

ACTIVE QUANT

A guide to Quant Street

Marketing materials for professional
investors only, not for onward distribution.
October 2025

You may have recently discovered our super-charged Active Quant strategy in our comprehensive 11-episode podcast series: 'A random talk down Quant Street'. This companion guide explores how these strategies are built, what makes them work, and how investors worldwide use them to achieve their goals.

A random talk down Quant Street



ALREADY LISTENED?

Use this guide to revisit the big ideas and key insights from each episode for quick reference and client conversations.



NEW TO THE SERIES?

Let this be your roadmap to exploring quant investing, one conversation at a time, with accessible insights from our in-house experts.



OVERVIEW

Some episodes have Active Quant in focus, showing how the strategy works. Others offer helpful background on Quant foundations from factor models to the human side of research. Together, they offer a closer look at Active Quant and a wider view of the ideas behind it.

Breaking the black box myth

IS QUANT INVESTING TOO COMPLEX TO UNDERSTAND?

Quantitative investing isn't a mysterious 'black box'. It's a systematic investment process built on economic logic and tested against decades of real-world data – much like evidence-based medicine.

- Quant investors require economic intuition beyond statistical signals
- Our proprietary portfolio construction tools show the rationale for each active position and trade
- Our philosophy is about keeping our models as simple as possible and as complex as necessary

Next-gen quant tools like machine learning might seem more opaque, but we apply the same principle here: lift the hood, trace the logic, and communicate clearly.



“ Contrary to popular opinion, quant by design is actually anti-black box

Understanding factors

WHAT MAKES A REAL FACTOR?

Factors are measurable stock characteristics that explain return differences across markets. While academic literature lists hundreds of factors, only those that are proven, performing, persistent, explainable and executable make the cut at Robeco. For Active Quant, we focus on five factor groups.

VALUE

Identifying undervalued companies in comparison to their fundamentals

QUALITY

Focusing on firms with solid management, healthy balance sheets and strong profitability

MOMENTUM

Capturing persistent trends in stock price performance

ANALYST REVISIONS

Leveraging changing analyst expectations and earnings estimates

SHORT-TERM SIGNALS

Exploiting dynamics of short-term trends



The quest for the Quant superstock

THE IDEAL BUT ELUSIVE COMBINATION

Imagine the perfect stock: Attractively priced, high-quality fundamentals, winning investor confidence through positive momentum, endorsed by analyst upgrades, and supported by favorable short-term market dynamics. It's the dream scenario – but rarely found in reality.

Why multi-factor works: That's where a multi-factor approach makes the difference. While few stocks excel across every dimension, those that shine in several areas often present compelling opportunities for alpha generation.

WHY DO FACTORS WORK AT ALL?

Two main schools of thought:

1. **Risk-based:** Investors are compensated for holding riskier assets.
2. **Behavioral/mispricing:** Investor behavioral biases can lead to market inefficiencies.

Behavior in action: For value stocks, investors may overpay for expensive stocks with eye-catching growth narratives and underestimate the rebound potential of out-of-favor names trading below their intrinsic value. For momentum, it's often about underreaction: new information is priced in slowly, letting trends persist.

““ *Everyone's looking for quality, value, and momentum, but they rarely show up in the same stock. That's why multi-factor is so powerful*

Zooming in on short-term dynamics

INTEGRATING SHORT-TERM SIGNALS

Alongside fundamental (value and quality) and sentiment (momentum and analyst revisions) factors, our stock selection model is further diversified by a basket of adaptive short-term signals. These signals aid the model in responding swiftly to changing market dynamics, providing an agile complement to the steadier, longer-term factors.

Some of these signals are AI-powered, specifically designed to detect nascent changes in price trends, sentiment, or stock flows before they are fully reflected in market prices.

Continuous strategy enhancement

True to our cautious yet pioneering spirit, we're constantly looking for ways to refine our approach – enhancing how we assess risk, forecast returns, integrate sustainability, and ultimately construct portfolios. AI is a key enabler here.

ALTERNATIVE DATA

Expands the information set, from earnings call transcripts to news filings, providing more insights that can aid decision-making.

MACHINE LEARNING

Captures non-linear relationships and interaction effects between return factors that can enhance prediction accuracy.

NLP

Translates vast amounts of unstructured data into actionable, investable insights that can aid decision-making.

This focus on innovation directly fuels our model enhancements, including our short-term signal basket, transforming cutting-edge techniques into tangible portfolio value.



AI and next-gen signals

WHAT DOES AI REALLY MEAN FOR INVESTING?

AI isn't just hype. From structured data to unstructured insights, our long-term investment in AI infrastructure is helping quants move faster, go deeper, and collaborate better.

1. ALTERNATIVE DATA

Exploding volumes of structured and unstructured information – from financial time series to earnings call transcripts.

2. COMPUTING POWER

Doubling every two years, enabling the processing of vast datasets.

