

Market consultation

The FTSE Russell logo consists of a light blue circle containing the text "FTSE" stacked above "Russell" in a white, sans-serif font.

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FTSE Fixed Income Client Consultation

Fixed Income Country Classification Framework



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Introduction

A distinguishing feature of multi-currency fixed income benchmarks is their approach to local market inclusion. There are a number of dimensions across which global markets can be evaluated to establish how they are represented as peer groups in broad-based benchmarks. These can include market size, credit rating, asset-type, designation as an emerging or developed market, and degree of market accessibility.

Users of global fixed income benchmarks require a robust and transparent framework for evaluating such local market inclusion considerations that can be applied to both flagship and bespoke benchmark construction. To provide the necessary foundation and enhance our benchmarking approach, this consultation proposes a robust and transparent scoring system to assign a “Market Accessibility Level” for local government markets. Given the proposed annual nature of the review for Market Accessibility Levels, we are also soliciting user preferences for a continual versus annual application of the objective market size and credit rating criteria for local market inclusion in flagship indexes once the accessibility framework is formally adopted.

FTSE Russell also maintains an equity country classification framework, which has been used by investors for many years to assess the eligibility of equity markets across the full global spectrum of country classifications, spanning frontier through emerging to developed markets. Our goal as a multi-asset index provider is to draw inspiration from the equity country classification framework to create a transparent country classification framework for fixed income index users, while acknowledging and preserving the clear and important nuances between the two asset classes.

Comprehensive client engagement and market education play an important role in evolving and developing our extensive families of fixed income benchmarks. The feedback received from this consultation will assist FTSE Russell in making any final decisions related to the topics considered. We value your input and participation.

Responding to the Consultation

The proposals set out in this consultation document are included in order to gather feedback and may or may not result in changes to FTSE Fixed Income Index rules.

Please submit your response to the questions included in this consultation online at <https://www.surveymonkey.co.uk/r/WMTSC7H>

The consultation will close on September 14th. All responses will be treated as confidential. FTSE Russell may publish a summary of the consultation results, but no individual responses will be published and no respondents will be named.

If you have any questions about this survey, or if you encounter any technical issues, please contact rpawson@ftserussell.com.

Background¹

Historically, inclusion of local markets within flagship fixed income multi-currency government benchmarks, such as the FTSE World Government Bond Index (WGBI) and FTSE Emerging Markets Government Bond Index (EMGBI), has been based on both objective (market size and credit rating) and relatively subjective (market accessibility) criteria.²

To be formally considered for index inclusion, a local currency government debt market is required to first meet a series of quantifiable and observable index criteria. These are designed to assess the accessibility of candidate countries from the point of view of global investors and to minimize unnecessary index turnover. An assessment of “barriers to entry” would subsequently take place to evaluate the eligibility of new markets, with ongoing monitoring of existing markets for any significant deterioration in accessibility.

The purpose of this consultation is to establish a robust and transparent framework for the “barriers to entry” assessment through the assignment of a “Market Accessibility Level” (0, 1 or 2) for local currency fixed-rate government bond markets. Accessibility will be measured across four dimensions: **Market, Macroeconomic and Regulation; FX and Fixed Income Derivatives; Technical and Market Structure; and Global Settlement and Custody**. Once this accessibility framework is established, flagship benchmark inclusion will be based on whether a stated Market Accessibility Level is met according to the requisite accessibility value stated in its methodology, as well as whether the existing objective market size and credit quality criteria are satisfied. This local market accessibility value will be transferrable across the design of all benchmarks tracking fixed rate, native currency government bonds and maintained through our formal FTSE Russell governance process. Given the proposed annual nature of the review for Market Accessibility Levels, we will also review the application of objective inclusion criteria to ensure a coordinated, consistent approach to market entry and exit.

This consultation applies exclusively to local currency denominated fixed-rate nominal treasury/government bond markets tracked by FTSE Fixed Income Indexes. It does not include non-government local currency asset classes that may be a consideration for inclusion into broad-based, multi-currency and multi-sector indexes, such as the FTSE World Broad Investment-Grade Bond Index (WorldBIG®), as this assessment may include additional variables to consider.³ Owing to potential differences in issuance patterns and technical / market structure (i.e., liquidity, bond pricing, etc.) between nominal and inflation-linked government markets (and within the global inflation-linked market, between developed and emerging markets), it also does not apply to inflation-linked securities, such as those tracked by the FTSE World Government Inflation-Linked Securities Index (WorldILSI). We intend to expand the scope of the FTSE Fixed Income Country Classification Framework in the future to account for idiosyncratic markets, such as the global inflation-linked government bond market, and address inclusion of other asset types.

