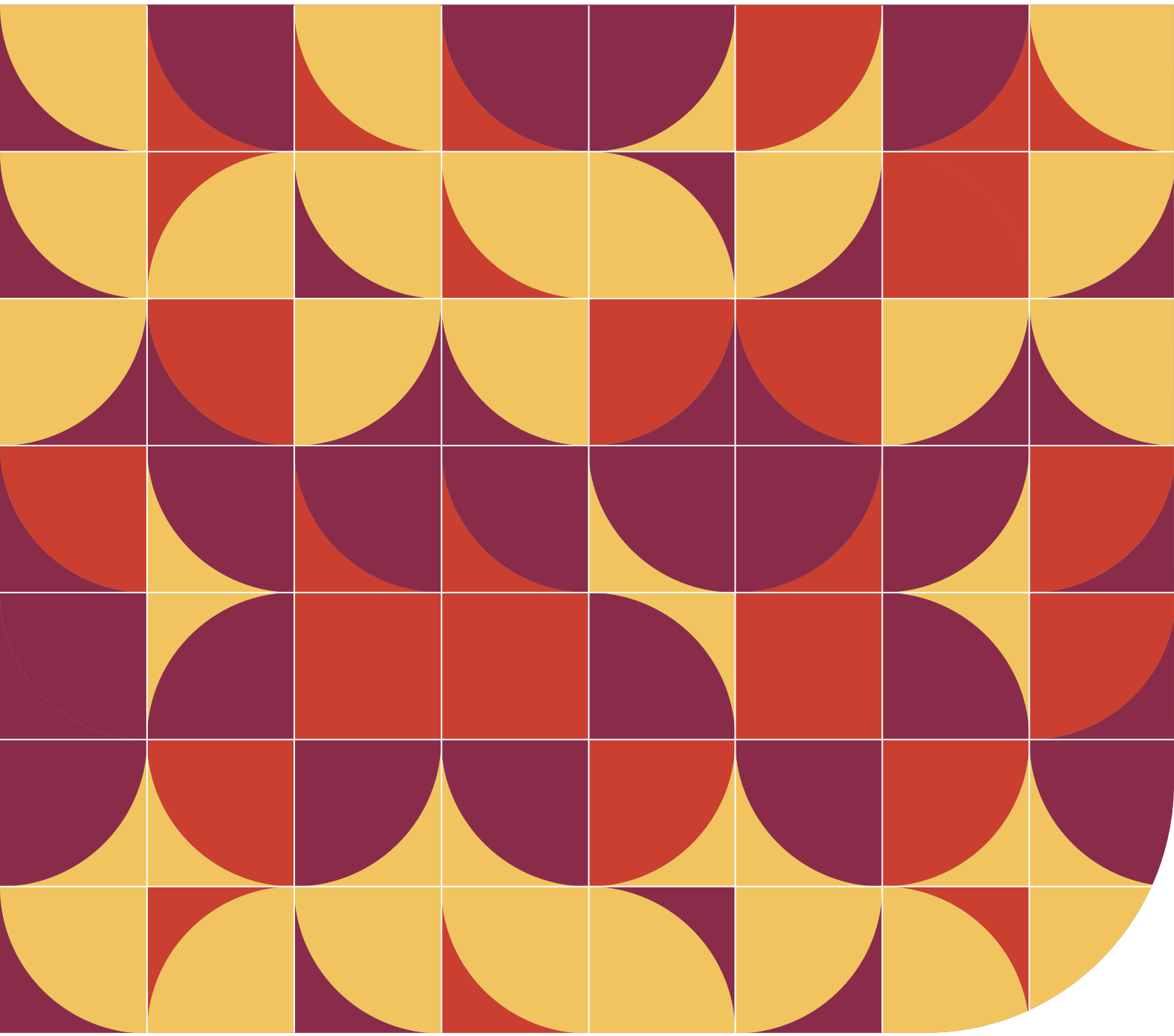
Quoniam



Customised fixed income portfolios: Why systematic processes have an edge

September 2026

Table of contents

Summary

Customisation has long been a defining characteristic of fixed income investing. Institutional investors such as pension funds, insurers, banks and corporates often require portfolios that reflect specific objectives, liabilities, regulatory frameworks and investment guidelines. Today, however, the scope of customisation has expanded significantly. Beyond traditional constraints such as duration, ratings, sectors and benchmarks, investors increasingly seek portfolios that incorporate sustainability objectives, climate considerations, liquidity requirements, risk budgets, turnover limits and highly tailored reporting.

