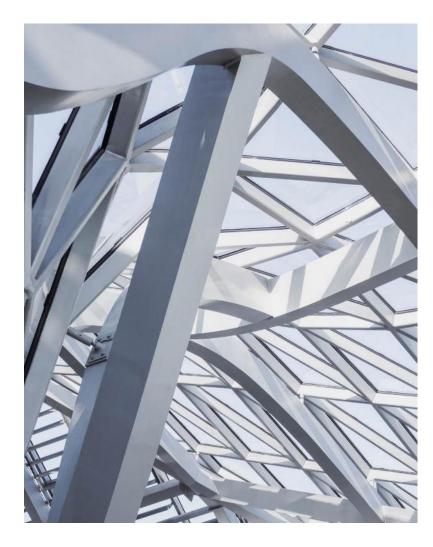






Content



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Executive Summary – Robeco QI Dynamic High Yield







"We aim for strong risk-adjusted returns and protection when high yield markets decline."

Robeco Dedicated to quantitative investing since the early 1990s

Dynamic Attractive returns from dynamically timing credit exposure

High Yield Highly liquid exposure to the global high yield market

Source: Robeco. Robeco QI Dynamic High Yield IH-EUR share class, gross of fees, based on gross asset value, all figures in EUR. Benchmark: Bloomberg Global High Yield Corporates

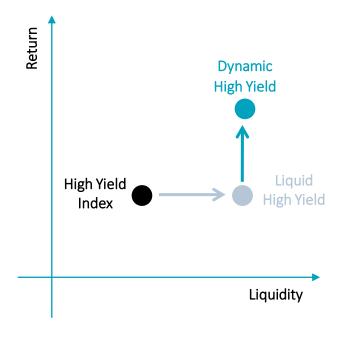
In reality costs (such as management fees and other costs are charged. These have a negative effect on the returns shown. The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

^{*}Performance: Annualized outperformance since inception per end of December 2022. **AuM per end of December 2022.

Liquid High Yield Exposure

Dynamic High Yield

Return and liquidity profile



High Yield Index

- > Broad exposure, but illiquid during crises
- > Trackers significantly underperform at high transaction costs

Liquid High Yield

- > More liquid than cash high yield bonds
- > Significantly lower transaction costs

Dynamic High Yield

- > High liquidity and low transaction costs
- > Superior risk-adjusted returns with proven timing alpha

Dynamic High Yield – liquid high yield exposure & strong risk-adjusted returns

Liquid high yield market exposure

Liquidity CDS indices compared to high yield bonds

	High Yield Bonds	CDS indices		
Total weekly trading volume	USD 36 billion	USD 36 billion		
Weekly volume per instrument	USD 18 million	USD 18,000 million		
Transaction costs	40-60 bps	5-10 bps		

- > Trading CDS indices is quick and cheap, average weekly volume of 36 bln USD
- > Low transaction costs for Dynamic High Yield

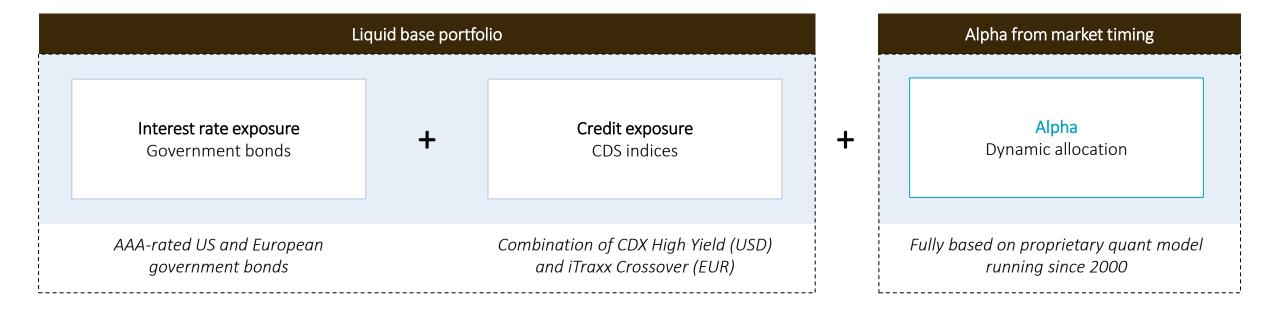
CDS index exposure 10 times more liquid than high yield bonds



Design of the investment strategy

Design of the investment strategy

We combine liquid high yield exposure with dynamic alpha from timing opportunities



Two blocks: (1) liquid base portfolio and (2) alpha from market timing

8

Liquid base portfolio – taking credit exposure

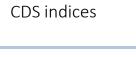
Credit exposure (high yield) taken via CDS indices

- > We take credit exposure via a combination of CDX HY (USD) and iTraxx Crossover (EUR)
- > The returns of this liquid exposure are ~85% correlated with the high yield bond index
- > Differences related to liquidity, exposure to liquid and larger issuers
- > The CDS indices have no Emerging Market exposure

Rating distribution Sector distribution Country distribution **United States** Consumer Cyclical BAA United Kingdom Communications France ΒA Consumer Non Cyclical Germany Luxembourg Capital Goods Italy Basic Industry Netherlands CAA Technology Switzerland Sweden Energy CA-D Spain Banking Ireland NR Other Other 10% 20% 30% 50% 60% 20% 25% 30% 30% 40% ■ Bloomberg Global High Yield Bond Index CDS indices

Characteristics CDS indices similar to high yield bond index

Source: Robeco, Bloomberg. Data end of September 2022.



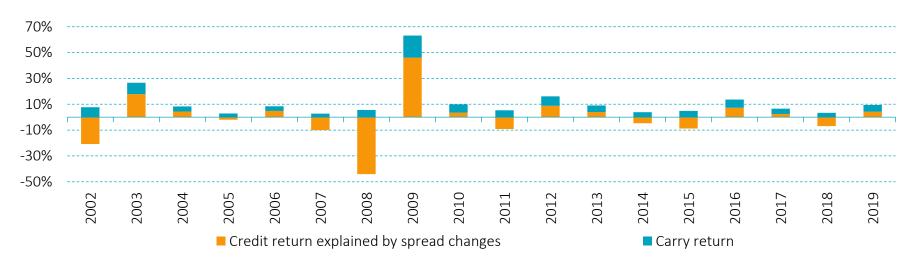
Credit exposure

Dynamic allocation—credit spread movements are the key driver of returns

Dynamic allocation aims to improve risk adjusted returns

- > Spread movements explain ~70% of the returns
- > Manage risk when spreads increase
- > Capture opportunities in periods with declining spreads

Explaining credit returns high yield bonds



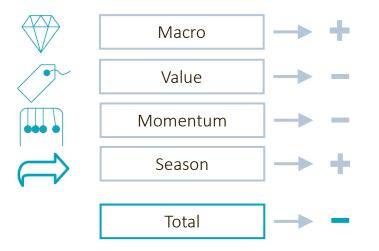
Spread movements are the key driver of returns proving the need for active market timing

