.7%	-15.6%	-42.6%	-23.0%	23.2%	11.5%
Return on Equity	-8.0%		19.4%	11.0%	17.9%	-2.2%	-17.6%	-8.1%	-25.1%	-18.6%	17.3%	-7.1%
Net Profit Margin on Sales	-4.8%		11.7%	10.4%	-36.3%		-15.5%	-13.2%	-25.7%	-0.7%	13.3%	10.9%
Margin Growth	3.1%		-12.0%	26.3%	12.8%	-11.7%	-12.9%	5.3%	-2.9%	-5.3%	-24.6%	23.9%
Earnings Quality (Accruals) (Inverted)	-4.9%		2.5%	-8.2%	15.4%		20.3%	-2.1%	-22.5%	13.3%	11.0%	4.2%
Balance Sheet Quality (NOA) (Inverted)	-1.1%		14.6%	0.8%	32.0%		20.0%	6.6%	-2.1%	14.2%	-18.2%	-10.7%
Price Momentum	0.5%	8.5%	8.3%	-4.6%	6.9%	2.1%	5.3%	11.6%	35.2%	-35.8%	9.0%	-7.4%
3 months	-5.0%		-10.7%	-3.6%	-9.5%	-17.0%	9.4%	31.2%	24.6%	-37.8%	-29.5%	-19.6%
12 months	6.0%		3.7%	-3.8%	15.2%	9.5%	10.5%	12.8%	19.9%	-23.3%	17.1%	3.0%
First 11 months	7.7%		18.3%	-3.1%	8.9%	12.7%	1.8%	7.9%	12.4%	-20.8%	4.3%	3.2%
Estimates Momentum	-4.0%	3.5%	11.7%	5.7%	-1.5%	9.8%	-6.5%	12.2%	17.2%	-32.9%	11.6%	-10.9%
1 Month Change in Earnings Forecast	-1.9%		4.6%	-0.5%	0.2%	5.2%	-12.4%	9.7%	9.0%	-29.1%	2.9%	-20.7%
Earnings Revision	-1.9%		-1.5%	-3.6%	2.1%	3.6%	-3.5%	2.3%	5.2%	-21.1%	-17.0%	-11.2%
Sales Revisions	1.6%		12.0%	0.2%	16.1%		-5.2%	11.1%	-13.3%	-8.9%	-5.1%	2.8%
Cash Revisions	0.1%		13.7%	10.8%	-4.8%		-6.5%	-1.7%	14.5%	-21.0%	-47.7%	-10.4%

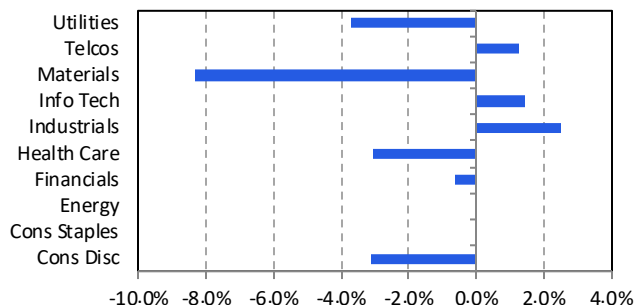
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See appendix for more information.

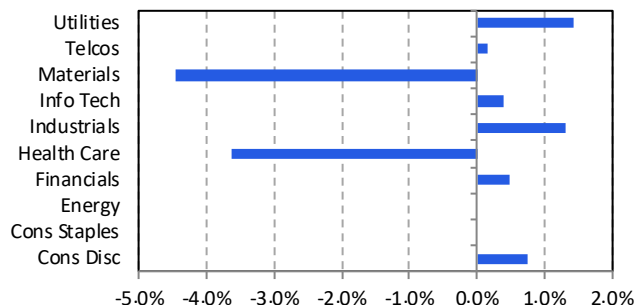
US: Macro Factor Sensitivities⁷: Sectors

Figure 85. GDP Weighted Global Bond Yield (G10)



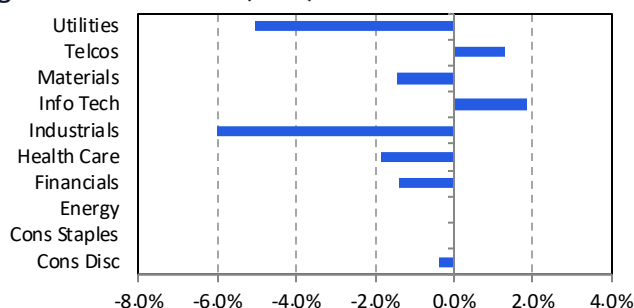
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Source: Citi Research, MSCI

Figure 86. Oil



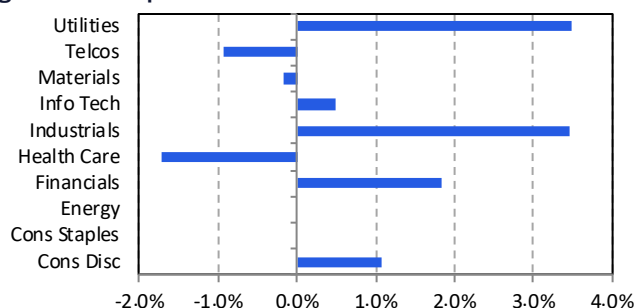
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Source: Citi Research, MSCI

Figure 87. Commodities (GSCI)



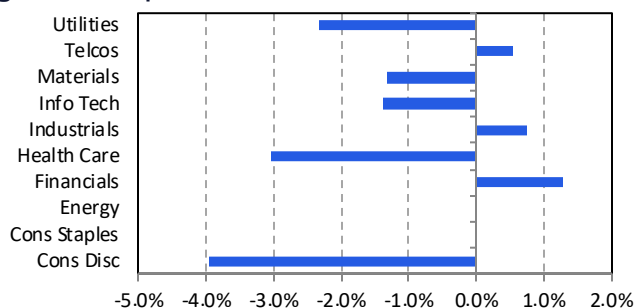
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Source: Citi Research, MSCI

Figure 88. EUR per USD



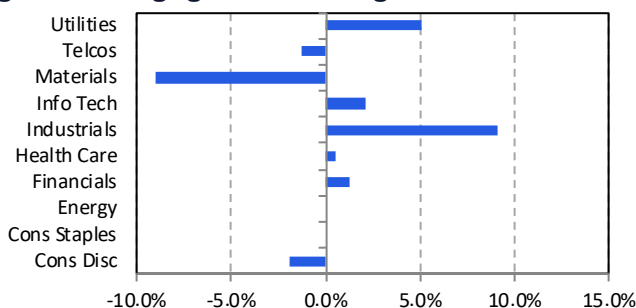
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Source: Citi Research, MSCI

Figure 89. YEN per USD



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Source: Citi Research, MSCI

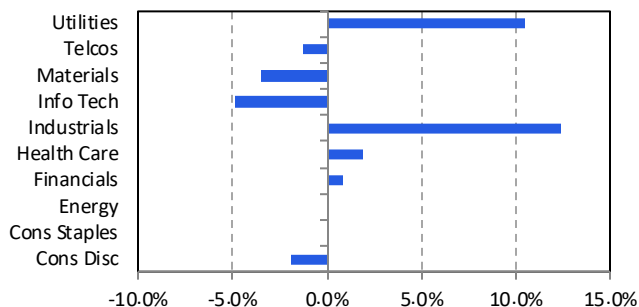
Figure 90. Emerging Market Sovereign Bond Yield



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Source: Citi Research, MSCI

⁷ The above charts illustrate predicted *relative returns* from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

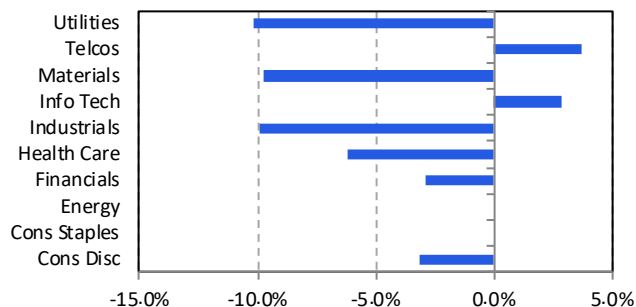
Figure 91. Credit Spreads



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Source: Citi Research, MSCI

Figure 92. Market (MSCI AC World)

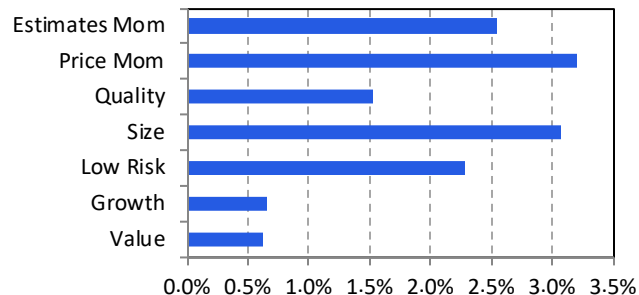


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Source: Citi Research, MSCI

US: Macro Factor Sensitivities⁸: Styles

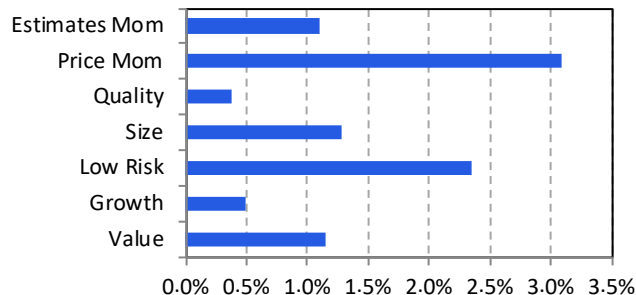
Figure 93. GDP Weighted Global Bond Yield (G10)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

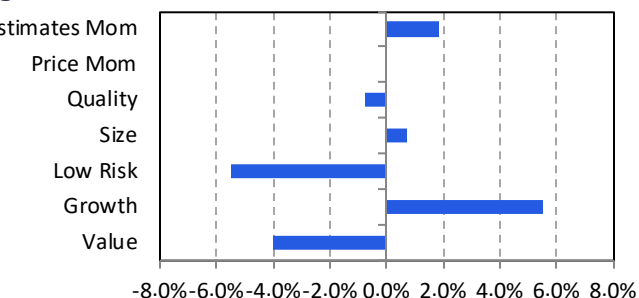
Figure 94. Oil



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

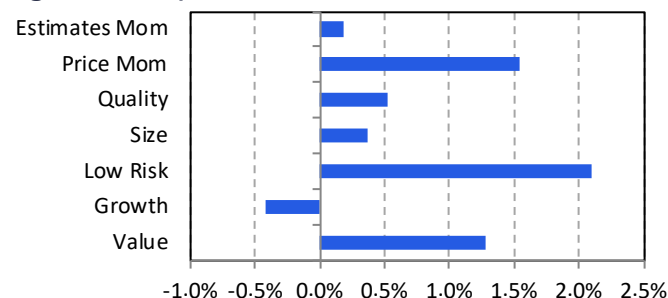
Figure 95. Commodities (GSCI)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 96. EUR per USD

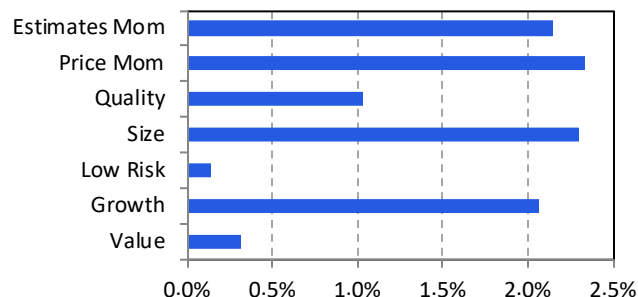


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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

