

FTSE Fixed Income Country Classification Process

v1.3



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Section 1

Introduction

A distinguishing feature of global multi-currency fixed income benchmarks is the approach to local market inclusion. There are a number of dimensions across which global debt markets can be evaluated to determine peer group representation in broad-based benchmarks; these dimensions can include market size, credit rating, asset type, designation as an emerging or developed market, and degree of market accessibility for international investors.

In January 2019, to enhance the foundation of its benchmarking approach, FTSE Russell implemented an evidence-driven and process-oriented framework for assessing the index eligibility of local currency government bond markets. The framework assigns markets a Market Accessibility Level based on the criteria and minimum requirements outlined in this document. The transparent nature of the assignment of these accessibility levels allows engagement with central banks and regulators in countries where a market is being considered for potential reclassification, and benefits portfolio managers and asset allocators by providing a clear view of the evolution of the index. The classification process is designed to be benchmark agnostic; its output can be applied in the construction of both standard and custom benchmarks.

FTSE Russell's goal as an index provider is to offer index users and stakeholders clarity and transparency with respect to the country classifications that underpin benchmark construction for both fixed income and equity markets, while acknowledging and preserving the important nuances between the two asset classes.

Section 2

Background¹

Historically, inclusion of local markets within global fixed income multi-currency government benchmarks, such as the FTSE World Government Bond Index (WGBI), was based on both objective (market size and credit rating) and relatively subjective ('barriers to entry') criteria. To be considered for index inclusion, a local currency government debt market was required to first meet a series of index criteria that were designed to assess the liquidity and credit quality of candidate countries, based on observable and commonly used metrics. An assessment of whether barriers to entry for international investors existed would subsequently take place to evaluate the eligibility of new markets, with ongoing monitoring of existing markets for any significant deterioration in accessibility. Market inclusion in dedicated fixed income Emerging Markets (EM) benchmarks also requires a local currency market to be classified as emerging under a given index provider's EM definition.

To add transparency to the 'barriers to entry' assessment process, FTSE Russell established a robust and evidence-driven country classification framework, which includes the assignment of a Market Accessibility Level for local currency government bond markets. The classification process incorporates feedback gathered through a [market consultation conducted in 2018](#) and is maintained through the FTSE Russell governance process.

Since 30 March 2019, Market Accessibility Levels have replaced the previous 'barriers to entry' inclusion criteria in the methodology of the FTSE World Government Bond Index (WGBI), FTSE Emerging Markets Government Bond Index (EMGBI), and indices that derive their membership from them. They are also available for use in custom indices.

At implementation, the use of Market Accessibility Levels, as described in this document, applied to fixed-rate, local currency nominal government bond markets tracked by FTSE indices exclusively. The framework was then expanded to global inflation-linked government bond markets tracked by the FTSE fixed income indices, effective 30 June 2021. Market Accessibility Levels were then incorporated into the index methodology of the FTSE World Inflation-Linked Securities Index (WorldILSI) and the FTSE Emerging Markets Inflation-Linked Securities Index (EMILSI), also effective from 30 June 2021.

In April 2021, the FTSE Frontier Emerging Markets Government Bond Index was launched. This index incorporates Market Accessibility as an index inclusion criterion and reflects the FTSE Fixed Income Country Classification Framework in its design and maintenance.

¹ FTSE Russell also maintains a country classification framework for its global equity indices which has an annual review cycle concurrent with the September fixed income country classification process. We believe important distinctions between these two asset classes merit a tailored approach for each.