Alpha

Dynamic allocation

Dynamic allocation – example High yield market outlook

Tactical outlook 11 March 2020 was negative



Alpha

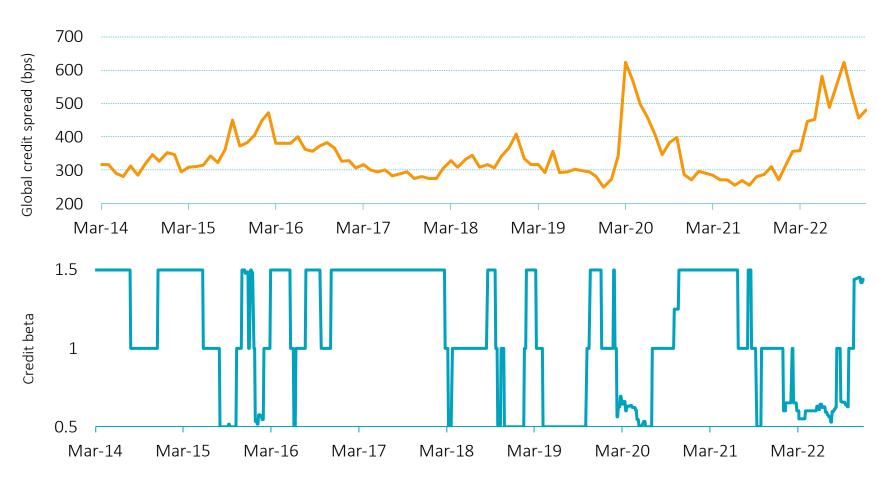
Dynamic allocation

- > Macro positive as low risk-free rates bode well for high yield issuers
- > Value negative as CDS indices were expensive compared to bonds
- > Momentum strongly negative credit trend, weak risk appetite and negative equity market
- > Season related to the calendar month, is positive in March

Position credit exposure was 44% underweight providing protection in sell-off Q1 2020

Dynamic allocation - manage risk rising spreads and benefit from declining spreads

Credit beta exposure of Robeco QI Dynamic High Yield since inception



Alpha
Dynamic allocation

- > Pronounced relative positions determine fund's absolute high yield market exposure
- > More than 70% of the time in active position

Live performance track record

Performance

Robeco QI Dynamic High Yield

Annualized performance (Hedged into EUR)						
	YTD	1 Year	3 Years	5 Years	7 Years	Since Apr-14
Robeco QI Dynamic High Yield	-11.28%	-11.28%	-1.50%	0.41%	2.81%	3.33%
Benchmark	-12.97%	-12.97%	-2.09%	-0.15%	2.58%	1.61%
Relative performance	1.69%	1.69%	0.59%	0.57%	0.23%	1.72%
Tracking error		4.96%	6.13%	5.05%	4.67%	4.54%
Information ratio		0.34	0.10	0.11	0.05	0.38

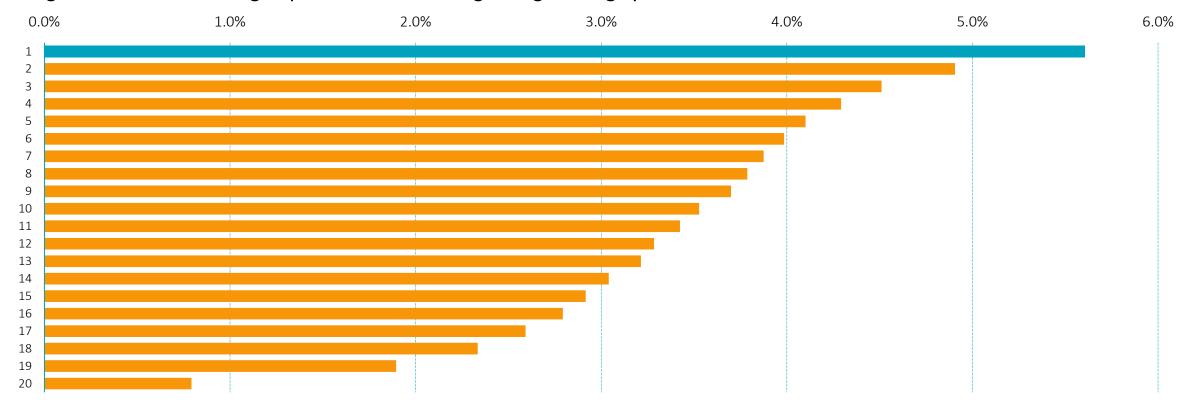
Calendar year performance (Hedged into EUR)						
	2022	2021	2020	2019	2018	2017
Robeco QI Dynamic High Yield	-11.28%	3.93%	3.64%	10.16%	-3.02%	10.24%
Benchmark	-12.97%	2.81%	4.91%	10.91%	-4.69%	5.88%
Relative performance	1.69%	1.12%	-1.28%	-0.75%	1.67%	4.37%

The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Periods shorter than one year are not annualized. The value of your investments may fluctuate. Past performance is no guarantee of future results. Returns gross of fees, based on gross asset value. In reality costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Source: Robeco, Bloomberg. Portfolio: Robeco QI Dynamic High Yield IH-EUR Share Class. Benchmark: Bloomberg Global High Yield Corporate. All figures in EUR. Data end of December 2022.

Comparison to Morningstar global high yield peer group

Average annual returns of 20 groups of funds in Morningstar's global high yield universe

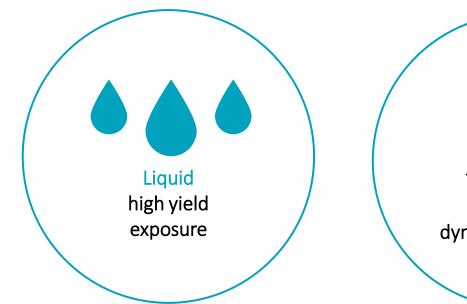


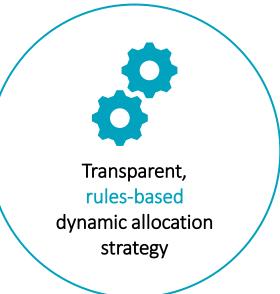
- > Dynamic High Yield in top 5 of 100 Morningstar funds
- > Low average correlation with the peers: style diversification
- > Outperformance mainly realized in bear markets

The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Source: Morningstar Direct, Robeco. Annual gross return in EUR of 96 global high yield funds in the Morningstar universe over the period April 2014 - October 2021. The universe is divided into 20 groups, with 16 groups of 5 funds and 4 groups of 4 funds. Robeco QI Dynamic High Yield is among the five top-ranked funds, represented by the blue bar. Returns are gross of fees. In reality costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Key takeaways







