SOLUTION OVERVIEW

FTSE Nomura Climate Risk-Adjusted Carry and Roll Down World Government Bond Index Series

Combining climate considerations and carry factor into global sovereign bond indexes

Overview

Enabling sovereign debt investors to consider climate risk exposures while optimizing carry and roll down yields in their investment portfolios

As a well-known concept to practitioners and academics, the carry factor has been leveraged in the currency markets for decades. With the understanding of such FX carry trades becoming established, academic publications have explored this concept cross-markets and showcased evidence of the carry premium in the fixed income asset class.

The global sovereign debt market is one of the largest asset classes in the world, yet fixed income markets have typically lagged behind other asset classes in relation to ESG integration activities. Sovereign debt investors are exposed to a range of climate risks that are typically not well understood or incorporated in the investment process.

The FTSE Nomura Climate Risk-Adjusted Carry and Roll Down World Government Bond Index Series (FTSE Nomura Climate CaRD WGBI Series) offers a solution that seeks to reflect a targeted exposure to the sovereign bonds in the FTSE Climate Risk-Adjusted World Government Bond Index (FTSE Climate WGBI) by applying carry, and roll down optimization. The index measures the performance of fixed-rate, local currency, and investment-grade sovereign bonds based on the market capitalization of its index eligible debt in the FTSE World Government Bond Index, and also incorporates a tilting methodology that adjusts index weights according to each country's relative climate risk performance.

Features

Representative

- Based on the FTSE World Government Bond Index (WGBI), a widely used benchmark that currently includes sovereign debt from over 20 countries, denominated in a variety of currencies, and with more than 30 years of history available
- Aims to maximize the total carry and roll down, while controlling interest rate risk with both duration and weights anchored the individual country within the base universe
- Incorporates a forward-looking assessment of the climate risks sovereigns face at a country level
- Tilts country weights on a relative basis to the three pillars of climate risk

Best-in-class climate risk modelling

- Comprehensive sovereign climate risk assessments with history available from 2002
- Climate risk modelling provided by Beyond Ratings, part of the London Stock Exchange Group, and a highly regarded provider of ESG data solutions, and climate change research and modelling across asset classes

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Quantitative climate risk assessments are made across three climate risk pillars, covering:

Transition risk	The level of climate-related risk exposure of the country's economy as measured by the distance to reach the modeled emissions needed to meet a 2 degree alignment
Physical risk	The level of climate-related risk exposure to the country and its economy from the physical effects of climate change
Resilience	A country's preparedness and actions to cope with its level of climate-related risk exposure

Benefits

- Gaining climate exposure combined with CaRD strategy
- Combined strategy of CaRD and Climate can be applied on multiple sovereign markets or customized universes
- Allows flexibility on climate exposure with different tilting to each of the climate pillar scores
- Quantitative and transparent approach to climate risk modelling and assessment

Developed in partnership with Nomura Securities

Nomura is a global financial services group with an integrated network spanning over 30 countries. By connecting markets East & West, Nomura services the needs of individuals, institutions, corporates and governments through its four business divisions: Retail, Asset Management, Wholesale (Global Markets and Investment Banking), and Merchant Banking. Founded in 1925, the firm is built on a tradition of disciplined entrepreneurship, serving clients with creative solutions and considered thought leadership. For further information about Nomura, visit www.nomura.com.

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Index inclusion and methodology summary

Coupon	Fixed-rate
Currency	JPY and hedged to JPY versions available
Minimum maturity	At least one year
Minimum Credit Quality	Entry: A- by S&P and A3 by Moody's, for all new markets Exit: Below BBB- by S&P and Baa3 by Moody's
Weighting	Alternatively weighted. The country weights of base universe are determined by Climate scores and pillars. The final weights of each Index in the Series are determined by performing an optimization process, for details, see Optimization Methodology section in the ground rule.
Rebalance frequency	Monthly on final business day of the month
Climate risk pillars	Each country is assessed by three core climate pillars (each with multiple sub-indicators) – **Transition risk** represents the impact on the economy from the required efforts to mitigate climate risk as measured by modelled emissions needed to meet 2 degree alignment – **Physical risk** represents the climate-related risk to the country and its economy from the physical effects of climate change – **Resilience** represents a country's preparedness and actions to cope with climate risk
Climate pillars and tilt calibration	Transition risk: 0.25 Physical risk: 1 Resilience: 1
Country climate scores	Updated annually and applied from the end of May rebalance
Base date	December 31, 2006

Disclaimer

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