Section 3

FTSE Fixed Income Country Classification approach

The FTSE Fixed Income Country Classification Process provides the framework for local market entry and exit within our benchmarks, and comprises the following pillars:

- **Market Accessibility Levels** calibrated for a super set of fixed-rate nominal and inflation-linked local currency government bond markets. Accessibility is measured across four dimensions, which are designed for use in the inclusion criteria of flagship FTSE multi-currency government benchmarks and in custom indices:
 - Market, Macroeconomic and Regulatory Environment.
 - Foreign Exchange Market Structure; Bond Market Structure.
 - Global Settlement and Custody.
- A **Market Accessibility Watch List** of fixed income local government markets that are on the cusp of meeting the criteria for either a higher or lower Market Accessibility Level.
- A **semi-annual schedule for determining country classification** whereby markets on the Market Accessibility Watch List are reviewed and consequent country classification changes are announced. These announcements are made in March and September.
- **Process and index governance**, supported by the FTSE Russell regional fixed income advisory committees and the FTSE Russell Policy Advisory Board, and overseen by the FTSE Russell Index Governance Board.
- **Synchronisation of the application of objective market inclusion criteria** (market size and credit rating) for flagship FTSE fixed income benchmarks to the semi-annual cycle of the Market Accessibility Level review.
- **Annual review and publication** of the FTSE fixed income emerging and developed market classifications each September.
- **An annual review of the local currency amount outstanding thresholds** applied at the security-level in index methodologies each September.

Further details of these elements are provided in the remainder of this document.

Review cycle and mechanisms

Market Accessibility Levels are determined by FTSE Russell via a rigorous governance process whereby index users and market practitioners provide feedback on their assessment of a local market's fulfillment of the criteria outlined in this document.

Relative market accessibility is reviewed on a semi-annual basis each March and September, along with changes in market eligibility due to objective criteria (market size and credit rating upgrades). Emerging and Developed market designations are also reviewed as part of the semi-annual review cycle.

FTSE Russell's advisory committees help FTSE Russell to ensure that the criteria used to determine country classification meet the needs of global investors and are evaluated objectively. Feedback gathered through these channels is used to assess whether a local market's accessibility level warrants an adjustment if there is a failure to meet the existing thresholds, or there are material changes to the local investment conditions that could merit a higher level of accessibility.² These external committees include:

- **Regional fixed income advisory committees:** comprised of market participants in the US, Canada, EMEA and Asia Pacific who are representative of the appropriate sectors of the investment community. The regional committees comment on markets from the perspective of international investors and based on their practical experience.
- **Policy Advisory Board:** drawing its membership from senior personnel at investment management companies, investment consultants and asset owners, the FTSE Russell Policy Advisory Board reviews proposals for classification changes to provide quality assurance and to ensure consistency with the strategic perceptions of seasoned investors.

FTSE Russell also consults the broader market on proposed changes to index methodologies to ensure that its indices continue to meet investors' requirements and are representative of the investment choice set they are meant to track. The proposals set out in formal consultation documents are put forward in order to gather market feedback; this may or may not result in changes to FTSE Russell methodologies. Ultimate decision making is taken by FTSE Russell at meetings of the FTSE Russell Index Governance Board.

Determination of market accessibility levels

Market Accessibility Levels are central to the FTSE Fixed Income Country Classification Framework and are assigned to each fixed-rate and inflation-linked local currency government market based on its fulfillment of a set of observable, transparent criteria. Market Accessibility Levels are underpinned by four key criteria and seventeen sub-criteria. The main criteria are:

- Market, Macroeconomic and Regulatory Environment.
- Foreign Exchange Market Structure.
- Bond Market Structure.
- Global Settlement and Custody.

The countries that are tracked by FTSE indices are assigned a Market Accessibility Level of 0, 1 or 2, with 2 representing the highest level of accessibility. A Level 2 market is assumed to already satisfy the Level 1 minimums and a Level 1 market is assumed to already satisfy the Level 0 minimum. A Level of 0 signifies that a market exhibits the minimum requirements for tracking by a FTSE fixed income benchmark, including the availability of bond pricing and reliable terms and conditions data. The degree to which a criterion must be met (fully or partially) depends on the Market Accessibility Level. Assessment takes place across the same four broad dimensions for each accessibility level, however, it is possible that a given factor might not be applicable for all levels.