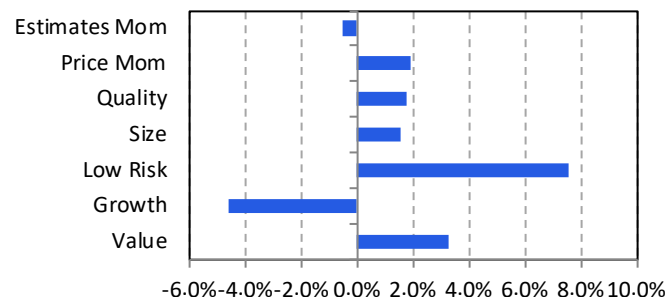
⁸ The above charts illustrate predicted long/short style returns from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

Figure 97. YEN per USD



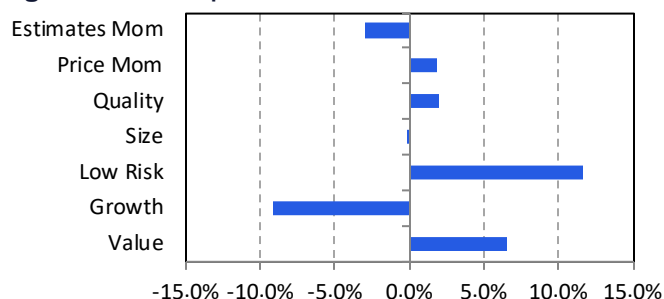
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 98. Emerging Market Sovereign Bond Yield



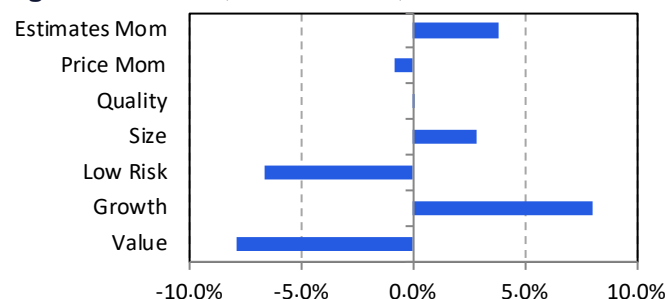
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 99. Credit Spreads



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

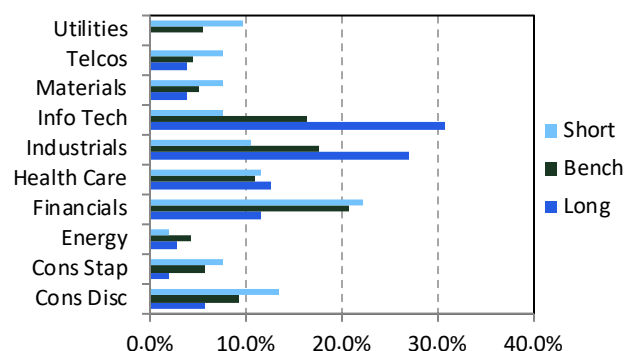
Figure 100. Market (MSCI AC World)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

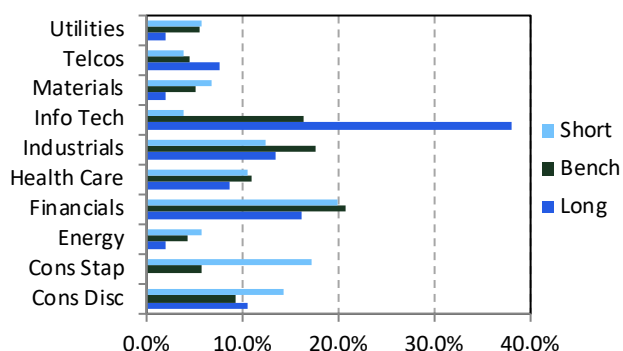
US: Style Sector Composition

Figure 101. Estimates Momentum



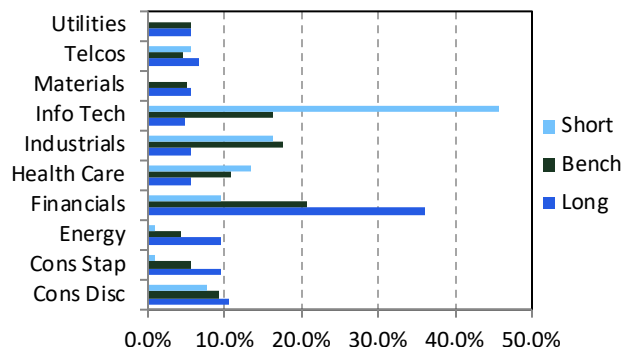
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 102. Growth



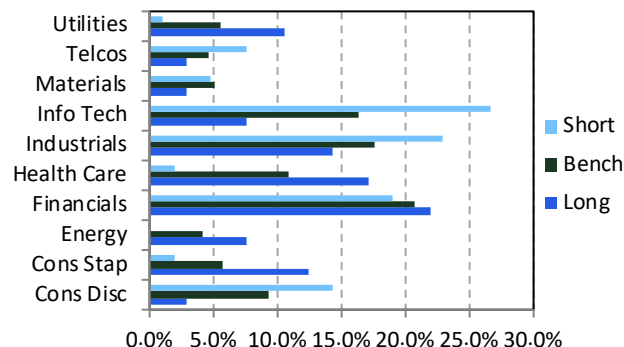
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Figure 103. Value



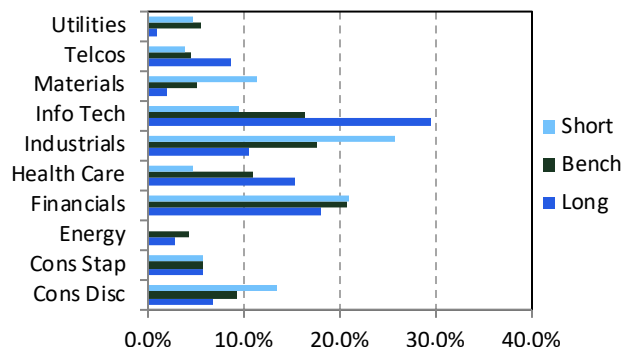
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Figure 104. Low Risk



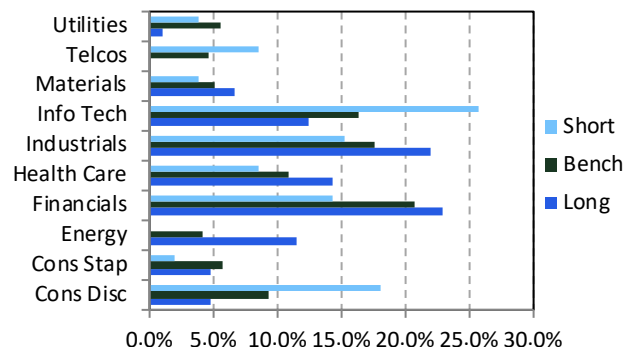
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 105. Size



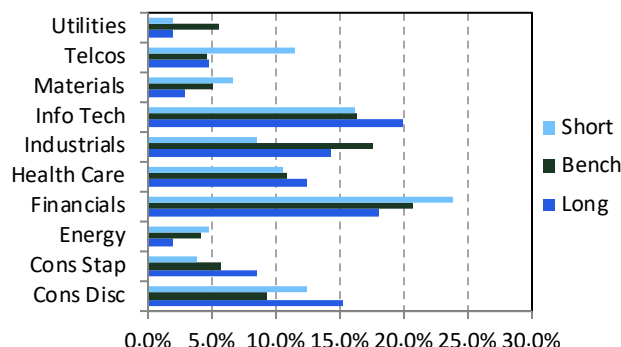
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 106. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

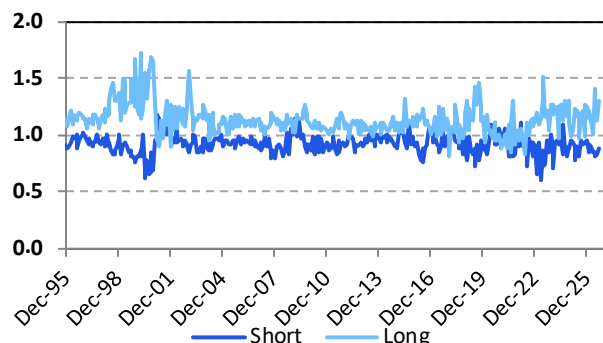
Figure 107. Quality



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Style composition is defined as the proportion of each of the long and short style portfolios coming from the relevant regions, country or sector.

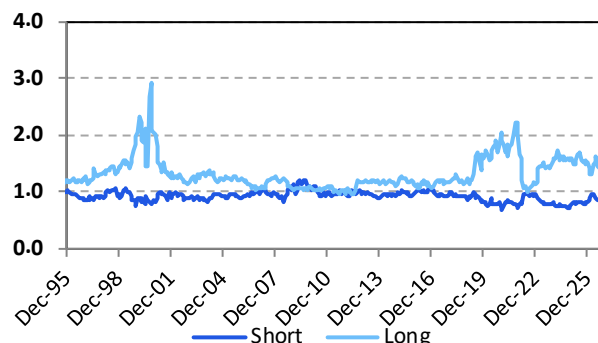
US:

Figure 108. Estimates Momentum



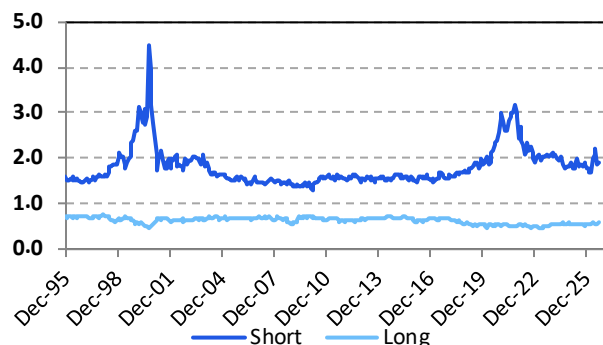
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 109. Growth



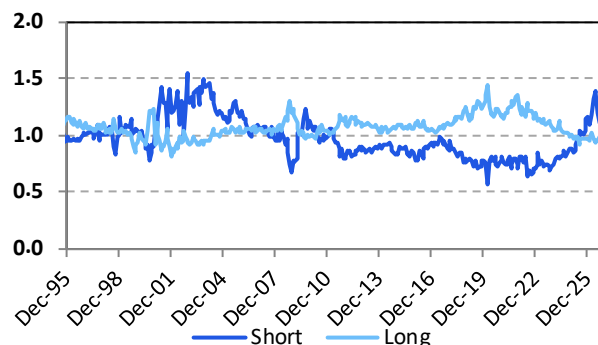
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 110. Value



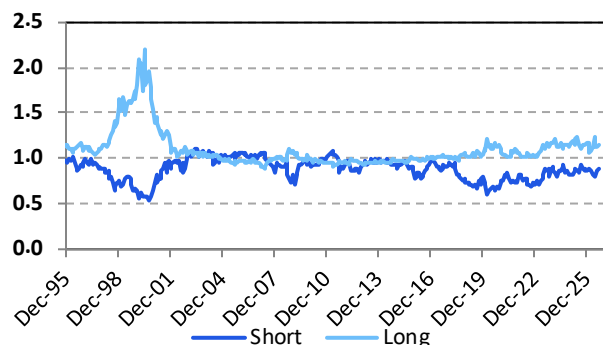
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 111. Low Risk



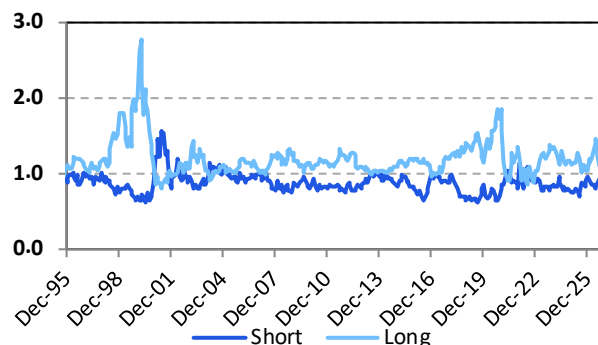
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 112. Size



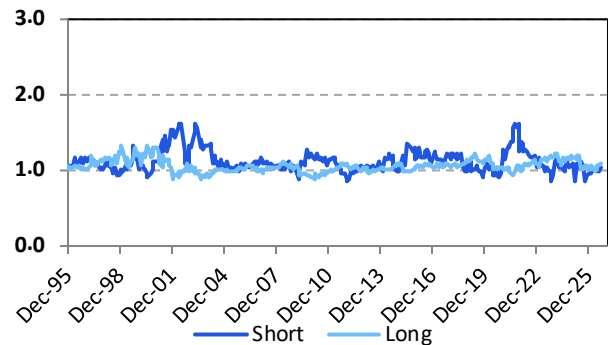
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 113. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 114. Quality

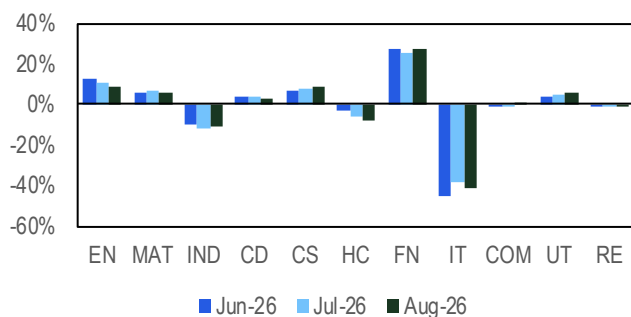


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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Relative style valuations calculated using median 12-month forward P/E of the respective long and short style quintiles relative to the benchmark median.