While many of these requirements appear straightforward in isolation, each can have far-reaching effects on portfolio characteristics, including yield, duration, spread exposure, liquidity, turnover and expected alpha. As a result, successful customisation is no longer simply a matter of excluding securities or applying overlays. It requires a disciplined investment process capable of evaluating and managing the interaction of multiple constraints simultaneously.

This paper argues that systematic investment processes are particularly well suited to this challenge. By analysing broad investment universes, incorporating diversified sources of return, embedding client requirements directly into portfolio construction and accounting for implementation considerations such as liquidity and transaction costs, systematic approaches can help preserve the intended risk and return characteristics of a portfolio while accommodating client-specific objectives.

Drawing on examples from fixed income portfolio management and evidence from Quoniam's internal research, the paper illustrates how a systematic framework can measure, manage and explain the trade-offs associated with customisation. Rather than treating client requirements as adjustments made after a portfolio has been constructed, a systematic process integrates them from the outset. The result is a more transparent and scalable approach that qualifies for investors the consequences of their choices and designs portfolios that remain aligned with their long-term objectives.

About Quoniam

Quoniam is a leading systematic, data-driven asset manager that provides customised investment solutions for professional clients by leveraging science and cutting-edge technology. Our product range includes equities, fixed income, liquid alternative and multi-asset strategies. We serve our clients from offices in Frankfurt and London. Quoniam has been operating since 1999 and we currently manage approximately EUR 27 billion for investors worldwide. We provide professional investors with smarter alpha and a more thoughtful way of investing, bringing clarity and precision to a complex world. Our approach involves harnessing the power of science-based research enhanced by AI to generate consistent, high-quality, risk-adjusted returns.

Author

Dr Harald Henke
Principal Investment Strategist Fixed Income

Your contact:

Quoniam Asset Management GmbH
Westhafen Tower · Westhafenplatz 1
60327 Frankfurt am Main

T +49 69 74384 0
info@quoniam.com
www.quoniam.com

Customised fixed income portfolios: Why systematic processes have an edge

Fixed income has always been customised – but the bar has risen

Fixed income investing has always been a highly customised business. Unlike equities, where many investors start from relatively standardised benchmark exposures, fixed income mandates are often shaped by very specific investor requirements. Institutional investors are far from homogeneous: pension funds, insurers, banks and corporates can have markedly different objectives, liabilities and regulatory constraints. These differences translate directly into the way fixed income portfolios need to be constructed. Investors may define therefore target durations, minimum rating thresholds, maturity ranges, currency rules, benchmark choices, regulatory constraints or liability-driven objectives. Customisation is thus not new to bond investors; it has long been part of how institutional fixed income portfolios are designed and managed.

What has changed, in our view, is the breadth and complexity of those requirements. Today, investors increasingly want their bond portfolios to reflect not only traditional investment guidelines, but also sustainability preferences, exclusion policies, climate objectives, risk budgets, liquidity constraints and more detailed reporting needs. ESG considerations have been an important driver of this development. Many investors now expect their managers to implement client-specific exclusion lists, carbon-reduction paths, ESG tilts or regulatory reporting requirements, while still preserving the intended risk and return profile of the portfolio. This has made customisation a more demanding task. It is no longer sufficient simply to define an eligible universe and select attractive bonds from it. Each additional requirement can affect several portfolio characteristics at once, including yield, duration, spread exposure, sector allocation, credit quality, liquidity, turnover and expected alpha. A portfolio that satisfies a client's formal guidelines may therefore still look very different from the portfolio the investor originally intended to hold.

The more customised the mandate, the more important it is to manage multiple constraints and trade-offs simultaneously.