² Prior to 30 March 2019, market eligibility for both the FTSE World Government Bond Index (WGBI) and FTSE Emerging Markets Government Bond Index (EMGBI) was reviewed on a continual basis. Once a market met all of the requirements, including both objective criteria and market accessibility thresholds, an announcement would be made that the market was eligible for inclusion in the index. If it continued to meet all the requirements for three consecutive months after the announcement, the market would join the index at the end of the three subsequent months.

The market accessibility watch list

FTSE Russell maintains a Market Accessibility Watch List of local currency fixed income government bond markets that are being considered for potential reclassification. Markets are added to the Market Accessibility Watch List when they fail to meet one or more of the accessibility thresholds for their existing level and become candidates for a potential demotion, or are on a trajectory to meet the thresholds for a higher level and index inclusion, and therefore could be promoted.

The inclusion of a market on the Market Accessibility Watch List signals FTSE Russell's engagement, or intent to engage, with governments, central banks and regulators. Firstly, the aim is to gather and then address specific feedback from investors on the fulfilment of the criteria for a higher Market Accessibility Level or to maintain the current Accessibility Level. The future evolution of FTSE Russell benchmarks is transparent and can be followed with relative ease as a result. In the case of a market disruption event (i.e., the sudden introduction of prohibitive capital controls), FTSE Russell will reference its [Statement of Principles](#) to determine whether an off-cycle review of Market Accessibility Levels should be triggered.

Following the implementation of the FTSE Fixed Income Country Classification Framework in early 2019, an inaugural review was conducted March 2019, during which Market Accessibility Levels were assigned to countries tracked by FTSE indices. An initial Market Accessibility Watch List of markets was also created and published on the FTSE Russell website. The annual review cycle formally commenced in September 2019, evolving into a semi-annual cycle from March 2021; the composition of the Market Accessibility Watch List is also considered at the semi-annual reviews.

Any reclassification decisions are assessed against the practical experience of international investors, rather than the enactment of new regulation. Consequently, the timing of any classification change will be based on the period of time required for regulatory enhancements to be fully operational and the anticipated benefits to be realised by the international investment community.

On its website, FTSE Russell also [publishes a list of local currency government bond markets](#), with a summary of each market's current index membership, accessibility level, market size and credit rating. This ensures that index users have visibility of markets that could be included within the relevant index should a market meet the relevant index market size and/or credit rating thresholds at a future date. The reclassification of such markets will be announced at either the March or September semi-annual review, giving a minimum of six months' notice for index inclusion.

FTSE Russell continues to expand its coverage of local currency government bond markets with the launch of standalone FTSE Government Bond indices (GBIs). The inaugural assessment to assign a Market Accessibility Level to markets for which tracking has been introduced takes place at the next scheduled semi-annual review (March or September).

It is important to note that the Market Accessibility Watch List identifies markets that are currently undergoing an assessment against the accessibility criteria for potential reclassification. There are additional markets that are tracked by FTSE Russell as part of regional government indices or standalone government bond indices, and may not qualify for index inclusion because they fail to meet index market size and/or credit rating criteria.

Communication

Following the March and September meetings of the FTSE Russell Index Governance Board, Market Accessibility Level reclassification decisions and Market Accessibility Watch List changes are communicated to the countries that are the subject of the announcement.

Reclassification and Market Accessibility Watch List decisions are published along with the timetable for any resulting benchmark changes. The notice period between the announcement of changes to Market Accessibility Levels and the implementation of consequent index membership changes is communicated to the market to allow for sufficient lead time for clients.

A market must remain on the Market Accessibility Watch List for a minimum of six months before a change to its Market Accessibility Level can be made to allow for sufficient notice for index investors. At least six months' notice will also be provided before index membership changes arising from a Market Accessibility Level reclassification are implemented.

