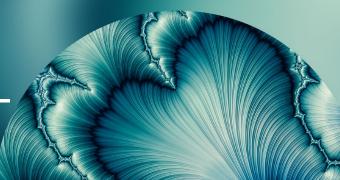
An index of qualityscreened US investmentgrade corporate bonds



"In our Access fixed income ETFs we're seeking to implement the principles of active management in a rules-based framework. Conventional wisdom suggests you must go active in bonds, you can't just buy the index portfolio. We disagree—with Access, we're looking to build a better beta."

Brendan McCarthy, Managing Director, Goldman Sachs Asset Management

Goldman Sachs

Asset Management

About the client

Profile

Goldman Sachs Asset Management provides investment and advisory services for the world's leading institutions, financial advisers and individuals.

Objectives

The firm was seeking a 'smart beta' fixed income index as the performance target for a new US dollar investment-grade corporate bond exchange-traded fund (ETF).

Solution

The FTSE Goldman Sachs Investment Grade Corporate Bond Index provides broad coverage of US\$ bonds while eliminating the bottom decile of low-quality issuers.



Client profile

Goldman Sachs Asset Management is one of the world's leading asset managers, providing clients around the world with a dedicated partnership and a focus on long-term performance.

Goldman Sachs Asset Management delivers investment and advisory services for the world's institutions, financial advisers and individuals. The firm oversaw more than \$2.6tm in assets under supervision worldwide as of September 30, 2023.

Goldman Sachs Asset Management's exchange-traded funds (ETFs) draw on the firm's global reach and history of innovation. They seek to offer innovative solutions for clients, leveraging the firm's intellectual capital in an ETF 'wrapper'.

Within fixed income, Goldman Sachs Access ETFs aim to offer investors the performance potential of active investing with the efficiency and low cost of passive (index-based) strategies. These strategies provide smarter access to the bond markets by embedding criteria such as liquidity, technicals or issuer fundamentals into the indices tracked by the ETFs.

Smarter beta in corporate debt

For its Access ETF range, Goldman Sachs Asset Management was looking to partner with an experienced fixed income index provider to develop a quality-focused approach for investing in US investment-grade corporate bonds. Investment-grade US dollar-denominated corporate bonds are one of the largest and most liquid segments of the global bond market.

The resulting 'smart beta' index would then act as the underlying benchmark of a new Goldman Sachs Access ETF.

The firm set the following objectives for the new corporate bond index:

- It should be broad-based and comprehensive;
- It should apply fundamental quality screens to the investment-grade corporate bond universe;
- The screens should help exclude weaker corporate bond issuers from the index universe:
- The weightings of new index should not deviate excessively from those of the capitalisation-weighted market index;
- The index should embed liquidity screens and weighting caps to ensure adequate diversification.

A quality-screened investment grade index

Goldman Sachs Asset Management's research and product development teams worked closely with FTSE Russell's fixed income specialists to create **the FTSE Goldman Sachs Investment Grade Corporate Bond index**.

The index is derived from the starting universe of the FTSE US Broad Investment-Grade Corporate Index, a benchmark for US dollar-denominated bonds issued in the US investment-grade bond market.

The FTSE Goldman Sachs Investment Grade Corporate Bond index serves as the benchmark of the Goldman Sachs Access Investment Grade Corporate Bond ETF (GIGB).

The FTSE Goldman Sachs Investment Grade Corporate Bond index meets the objectives set by Goldman Sachs Asset Management in the following ways:

The FTSE Goldman Sachs Investment Grade Corporate Bond Index

The index provides a broad representation of the US investment-grade corporate bond market while excluding issuers with the lowest operating margin and highest leverage.

FTSE Russell 2

- It is based on the FTSE US Broad Investment-Grade Corporate Index (FTSE US BIG), a comprehensive, broad-based index of US dollar-denominated bonds, launched in 1985;
- To aid liquidity, the bond universe is screened for larger issues (based on the dollar amount outstanding), and larger issuers (based on the total debt outstanding):
- The FTSE Goldman Sachs Investment Grade Corporate Bond index uses a single, intuitive quality screen to capture and exclude the bottom decile of corporate bond issuers by creditworthiness;
- The quality screen uses two complementary rankings, one income-based (operating margin) and one balance sheet-based (leverage);
- The remaining index constituents are weighted by the market capitalisation of their bonds:
- To ensure adequate index diversification, issuer weights are capped at 5% (for issuers with fundamental indicators) and 3% (for issuers where fundamental indicators are not observable).

A single screen captures deterioration in issuer quality



The central idea behind the index's design is that a company's ability to generate cash and service debt is a good indicator of its financial health.

Any deterioration of its operating margin and any rise in its leverage can indicate that a company is becoming stressed, leading to the potential underperformance of its traded debt. It therefore makes sense to exclude the weakest bond issuers from the index portfolio. This hypothesis was empirically supported in the research conducted by Goldman Sachs Asset Management and FTSE Russell ahead of the index's launch.

A long-standing collaboration

The FTSE Goldman Sachs Investment Grade Corporate Bond index is the fruit of a long-standing collaboration between FTSE Russell and Goldman Sachs Asset Management. The partnership combines Goldman Sachs's expertise in asset management and product design with FTSE Russell's sophisticated index and benchmarking solutions and capabilities in fixed income pricing and analytics.

Additional information

Further information on FTSE Russell's comprehensive range of US fixed income indices is available at:

Americas Fixed Income Indexes | FTSE Russell

FTSE Russell 3

ABOUT FTSE RUSSELL

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner we help investors make better-informed investment decisions, manage risk, and seize opportunities.

Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives. Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity.

For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

CONTACT US

To learn more, visit learn more, visit learn-more, visit <a h

EMEA +44 (0) 20 7866 1810

Asia-Pacific

North America +1 877 503 6437

Hong Kong +852 2164 3333

Tokyo +81 3 6441 1430

Sydney +61 (0) 2 7228 5659

Disclaimer

© 2023 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™ and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.