The central challenge is not whether a manager can implement a restriction. All managers can exclude a sector, avoid certain issuers or adjust a rating profile. The more important question is whether the manager can understand, manage and explain the consequences of these decisions across the whole portfolio. In modern fixed income mandates, customisation has become an investment problem rather than a purely administrative one.

Customisation covers the entire investment process

Investment guidelines

- Universe definitions
- Customised benchmark
- Restrictions and exclusions regarding:
  - Ratings
  - Maturities
  - Sectors, etc.

Sustainability

- Exclusions
- Climate-related investments
- ESG tilts
- PAIs
- SFDR

Portfolio construction

- Risk budgets
- Tracking errors
- Turnover and liquidity
- Cash flow matching
- Realised loss budgets

Reporting and analytics

- Performance attribution related to client-specific customisation
- ESG reports
- Scenario analysis
- Risk reports

Source: Quoniam Asset Management GmbH

This is where the design of the investment process matters. The more client-specific a mandate becomes, the more important it is to have a process that can evaluate many securities, constraints and trade-offs at the same time. Customisation in fixed income is therefore increasingly about preserving the desired portfolio outcome while adapting the investment universe to the client's specific requirements.

What investors customise today

The growing demand for customised fixed income solutions is visible across the entire investment process. At the starting point, investors define the basic investment guidelines of the mandate. These may include the eligible universe, benchmark selection, rating requirements, maturity ranges, sector restrictions, issuer limits or currency rules. Such guidelines determine what the portfolio is allowed to invest in and what risks it should avoid.

Sustainability has added another important layer. Many investors no longer want ESG considerations to be treated as a generic overlay. They may have their own exclusion policies, climate objectives, carbon-reduction targets or preferences regarding ESG tilts. Some investors also need reporting that reflects specific regulatory frameworks, such as SFDR-related requirements, or internal governance standards. As a result, sustainability customisation increasingly affects both the composition of the portfolio and the way outcomes are measured.

Customisation also reaches directly into portfolio construction and risk management. Investors may specify tracking-error budgets, turnover limits, liquidity requirements, cash-flow objectives or realised-loss budgets. These requirements are not merely operational details. They influence which bonds can be held, how large positions can be, how frequently the portfolio can be traded and how much active risk the manager can take.

Finally, customisation extends to reporting and analytics. Investors increasingly want to understand not only what the portfolio holds, but why it behaves as it does. This can include performance attribution related to client-specific restrictions, risk reports, ESG reports and scenario analysis. For many clients, transparent reporting is therefore part of the customisation itself, because it allows them to assess whether the mandate is delivering the intended outcome.

Taken together, these requirements show that customisation is much broader than excluding individual issuers or sectors. It covers the investment universe, the sustainability framework, portfolio construction, implementation and reporting. The more these dimensions interact, the more important it becomes to manage them within a consistent investment process rather than as separate adjustments made after the portfolio has been built.

Why customisation is harder than it looks

At first sight, many customisation requests appear straightforward. If a client wants to exclude a sector, avoid certain issuers, reduce carbon intensity or limit lower-rated bonds, the required action seems clear: remove the affected securities from the portfolio and replace them with eligible alternatives. In practice, however, this is only the first step.

Every restriction changes more than the characteristic it directly targets. Excluding a sector, for example, does not only reduce exposure to that sector. It can also change the portfolio's duration, spread duration, yield, rating profile, liquidity, turnover, factor exposure and tracking error. A climate-related restriction may have sector effects. A rating constraint may reduce carry. A liquidity requirement may remove attractive but less frequently traded bonds. Even a simple constraint can therefore create several unintended consequences.

This matters because investors usually want customisation without losing the core investment objective of the mandate. They may want to exclude certain securities, but they still expect the portfolio to preserve its intended risk profile, return potential and implementation discipline. The manager's task is therefore not merely to comply with the rule, but to rebuild the portfolio in a way that keeps the overall mandate intact.

This is particularly challenging in credit markets, where bonds differ across many dimensions at the same time. Two bonds may come from similar issuers but have different maturities, seniority, liquidity, spreads or factor characteristics. Replacing one bond with another can therefore solve one problem while creating a new one elsewhere in the portfolio. A substitute that restores sector exposure may worsen duration. A bond that improves yield may increase downgrade risk. A trade that looks attractive on paper may be difficult or costly to implement.