Initial assignment and incorporation of market accessibility levels

Minimum Market Accessibility Levels replaced the barriers-to-entry criteria of the methodology for the flagship FTSE World Government Bond Index (WGBI) and FTSE Emerging Markets Government Bond Index (EMGBI), and indices that derive their membership explicitly from these indices according to their methodologies, from 30 March 2019. Following this date, a local currency government debt market must have a Market Accessibility Level of 2 to satisfy the accessibility criteria for the WGBI and a value of at least 1 for the EMGBI. Countries that meet the minimum requirements to be tracked as a standalone additional government market must meet the criteria for a Market Accessibility Level of 0.

At the time of implementing the country classification framework, FTSE Russell assigned a preliminary level of 2 to countries already included in the WGBI and a preliminary level of 1 to countries included in the EMGBI, but were not eligible for the WGBI (e.g., crossover markets were assigned a level of 2). Local markets not tracked by either of these indices, including candidate markets that potentially warranted the introduction of FTSE Russell local currency government benchmark tracking, were given a preliminary Market Accessibility Level assignment in March 2019. The Market Accessibility Level review cycle commenced in September 2019.

As of 30 March 2021, the FTSE Fixed Income Country Classification Framework was expanded to cover inflation-linked local currency government bond markets. In extending the framework, the accessibility level of each nominal, fixed-rate government market tracked by FTSE Russell was applied to its corresponding inflation-linked local currency government bond market. As of 30 June 2021, the methodology for the FTSE World Inflation-Linked Securities Index (WorldILSI) was amended to require a minimum Market Accessibility Level of 2 and the flagship FTSE Emerging Markets Inflation-Linked Securities Index (EMILSI) was amended to require a minimum Market Accessibility Level of 1. Owing to the separate and distinct local government debt management practice for nominal and inflation-linked debt, as of 30 June 2021, a minimum market size criterion of USD 10 billion was applied to WorldILSI. This change decoupled the membership of local currency markets in the WorldILSI from their membership of the WGBI; prior to these changes, WorldILSI membership was based entirely on WGBI member countries.

In April 2021, the FTSE Frontier Emerging Markets Government Bond Index was launched, leveraging the existing FTSE Fixed Income Classification Process. To be included in this index, countries must be assigned a Market Accessibility Level of 0 and meet other eligibility criteria, such as market size. By design, inclusion in the FTSE Emerging Markets Government Bond Index and the FTSE Frontier Emerging Markets Government Bond Index is mutually exclusive. In the event that the Market Accessibility Level for a country is upgraded from 0 to 1, it will exit the FTSE Frontier Emerging Markets Government Bond Index and enter the FTSE Emerging Markets Government Bond Index. Index users will receive sufficient notice of this change, which will be carried out in accordance with the governing methodology.

Criteria and assessment of market accessibility levels

The market criteria considered when assigning a Market Accessibility Level are provided below:

1. Market, Macroeconomic and Regulatory Environment

- **Investment Restrictions:** includes restrictions on investment into eligible assets or repatriation of principal and cash flows of eligible assets for international investors. Undue discriminatory quotas or capital controls directed towards international investors should not be present. Market Accessibility Level 2 markets should have no recent history of capital controls.
- **Sustainable Issuance and Debt Management Practices:** formal commitment and/or clear evidence of a commitment from local debt management agents to sustain issuance and support primary and secondary market liquidity. Issuance will be assessed in absolute terms, and consideration may also be given to issuance at specific tenor points and across the yield curve. Debt management practices may be evidenced to support market liquidity through establishment of a primary dealer network, issuance patterns (i.e., regular issuance with published auction schedule, reopening of existing issuance), open market operations, etc. This is assessed separately for nominal and inflation-linked markets, such that conceivably, the assessments of the nominal and inflation-linked markets may differ.

