SOLUTION OVERVIEW

FTSE Climate Risk-Adjusted Government Bond Index Series

Accounting for climate risk in sovereign bond portfolios



Overview

Sovereign debt investors are now able to consider climate change risks in their investment portfolios.

The global sovereign debt market is one of the largest asset classes in the world, yet fixed income markets have typically lagged other asset classes in relation to ESG integration. Sovereign debt investors are exposed to a range of climate change risks that are typically not well understood or incorporated in the investment process. Part of the challenge has been the lack of sustainable investment products and viable climate data.

The FTSE Climate Risk-Adjusted Government Bond Index Series offers a range of solutions that investors can viably implement into their investment process. The indexes measure the performance of fixed-rate, local currency, investment-grade sovereign bonds, incorporating a tilting methodology that adjusts index weights according to each countries' relative climate risk performance.

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

Transition risk	Climate-related risk exposure and vulnerability based on countries' carbon footprint relative to peers and implied temperature rise based on 2030 commitments		
Physical risk	Measured by countries' historical exposure and vulnerability in 2050 to seven climate hazards, from an economic perspective		
Resilience	Countries' preparedness to tackle climate change based on institutional, economic, societal, and ecological factors		

Features

Representative

- Based on the FTSE World Government Bond Index and the FTSE European Monetary Union (EMU) Government Bond Index.
 These widely used benchmarks currently incorporate sovereign debt from over 20 countries, denominated in a variety of currencies, and has more than 30 years of history available
- Incorporates both historical and forward-looking metrics to provide a comprehensive and efficient assessment of sovereign climate risk
- Tilts country weights on a relative basis to the three pillars of climate risk

Best-in-class climate risk modeling

- Comprehensive sovereign climate risk assessments with history available from 2002
- Climate risk assessment provided by LSEG's
 Sovereign Sustainability Solutions, a highly
 regarded provider of sovereign ESG data
 solutions, climate change research and
 modelling. Complementary to traditional credit
 analysis, it assesses financial sector clients in
 the transition towards a sustainable economy



Benefits

- Meaningful climate risk reduction compared to the conventional market value weighted indexes
- Closely matches the index characteristics of the conventional market value weighted index, whilst achieving minimal tracking error and turnover
- Quantitative and transparent approach to climate risk modeling and assessment
- Highly configurable methodology supports custom versions that further reduce the index's climate risk profile

Index inclusion and methodology summary

Index series	FTSE Climate Risk-Adjusted World Government Bond Index ("Climate WGBI")		FTSE Climate Risk-Adjusted EMU Government Bond Index ("Climate EGBI")			
Index	Climate WGBI	Advanced Climate WGBI	Climate EGBI	Advanced Climate EGBI		
Coupon	Fixed-rate					
Currency	Multiple		EUR			
Minimum maturity	At least one year					
Securities included	Fixed rate non-callable bonds. Sovereign debt denominated in the local currency					
Weighting	Alternatively weighted					
Rebalance frequency	Monthly on final business day of the month					
Climate risk pillars	 Transition Risk (TR) measures climate-related risk exposure and vulnerability based on countr carbon footprint relative to peers and implied temperature rise based on 2030 Nationally Determined Contributions (NDCs). Physical Risk (PR) measures countries' historical exposure and vulnerability in 2050 to seven climate hazards, from an economic perspective. Resilience (R) represents countries' preparedness to tackle climate change based on institution economic, societal, and ecological factors. 					
Climate pillars and tilts calibration	TR: 0.25 PR: 1 R: 1	TR: 1 PR: 1 R: 1	TR: 0.5 PR: 0.25 R: 0.25	TR: 1 PR: 1 R: 1		
Country climate scores	Updated annually and applied each September month-end rebalance. The cut-off for input data is September 1 of each year.					
Country Climate Score Assessment Cohort	Major local currency sovereign bond markets actively tracked by FTSE Russell. This includes: WGBI, EMGBI and sovereigns on the Watch List published through the FTSE Fixed Income Country Classification framework		EGBI eligible local currency sovereign bond markets (current and historical)			
	income country classin	Cation namework				

Note: The same logic applies to sub-indices such as the FTSE Climate WGBI ex-Japan and the FTSE Climate WGBI – Developed Markets.

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