Customisation should preserve the intended portfolio profile – but each constraint can affect multiple portfolio characteristics.

The real complexity of customisation lies in these interactions. The more client-specific the mandate becomes, the more difficult it is to make changes sequentially. Each adjustment has to be checked against the rest of the portfolio, and each correction can trigger further deviations. Customisation is therefore not simply a matter of editing holdings. It is the task of managing many portfolio characteristics simultaneously while preserving the intended outcome for the investor.

An example: excluding energy bonds

Consider a client who wants to exclude all energy bonds from a global investment grade credit portfolio. At first glance, this may seem like a simple sector restriction. The manager removes the affected bonds, replaces them with eligible alternatives and continues to manage the portfolio. In reality, however, the exclusion creates a much broader portfolio-construction challenge.

Energy bonds are not only sector exposures. They also contribute to the portfolio's yield, duration, spread duration, credit quality, liquidity profile and factor exposure. Once they are removed, the portfolio may become underexposed to certain spread characteristics, lose part of its carry, change its sensitivity to credit markets or drift away from the desired maturity and rating profile. The task is therefore not merely to replace energy bonds with non-energy bonds. The task is to rebuild the portfolio so that it continues to deliver the intended investment outcome under the new client restriction.

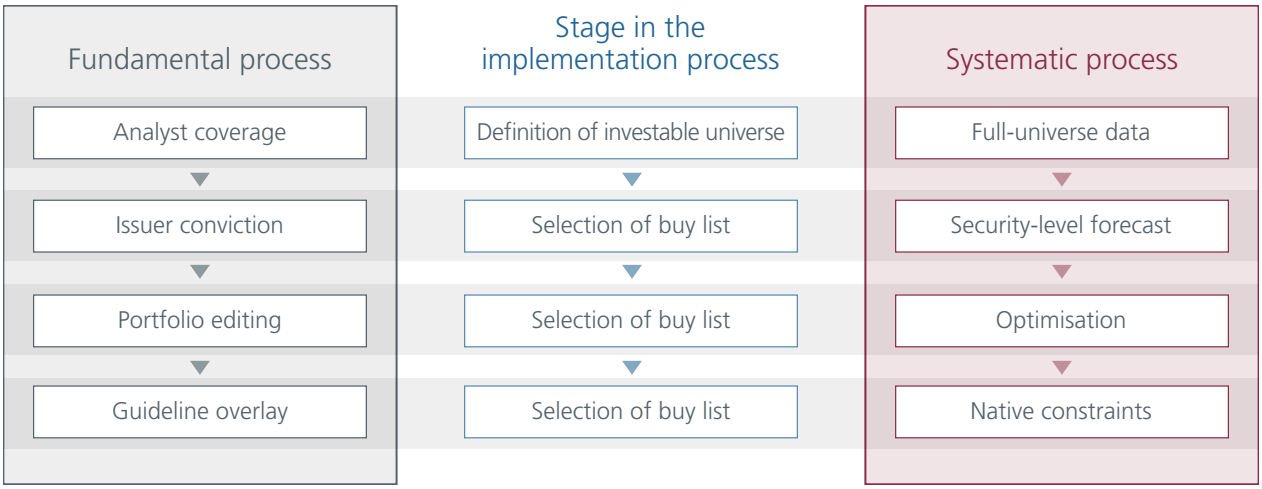
A traditional fundamental process would typically work through these adjustments sequentially. First, the excluded bonds are removed and suitable replacements are identified. The manager then checks whether portfolio characteristics such as duration, spread duration, sector and rating exposures, yield or liquidity have shifted. Turnover and transaction costs must be assessed. If one adjustment creates a new deviation elsewhere, the process has to be repeated.

The systematic process does not build a standard portfolio and customise it afterwards. Customisation is part of the portfolio construction process itself.

The difficulty is that each individual adjustment can solve one problem while creating another.