References

Quantitative investing at Robeco

Facts and figures



AuM: **EUR 173 billion**



EUR 69.4 billion*

managed based on quant models



1,028 employees



EUR 169 billion

managed in ESG integrated assets

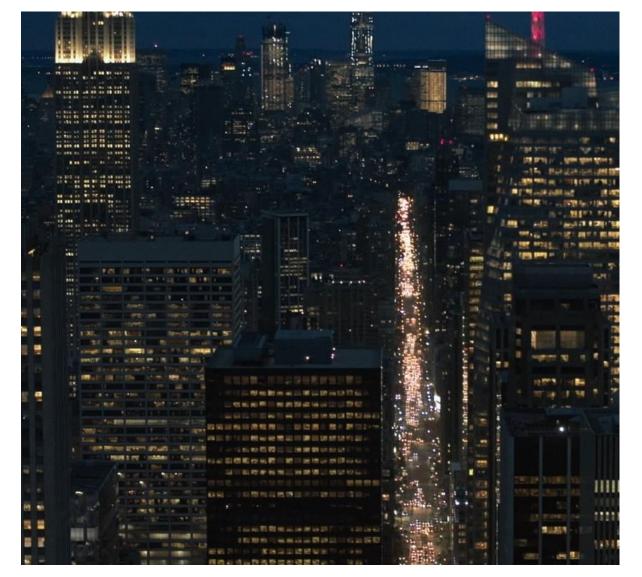


 $\begin{array}{c} \textbf{300} \\ \textbf{investment professionals} \end{array}$

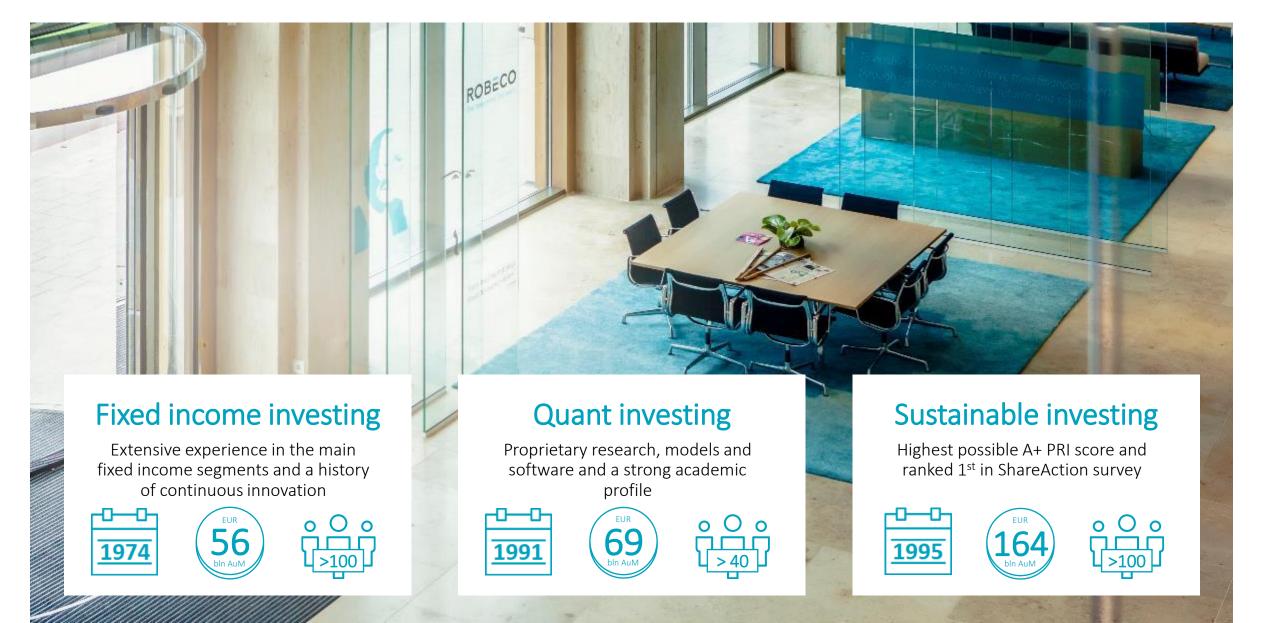


A+ in PRI assessment





AuM figures as of September 2022, * excludes EUR 1.3 billion from reinvesting. Personnel figures as of June 2022.



Source: Robeco. AuM data end of September 2022.

Source PRI score: PRI Assessment report 2020. Please also see the Public Transparency Report for Robeco at unpri.org: https://www.unpri.org/signatory-directory/robeco/1717.article.

Source ShareAction survey: 202 ranking by the Asset Owners Disclosure Project (AODP), a project managed by the responsible investment organization ShareAction. Full report can be downloaded here: https://shareaction.org/reports/point-of-no-returns-a-ranking-of-75-of-the-worlds-asset-managers-approaches-to-responsible-investment

Robeco Quant Fixed Income

Credible offering



- > Seasoned team of 16 PMs & researchers with strong academic credentials
- > Six capabilities and EUR 6.7 billion in funds and customized mandates

Long experience



- > In-house quant research: rates since 1991 and credits since 1999
- > Long track-records; rates since 1998 and credits since 2012

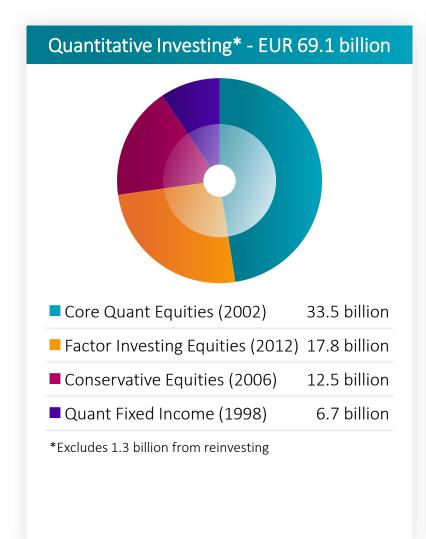
Building on fundamental fixed income expertise

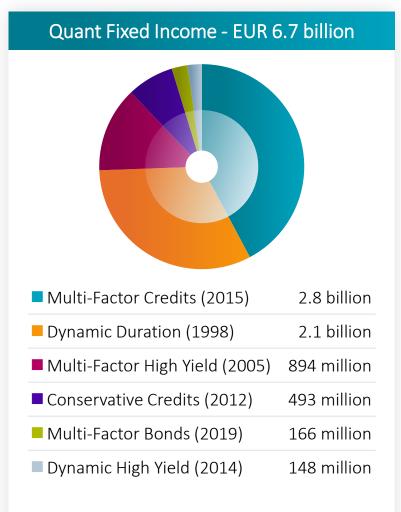


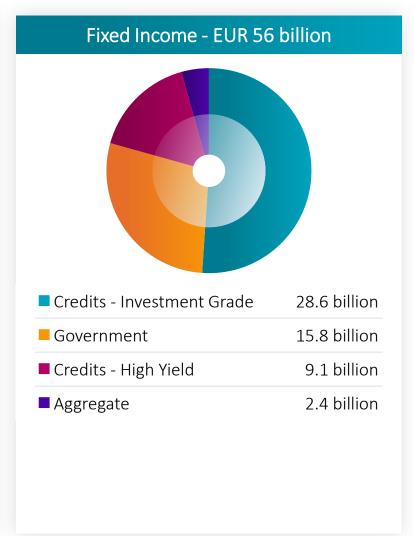
- > Fundamental expertise in research, execution and sustainability
- > Human oversight for practicalities and risks beyond scope of models



Overview capabilities related to Quant Fixed Income







Source: Robeco. Quant and Quant Fixed Income data end of December 2022. Fixed Income data end of September 2022. Quant and Quant Fixed Income figures based on preliminary data.