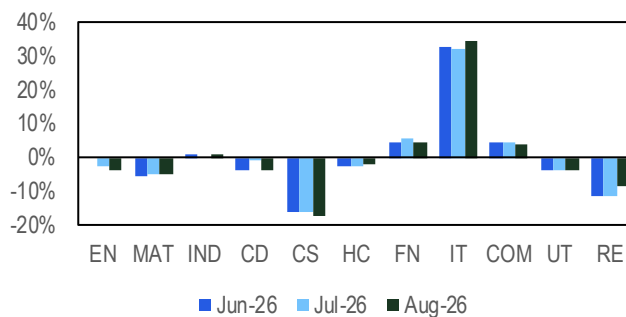
US: Net Sector Weights

Figure 115. Value



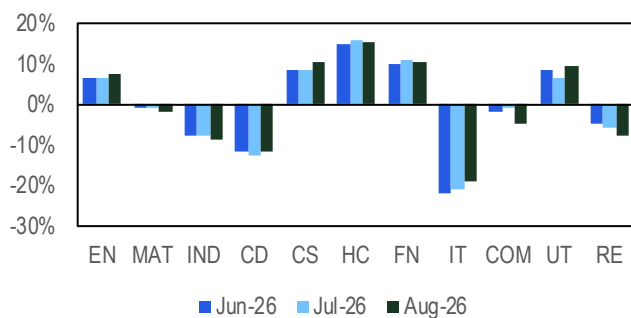
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Source: Citi Research, MSCI

Figure 116. Growth



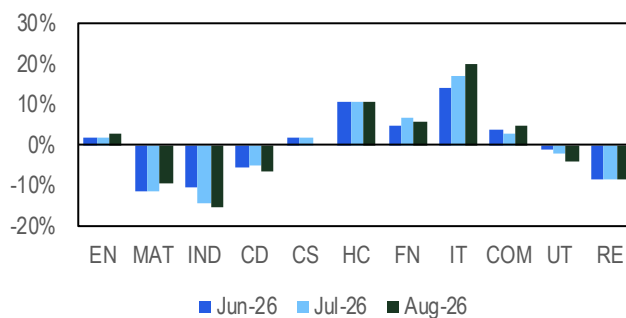
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Source: Citi Research, MSCI

Figure 117. Low Risk



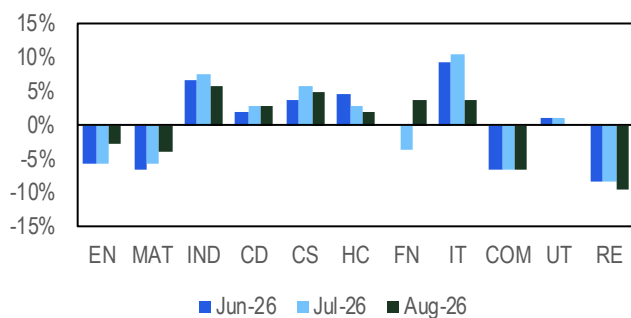
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Source: Citi Research, MSCI

Figure 118. Size



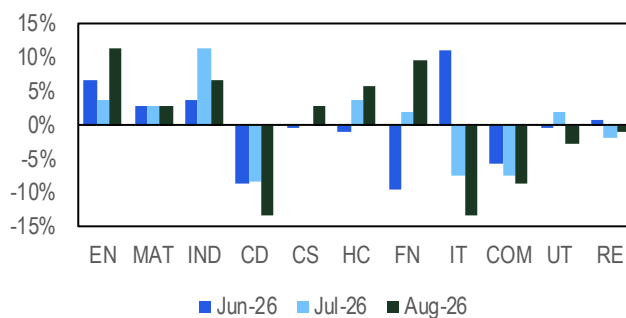
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Source: Citi Research, MSCI

Figure 119. Quality



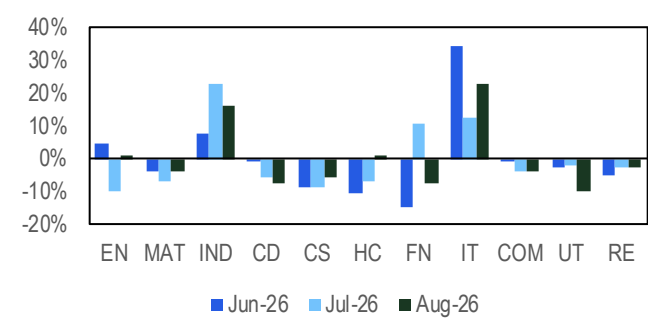
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Figure 120. Price Momentum



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Figure 121. Estimates Momentum



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Europe

Europe: Factor Performance and Volatility

Figure 122. Factor Performance and Volatility

Period	Date	MSCI Europe	Value	Growth	Low Risk	Size	Quality	PMOM	EMOM
Monthly Performance	Sep-25	2.0%	0.3%	1.7%	-1.0%	3.4%	1.4%	3.9%	3.0%
	Oct-25	0.8%	-0.2%	-2.1%	-3.4%	0.9%	-1.0%	0.0%	-1.5%
	Nov-25	1.5%	5.2%	-2.7%	0.0%	2.5%	0.1%	3.2%	0.2%
	Dec-25	3.9%	2.5%	0.8%	-2.6%	1.6%	-1.9%	4.1%	3.0%
	Jan-26	4.5%	-0.3%	-1.1%	0.2%	1.3%	-0.7%	6.4%	2.8%
	Feb-26	3.3%	0.9%	-4.8%	1.1%	0.5%	-0.9%	0.7%	1.1%
	Mar-26	-9.8%	4.8%	-6.0%	5.6%	1.3%	-2.7%	0.1%	-0.8%
	Apr-26	7.3%	0.7%	1.4%	-5.5%	0.7%	-1.6%	2.2%	0.6%
	May-26	2.8%	-3.0%	3.0%	-6.8%	-2.2%	-3.7%	-1.9%	-4.0%
	Jun-26	1.0%	0.7%	1.0%	-0.6%	2.8%	4.2%	2.3%	1.3%
Quarterly Performance	Jul-26	1.6%	10.0%	-3.4%	2.9%	-3.9%	0.5%	-8.0%	-2.7%
	Aug-26	1.4%	-2.0%	2.4%	1.6%	-2.2%	-0.3%	-2.3%	0.1%
	Sep-23	-4.9%	10.4%	-1.9%	-2.1%	-4.2%	-0.7%	-2.8%	1.6%
	Dec-23	11.1%	-7.5%	-4.8%	-4.6%	-7.0%	0.0%	-0.5%	-3.3%
	Mar-24	5.4%	-0.3%	4.2%	0.7%	9.2%	8.9%	9.9%	0.3%
	Jun-24	0.9%	4.0%	0.6%	0.7%	-1.2%	1.7%	1.4%	-1.2%
	Sep-24	6.6%	-2.8%	1.7%	0.4%	-5.5%	-5.2%	-0.2%	-0.4%
	Dec-24	-9.7%	3.4%	7.7%	-0.1%	3.7%	2.5%	7.3%	2.8%
	Mar-25	10.6%	13.4%	-3.9%	6.0%	6.6%	0.9%	10.2%	-0.2%
	Jun-25	11.8%	2.3%	5.9%	-5.6%	-4.3%	-1.4%	7.9%	5.6%
Annualized Vol over a Month	Sep-25	3.7%	8.0%	0.2%	-2.6%	4.8%	-4.0%	6.6%	8.1%
	Dec-25	6.3%	7.5%	-4.1%	-5.9%	5.1%	-2.8%	7.4%	1.7%
	Mar-26	-2.7%	5.5%	-11.5%	6.9%	3.1%	-4.4%	7.3%	3.1%
	Jun-26	11.3%	-1.6%	5.5%	-12.5%	1.2%	-1.2%	2.6%	-2.2%
	Sep-25	10.5%	11.5%	8.6%	9.1%	8.8%	5.9%	12.0%	8.5%
	Oct-25	10.9%	10.0%	8.3%	7.3%	7.9%	6.0%	13.5%	9.4%
	Nov-25	13.9%	7.8%	8.6%	9.5%	8.7%	7.1%	14.6%	8.9%
	Dec-25	7.6%	7.3%	6.3%	6.2%	6.5%	3.9%	11.8%	7.9%
	Jan-26	9.6%	15.5%	11.7%	10.9%	9.8%	9.4%	13.3%	6.9%
	Feb-26	11.0%	13.9%	15.2%	7.0%	14.0%	11.7%	28.8%	15.8%
Annualized Vol over a Quarter	Mar-26	25.1%	8.3%	15.1%	11.7%	6.6%	6.9%	15.3%	10.6%
	Apr-26	24.4%	11.8%	16.5%	16.7%	9.4%	5.1%	20.8%	10.5%
	May-26	17.4%	8.6%	12.4%	15.3%	7.0%	7.3%	18.3%	13.8%
	Jun-26	14.1%	11.4%	11.1%	16.2%	8.9%	7.3%	19.3%	13.5%
	Jul-26	14.1%	10.1%	11.0%	14.5%	12.4%	5.5%	29.0%	14.8%
	Aug-26	6.8%	12.6%	8.3%	8.3%	6.0%	4.9%	12.9%	8.4%
	Sep-23	13.5%	9.6%	6.5%	7.8%	8.6%	7.5%	9.1%	5.6%
	Dec-23	13.7%	8.4%	5.1%	13.2%	12.9%	10.7%	14.8%	10.1%
	Mar-24	10.5%	9.9%	5.2%	8.9%	6.5%	7.6%	10.9%	5.7%
	Jun-24	12.9%	11.0%	7.4%	9.7%	6.9%	8.2%	9.9%	6.5%
Annualized Vol over a Quarter	Sep-24	13.1%	12.0%	8.0%	11.4%	6.3%	7.4%	13.7%	10.6%
	Dec-24	12.5%	11.7%	7.4%	7.5%	6.4%	6.6%	10.6%	8.0%
	Mar-25	15.2%	13.6%	10.5%	12.9%	7.5%	9.0%	12.6%	7.9%
	Jun-25	17.6%	9.5%	8.0%	13.2%	6.7%	8.5%	15.8%	12.4%
	Sep-25	11.1%	9.9%	8.3%	9.8%	8.7%	7.7%	14.0%	9.3%
	Dec-25	10.9%	7.8%	7.6%	7.8%	7.9%	5.7%	13.3%	8.9%
	Mar-26	17.8%	12.5%	13.8%	10.4%	10.5%	9.5%	20.2%	11.6%
	Jun-26	18.4%	10.9%	12.8%	16.3%	8.8%	7.2%	20.0%	13.1%