A systematic process approaches the same problem differently. Rather than adjusting the portfolio one characteristic at a time, the exclusion of, for example, energy bonds becomes one input among many. An optimisation approach considers the relevant securities, forecasts, risks, liquidity, transaction costs and client constraints simultaneously. It seeks a portfolio that maximises expected alpha while satisfying the full set of client-specific and portfolio-level constraints.

Two approaches to implementing client constraints



Source: Quoniam Asset Management GmbH

This distinction is important. The systematic process does not first build a standard portfolio and then customise it afterwards. Customisation is part of the portfolio-construction process itself. The objective is to preserve the portfolio's intended characteristics while adapting the investable universe to the client's requirements. In this sense, the energy exclusion illustrates a broader point: customisation is not a single adjustment, but a network of interacting trade-offs that need to be solved simultaneously.

Why systematic processes are well suited to customisation

The complexity of customised fixed income mandates plays to the strengths of a systematic investment process. This is not because quantitative managers face no trade-offs. Every restriction has a potential cost. The advantage lies in the ability to identify those trade-offs, measure them and manage them consistently across a broad opportunity set.

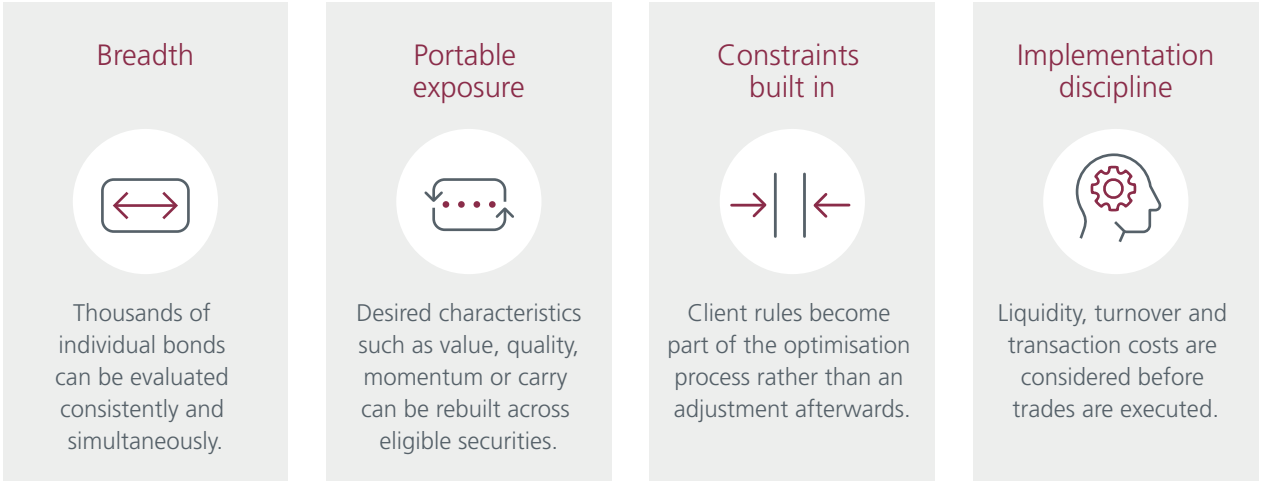
The first important advantage is **breadth**. In global investment grade credit, the investable universe consists of thousands of individual bonds across currencies, sectors, issuers, maturities and rating categories. A systematic model can evaluate this universe consistently and simultaneously. When a client restriction removes part of the universe, the process still has a large number of remaining bonds from which to find suitable substitutes. This breadth is particularly valuable when the aim is not only to replace excluded holdings, but also to preserve the portfolio's intended risk and return characteristics.

The second advantage is the **portability of factor exposure.** In a fundamental process, investment ideas are often linked to specific issuer views. If a client guideline excludes one of those issuers, sectors or rating segments, the preferred expression of the investment view may disappear. In a systematic process, by contrast, the alpha engine is typically based on diversified return drivers such as value, quality, momentum or carry. These exposures can often be rebuilt across other eligible securities. The investment idea is therefore less dependent on a small number of individual names.

A third advantage is that **client rules can be embedded** directly into portfolio construction. Restrictions, risk limits, liquidity requirements, ESG preferences and turnover budgets are not treated as after-the-fact adjustments. They become part of the optimisation problem itself. The portfolio can therefore be built with the client's requirements already included, rather than being corrected afterwards to comply with them.