- **Sound Regulatory Environment:** evidence of consistency and perceived stability of regulations that impact fixed income investment conditions for international investors, and active monitoring/regulatory oversight of the fixed income dealing landscape (either broker-dealers that operate in the over-the-counter markets or exchanges where fixed income instruments are traded). Consideration will also be given to transparency and communication of monetary policy.
- **Foreign Exchange Policy and Communication:** consistent and transparent FX policy environment where policies and parameters are clearly communicated to market participants. Consideration will be given to the degree to which core FX and forward fixings are determined via open market mechanisms.
- **Taxation Regime:** taxes, including those applied to FX, coupons and principal payments, should not unduly discriminate against international investors. Consideration will be given to the level of taxation, tax administration and ease of tax collection. Where tax exemptions for international investors exist, the reclamation process should not be cumbersome and lengthy.
- **Registration Process for International Investors:** clear registration process with low latency where required for international investors.

2. Foreign Exchange Market Structure

- **FX Liquidity and Investability:** 'Hedgeable' and tradable spot FX and availability of hedging instruments that lend themselves to the replicability of index currency return calculations which currently use one-month forward contracts. Liquidity is measured by daily turnover and compared to the Accessibility Level peer group. Consideration will also be given to the practicality of offshore and third party FX for international investors.
- **Currency Convertibility:** local currency that can be bought and sold without overly prohibitive or costly government restrictions for purposes of investment activity. Consideration will be given to regulatory constraints that apply to onshore/offshore FX and third party FX.
- **Currency Hedging:** evidence of an established and developed onshore forward market and/or offshore non-deliverable forward (NDF) market. The degree to which a market with offshore/NDF meets this criterion is based on the divergence between the onshore forward and offshore NDF markets.

3. Bond Market Structure

- **Bond Liquidity:** representative two-way pricing should be available from multiple sources. Relative liquidity will be measured against an Accessibility Level peer group, as well as an asset type peer group (nominal and inflation-linked debt) and monitored continuously given its dynamic nature. Metrics that may be used to assess the liquidity of a local market include, but are not limited to, average bid/offer spreads, trading volume, turnover ratios, depth of ownership (both international and domestic) and break-even analysis in the case of inflation-linked bond markets. Both contemporary and historic observations may be considered.
- **Transaction Costs:** the cost of investment for international investors should be reasonable and not prohibitive. The investment costs are assessed across the entire investment process, including but not limited to foreign exchange, dealing, clearing, custody and settlement. Fees that may be considered include but are not limited to: costs related to transaction capture and processing, pre-matching and matching efforts, transaction reporting (including regulatory reporting), CSD charges, costs related to safekeeping, and asset servicing fees.
- **Fixed Income Dealing and Trading Landscape:** presence of an over-the-counter (OTC) or exchange market(s) that facilitate efficient price discovery and stability. A well-organised, local network of trading relationships inclusive of multiple dealers for OTC markets or exchange trading should allow for easy trade execution by international investors. The ability to conduct odd lot trades is also a consideration.
- **Bond Conventions:** replicable bond conventions that support unconstrained calculations of returns and analytics. Reliable and accessible terms and conditions data, and supported analytics capabilities must be freely available for markets to be tracked by FTSE Russell. Provision of a local inflation index is also a consideration for inflation-linked markets.
- **Bond Pricing:** availability of suitable pricing, which is representative and conforms to the local/appropriate convention (i.e. bid/mid or dirty). Reliable prices for index calculation purposes must be seamlessly available for markets to be tracked by FTSE Russell.

4. Global Settlement and Custody

- **Global Settlement:** settlement via an ICSD is desirable, otherwise an equivalent seamless and frictionless solution that does not restrict local market access to international investors should be in evidence.
- **Availability of Delivery vs Payment (DvP):** DvP should be available for Market Accessibility Levels 1 and 2.
- **Competitive Custody Market:** multiple custody options from both global and domestic custodians should be available. Important considerations include but are not limited to account opening procedures without high operational hurdles (simple/unbureaucratic, low latency, pre-approval not required, etc.), the ability to block trade and allocate client holdings post trade, and the availability of omnibus account structures.