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Source: Citi Research, MSCI

Europe: Last Month's Style Leaders and Laggards

Figure 123. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, Last Month

	Quantile Perf.	Pure Perf.	Cons Disc	Cons Staples	Energy	Financial s	Health Care	Industrial s	Info Tech	Materials	Telcos	Utils
Valuation	-2.0%	-0.9%	2.7%	-4.3%	2.1%	-3.0%	-3.2%	-1.1%	2.0%	3.9%	-2.9%	-1.5%
Earnings Yield - 12 month forward	0.3%		1.1%	-2.9%	3.7%	-3.0%	-5.9%	-4.2%	6.0%	11.1%	1.2%	2.1%
Earnings Yield- 12 month historical	-0.6%		1.6%	-5.7%	-0.1%	-2.6%	-7.4%	-2.6%	3.7%	5.8%	1.8%	1.7%
Cash Flow To Price	-1.0%		3.0%	-5.2%	3.6%		-4.4%	1.3%	6.0%	6.2%	-3.0%	-4.1%
Dividend Yield	-2.4%		5.0%	-4.3%	6.0%	-0.2%	-5.5%	-6.7%	2.7%	2.1%	-4.4%	1.4%
Book to Price Ratio	-1.4%		-0.9%	-4.7%	-4.2%	-3.9%	-0.2%	-1.0%	0.3%	-3.3%	-1.2%	-0.5%
Sales to Price Ratio	-3.2%		-2.2%	-3.6%	1.7%		3.5%	-2.2%	3.9%	-1.5%	-2.7%	-6.3%
EBITDA / EV	-0.8%		-1.3%	-7.8%	7.3%		0.1%	-1.3%	5.0%	7.1%	-0.6%	-8.3%
Sales / EV	-2.1%		-4.1%	-3.6%	-1.5%		0.4%	-0.1%	3.9%	-0.8%	-0.3%	-6.3%
Growth	2.4%	1.7%	-1.7%	2.5%	4.5%	4.1%	2.2%	0.0%	6.3%	11.5%	1.3%	3.9%
Earnings Growth (12 month forward)	2.2%		-2.9%	6.2%	-2.4%	1.4%	5.9%	1.0%	-5.6%	9.2%	-0.3%	2.2%
SB Growth-Value Score	2.0%		1.5%	6.5%	7.6%	5.4%	0.4%	-1.1%	-9.5%	-4.2%	-0.2%	-3.1%
One Year Sales Growth	2.0%		-2.7%	2.6%	0.7%		2.3%	-3.1%	8.9%	13.7%	3.1%	2.1%
Long Term Earnings Growth	3.6%		-3.6%	2.0%	7.0%	1.5%	-0.9%	-0.1%	2.5%	10.4%	2.1%	0.1%
One Year EPS Growth	0.6%		-2.8%	-3.0%	4.0%	-1.4%	0.0%	-0.6%	10.5%	8.3%	2.7%	-0.6%
One Year DPS Growth (based on LTM)	0.5%		-1.5%	-2.4%	-3.4%	2.8%	-0.4%	-4.8%	7.1%	11.8%	0.3%	0.8%
Low Risk	1.6%	1.1%	3.9%	-4.0%	-4.9%	0.7%	-1.7%	4.0%	19.2%	5.9%	-0.4%	5.8%
Debt to Equity (Inverted)	3.4%		1.1%	1.2%	-6.3%		-1.8%	2.3%	-1.8%	5.8%	3.9%	1.0%
Earnings Stability	1.4%		-1.9%	-3.0%	2.8%	1.2%	-0.2%	4.6%	12.3%	1.1%	4.8%	6.1%
Beta against MSCI AC World	-1.0%		3.7%	-6.7%	2.8%	2.1%	-3.6%	-0.1%	16.9%	2.0%	-1.1%	4.9%
Beta against MSCI Country Index	1.3%		2.8%	-3.9%	-2.9%	3.8%	-3.0%	0.6%	8.6%	-6.4%	-4.3%	-1.1%
Size (Market Cap)	-2.2%	-0.7%	0.5%	-4.7%	-8.8%	-0.2%	-4.3%	-4.3%	-3.9%	-1.5%	-0.9%	-3.7%
Quality	-0.3%	0.4%	7.1%	-5.7%	1.9%	-1.6%	-6.7%	-1.5%	1.3%	4.7%	4.9%	2.1%
Earnings Certainty	-3.1%		1.1%	-5.6%	1.2%	-1.8%	-0.8%	-3.1%	10.3%	-13.5%	6.9%	3.1%
Return on Equity	0.7%		1.8%	1.3%	3.5%	1.6%	-2.4%	-1.4%	1.3%	4.5%	1.0%	3.0%
Net Profit Margin on Sales	2.9%		1.9%	1.3%	0.7%		2.9%	2.8%	3.8%	5.5%	2.7%	5.0%
Margin Growth	0.4%		3.0%	2.4%	-5.4%	-3.0%	-8.2%	-0.9%	-3.4%	4.6%	5.0%	6.6%
Earnings Quality (Accruals) (Inverted)	1.6%		4.2%	-3.7%	3.2%		-9.7%	-0.4%	6.9%	5.2%	-0.1%	-4.9%
Balance Sheet Quality (NOA) (Inverted)	-0.6%		-1.6%	-4.9%	2.1%		-4.1%	-0.1%	-2.2%	4.3%	0.1%	-5.6%
Price Momentum	-2.3%	-2.7%	-0.7%	-1.9%	-0.1%	-3.2%	-5.1%	-2.5%	-14.5%	1.1%	-2.1%	1.3%
3 months	-2.2%		-0.7%	-0.9%	1.5%	-3.2%	-1.0%	-0.4%	-7.8%	-13.0%	3.3%	-0.8%
12 months	-1.9%		-1.9%	0.2%	-1.8%	-3.0%	-5.0%	-0.8%	-14.5%	7.2%	-5.3%	-0.3%
First 11 months	-1.4%		-3.0%	-0.9%	-1.8%	-3.9%	-4.8%	-2.0%	-14.5%	5.4%	-5.3%	-0.4%
Estimates Momentum	0.1%	1.4%	1.0%	-3.9%	5.3%	0.9%	-4.5%	5.8%	-6.9%	-7.7%	1.2%	1.7%
1 Month Change in Earnings Forecast	1.5%		-5.1%	0.1%	-0.5%	1.8%	2.7%	2.9%	-3.4%	-5.5%	-0.6%	5.1%
Earnings Revision	-0.8%		3.3%	-3.6%	2.1%	-0.7%	-4.4%	3.1%	-7.6%	-7.5%	0.9%	3.7%
Sales Revisions	0.2%		-2.9%	0.3%	4.2%		-1.2%	3.5%	2.6%	-9.7%	1.8%	-0.9%
Cash Revisions	-1.4%		5.1%	-2.7%	6.8%		0.7%	3.3%	-10.4%	-3.1%	0.9%	-0.6%

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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Note: That Quantile performance refers to the spread of returns between the top and bottom quintile of styles, while the Pure performance refers to style performance where other sources of risk exposure such as Country, Sector and other style exposure have been removed. Baskets with less than 5 stocks have been removed. See appendix for more information.

Europe: LTM Style Leaders and Laggards

Figure 124. Performance Spread Between High (Top 20%) and Low (Bottom 20%), and Pure Factor Portfolios, LTM

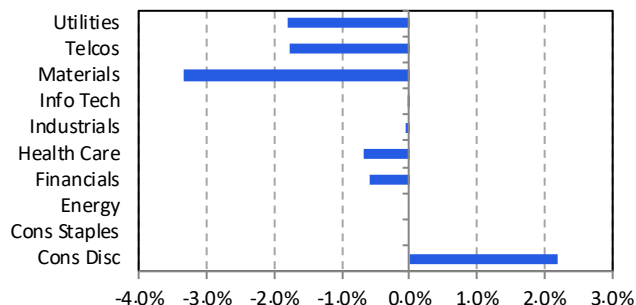
	Quantile Perf.	Pure Perf.	Cons Disc	Cons Staples	Energy	Financials	Health Care	Industrials	Info Tech	Materials	Telcos	Utils
Valuation	11.9%	5.6%	-15.3%	-3.8%	20.3%	24.7%	3.5%	0.2%	-22.2%	12.5%	32.2%	20.8%
Earnings Yield - 12 month forward	8.5%		-29.3%	22.1%	35.1%	19.1%	17.0%	-8.3%	-43.1%	14.5%	19.0%	5.5%
Earnings Yield- 12 month historical	10.8%		-6.4%	6.4%	13.9%	17.3%	13.5%	-2.1%	-54.5%	4.6%	18.4%	13.1%
Cash Flow To Price	10.6%		-5.3%	1.5%	18.3%		4.8%	4.8%	-9.7%	13.9%	52.0%	17.2%
Dividend Yield	4.2%		-11.3%	3.9%	27.7%	18.7%	-11.5%	5.0%	-43.1%	-16.1%	-6.8%	5.8%
Book to Price Ratio	8.0%		-33.6%	0.6%	-7.4%	7.5%	0.7%	2.6%	7.6%	7.4%	60.6%	-5.6%
Sales to Price Ratio	12.3%		2.8%	-0.7%	4.8%		12.2%	4.9%	-34.7%	24.8%	39.4%	4.5%
EBITDA / EV	11.3%		8.2%	-0.4%	9.0%		-6.8%	0.4%	-6.9%	1.3%	43.9%	13.4%
Sales / EV	12.6%		15.2%	-3.3%	30.9%		3.2%	8.3%	-38.0%	22.7%	30.6%	0.2%
Growth	-7.7%	3.9%	22.7%	3.8%	-16.1%	-1.7%	6.5%	-1.8%	-27.4%	-23.2%	-6.2%	2.0%
Earnings Growth (12 month forward)	-6.1%		-8.0%	8.8%	-16.3%	0.1%	-16.8%	-2.8%	11.7%	-3.4%	6.7%	-13.5%
SB Growth-Value Score	-3.7%		18.0%	8.9%	28.5%	0.6%	-1.4%	3.1%	9.7%	-7.6%	-22.1%	-7.0%
One Year Sales Growth	-8.7%		13.1%	2.1%	5.8%		2.7%	1.6%	-18.7%	-28.2%	-27.0%	7.1%
Long Term Earnings Growth	-2.4%		15.5%	16.9%	3.3%	1.1%	-4.6%	-4.9%	-20.9%	-33.8%	-0.3%	7.1%
One Year EPS Growth	-0.5%		17.4%	-1.7%	-18.4%	-12.2%	-5.2%	7.8%	-33.2%	-1.0%	12.0%	15.2%
One Year DPS Growth (based on LTM)	2.5%		5.8%	7.2%	-15.8%	-1.7%	9.2%	-4.1%	-3.7%	-15.4%	-25.4%	-0.5%
Low Risk	-2.2%	-3.5%	-9.6%	-11.0%	-30.6%	-3.9%	-3.7%	-4.2%	-59.7%	-7.3%	-9.0%	-6.2%
Debt to Equity (Inverted)	0.2%		-21.7%	-3.6%	-17.5%		-12.9%	2.8%	49.8%	-20.6%	-16.4%	-12.8%
Earnings Stability	-7.0%		1.2%	6.5%	-16.0%	-2.7%	-6.5%	-1.9%	-49.8%	-18.4%	-6.4%	4.0%
Beta against MSCI AC World	-1.7%		5.3%	-17.9%	12.7%	-3.4%	9.0%	4.1%	-17.3%	-18.8%	27.5%	-16.9%
Beta against MSCI Country Index	-0.9%		5.3%	-6.6%	-20.8%	3.1%	11.1%	1.8%	-44.5%	-14.5%	1.8%	-6.1%
Size (Market Cap)	-2.0%	-1.4%	-24.5%	-14.6%	-10.7%	-6.7%	-8.1%	-7.1%	19.5%	0.0%	-1.0%	-0.9%
Quality	-5.2%	-4.1%	18.4%	-2.7%	32.6%	-8.7%	-13.7%	-9.3%	-11.9%	-19.2%	-17.9%	12.3%
Earnings Certainty	-8.8%		-9.1%	6.6%	3.0%	-1.9%	-11.7%	-12.4%	-45.3%	-23.1%	-19.5%	0.3%
Return on Equity	-5.4%		7.2%	0.5%	30.6%	-7.8%	-2.9%	0.2%	-49.5%	-23.3%	-27.8%	18.9%
Net Profit Margin on Sales	-10.9%		-7.9%	2.7%	19.4%		3.6%	-1.7%	-13.4%	-25.8%	-27.8%	-1.9%
Margin Growth	-6.2%		-16.5%	3.8%	11.5%	-2.5%	-17.1%	-12.1%	-1.4%	-23.7%	-9.3%	4.9%
Earnings Quality (Accruals) (Inverted)	-3.6%		8.7%	8.0%	-21.0%		-19.3%	-14.2%	6.9%	-1.0%	7.3%	1.9%
Balance Sheet Quality (NOA) (Inverted)	7.7%		13.8%	-10.1%	-23.4%		3.9%	-4.0%	-11.4%	16.9%	-18.5%	6.9%
Price Momentum	-1.0%	-1.7%	-11.7%	-19.6%	2.5%	4.3%	-6.3%	-1.6%	13.5%	-17.6%	28.2%	22.0%
3 months	-4.9%		-4.3%	-20.2%	-17.0%	-13.9%	13.8%	-7.3%	49.2%	-2.7%	44.7%	6.7%
12 months	1.9%		-11.5%	-9.2%	4.7%	6.9%	-2.8%	2.7%	15.3%	-10.2%	19.0%	15.5%
First 11 months	3.7%		-8.9%	-12.2%	8.8%	7.2%	-0.1%	3.4%	22.0%	-8.8%	17.0%	15.4%
Estimates Momentum	-1.8%	2.5%	-19.8%	-5.5%	-0.8%	0.6%	1.6%	0.3%	-11.0%	-19.1%	3.1%	17.0%
1 Month Change in Earnings Forecast	-2.7%		-34.9%	-7.4%	-13.3%	-0.8%	10.5%	-2.9%	1.6%	-14.0%	13.0%	30.0%
Earnings Revision	-0.5%		-4.0%	-3.1%	-6.0%	-2.8%	11.6%	-1.9%	-51.1%	-22.5%	-19.2%	6.3%
Sales Revisions	7.1%		-10.0%	0.9%	-4.8%		17.7%	10.9%	14.2%	-15.0%	-2.5%	-6.2%
Cash Revisions	-7.8%		-4.2%	-1.0%	23.2%		4.2%	2.5%	-39.5%	-19.4%	-8.6%	-4.4%