Implementation is equally important. Customisation often changes the trading profile of a portfolio. It may require selling excluded bonds, buying substitutes, avoiding less liquid securities or limiting turnover. A systematic process can **incorporate liquidity and transaction-cost estimates** before trades are executed. This helps to avoid situations in which a theoretically attractive customised portfolio becomes expensive or difficult to implement in practice.

Systematic approaches are well-positioned to deliver customised solutions



Source: Quoniam Asset Management GmbH

Taken together, these features explain why systematic processes can be particularly effective in customised fixed income. They combine broad security-level evaluation, portable factor exposures, constraint-aware optimisation and implementation discipline. The result is not cost-free customisation, but customisation whose expected impact on alpha, risk, liquidity and turnover can be assessed before decisions are made. That transparency is an important benefit for investors, because it turns mandate design into an informed discussion about objectives and trade-offs.

What the evidence shows

The case for systematic customisation becomes stronger when the trade-offs can be measured. In Quoniam's internal model calculations for a global investment grade credit universe, different client exclusions were tested over the period from January 2010 to March 2026. The results show a clear pattern: restrictions can reduce the investable universe substantially, but the expected alpha potential is often retained to a much greater extent.

This is an important distinction. A restriction may remove a large share of available bonds, but that does not automatically mean that the investment process loses the same proportion of its alpha opportunity. For example, exclusions based on ESG, sector, rating, duration or liquidity criteria reduce the universe in different ways. Yet the model can still search across the remaining bonds and identify securities with similar or attractive factor characteristics. In other words, the opportunity set becomes smaller, but it does not necessarily become unattractive.

The empirical analysis also shows why breadth matters. If a process evaluates only a narrow list of preferred issuers, a restriction can have a large impact because it may remove some of the manager's highest-conviction ideas. A systematic process starts from a much broader universe. It can therefore look for alternative expressions of the same investment characteristics across many issuers, sectors and maturities. This helps preserve expected alpha even after meaningful parts of the universe have been excluded.

A systematic process can estimate the effect of different client requirements before implementation and explain which constraints are most costly.

A second finding is that factor exposure can often be retained after customisation. This matters because factor exposure is one of the mechanisms through which systematic credit strategies seek to generate return. If a client exclusion removes certain bonds, the optimiser can rebuild exposure to factors such as quality, carry, value, momentum or diversification through other eligible bonds. The portfolio may not be identical to the unconstrained version, but it can still preserve much of the intended investment profile.

The analysis does not suggest that customisation is free. Some restrictions have a clear impact on expected alpha, tracking error or transaction costs. That is precisely why measurement is valuable. A systematic process can estimate the effect of different client requirements before implementation and explain which constraints are most costly. This turns customisation into a transparent design discussion. The relevant question is not only whether a client objective can be implemented, but what its expected impact is and whether that trade-off is acceptable.

Individual restrictions influence portfolios across multiple dimensions

	Yield/carry	Duration	Spread	Ratings	Liquidity	Turnover	Factors	Tracking error
Sector exclusion	●	●	●	●	●	●	●	●
Rating floor	●	○	●	●	○	○	●	●
Maturity cap	●	●	●	○	●	●	●	●
Liquidity minimum	●	○	●	○	●	●	○	●

Source: Quoniam Asset Management GmbH

For investors, this transparency is highly relevant. It allows them to compare different versions of a mandate and understand the consequences of their choices. A carbon-related exclusion, a rating restriction or a liquidity requirement may all be desirable, but they affect the portfolio in different ways. By quantifying those effects, the manager can help the client make informed decisions rather than treating customisation as a black box.

The evidence therefore supports the broader argument: systematic processes are well suited to customised fixed income because they can measure, manage and explain the consequences of client-specific constraints. The objective is not to claim that every restriction is harmless. The objective is to ensure that customisation remains deliberate, transparent and consistent with the investor's desired outcome.