Table 1e summarises the requirements that must be met for the classification of each Market Accessibility Level, which are defined as follows:

- A criterion marked with indicates that it is **fully required** for a market to meet that accessibility threshold.
- A criterion marked with indicates that the criterion only needs to be **partially met** for a market to meet the overall accessibility threshold.
- A criterion marked with indicates that the criterion **does not apply** to the evaluation of that accessibility threshold.

Table 1: Market Accessibility Value Requirements for Local Currency Government Bond Markets

Market Accessibility Level	Level 2 (WGBI minimum)	Level 1 (EMGBI Minimum)	Level 0
Criteria/Factors	Minimum Requirements	Minimum Requirements	Minimum Requirements
1. Market, Macroeconomic and Regulatory Environment			
No Undue Investment Restrictions on International Investors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustainable Issuance and Debt Management Practices Supportive of Market Liquidity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sound Regulatory Environment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transparent FX Policy and Communication	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxation Regime not Burdensome to International Investors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear Registration Process for International Investors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Foreign Exchange Market Structure			
Sufficient FX Liquidity and Investability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Overly Prohibitive Currency Restrictions for Investment Purposes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Currency Hedging Onshore or Offshore using NDF with Limited Divergence to Onshore	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Bond Market Structure			
Sufficient Bond Liquidity in Primary and Secondary Markets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Competitive Transaction Costs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Efficient Fixed Income Dealing and Trading Landscape	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bond Conventions that Support Index Calculations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Availability of Suitable Bond Pricing for Index Calculation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Market Accessibility Level	Level 2 (WGBI minimum)	Level 1 (EMGBI Minimum)	Level 0
4. Global Settlement and Custody			
Settlement Accommodative of Global Investors	■	■	<input type="checkbox"/>
Availability of DvP	■	■	<input type="checkbox"/>
Competitive Custody Market	■	■	<input type="checkbox"/>

FTSE Fixed Income Market Accessibility Levels can be viewed using the following links:

- [FTSE Fixed Income Country Classification for Nominal Fixed-Rate Government Bond Markets](#)
- [FTSE Fixed Income Country Classification for Inflation-Linked Government Bond Markets](#)

Section 4

Application of objective inclusion criteria

Market size and credit rating, and fixed income emerging and developed markets designations are also assessed and applied as part of the FTSE Fixed Income Country Classification process. The application of these objective criteria ensures a consistent approach to market inclusion and exclusion. These criteria, which are outlined in the index methodology for the relevant FTSE fixed income indices, are evaluated on a semi-annual basis³.

Market size

Market size is determined based on par amount outstanding of the index-eligible universe of securities for the March and September index profiles, respectively.

Only bonds that qualify for index inclusion based on other index rules (i.e., minimum amount outstanding, minimum one-year time to maturity, coupon type, etc.) count towards the calculation of total debt outstanding for the market size assessment. Each Eurozone market must meet the market size criteria with its own eligible issues.

The WGBI, EMGBI and WorldILSI market size rules are provided below:

- To qualify for entry to the FTSE WGBI, the outstanding amount of a market's eligible issues must total at least USD 50 billion, EUR 40 billion and JPY 5 trillion of index eligible debt. When the outstanding amount of a market's eligible issues falls below half of the entry-level market size criteria (USD 25 billion and EUR 20 billion and JPY 2.5 trillion), it no longer meets the minimum market size.
- To be included in the FTSE EMGBI, the amount outstanding in a market's eligible issues must total at least USD 10 billion for the market to be considered eligible for inclusion. When the amount outstanding of a market's eligible issues falls below half of the entry-level market size criteria (USD 5 billion), it no longer meets the minimum market size.
- Effective 30 June 2021, to be included in the FTSE WorldILSI, the amount outstanding in a market's eligible issues must total at least USD 10 billion for the market to be considered eligible for inclusion. When the amount outstanding of a market's eligible issues falls below half of the entry-level market size criterion (USD 5 billion), it no longer meets the minimum market size requirement.