3. ALGORITHMS

Machine learning captures complex patterns; NLP turns unstructured data into investable insights.

“*Innovation is the name of the game. Some alpha sources fade, so our job is to keep discovering new ones*”

From AI to next-gen signals

AI makes it possible to capture signals that were previously out of reach. These next-gen signals extend the traditional factor set by using new data and methods; for example, gauging CEO confidence on an earnings call, or detecting shifts in market sentiment before they show up in prices.

Why it's harder than it looks

Anyone can build a basic AI model, but making it scalable, auditable, and robust in live investing requires deep infrastructure. In 2017, we began laying our cloud-based foundation to unlock scalable computing, streamline data storage, and facilitate team-wide collaboration. That groundwork now supports cutting-edge AI integration across research teams.

The Active Quant advantage

WHAT'S IN ACTIVE QUANT FOR YOU?

Stable outperformance

Seeks to generate consistent alpha through diversified exposure to return-driving factors, with a disciplined benchmark-aware approach.

Risk management

Keeps absolute risk aligned with the benchmark, while using a moderate relative risk budget to take informed active positions across hundreds of stocks to generate alpha.

Portfolio diversification

Provides a differentiated investment approach that complements fundamental strategies, helping deliver smoother performance across market cycles, when blending the two styles.

Proven track record

Robeco's 3D Emerging Markets Active strategy outperformed MSCI EM in 7 of the past 10 years with 3% annualized outperformance (EUR).*

*** Past performance is no guarantee of future results. The value of your investments may fluctuate.**

Source: Robeco, MSCI. Robeco Emerging Markets 3D Active Equities strategy. Index: MSCI Emerging Markets Index (net dividends reinvested). All figures in EUR. Data end of 31 July 2025. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance since inception is as of the first full month. Periods shorter than one year are not annualized. Returns gross of fees, based on gross asset value. Values and returns indicated here are before cost; the performance data does not take account of the commissions and costs incurred on the issue and redemption of units. These have a negative effect on the returns shown.

Active Quant

WHAT MAKES ACTIVE QUANT 'ACTIVE'?

Compared with our Enhanced Indexing strategies, Active Quant takes more pronounced, yet benchmark-aware, active positions with the aim of delivering higher excess returns. Active Quant portfolios systematically target proven factors — value, quality, momentum, analyst revisions, and short-term signals — resulting in meaningful, but risk-controlled, over- and underweights across hundreds of stocks.

BROADER UNIVERSE, SMARTER SELECTION

We start with a universe broader than the benchmark, ending up with around 250-300 stocks while maintaining diversification.

GUIDED BY TRACKING ERROR

When it comes to Active Quant strategies, we aim for a long-term tracking error of around 3%, which is around three times more than our Enhanced Indexing strategies.

RISK-AWARE BY DESIGN

We distinguish between rewarded risk (alpha potential) and unrewarded risk (which is stripped out in how factors are defined). Static and dynamic risks are controlled with benchmark constraints and our proprietary time-varying risk model, respectively.

ALGORITHM-DRIVEN OPTIMIZATION

Our proprietary portfolio construction algorithm systematically evaluates a wide range of risk, return, and sustainability trade-offs to construct portfolios optimized to align with clients' financial objectives and sustainability goals.

HUMAN OVERSIGHT

Portfolio managers only intervene to reduce risks or costs that are not captured by model, for example, corporate actions, impending index changes, or instrument selection in cases of multiple listings.

Quant alpha isn't a lucky accident. It's engineered through proven factor models, thoughtful portfolio construction, and dynamic risk management. Robeco's in-house systems have been refined over 20+ years to do exactly that.

Investor use cases

HOW DOES ACTIVE QUANT FIT IN A PORTFOLIO?



COMPLEMENTING FUNDAMENTAL

Systematic and style-diversified, Active Quant pairs well with fundamental strategies, potentially leading to smoother return profiles when blended.



CLIENT-SPECIFIC GOALS

Client-specific risk, return, and sustainability preferences can be seamlessly integrated into mandates, ensuring portfolios are tailored to achieve each client's financial and sustainability objectives.



NATURAL PROGRESSION FROM PASSIVE OR LOW TRACKING ERROR PORTFOLIO

For passive or low-tracking-error investors looking to move meaningfully beyond the benchmark, Active Quant offers a disciplined, risk-controlled approach designed to unlock excess returns, while staying benchmark-aware.



AUGMENT PASSIVE CORE ALLOCATION

Active Quant can serve as a complementary satellite allocation, enhancing passive or core holdings by aiming to generate higher excess returns.

The human side of quant

WHERE TECHNOLOGY MEETS HUMAN INSIGHT

Despite running on sophisticated models and algorithms, humans remain at the heart of quantitative investing – from curiosity-driven research to critical oversight and client relationship building.