Why quantamental approaches do not fully close the gap

The advantages of a systematic process do not mean that fundamental managers cannot use quantitative tools. Many do. Screening models, risk systems, optimisers, ESG datasets and substitution tools can all improve a fundamentally driven investment process. They can help analysts identify opportunities, monitor exposures, assess tracking error or implement client guidelines more efficiently.

These tools are valuable, but they do not automatically turn a fundamental process into a systematic customisation platform. The distinction lies in the role that quantitative methods play. In a quantamental process, quantitative tools often support an investment process that remains centred on analyst coverage, issuer conviction and discretionary portfolio decisions. In a systematic process, by contrast, data, forecasts, risk models, liquidity estimates, transaction costs and client constraints are integrated into the core portfolio-construction engine.

This distinction matters when mandates become highly customised. A quantitative screen may help narrow the universe, but it does not necessarily create consistent alpha forecasts for every investable bond. A risk model may measure exposures, but risk measurement is not the same as rebuilding expected alpha under a new set of constraints. An optimiser can construct portfolios subject to rules, but its usefulness depends on the breadth and consistency of the expected-return inputs it receives. Similarly, a substitution tool may identify bonds with similar risk characteristics, but similarity of risk is not always the same as similarity of expected alpha.

The important question is whether the entire investment process is designed to manage client-specific constraints consistently, transparently and at scale.

There are also structural bottlenecks that quantitative tools alone may not remove. Fundamental managers can screen a large universe, but not every security will have the same depth of human conviction behind it. Outperformance may depend on specific issuer views, and client restrictions can remove the preferred expression of those views. When analyst judgement and model output disagree, the process also needs clear governance rules, especially across many customised mandates. Each additional guideline set can increase the burden on portfolio managers, analysts and implementation teams.

This is why quantamental approaches can narrow the gap but may not close it completely. They improve parts of the process, but they do not necessarily create a fully integrated system in which alpha, risk, liquidity, costs and client constraints are solved simultaneously. For customised fixed income mandates, the key question is therefore not whether a manager uses quantitative tools. The more important question is whether the entire investment process is designed to manage client-specific constraints consistently, transparently and at scale.

What investors should ask their fixed income manager

As customisation becomes more important, investors should look beyond the question of whether a manager is willing to implement specific guidelines. Willingness is only the starting point. The more relevant question is whether the manager has a process that can assess the full impact of those guidelines before they are implemented.

A useful first question is how the manager evaluates the remaining opportunity set after a restriction has been applied. If certain sectors, issuers, ratings or sustainability exposures are excluded, the portfolio needs credible substitutes. Investors should therefore understand whether the manager can evaluate the full eligible universe, or whether the process depends mainly on a narrower list of preferred issuers.

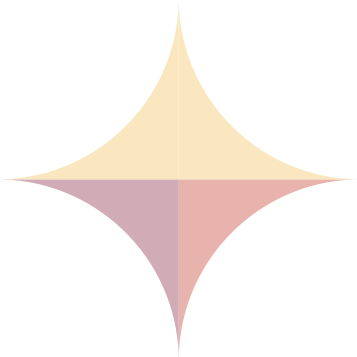
A second question concerns the preservation of the intended portfolio profile. After customisation, the portfolio should not only comply with the client's rules; it should also remain aligned with the original investment objective. Investors should ask how the manager controls duration, spread duration, yield, rating profile, sector exposure, factor exposure, liquidity and turnover after the guideline has changed the universe.

A third question is how the cost of customisation is measured. Some restrictions may have only a limited effect on expected alpha, risk or transaction costs. Others may create more meaningful trade-offs. A manager should be able to explain these effects transparently, ideally before implementation. This allows the client to decide whether a specific objective is worth its expected cost.

Investors should also ask how customisation is embedded in the investment process. If client-specific rules are applied only after the portfolio has been built, there is a greater risk that the customised portfolio becomes an adjusted version of the original idea. If the rules are incorporated directly into portfolio construction, the portfolio can be designed around the client's requirements from the outset.

Finally, investors should consider whether the process is repeatable and scalable. Many clients require more than one customisation feature. A mandate may combine ESG exclusions, climate targets, rating limits, liquidity requirements, turnover budgets and specific reporting needs. The challenge is not only to implement each individual rule, but to manage all of them consistently at the same time.