Experienced team responsible for Quant Fixed Income strategies

Portfolio Management

Patrick Houweling, PhD



Co-head Quant FI Portfolio Manager Industry: 24 years



Industry: 24 years

Johan Duyvesteyn, PhD, CFA Portfolio Manager

Industry: 23 years

Guido Baltussen, PhD



Co-head Quant FI Portfolio Manager Industry: 19 years

Mark Whirdy



Portfolio Manager Industry: 18 years

Lodewijk van der Linden



Portfolio Manager

Industry: 10 years

Research

Martin Martens, PhD Researcher



Industry: 29 years

Casper Zomerdijk, CFA



Industry: 9 years

Luca Giorgianni



Industry: 1 years

Thibault Lair, PhD, CFA, FRM



Industry: 16 years

Joris Blonk, CFA



Industry: 9 years

Researcher

Philip Messow, PhD

Researcher



Industry: 12 years

Robbert-Jan 't Hoen, CFA Researcher



Industry: 5 years

Frederik Muskens, CFA



Industry: 11 years

Fabio Martinetti



Industry: 3 years

Client Portfolio Management

Ralph Berkien



Client Portfolio Manager

Industry: 21 years



Industry: 17 years



Client Portfolio Manager

Industry: 8 years

Quant Equity Research (18)

David Blitz, PhD



Industry: 27 years

Weili Zhou, CFA



Head Quant Equity Industry: 20 years

Quant Equity Research

18 Investment Professionals 9 years average experience

Data Science (15)

Jacob Buitelaar



Data Science

Industry: 16 years

Paul Beekhuizen, PhD



Data Science Industry: 13 years

9 years average experience

Data Science 15 Investment Professionals

Sustainability (~50)

Carola van Lamoen



Head of Sustainable Investing Industry: 21 years

Malene Christensen



Sustainable Investing Client Portfolio Manager Industry: 4 years

Sustainability

~50 Investment Professionals 12 years average experience

Fundamental Credit Analysts (28)

Taeke Wiersma



Head Credit Research Industry: 27 years

Jankees Ruizeveld



Co-head Credit Research

Industry: 28 years

Fundamental Credit Analysts 27 Investment Professionals 18 years average experience

Fundamental Credit Portfolio Managers (11)

Victor Verberk



Co-head Credit team Portfolio Manager Industry: 25 years

Sander Bus



Co-head Credit team Portfolio Manager Industry: 27 years

Fundamental Credit PMs

11 Investment Professionals 23 years average experience

Fundamental FI Macro PMs & Strategists (8)

Jamie Stuttard



Head Global Macro team Portfolio Manager Industry: 25 years

Fundamental FI Macro PMs

4 Investment Professionals 24 years average experience

Fundamental FI Macro Strategists

4 Investment Professionals 17 years average experience

Portfolio Engineering & Trading FI (16)

Erik van Leeuwen



Chief Ops Investments **Business Development** Industry: 31 years

Paul van Overbeek



Industry: 24 years

FI & FX Trading

8 Investment Professionals 23 years average experience

FI Technical & Operational PMs

7 Investment Professionals 25 years average experience

Number of investment professionals and experience per department includes the people that are mentioned by name.

The benefits of a quant approach to fixed income

Evidence-based investment decisions



- > Investment process is based on deep historical research
- > Signals are proven, understandable and implementable

Alternative to passive strategies



- > Both: transparent, rules-based, low-cost
- > Quant: outperformance potential, improved diversification and sustainability

Style diversification with fundamental strategies



- > Both: take active positions with the aim to outperform
- > Quant: multiple styles, covers entire universe, free of emotions and biases



Quant Fixed Income: Selected academic publications

Academic recognition of our innovative research

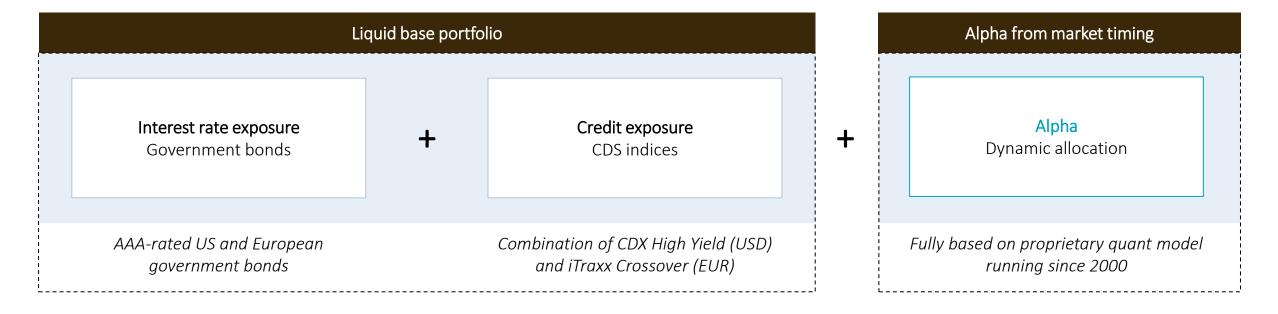


Source: Robeco. These examples are for information purposes only and not intended to be an investment advice in any way

Design of the investment strategy

Design of the investment strategy

We combine liquid high yield exposure with dynamic alpha from timing opportunities



Two blocks: (1) liquid base portfolio and (2) alpha from market timing

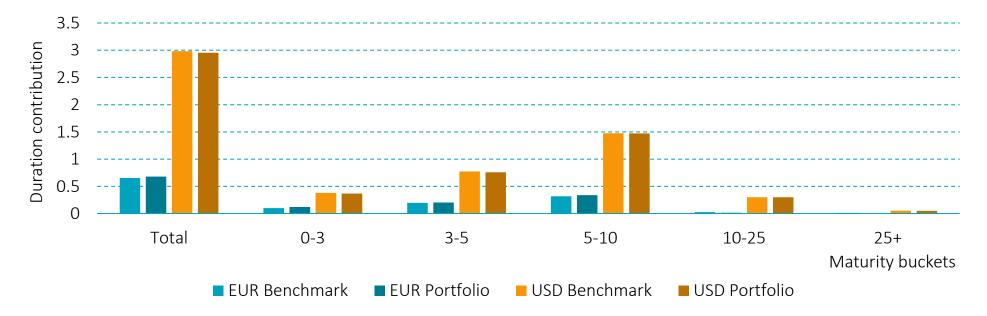
Liquid High Yield Market Exposure – align interest rate exposure with bond index

Interest rate exposure taken via safe government bonds

- > We buy US treasuries, UK Gilts and AAA-rated bonds from Europe to match duration
- > Benchmark duration is matched over the curve for EUR and USD exposure

Interest rate exposure
Government bonds

Interest rate exposure hedged to benchmark level

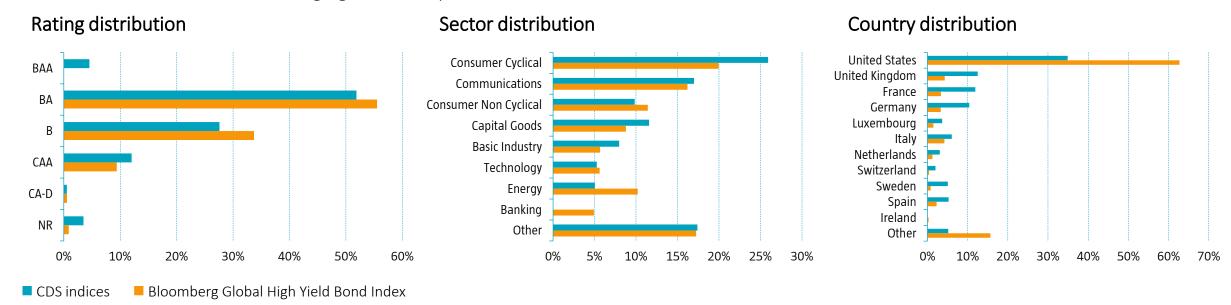




Liquid base portfolio – taking credit exposure

Credit exposure (high yield) taken via CDS indices

- > We take credit exposure via a combination of CDX HY (USD) and iTraxx Crossover (EUR)
- > The returns of this liquid exposure are ~85% correlated with the high yield bond index
- > Differences related to liquidity, exposure to liquid and larger issuers
- > The CDS indices have no Emerging Market exposure



Characteristics CDS indices similar to high yield bond index

Source: Robeco, Bloomberg. Data end of September 2022.

