

Index Research and Design | Index Ideas

Macro relevance and factor rotation

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Contents

Macro relevance and factor rotation	.3
Understanding informativeness, similarity and relevance	.3
Static equal-weight baseline	.4
Equally weighted relevant strategy	.5
Relevance weighted forecasts	.6
Factor contributions to strategy performance	.7
Conclusion	.8
Let's talk: Applications and extensions	.8

Macro relevance and factor rotation

Markets are shaped by more than short-term noise. Among other influences, they are shaped by macroeconomic environments that evolve, recur, and at times, closely resemble one another. While no two periods are ever exactly alike, historical environments often share features with the present. Recognising these similarities offers an edge: by identifying when today's conditions echo the past, investors can draw on those parallels to inform allocation decisions.

Building on work by Man Group¹ and Verdad², this research introduces a macro relevance framework – a simple, transparent method for identifying past environments that closely resemble today's macro backdrop.

By combining similarity (how comparable the current macro environment is to historical regimes) with informativeness (how statistically significant the deviation is from long-term means), this framework identifies periods in history that are most "relevant" to today. These relevant periods are then used to generate forward-looking forecasts of factor return and risk – informing rotation decisions.

The approach has three key strengths:

- It is simple and explainable, avoiding black-box complexity
- It adjusts to changing conditions based on observable data
- It is flexible, supporting use across different investment contexts

Understanding informativeness, similarity and relevance

The strategy uses a diverse set of market based macroeconomic indicators to capture prevailing economic conditions. These inputs are transformed into z-scores to enable standardised comparisons across time and across variables. This process ensures that each macro snapshot represents a normalised state of the economy.

At each point in time, the macro state is compared to every previous observation using Mahalanobis distance³.

- Similarity measures how close today's environment is to each point in the past
- Informativeness assesses the deviation of today and each past point from their respective long-term means

These are combined into a relevance score that identifies historical regimes most structurally and statistically aligned with the present.

¹ Regimes, Systematic Models and the Power of Prediction | Man Group

² Navigating Turbulence

³ Mahalanobis distance accounts for correlations between variables.



Figure 1: Similarity Informativeness and Relevance in 2008

Source: LSEG Datastream, FTSE Russell calculation, June 2025.

Relevance spiked in 2001 (high similarity) and in 1990 (similar and informative), illustrating how the framework highlights meaningful analogues across market history.

Static equal-weight baseline

Our baseline strategy equally weights several equity factor portfolios from the Russell 1000 Pure Single Target Exposure Factor Index Series (active relative to the Russell 1000), each volatility-scaled to 10% on a rolling basis.





Table 1: Equally weighted factors strategy performance statistics

	EW
Return p.a. (%)	2.85
Volatility p.a. (%)	4.91
Return/Risk	0.58
Max Drawdown (%)	-15.52
Average Drawdown (%)	-3.33
Skewness	-0.17
Kurtosis	0.34

Source: FTSE Russell, June 2025.

Equally weighted relevant strategy

This strategy introduces macro context. At each point in time, we identify historically relevant periods and observe how each factor performed during those windows. If a factor delivered a positive average return in relevant periods, it is included in the portfolio. All selected factors are equally weighted.



Figure 3: Equally weighted relevant strategy

Table 2: Equally weighted relevant performance statistics

	EW	EWR
Return p.a. (%)	2.85	4.19
Volatility p.a. (%)	4.91	7.01
Return/Risk	0.58	0.60
Max Drawdown (%)	-15.52	-9.83
Average Drawdown (%)	-3.33	-2.97
Skewness	-0.17	0.08
Kurtosis	0.34	1.88

Source: FTSE Russell, June 2025.

The result is a long-only strategy that enhances returns by filtering for macro-aligned exposures, without introducing additional complexity or forecasting. The annualised return increases from 2.85 to 4.19 and the risk adjusted return is 0.6.

Relevance weighted forecasts

In this approach, we build full return, and volatility estimates for each factor based on the relevance-weighted returns during prior periods with positive relevance. We then use the forward-looking metrics to rank and weigh factors based on their return/risk forecasts.

Table 3: Relevance weighted forecast performance statistics

	EW	RWF
Return p.a. (%)	2.85	3.54
Volatility p.a. (%)	4.91	5.59
Return/Risk	0.58	0.63
Max Drawdown (%)	-15.52	-14.63
Average Drawdown (%)	-3.33	-2.93
Skewness	-0.17	0.01
Kurtosis	0.34	0.58

Source: FTSE Russell, June 2025.

Factor contributions to strategy performance

Figure 5: Factor contribution to outperformance of relevance strategies

The relevance-weighted strategies differ not only in total performance but also in where that performance comes from.

- In the equally weighted relevance strategy, most of the outperformance stems from momentum, while other factors contribute minimally or detract
- The relevance-weighted forecast strategy shows a broader profile—positive contributions from all factors except low volatility, which remains a consistent detractor across models

Conclusion

The macro relevance framework offers a simple, intuitive way to incorporate historical context into factor allocation. By identifying the environments most similar and informative to today, it enables strategies that are both adaptive and explainable – balancing improved performance with transparency.

Rather than relying on complex forecasts or opaque models, this approach simply asks: When have we seen conditions like these before, and what worked then? In doing so, it helps investors align with environments where their exposures are more likely to succeed—and avoid those where they're not.

Let's talk: Applications and extensions

The relevance framework is transparent and highly adaptable. Beyond factor rotation, potential applications include

- Asset class allocation
- Sector or regional rotation
- Stress testing across macro scenarios
- Strategy screening or signal conditioning

It can also be extended in several directions:

- Using alternative universes (e.g. Europe, global small caps)
- Including new macro or market-based inputs
- Calibrating to specific client goals, regimes, or ESG overlays

We welcome the opportunity to collaborate, tailor this framework to client portfolios, and co-develop solutions that support evolving investment objectives.

If this sparked ideas, let's explore them together.

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