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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

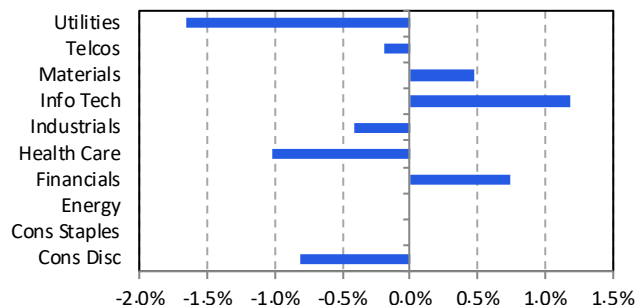
Europe: Macro Factor Sensitivities⁹: Sectors

Figure 125. GDP Weighted Global Bond Yield (G10)



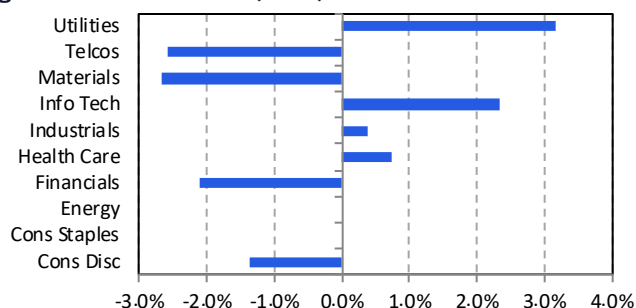
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Source: Citi Research, MSCI

Figure 126. Commodities (GSCI)



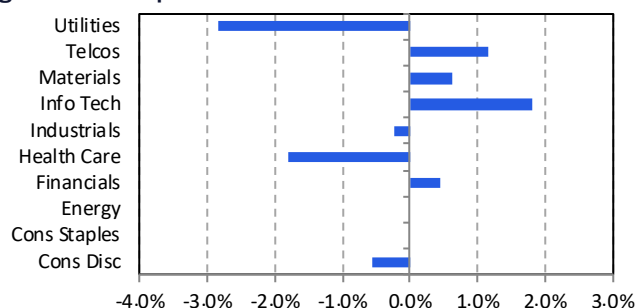
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Source: Citi Research, MSCI

Figure 127. Commodities (GSCI)



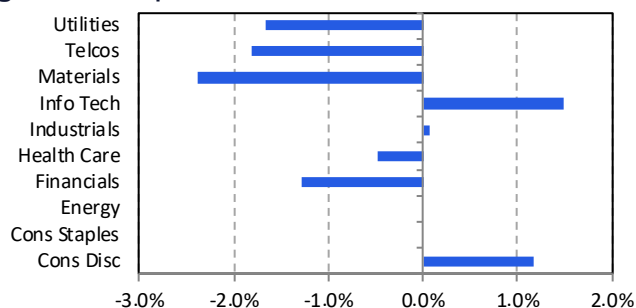
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Source: Citi Research, MSCI

Figure 128. EUR per USD



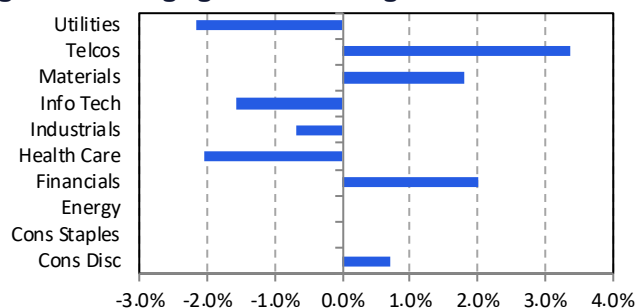
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Source: Citi Research, MSCI

Figure 129. YEN per USD



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Source: Citi Research, MSCI

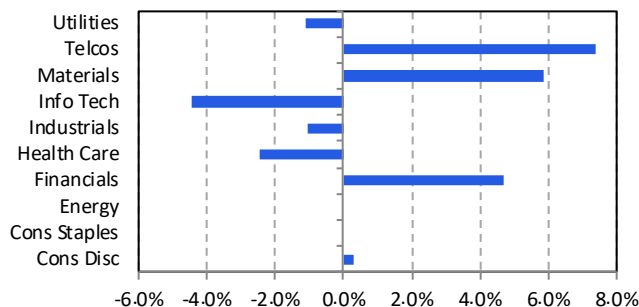
Figure 130. Emerging Market Sovereign Bond Yield



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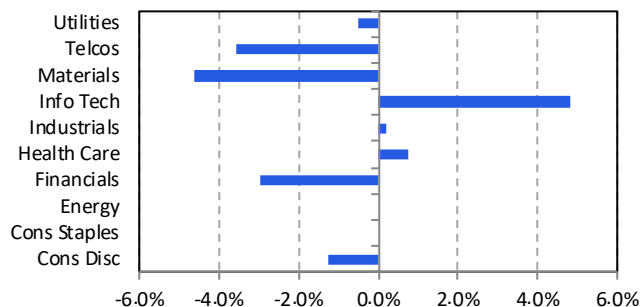
⁹ The above charts illustrate predicted *relative returns* from our proprietary risk model (Global RAM) for a one standard deviation change in the underlying macroeconomic factor.

Figure 131. Credit Spreads



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Source: Citi Research, MSCI

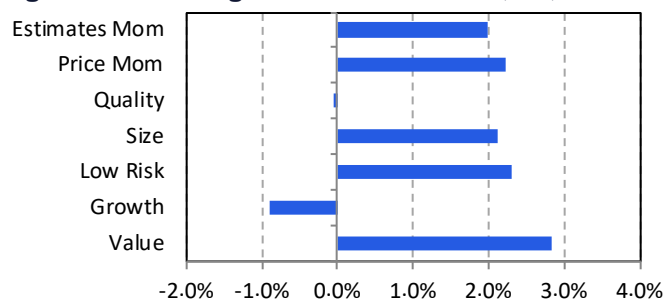
Figure 132. Market (MSCI AC World)



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Source: Citi Research, MSCI

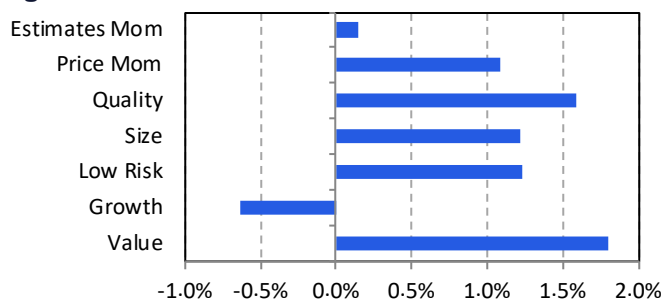
Europe: Macro Factor Sensitivities¹⁰: Styles

Figure 133. GDP Weighted Global Bond Yield (G10)



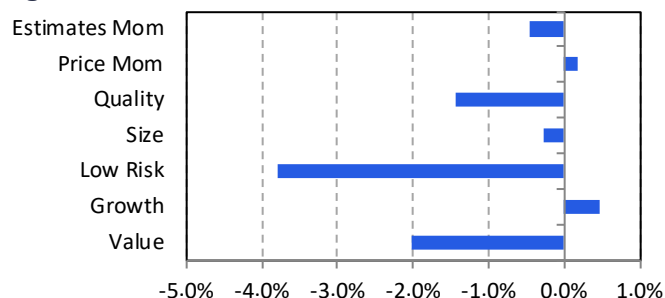
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 134. Oil



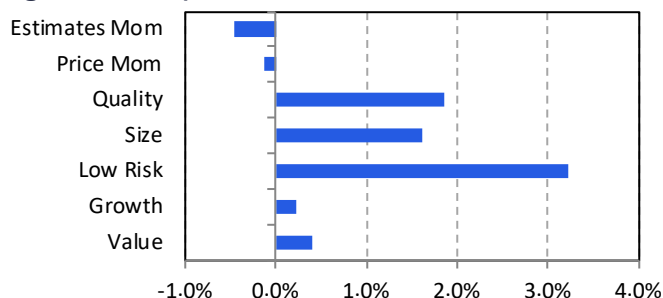
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 135. Commodities (GSCI)



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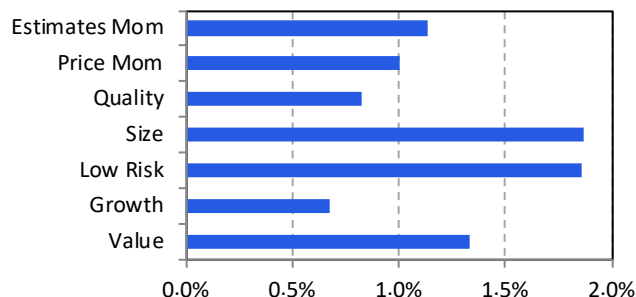
Figure 136. EUR per USD



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

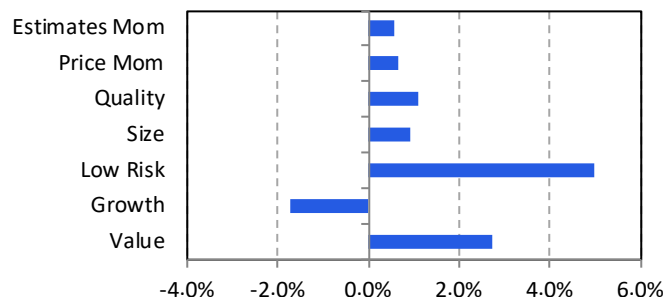
¹⁰ The above charts illustrate predicted long/short style returns from our proprietary risk model (European RAM) for a one standard deviation change in the underlying macroeconomic factor.