Credit exposure

CDS indices

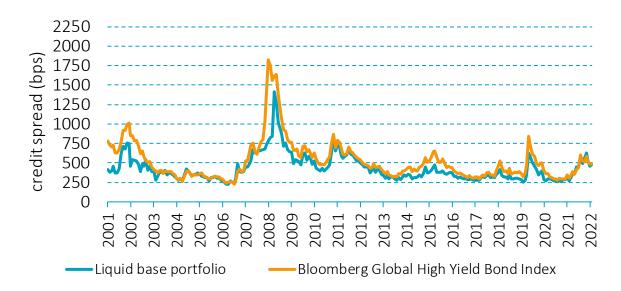
Liquid High Yield Market Exposure – smaller drawdowns

Liquid base portfolio with smaller drawdowns

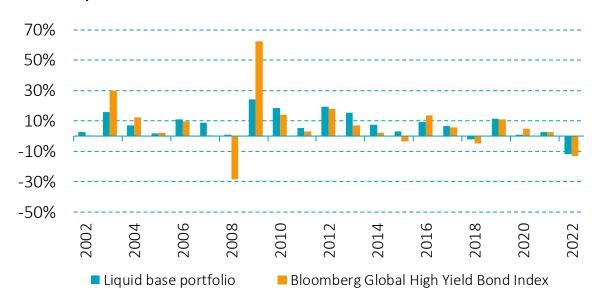
- > Spreads and returns of liquid base portfolio overall similar to high yield bond index
- > In credit bear markets the liquid base portfolio typically outperforms
- > The high yield bond market shows stronger recoveries

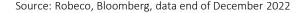
Credit exposure
CDS indices

Spreads high yield bonds vs CDS indices



Calendar year returns



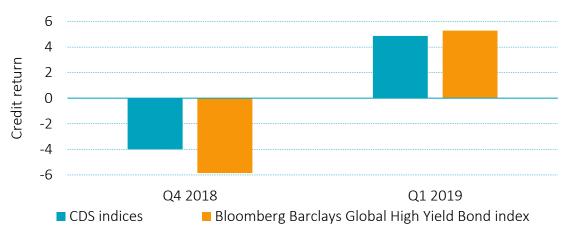


Liquid high yield exposure offers similar return, but with tracking error

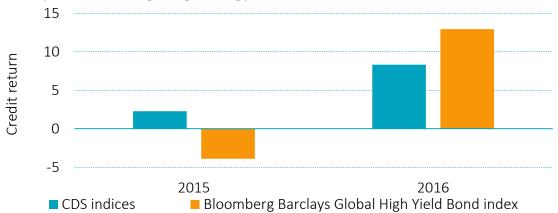
Tracking error of CDS indices versus high yield bond index driven by:

- Differences in liquidity & size
 CDS indices are tilted to larger caps
- 2. EM & sector weighting CDS indices not exposed to EM and less to energy and banking
- 3. Roll down and curve
 CDS indices have different roll-down returns
- Callability
 CDS indices do not have optionality.

Example liquidity & size



Example sector weighting: energy crisis



Dynamic market timing model – evidence-based alpha following sound economic logic

Dynamic market timing fully based on proven model

Sound economic logic captured in a systematic investment process

- > Fundamental drivers of credit markets plus technical variables
- > Financial market data used to capture expectations on fundamentals
- > Model fundamentals in place since 2000

Alpha Dynamic allocation

Model variables:



Dynamic market timing model - easy to explain which variables drive model signal

Model score is the equally weighted average of variables' normalized scores

- > No single variable consistently performs better over time
- > Equal weights are optimal as this ensures maximum diversification

Alpha Ovnamic allocation

Robust and transparent implementation

- > Raw model score is translated into positive, neutral or negative signal
- > Weekly signal implementation delivers optimal balance between timeliness and turnover

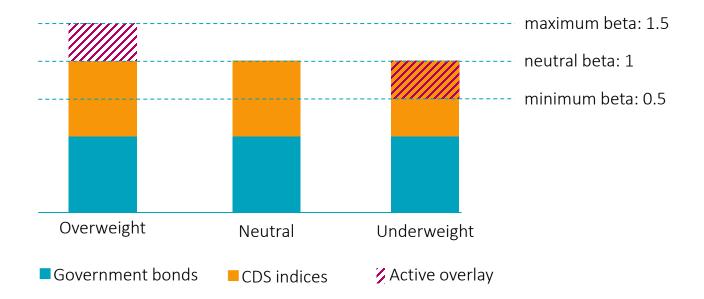
Example of daily model output with signal based on variable scores

	Macro	Value	Momentum	Season	Model	Signal
Variable scores	0.63	-0.91	-0.86	0.50	-0.16	Negative

Dynamic market timing – portfolio implementation

Active overweight or underweight beta positions

Pronounced active beta positions (1.5 or 0.5)*

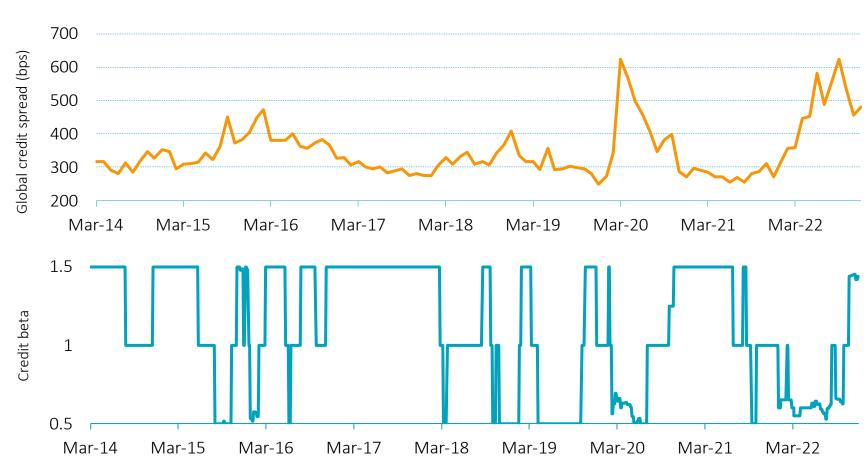


An overweight beta position of 1.5 is implemented by taking 50% more exposure to both CDS index contracts An underweight beta position of 0.5 is implemented by taking 50% less exposure to both CDS index contracts

Alpha
Dynamic allocation

Dynamic allocation - manage risk rising spreads and benefit from declining spreads