Research innovation

Researchers generate and rigorously test hypotheses, and uncover new insights, continually advancing our quant capabilities beyond traditional boundaries.



Collaborative culture

Strong partnerships between quant and fundamental teams create unique synergies, sharing insights while respecting distinct investment processes.



Transparent communication

Proprietary portfolio construction tools provide clear visibility into every investment decision and performance reports make sure results are explained with full transparency.



Why Robeco for quant?

Cautiously pioneering. Trusted for nearly a century. Focused on delivering innovative alpha.



HERITAGE

Research-driven DNA ensuring every strategy rests on robust economic rationale validated by robust evidence.



TRUSTED PARTNER

30 years of quant experience, 95 years of active management.



CLIENT-SPECIFIC APPROACH

Preferences can be integrated into mandates, letting us tailor portfolios to specific financial and sustainability objectives.



INNOVATION

Proven record of turning academic insights into investable strategies, from multi-factor equity to next-gen AI-driven ETFs.



INVESTMENT ENGINEERS

50+ quant professionals worldwide, combining rigor with creativity to design explainable, client-focused solutions.





For more information please visit the Robeco website.

IMPORTANT INFORMATION – CAPITAL AT RISK

This information refers only to general information about Robeco Holding B.V. and/or its related, affiliated and subsidiary companies (“Robeco”), Robeco’s approach, strategies and capabilities. This is a marketing communication solely intended for professional investors, defined as investors qualifying as professional clients, who have requested to be treated as professional clients or who are authorized to receive such information under any applicable laws. Unless otherwise stated, the data and information reported is sourced from Robeco, is, to the best knowledge of Robeco, accurate at the time of publication and comes without any warranties of any kind. Any opinion expressed is solely Robeco’s opinion, it is not a factual statement, and is subject to change, and in no way constitutes investment advice. This document is intended only to provide an overview of Robeco’s approach and strategies. It is not a substitute for a prospectus or any other legal document concerning any specific financial instrument. The data, information, and opinions contained herein do not constitute and, under no circumstances, may be construed as an offer or an invitation or a recommendation to make investments or divestments or a solicitation to buy, sell, hold or subscribe for financial instruments or as financial, legal, tax, or investment research advice or as an invitation or to make any other use of it. All rights relating to the information in this document are and will remain the property of Robeco. This document may not be copied or used with the public. No part of this document may be reproduced or published in any form or by any means without Robeco’s prior written permission. Robeco Institutional Asset Management B.V. has a license as manager of UCITS and AIFs of the Netherlands Authority for the Financial Markets in Amsterdam.

United Kingdom

This information is provided by Robeco Institutional Asset Management UK Limited, 30 Fenchurch Street, Part Level 8, London EC3M 3BD, registered in England no.15362605. Robeco Institutional Asset Management UK Limited is authorised and regulated by the Financial Conduct Authority (FCA – Reference No: 1007814).

Switzerland

Robeco Switzerland Ltd is licensed by the Swiss Financial Market Supervisory Authority FINMA as a manager of collective assets.

Australia

This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) which is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco Hong Kong Limited is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws.

New Zealand

In New Zealand, this document is only available to “wholesale investors” within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 (‘FMCA’). This document is issued by Robeco Hong Kong Limited which does not have a place of business in New Zealand.

Hong Kong

This document is issued by Robeco Hong Kong Limited, which is regulated by the Hong Kong Securities and Futures Commission (“SFC”). The contents of this document have not been reviewed by the SFC. Investment involves risks. This information does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation for any security.

Singapore

This information is for informational purposes only and should not be construed as an offer to sell or an invitation to buy any securities or products, nor as investment advice or recommendation. The contents of this document have not been reviewed by the Monetary Authority of Singapore (“MAS”). Robeco Singapore Private Limited holds a capital markets services licence for fund management issued by the MAS and is subject to certain clientele restrictions under such licence. An investment will involve a high degree of risk, and you should consider carefully whether an investment is suitable for you.

US

This document may be distributed in the US by Robeco Institutional Asset Management US, Inc. (“Robeco US”), an investment adviser registered with the US Securities and Exchange Commission (SEC). Such registration should not be interpreted as an endorsement or approval of Robeco US by the SEC. Robeco B.V. is considered “participating affiliate” and some of their employees are “associated persons” of Robeco US as per relevant SEC no-action guidance. Employees identified as associated persons of Robeco US perform activities directly or indirectly related to the investment advisory services provided by Robeco US. In those situations, these individuals are deemed to be acting on behalf of Robeco US. SEC regulations are applicable only to clients, prospects and investors of Robeco US. Robeco US is wholly owned subsidiary of ORIX Corporation Europe N.V. (“ORIX”), a Dutch Investment Management Firm located in Rotterdam, the Netherlands. Robeco US is located at 230 Park Avenue, 33rd floor, New York, NY 10169.

For more information please
visit our website.