Figure 137. YEN per USD



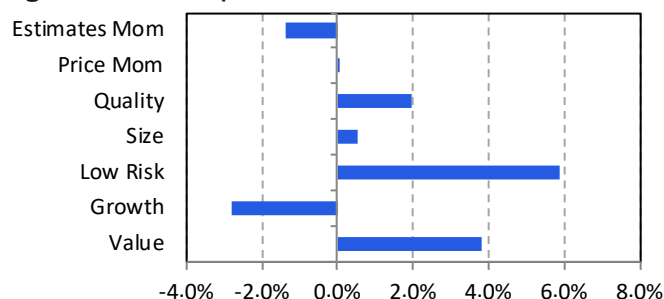
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 138. Emerging Market Sovereign Bond Yield



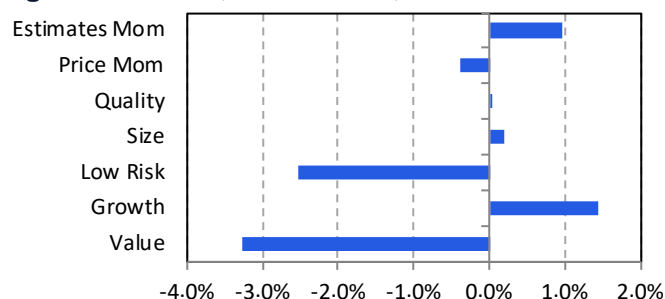
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 139. Credit Spreads



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

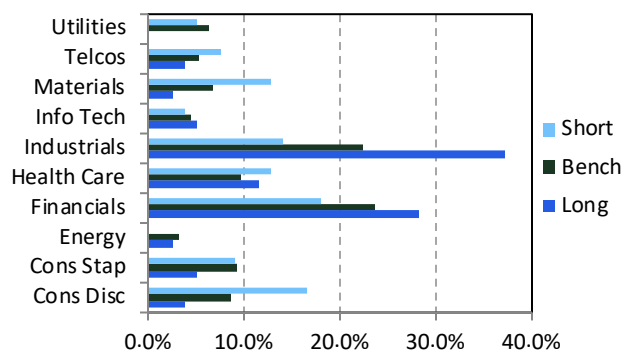
Figure 140. Market (MSCI AC World)



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

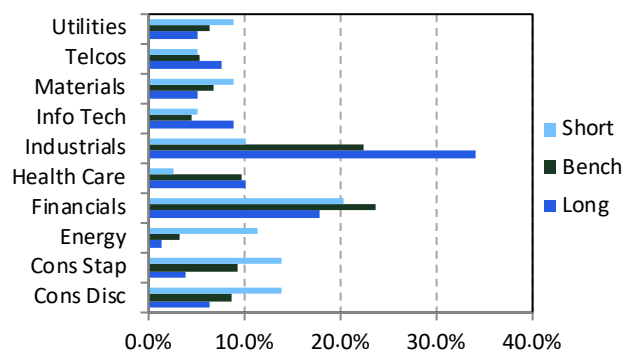
Europe: Style Sector Composition

Figure 141. Estimates Momentum



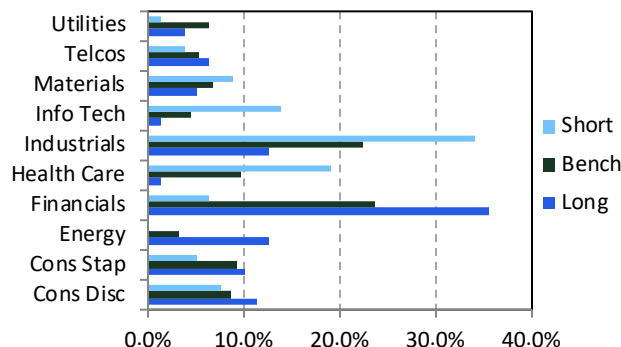
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 142. Growth



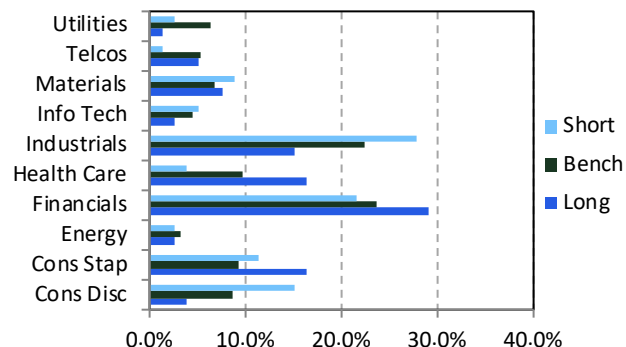
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 143. Value



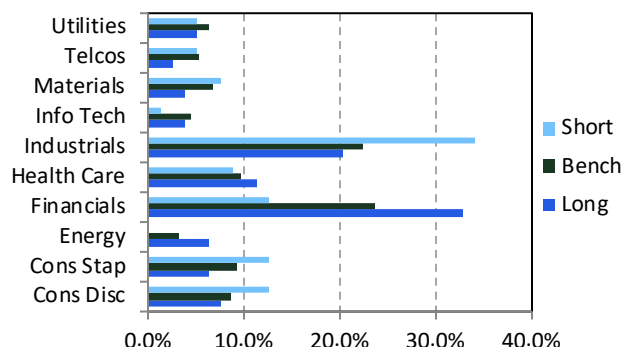
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 144. Low Risk



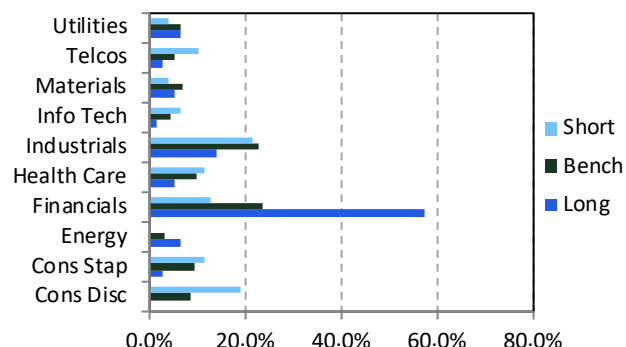
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 145. Size



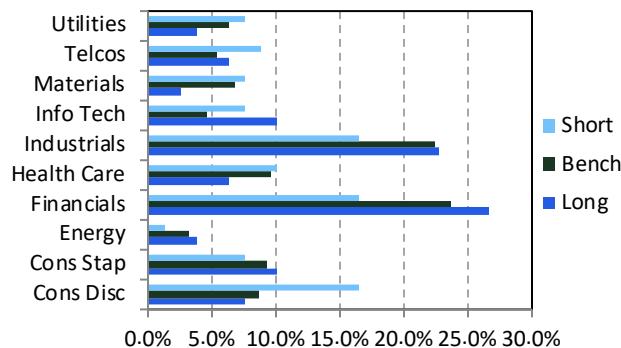
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 146. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

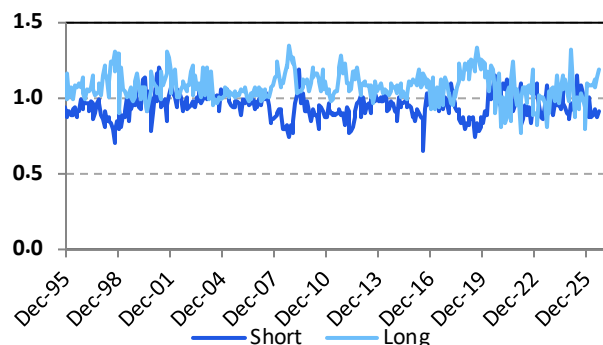
Figure 147. Quality



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Style composition is defined as the proportion of each of the long and short style portfolios coming from the relevant regions, country or sector.

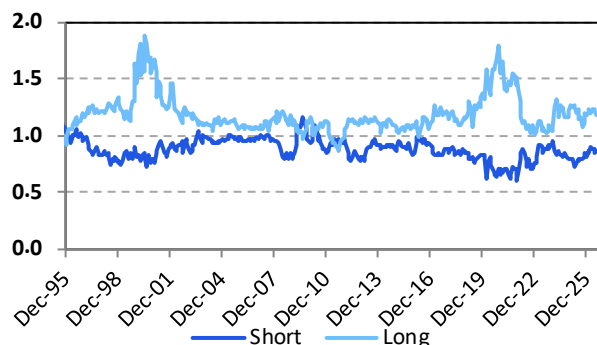
Europe: Relative Style Valuations

Figure 148. Estimates Momentum



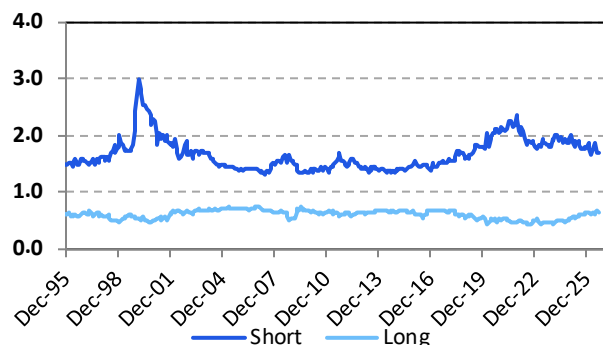
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 149. Growth



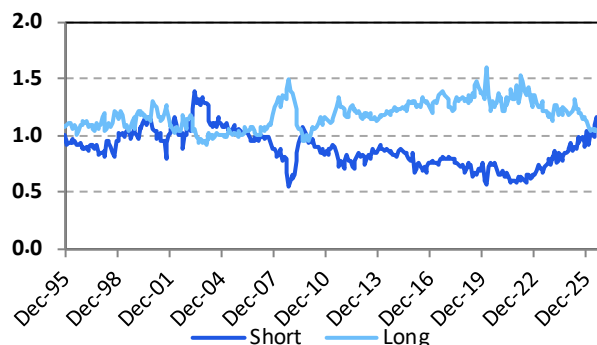
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 150. Value



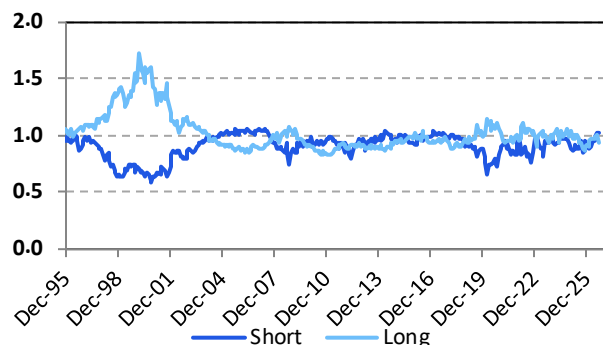
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 151. Low Risk