Credit beta exposure of Robeco QI Dynamic High Yield since inception



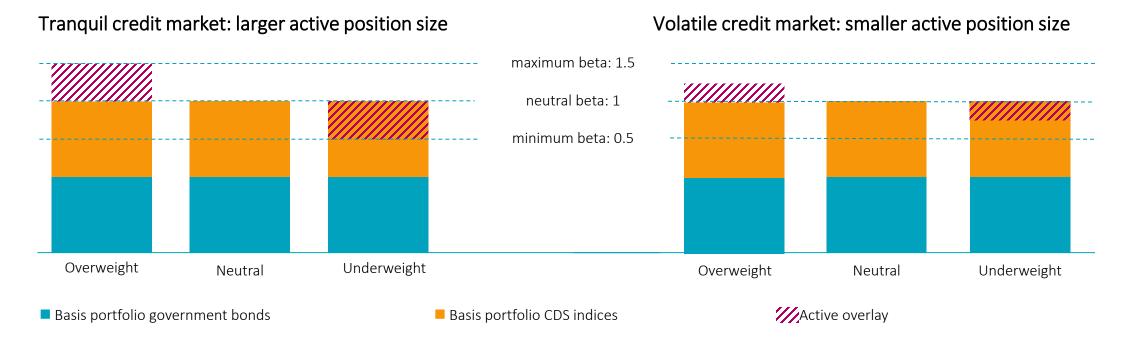
Alpha
Dynamic allocation

- > Pronounced relative positions determine fund's absolute high yield market exposure
- > More than 70% of the time in active position

Volatility adjustment of active beta positions

- > Risk management if credit spreads rise above 400 bps
- > Active beta position is gradually scaled down to limit risk
- > Applied since inception end of 2015

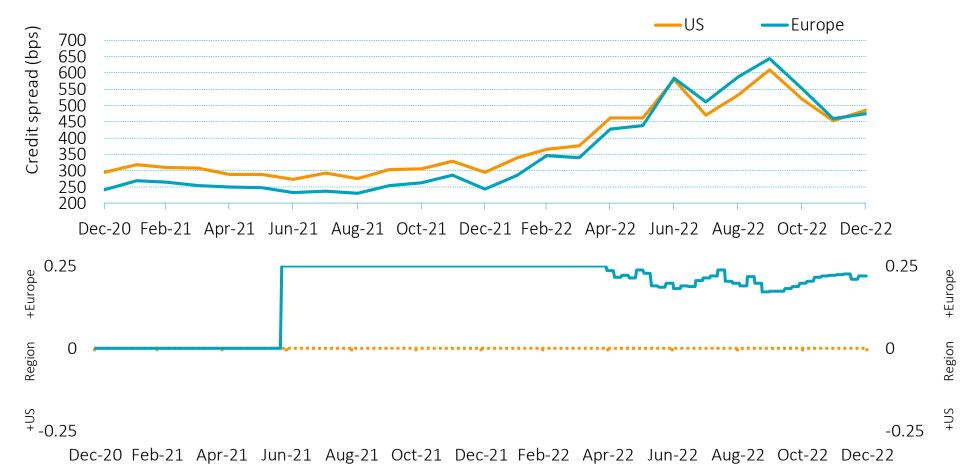
Alpha
Dynamic allocation



Source: Robeco

Region allocation based on relative valuation

Region allocation of Robeco QI Dynamic High Yield since July 2021



- > Pronounced relative region allocation positions of 25% determine fund's exposure in Europe versus the US
- > More than 70% of the time in active position

Alpha region allocation

Live performance track record

Performance

Robeco QI Dynamic High Yield

Annualized performance (Hedged into EUR)						
	YTD	1 Year	3 Years	5 Years	7 Years	Apr-14
Robeco QI Dynamic High Yield	-11.28%	-11.28%	-1.50%	0.41%	2.81%	3.33%
Benchmark	-12.97%	-12.97%	-2.09%	-0.15%	2.58%	1.61%
Relative Performance	1.69%	1.69%	0.59%	0.57%	0.23%	1.72%
Performance attribution						
	YTD	1 Year	3 Years	5 Years	7 Years	Apr-14
Relative performance from replication strategy	1.06%	1.06%	-0.84%	0.03%	-0.46%	1.03%
Relative performance from dynamic market timing	0.63%	0.63%	1.43%	0.54%	0.69%	0.69%
Calendar year performance (Hedged into EUR)						
	2022	2021	2020	2019	2018	2017
Robeco QI Dynamic High Yield	-11.28%	3.93%	3.64%	10.16%	-3.02%	10.24%
Benchmark	-12.97%	2.81%	4.91%	10.91%	-4.69%	5.88%
Relative Performance	1.69%	1.12%	-1.28%	-0.75%	1.67%	4.37%

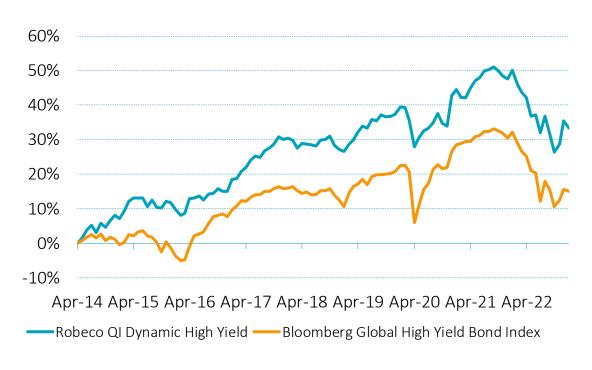
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Source: Robeco, Bloomberg. Portfolio: Robeco QI Dynamic High Yield IH-EUR Share Class. Benchmark: Bloomberg Global High Yield Corporate. All figures in EUR. Data end of December 2022.

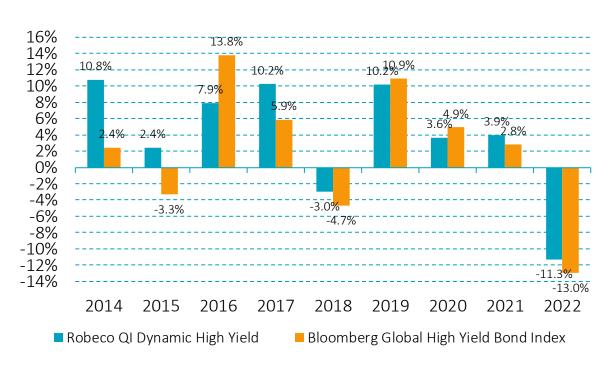
Strong live track record: stable and robust

Strong outperformance versus the high yield bond index

Cumulative returns



Annual returns



> Performance dynamic high yield more stable than global high yield bond index

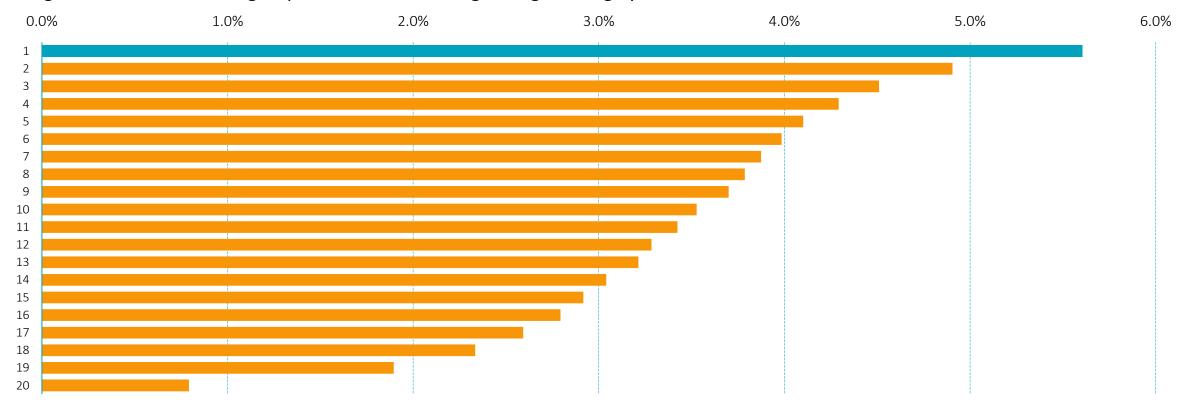
Sources: Bloomberg, Thomson Datastream. Data until end of December 2022. Robeco QI Dynamic High Yield, IH EUR share class, gross of fees, based on gross asset value, all figures in EUR.