In the event that a market newly meets the minimum market size for inclusion in a flagship FTSE fixed income index, FTSE Russell will review the market for inclusion at the next semi-annual review date and may announce an inclusion decision for the market with a minimum six months' notice following the review. The market size will not be reassessed during the notice period between announcement and inclusion of the market in such instances.

In the event that a market no longer meets the minimum market size for inclusion in a flagship FTSE fixed income index, details of the exclusion of that market will be published as part of the next FTSE Fixed Income Country Classification Review Results.

³ Prior to 30 March 2019, local market eligibility was reviewed on a continual basis with a three month notice period for entry and removal due to market size and ratings upgrade after a market started or failed to meet the stated thresholds.

For purposes of assessing market size in each currency, the closing WM/Refinitiv spot FX rates as of the March and September index fixing dates are used. FX rates are mid-market quotations centered around 4pm London time.

Local currency amount outstanding minimums

The minimum bond-level amount outstanding amounts are set for each local currency fixed-rated and inflation-linked market that is eligible for an index based on prevailing domestic issuance patterns and benchmark sizes.

Bond-level amount outstanding amounts are incorporated into respective index methodologies and from time to time, may require recalibration to re-align them with contemporary market structures and debt issuance programs. These local currency amount outstanding minimums are reviewed each September as part of the FTSE Fixed Income Country Classification Process and may result in recalibrations of local thresholds based on feedback from market participants.

Credit rating

The credit ratings for local currency government bond markets are based on the long-term local currency debt rating assigned by Moody's Investors Service, Inc. ("Moody's") and Standard & Poor's Financial Services LLC ("S&P").

Newly eligible markets for credit rating changes are required to meet index criteria minimums as of both the March and September semi-annual review dates and at the time of inclusion. Markets downgraded to below the minimum index criteria exit the index at the next monthly rebalance.

The WGBI, WorldILSI and EMGBI credit rating rules are provided below:

- To qualify for entry into the WGBI and WorldILSI, a market must have a minimum credit quality of A- by S&P and A3 by Moody's. In the event that it is subsequently downgraded, a market will not exit until its credit rating fell below BBB- by S&P and Baa3 by Moody's.
- EMGBI countries must have a minimum rating of C by S&P and Ca by Moody's.

FTSE fixed income emerging and developed designations

For the purposes of inclusion in FTSE EM hard and local currency fixed income benchmarks, a market is considered to be emerging if it is defined by the IMF⁴ to be among "emerging and developing economies" or if it is defined by the World Bank⁵ to be among "low-income economies", "lower-middle-income economies" or "upper-middle-income economies".

The WGBI is comprised of high quality, generally developed markets, but can, and does, overlap with dedicated EM benchmarks, such as the EMGBI. Markets that are eligible for both WGBI and EMGBI benchmarks are commonly referred to by FTSE Russell as 'crossover markets'.

Updates to the EM list are made on an annual basis each September and based on updated data from the IMF and World Bank. The current list is published to the FTSE Russell website.

⁴ <http://www.imf.org/external/ns/cs.aspx?id=28>

⁵ <http://data.worldbank.org/about/country-classifications/>

Section 5

Conclusion

FTSE Russell considers its evidence-driven and process-oriented framework for managing the index inclusion of local currency government markets to be a cornerstone of its benchmarking approach. The approach has created a forward-looking, proactive and evolutionary process that managers can depend on for managing global debt markets efficiently.

FTSE Russell welcomes the views of all stakeholders on the future evolution of its approach to ensure it exhibits thought leadership and meets their needs. Comments can be sent to committeesecretary@ftserussell.com.

For more information about our indices, please visit ftserussell.com.

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