These questions help shift the discussion from implementation to investment quality. In customised fixed income, the aim is not merely to create a compliant portfolio. The aim is to create a portfolio that remains coherent, transparent and aligned with the investor's objectives after the customisation has been applied.



Conclusion: Customisation should be measurable, not just possible

For investors, the key question is no longer simply whether a manager can implement a customised fixed income mandate. Most managers can adjust a benchmark, exclude issuers, apply sustainability criteria or introduce additional risk limits. The more important question is whether the manager can measure the consequences of those decisions and manage them consistently across the whole portfolio.

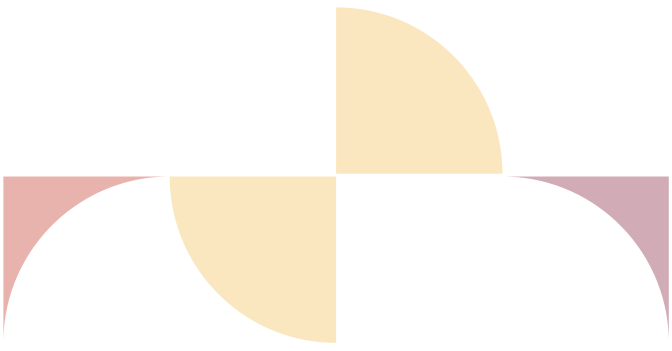
A restriction may be easy to state, but its impact can be broad. It may reduce the investable universe, change the portfolio's factor exposure, alter its duration or spread profile, affect liquidity, increase turnover or reduce expected alpha. Without a disciplined framework, these effects can remain hidden until they appear in performance, risk or implementation outcomes. A systematic process can bring these trade-offs into the open before the portfolio is implemented.

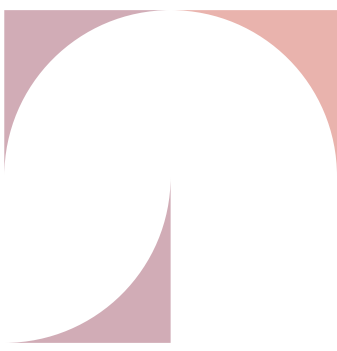
Quoniam's approach is designed around this idea. Customisation is not treated as a separate overlay added after portfolio construction. It is integrated into the investment process itself. Daily security-level forecasts, risk and downgrade models, liquidity and transaction-cost estimates, sustainability data, client-specific constraints and reporting needs all feed into a repeatable portfolio-construction framework. This allows different client requirements to be considered simultaneously rather than sequentially.

The result is a more transparent form of customisation. Investors can see not only whether a requirement can be implemented, but also how it is expected to affect alpha, risk, costs and portfolio characteristics. This turns the discussion with clients into a genuine design dialogue. Some restrictions may have limited impact; others may involve more meaningful trade-offs. In either case, the objective is to make those trade-offs explicit and manageable.

As fixed income mandates become more individualised, this capability becomes increasingly important. Customisation is valuable only if the resulting portfolio still serves the investor's purpose. The challenge is therefore to adapt the investment universe to the client's requirements while preserving the intended investment outcome as far as possible. That is where systematic investing can add particular value.

In customised fixed income, the competitive edge is not only the ability to find attractive bonds. It is the ability to preserve a coherent portfolio when client-specific requirements change the opportunity set. A systematic platform makes this process broader, more consistent and more transparent. It helps ensure that customisation is not merely possible, but measurable, explainable and aligned with the investor's objectives.





Further reading

Distinguishing factor strategies

How corporate bond and equity factor strategies differ

Learn more →

Diversifying credit portfolios

Investors benefit from investing in fixed income factor strategies

Learn more →

Incorporating pre-trade bond liquidity

Sharpening tradability and cost estimates for a better performance

Learn more →

Imprint

Editor: Leigh Ann Kittell, *CFA*
Quoniam Asset Management GmbH
Westhafenplatz 1
60327 Frankfurt · Germany

Disclaimer

The use of investment services as well as investments in financial instruments are conjoint with risks.
For more information and guidance on opportunities and risks, please visit www.quoniam.com/riskstatement