In reality costs (such as management fees, and other costs) are charged. These have a negative effect on the returns shown. The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.



Comparison to Morningstar global high yield peer group

Average annual returns of 20 groups of funds in Morningstar's global high yield universe



- > Dynamic High Yield in top 5 of 100 Morningstar funds
- > Low average correlation with the peers: style diversification
- > Outperformance mainly realized in bear markets

The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Source: Morningstar Direct, Robeco. Annual gross return in EUR of 96 global high yield funds in the Morningstar universe over the period April 2014 - October 2021. The universe is divided into 20 groups, with 16 groups of 5 funds and 4 groups of 4 funds. Robeco QI Dynamic High Yield is among the five top-ranked funds, represented by the blue bar. Returns are gross of fees. In reality costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Appendix

Characteristics

Robeco QI Dynamic High Yield

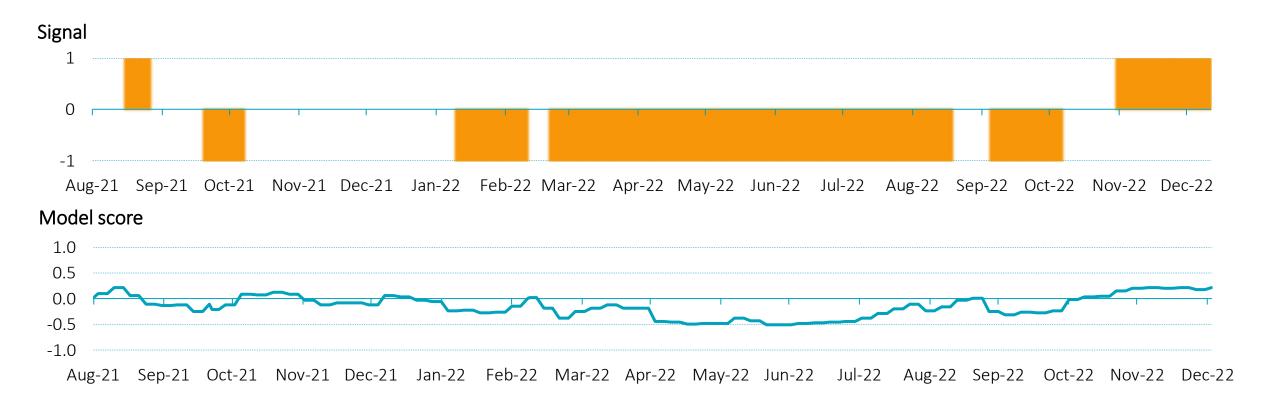
Characteristics	Description
Name	Robeco QI Dynamic High Yield
Portfolio Manager	Johan Duyvesteyn, Patrick Houweling
Inception	April 2014
Asset under Management	USD 158 million / EUR 148 million
Benchmark	Bloomberg Global High Yield Corporate
Benchmark (neutral portfolio)	CDX High Yield & iTraxx Crossover, weighted 100:75, semi-annual roll to on-the-run contract + US Treasuries & German Bunds, weighted 100:75, 4yr duration
No ex-ante tracking error	3% target tracking error using integrated risk management
Currency risk	Fully hedged to share class currency
Liquidity	Daily liquidity
Legal status	Investment company with variable capital incorporated under Luxembourg law
UCITS IV	Yes

Source: Robeco. Data end of December 2022.

Note: These internal guidelines determined by Robeco are subject to change without prior notice, in the best interest of the client. The restriction in the prospectus are at all times leading. The prospectus is available on request and free of charge from www.robeco.com.



Positioning Robeco high yield credit beta model





Model variables: Macro

- Credit markets move in long, multi-year cycles related to the business cycle
- > If markets are in a downward trend, they usually continue to do so
- > The business cycle variable is based on two components: the government bond yield and economic surprises
- A high government bond yield means higher financing costs for companies and a negative impact on company profits
- Aggregate economic surprise data is an early indicator for a different direction of the economic growth

Return and risk per business cycle phase





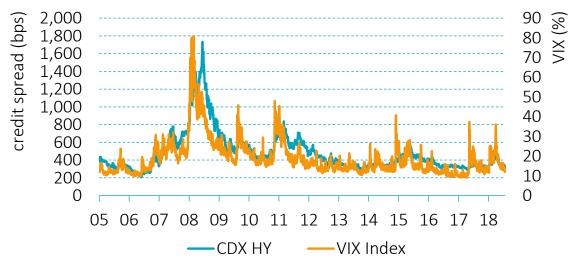
Fama & French, 1998, "Business conditions and expected returns on stocks and bonds", Journal of Financial Economics van Vliet & Blitz, 2011, "Dynamic strategic asset allocation: Risk and return across the business cycle", Journal of Asset Management Bloomberg Barclays, Robeco Quantitative Research, NBER



Model variables: Value

- > Value is typically defined as the market price compared to its fair value
- > For credit markets, the current price is often evaluated using the credit spread
- > Two reference points: the implied equity volatility and the high yield corporate bond market spread
- > CDS spread and equity volatility related via Merton Model
- VIX index typically leads the CDS market

CDX HY spreads & VIX index



CDX HY spreads & US HY bond spreads



Sources and references:

Houweling, P., van Zundert, J., 2017. Factor investing in the corporate bond market. Financial Analysts Journal 73(2), 1-16. Figuerola-Ferretti & Paraskevopoulos, 2012, "Pairing market risk and credit risk" Byström, 2006, Merton Unraveled: A Flexible Way of Modeling Default Risk, Journal of Alternative Investments 8(4), pp 39-47.



Model variables: Momentum

- > Financial markets exhibit short-term momentum
- > If past credit returns were positive, future credit returns tend to be positive as well
- Avoid potential short term mean reversion related to passive investor behavior
- > Enhance credit trend with equity trend and Risk Appetite Index

Example credit trend in 2011 for CDX HY (US)



Sources and references:

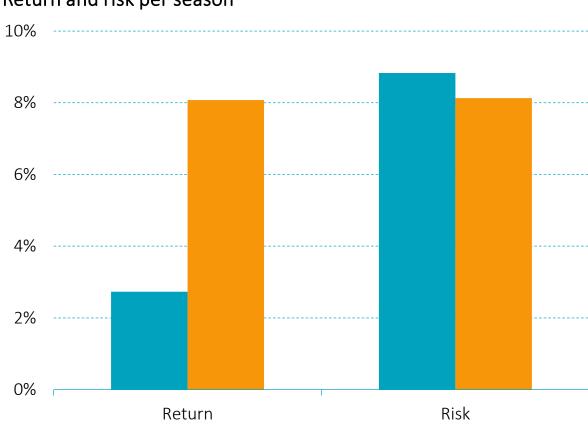
Clinebell, Kahl & Stevens, 1996, "Time series estimation of the bond default risk premium", The Quarterly Review of Economics and Finance Hong, Lin & Wu, 2012, "Are corporate bond market returns predictable?", Journal of Banking and Finance Faber, 2007, "A quantitative approach to tactical asset allocation", The Journal of Wealth Management Bloomberg Barclays, Robeco Quantitative Research