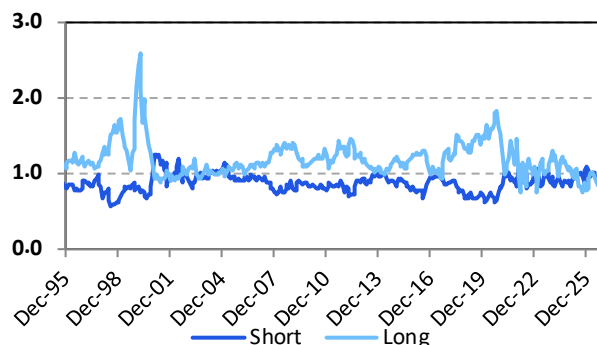
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 152. Size



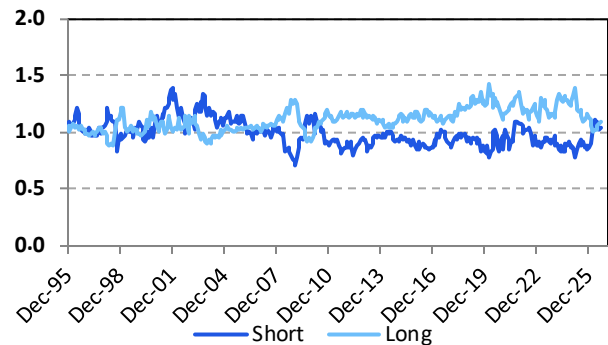
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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 153. Price Momentum



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Source: Citi Research, MSCI, IBES, Worldscope, Datastream

Figure 154. Quality

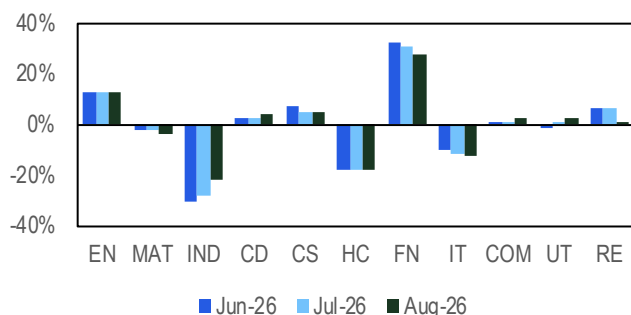


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Source: Citi Research, MSCI, IBES, Worldscope, Datastream, Relative style valuations calculated using median 12-month forward P/E of the respective long and short style quintiles relative to the benchmark median.

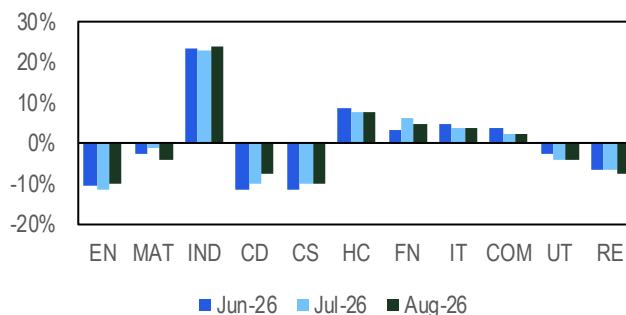
Europe: Net Sector Weights

Figure 155. Value



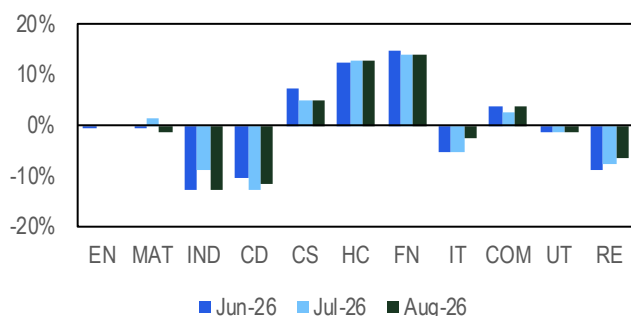
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Source: Citi Research, MSCI

Figure 156. Growth



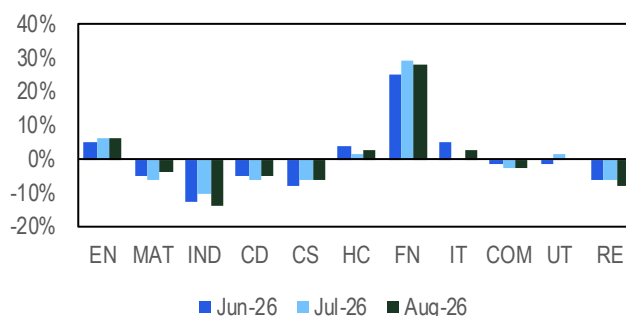
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Source: Citi Research, MSCI

Figure 157. Low Risk



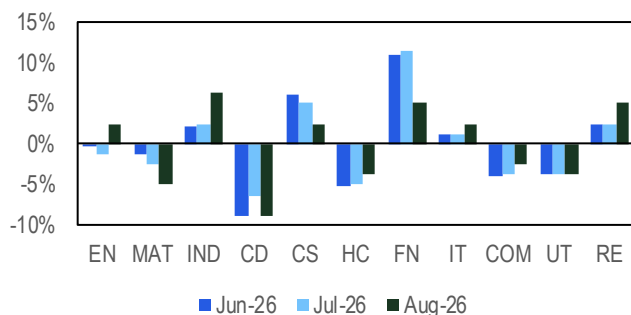
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Source: Citi Research, MSCI

Figure 158. Size



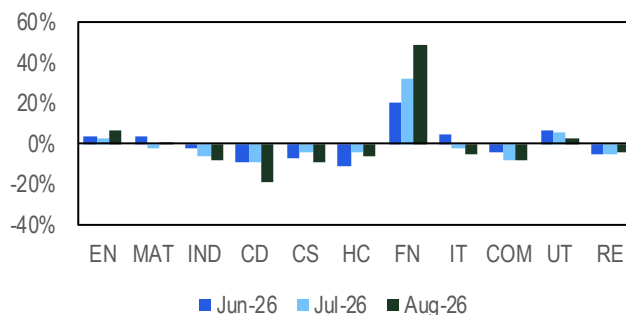
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Source: Citi Research, MSCI

Figure 159. Quality



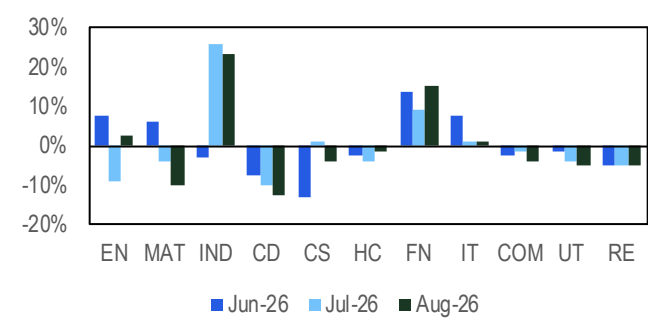
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Source: Citi Research, MSCI

Figure 160. Price Momentum



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Source: Citi Research, MSCI

Figure 161. Estimates Momentum



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Source: Citi Research, MSCI

Appendix: Construction Style Indices and Calculation of Style Performance

The first step involves the identification of the most important systematic drivers of risk and return across global markets over the long term. Using results from the extensive style performance research published by the Citi Global Quantitative Research team together with empirics documented within the Academic literature we arrive at the following styles: Size, Value, Growth, Low Risk, Quality, Price Momentum and Estimates Momentum.

For each style factor, we then select a list of descriptors that best represent that specific attribute. For example, we use a range of defensive and cyclical price-based ratios to describe the Value attribute. These descriptors are then combined to arrive at a style factor loading for each stock in a given MSCI universe.

Style Descriptors

Stock universes are based on MSCI indices, and we have a complete history of styles/factors back to 1995. Figure 159 lists the styles that we cover together with the descriptors used in the construction of each index. One notable absence from our style classification is GARP. We chose not to include this style because as a distinct style, this could be constructed from combining Value and Growth.

Figure 162. Style Factors and Descriptors

Style Index	Descriptors	
Size	Market Capitalisation (log)	
Value	Earnings Yield (12 month forward)	Earnings Yield (12 month historical)
	Cash Flow To Price	Dividend Yield
	Book to Price Ratio	Sales to Price Ratio
	EBITDA / EV	Sales / EV
Growth	Earnings Growth (12 month forward)	S&P Growth-Value Score
	One Year Sales Growth	Long Term Earnings Growth
	One Year EPS Growth	One Year DPS Growth
Low Risk	Debt to Equity (Inverted)	Earnings Stability
	Beta against MSCI AC World (Low-High)	Beta against MSCI Country Index (Low-High)
Quality	Earnings Certainty	Return on Equity
	Net Profit Margin on Sales	Margin Growth
	Earnings Quality (Accruals) (Inverted)	Balance Sheet Quality (NOA) (Inverted)
Price Momentum	3 Month Volatility Adjusted Price Trend	12 Month Volatility Adjusted Price Trend
	First 11 Month Volatility Adjusted Price Trend	
Estimates	1 Month Change in Earnings Forecast	Earnings Revision
Momentum	Sales Revisions	Cash Revisions

Source: Citi Research

When building our style factor loading, we start by winsorizing the descriptor data to eliminate outliers. After this we normalise this data and combine it on an equal weighted basis to form the style composite factor.

Calculation of Raw Style Performance

We calculate raw style performance using the standard factor mimicking approach. In each universe stock are ranked using each composite

Construction of Pure Style Indices

For a point in time, given the style factor loadings, country/sector membership dummies and our desired orthogonal style exposures, we then employ a simple matrix inversion to compute a set of orthogonal style factor portfolios. The last step involves a simple linear combination of the monthly style factor portfolios with the next-period returns of each constituent stock measured over a monthly or daily periodicity to generate an index of style returns. The result is that each index has a unit exposure to any one style and zero exposure to all other styles, at the time of the monthly rebalance.

Calculating the Style Betas

In order to calculate the betas, we are effectively constructing the style portfolios. Following this, the style portfolio exposures are function of the style loadings and their corresponding betas. In matrix notation (simplified version):

$$Y = B'F$$

Where (the equation above is contemporaneous, hence ignoring the time subscript):

Y = matrix (m,m) factor portfolio exposures;

B = matrix (n,m) of style portfolio weights (betas);

F = matrix (n,m) stock exposures to style/country/sectors;

n = number of stocks;

m = number of styles, country and sectors.

Given our desire for set of linearly independent style portfolios, Y can take the form of an identity matrix, F is our style factor loadings so we are therefore solving for B .

$$B = \left((F'F)^{-1} F' \right) Y$$

The result of B is a set of stock level weights (or betas) for each style that multiplied with the style factor loadings produces orthogonal style exposures¹¹. Or in other words, each style portfolio has a unit exposure to itself and zero exposure to all other styles.

¹¹ We also constrain the weighted sum of the sectors to be zero.

Construction of Style Return Indices

As part of the construction of the style portfolio exposures, at a point in time, we are left with a set of style portfolios and their corresponding long-short stock weights. Bringing this part of the style index construction to return space (i.e., the B matrix), we assume that cross-sectional stock returns over any period can be expressed with the following equation:

$$P_t = R_t' B_{t-1}$$

Where:

P_t = a row vector $(1,m)$ of pure style portfolio returns from time $t-1$ to time t

R_t = a column vector $(n,1)$ of stock returns from time $t-1$ to t

B_{t-1} = matrix (n,m) of style portfolio weights formed at time $t-1$

Given we know R_t and we have calculated B_{t-1} , the product of these two matrices is P_t , the return of each pure systematic factor (in total, m) at time t .