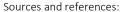
Model variables: Season

- > The Halloween-indicator is based on increasing optimism and risk-seeking behavior of investors towards the end of the calendar year
- Hence returns are higher in the "Winter" (November-April) and lower in the "Summer" (May-October), and vice versa for the risk

Return and risk per season



Summer



Bouman & Jacobsen, 2002, "The Halloween indicator, 'Sell in May and go away': Another puzzle", American Economic Review; Doeswijk, 2008, "The optimism cycle: Sell in May", De Economist Bloomberg Barclays, Robeco Quantitative Research



Winter

Dynamic High Yield: keeping the model in perfect shape

Model fundamentals unchanged, yet open to enhancements

Optimal balance between making technical refinements and sticking to model philosophy

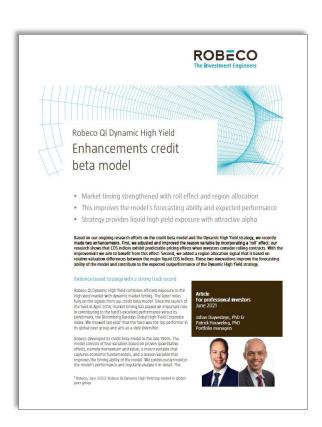
- > Conservative approach in changing the model, sticking to structural drivers of credit markets since 2000
- > Continuous model performance monitoring and regular detailed analyses
- > Despite strong track record, we keep looking for possible enhancements

Recent enhancements

- > 2019: added new value variable
- > 2021: enhanced season variable with semi-annual roll effect
- > 2021: added region allocation taking positions in Europe vs the US

Current research focus on macro variable

- Investigate nowcast and alternative economic surprise data
- > Lookback horizon relation risk-free rate and credit spread



CDS failure to pay event and bankruptcy

CDS auction

- 1. Decision 2 members of the ISDA Americas Determinations Committee (DC)
- 2. DC determines the auction date within a month
- 3. Auction: initial market midpoint and net open interest
- 4. Trade orders against the clearing price and open interest

Impact CDX index if protection seller

- > Payment = index notional * (1 recovery) * (1% / index factor)
- > Index factor starts at 1, depends on the amount of CDS issuers still in the index
- > New index price = [old index price (recovery / old index factor)] / (new index factor / old index factor)

Example: Caesars Entertainment in Feb 2015

- > Initial market midpoint: 14.875
- > Clearing price: 15.875
- > For an index notional of 10 mln USD the payment would be \$10mn * (1 0.15875) * (1% / 1) = \$84,125
- > New index price = [\$106.33 (0.15875/1)]/(0.99/1) = \$107.24

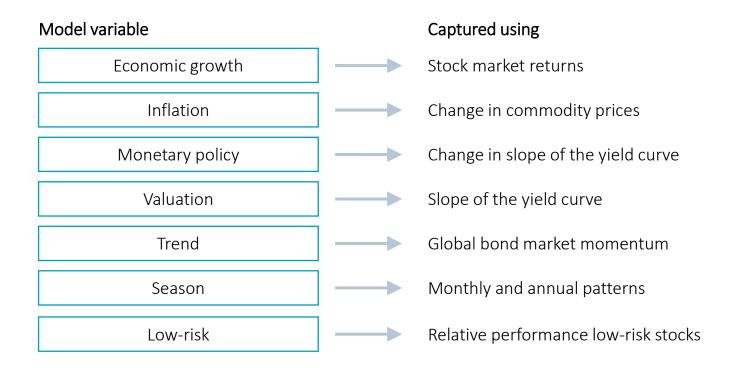
Overview of quant fixed income strategies

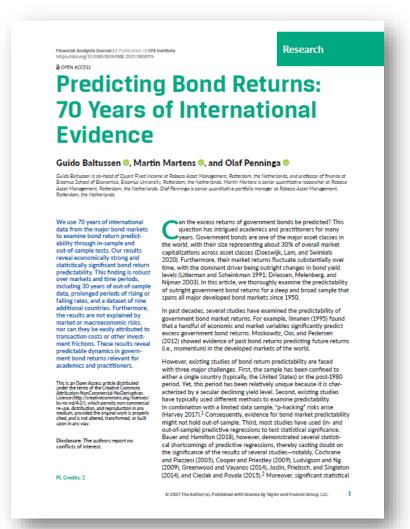
Successfully applying factor-based strategies to deliver superior risk-adjusted returns

Government bonds	Credits	Aggregate
> Global Dynamic Duration> Long/Short Dynamic Duration	> Dynamic High Yield	
> Multi-Factor Government Bonds*	 Multi-Factor Credits SDG & Climate Multi-Factor Credits Multi-Factor High Yield Conservative Credits* Sustainable Enhanced Index HY* 	> Multi-Factor Bonds
	> Long/Short Dynamic Duration	 Long/Short Dynamic Duration Multi-Factor Government Bonds* Multi-Factor Credits SDG & Climate Multi-Factor Credits Multi-Factor High Yield Conservative Credits*

Duration management: model-driven since 1998

Full transparency, sound economic logic and proven forecasting ability





Source: Robeco. Baltussen, Guido and Martens, Martin and Penninga, Olaf, Predicting Bond Returns: 70 Years of International Evidence (June 19, 2020). Available at SSRN: https://ssrn.com/abstract=3631109 or http://dx.doi.org/10.2139/ssrn.3631109

Performance

Robeco QI Global Dynamic Duration

Annualized performance (Hedged into EUR)						
	YTD	1 Year	3 Years	5 Years	10 Years	Since Jan-98
Robeco QI Global Dynamic Duration	-14.62%	-14.62%	-5.81%	-2.28%	0.22%	3.66%
Benchmark	-14.07%	-14.07%	-4.41%	-1.84%	0.20%	3.10%
Relative performance	-0.55%	-0.55%	-1.40%	-0.44%	0.01%	0.56%
Tracking error		2.78%	2.13%	2.12%	2.02%	2.34%
Information ratio		-0.20	-0.66	-0.21	0.01	0.24

Calendar year performance (Hedged into EUR)						
	2022	2021	2020	2019	2018	2017
Robeco QI Global Dynamic Duration	-14.62%	-3.58%	1.52%	4.85%	1.71%	0.37%
Benchmark	-14.07%	-3.09%	4.88%	4.63%	-0.27%	0.40%
Relative performance	-0.55%	-0.50%	-3.36%	0.21%	1.98%	-0.03%

The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Periods shorter than one year are not annualized. The value of your investments may fluctuate. Past performance is no guarantee of future results. Returns gross of fees, based on gross asset value. In reality costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Source: Robeco, JPM. Portfolio: Robeco QI Global Dynamic Duration DH-EUR Share Class. Benchmark: JPM GBI Global Investment Grade. All figures in EUR. Data end of December 2022. January 1, 1998 marks the start of the track record generated on the basis of the current investment strategy in which all active positions are fully based on the quantative model.

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