Appendix: Style Definitions

Most of the style descriptors we use are self-explanatory. Data is primarily sourced from either Worldscope or Thomson IBES. However, there are some style descriptors that warrant further explanation:

- **S&P Global BMI Growth-Value Score** — this is a score between 0 (pure value) and 1 (pure growth) is assigned to each stock and is calculated by S&P. For more information on the methodology that is employed to calculate the score, please see refer to S&P on methodology.
- **Earnings Stability** — calculated as the R-squared from a regression of five annual EPS values (three historical and two forecast) against a time trend. (For more details, see our report *Searching for Alpha: Focus on Earnings Stability*, Citi Research, February 2003.
- **Price Momentum** — for each respective daily time period, price momentum is calculated as the t-statistic of the slope coefficient, derived from a regression of the log of daily prices (in local currency) on a time trend.
- **Earnings, Sales, Cash Revisions** — this is the time-weighted average of analyst upgrades less downgrades scaled by the total number of estimates for fiscal years 1 and 2.
- **Earnings Certainty** — measured as the inverse of the coefficient of variation in the next 12-month EPS estimates (stocks are excluded if there are less than five estimates or EPS is less than one cent). This is the same as the inverse of our EPS dispersion measure and more detail can be found in *Searching for Alpha: Sell When Analysts Disagree*, Citi Research, December 2003.
- **Earnings Quality** — calculated as the year-on-year change in net operating assets or the difference between accounting and cash earnings (accruals). For more details, see our reports. [Searching for Alpha - Accruals Volatility – A New Approach to Quality Investing](#), *Searching for Alpha: Quantifying Earnings Quality*, Citi Research, October 2004.
- **Balance Sheet Quality** — this is the level of net operating assets. NOA incorporates all the changes in NOA and can be used as proxy for cumulated accruals. Since accumulation of earnings without cash flow is unsustainable in the long term, having high net operating assets is a sign of balance sheet bloat. For more details, *Searching for Alpha: Quantifying Earnings Quality*, European Quantitative Strategy, October 2004.

Previously Published Research

Figure 163. Research Reports (since 2009)

Date	Research Theme	Report Link
29-Sep-25	Allocation	Searching for Alpha: What can Mutual Fund Flows tell us about Future Stock and Sector Returns?
29-Sep-25	Factor	What Works in Equity Markets: Misguided by Factor Betas
04-Sep-25	Allocation	What Works in Equity Markets – Style Factor Performance and High Macro Risk Environments
01-May-25	Positioning	What Works in Equity Markets: Does Crowding Outperformance Outweigh Crash Risk?
23-Apr-25	Rotation	Searching for Alpha – Style Rotation: Using Mutual Fund Flows to Predict Style Returns
05-Dec-24	Factor	Searching for Alpha – Stock Selection and Enhanced Growth Strategies with Option-Implied Volatility
29-Oct-24	Allocation	Searching for Alpha – Macro Sector Selection – Using Macro Regimes & News Sentiment to Forecast Sector Returns
27-Aug-24	Positioning	Measuring the Crowded Trade in Global Equities News Sentiment, Factor Crowding & Extended Coverage
20-Aug-24	Misc.	Global Risk Attribute Model: A Framework for Equity Macro Risk Analysis
10-Apr-24	Misc	Searching for Alpha – European Industry-Specific Return Drivers
11-Jan-24	Allocation	Searching for Alpha – Are PMIs Leading or Misleading?
04-Dec-23	Factor	Searching for Alpha: Leveraging Option Information to Improve Factor Performance
26-Sep-23	Allocation	Searching for Alpha: Macro Regimes and Systematic Equity Investing
10-Aug-23	Allocation	Searching for Alpha: Exposure to Macro via Equities
26-Jun-23	Positioning	Measuring the Crowded Trade in Global Equities: Introducing our Short Stock Crowding Model
16-May-23	Machine Learning	Searching for Alpha: From Machine Learning to Stock Screens – A Rulefit Model
24-Mar-23	Factor	Searching for Alpha: A Bottom-Up Approach to Evaluating Market Overbought/Oversold Conditions
20-Jan-23	Factor	What Works in Equity Markets: The Enduring Appeal of Income Investing
13-Jan-23	Factor	What Works in Equity Markets: Return on Equity, a different perspective through Revisions
07-Nov-22	Event	Searching for Alpha: Systematic M&A Strategies that Outperform Discretionary Event-Driven Approaches
26-Oct-22	Allocation	What Works in Equity Markets: Sector Selection – A Bottom-up, Factor Approach
09-Jun-22	Event	Searching for Alpha: M&A – Identifying Potential Takeover Targets
24-Feb-22	Event	What Works in Equity Markets: Buy Backs – Back in Vogue
26-Jul-21	Factor	What Works in Equity Markets: Risky Value vs. Quality Value Revisited
26-Jul-21	Machine Learning	Searching for Alpha: Practical Considerations in Building Neural Networks for Stock Selection
22-Jul-21	ESG	ESG Insights: Indexed ESG Funds – A Widespread Implementation Choice
22-Jun-21	Factor	Searching for Alpha: Go with the Stock Connect Flow, for a Sharpe of 4
18-Jun-21	Factor	Searching for Alpha: Overlaying Price Mo. and Short Interest to avoid drawdowns and improve returns
15-Jun-21	ESG	ESG Insights: ESG Fundamental Characteristics
13-Apr-21	ESG	ESG Insights: Following the ESG Herd: Has ESG become a Crowded Trade?
29-Mar-21	Machine Learning	Searching for Alpha: Pairs Trading: Applying Machine Learning to Pairs Trading
09-Mar-21	Positioning	Regime Modelling using Futures Positioning: Futures vs. Cash – A Distant but Meaningful Relationship
18-Feb-21	ESG	ESG Insights: The ESG ‘Premium’: How does ESG compare to other Factors?
01-Feb-21	Event	Searching for Alpha: Asia Earnings Surprise: Predicting Asia Earnings Surprises
14-Jan-21	ESG	ESG Insights: Where Machines do it Better: Inferred ESG Ratings Data
30-Oct-20	Factor	Searching for Alpha: China A Alpha – Smoothing Price Momentum
16-Oct-20	Factor	Under the Microscope: Overlapping Momentum
14-Sep-20	Positioning	Equity Markets Positioning Model: Introducing the EMP
11-Sep-20	Factor	Searching for Alpha: Combining ESG and Risk Premia Investment: A Double Screen Approach
08-Sep-20	Factor	Searching for Alpha: Factoring Short Interest: Measuring and Profiting from Information in Shorts
28-May-20	Machine Learning	Searching for Alpha: Machine Learning – SHAP Value as Factor Selection Criterion
28-Feb-20	Machine Learning	Searching for Alpha: Machine Learning: Leveraging Return Forecasts
21-Feb-20	Factor	Searching for Alpha: China A Alpha – Sector-rel. Value Is Powerful, Choose Sector Mappings Wisely
03-Oct-19	Machine Learning	Searching for Alpha: Machine Learning: Beyond Random Forest for Stock Selection
23-Sep-19	Event	Searching for Alpha: Earnings Surprise: Managing Expectations
05-Mar-19	Machine Learning	Searching For Alpha: Machine Learning: Interpreting Machine Learning Predictions
07-Feb-19	Misc	Searching for Alpha: GAAP vs. Non-GAAP: Which Earnings does the Market Price?
21-Nov-18	Positioning	Searching for Alpha: Style Crowding in Asia: Getting Ahead of the Crowd
17-Sep-18	Event	Searching for Alpha: Earnings Surprise: Using ML to Forecast Earnings Surprises & Returns
13-Sep-18	ESG	Searching for Alpha: The ESG Edge: ESG Investing – A Step Forward
03-Sep-18	Machine Learning	Searching For Alpha: Machine Learning: Interacting Machine Learning and Factors
03-May-18	Positioning	Measuring the Crowded Trade: Introduction to our Crowding Composite for individual stocks
14-Mar-18	Factor	Searching for Alpha: Profiting from Capex: Look To Capex Announcements
07-Sep-17	Rotation	Searching for Alpha: Tactical Style Rotation: Using Risk and Return to Manage Style Exposure
10-Mar-17	Misc	Searching for Alpha: Big Data: Navigating New Alternative Datasets
13-Feb-17	Factor	Searching for Alpha: Betting Against (Accurate) Beta
19-Sep-16	Factor	Searching for Alpha: Competitive Advantage: Survival of the Fittest
09-Sep-16	Factor	Searching for Alpha: Financial Strength Redux
14-Apr-16	Rotation	Searching for Alpha: Dynamic Style Weighting: Risk-Based Equity Style Allocation
04-Mar-16	Smart Beta	Long-Only Pure Style Portfolios: No Shorts Please
18-Feb-16	Factor	Industry Alpha Insights: Banks: One Size Does Not Fit All
21-Sep-15	Factor	Under the Microscope: Stock Momentum Conflation
15-Sep-15	Allocation	Searching for Alpha: Macro Moves Markets: Economic Data, Expectations and Market Pricing
06-Aug-15	Misc	Normalising for Style Factor Composites: Reviewing alternative solutions for constructing style composites
23-Mar-15	Rotation	Searching for Alpha: Style Timing: Style Performance, Trading Volumes and Investor Agreement
13-Mar-15	Misc	World Radar Screen: Refining Our Global Search for Alpha
18-Feb-15	Factor	Searching for Alpha: Networking with Analysts: Modelling Analyst Forecast Dependence
01-Oct-14	Smart Beta	The Rise of Low Risk Investing: Is It Getting Crowded Out There?
27-Mar-14	Factor	Under the Microscope: Five Innovations In Momentum Investing
07-Mar-14	Factor	Searching for Alpha: Timing Price Momentum: When Does Momentum Move?
27-Nov-13	Smart Beta	Equity Risk Premia Investing: A New Methodology for Monitoring Style Performance
23-Jul-13	Allocation	Stock Market Country Selection: Changes to a Well-Established Model

02-Jul-13	Factor	Searching For Alpha: Digging For Dividends: QUARI - QUality with A Reliable Income
24-Jun-13	Misc	Global Theme Machine: An Objective Way of Identifying Attractive Investment Themes
25-Mar-13	Factor	Searching for Alpha: Purifying Analyst Recommendations: Removing Beta to get to the Alpha
06-Nov-12	Factor	Searching for Alpha: Tangible Benefits of Intangibles: Brand, Respect & Intellectual Capital
09-Mar-12	Smart Beta	Low-Risk Portfolio Strategies: Sharpe Ratio Maximisation and Multi-Asset Applications
28-Feb-12	Rotation	Macro Risk and Style Rotation: A Guide Rather than a Prescription
14-Sep-11	Factor	Searching for Alpha: Accruals Volatility - A New Approach to Quality Investing
24-Aug-11	Allocation	Industry Alpha Insights: Four Approaches to Tactical Industry Selection
17-Mar-11	Misc	Industry Alpha Insights: Quantifying Industry-Specific Fundamentals
18-Nov-10	Smart Beta	Low-Risk Equity Portfolios: More than just Minimum Variance
15-Nov-10	Allocation	Under the Microscope: Measuring Systemic Risk - The Absorption Ratio
14-Jun-10	Factor	Under the Microscope: Optionality in Valuation
31-Mar-10	Event	Searching for Alpha: Earnings Surprise: Still Profiting from Surprises
29-Jan-10	Factor	Momentum in Japan: Looking at Price, Trading Values and Earnings
15-Oct-09	Rotation	Searching for Alpha: Style Rotation: Optimising Style Rotation Strategies

Source: Citi Research

Citi Quant Research Team

Figure 164. Citi Quantitative Research Teams (For Informational Purposes Only)

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1 Citigroup Global Markets Ltd; 2 Citigroup Global Markets Asia Limited; 3 Citigroup Pty Limited, 4 Citigroup Global Markets Inc., 5 Citigroup Global Markets India Private Limited

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Appendix A-1

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% of companies in each rating category that are investment banking clients	24%	16%	16%			
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% of companies in each rating category that are investment banking clients	39%	40%	43%			
Citi Research Quantitative Asia Radar Screen Model Coverage	20%	60%	20%			
% of companies in each rating category that are investment banking clients	26%	10%	7%			
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