Based on feedback gathered from market participants, we intend to finalize the FTSE Fixed Income Country Classification framework in the coming months and subsequently use it to assign Market Accessibility Levels to the local markets tracked by our fixed rate government benchmarks.

¹ FTSE Russell also maintains a country classification framework for its global equity indexes. We believe important distinctions between these two asset classes merit a tailored approach for each. Please see Appendix 1 for further details.

² Market inclusion in dedicated fixed income Emerging Markets (EM) benchmarks also requires that a local currency market be classified as emerging under a given index provider’s EM definition. For purposes of inclusion in FTSE Emerging Markets hard and local currency benchmarks, a market is considered to be emerging if it defined by the IMF to be among “emerging and developing economies” or if it is defined by the World Bank to be among “low-income economies”, “lower-middle-income economies” or “upper-middle-income economies”. Therefore, to be included in the EMGBI, a local currency market must meet this definition. Conversely, the WGBI is comprised of high quality, generally developed markets, but can and does have overlap with dedicated EM benchmarks, such as the EMGBI; markets that are eligible for both WGBI and EMGBI benchmarks are commonly referred to as “crossover markets”.

³ A “Country” is also assigned for each security tracked by the FTSE Fixed Income Indexes to represent its issuer’s country of risk and can be different from the “Country” for the purposes of local market inclusion. This Country of Risk attribute is used to determine eligibility in the hard currency FTSE EM USD Broad Bond Index (EMUSDBBI), and the FTSE High Yield Market Index, which includes debt from United States and Canada issuers only.

Proposed Framework for Assigning Market Accessibility Levels

The proposed country classification framework will be evaluated annually, at a pre-determined date and will seek to calibrate a relative accessibility value for a super-set of local fixed-rate government bond markets. This will include existing markets eligible for flagship local currency government bond indexes, such as the WGBI and EMGBI, as well as candidate markets for potential promotion or demotion⁴, which will be published on a “Watch List”. Market Accessibility Levels will be determined by FTSE Russell based on market feedback via a predefined, transparent, and rigorous governance process. Index users will provide feedback on their assessment of a local market’s accessibility using the criteria and variables outlined in this consultation. Once established, these levels will be reviewed annually and formally incorporated into the inclusion criteria of flagship multi-currency FTSE government benchmarks, and available for use in custom indexes. The accessibility threshold will vary according to the nature of the benchmark; benchmarks such as the WGBI have a high-bar for inclusion, therefore their accessibility threshold levels will be more stringent than for the EMGBI.

Annual Review Cycle

Relative market accessibility will be reviewed on an annual basis each September. Based on market feedback, a local market’s accessibility value may be adjusted if there is a failure to meet the existing accessibility thresholds or if there are material changes to the local investment conditions that warrant a higher value.⁵ FTSE Russell will maintain a “Watch List” of fixed income local markets that are close to meeting the criteria for either a higher or lower Market Accessibility Level. Local markets either failing to meet the accessibility thresholds of their existing level (i.e., due to incremental deterioration in their investment conditions) or are close to meeting the thresholds for a higher Market Accessibility Level will be considered as part of this annual review. Proposed implementation of the FTSE Fixed Income Country Classification framework is discussed later in this document, and allows for an inaugural March 2019 review and assignment of Market Accessibility Levels.

Any resulting benchmark changes will be announced along with changes to Local Market Accessibility Levels. The notice period between announcement and implementation of index inclusion changes will be also communicated to the market and allow for sufficient lead time for clients.

In the case of a market disruption event (i.e., the introduction of prohibitive capital controls), FTSE Russell will reference its Statement of Principles to determine whether an off cycle review of Market Accessibility Levels is triggered.

Determination of Market Accessibility Levels

Under the proposed FTSE Fixed Income Country Classification framework, a Market Accessibility Level is assigned for each fixed rate government market based on its fulfillment of a set of transparent criteria. Each local market will receive a level of 0, 1 or 2, with “2” representing the highest level of accessibility. A local market value of “2” is assumed to already satisfy the Level 1 thresholds; a local market value as “1” is assumed to already satisfy the Level 0 thresholds. A value of “0” represents the lowest level of accessibility a debt market must satisfy to be tracked by a FTSE fixed income benchmark. The approach to assigning Market

⁴ The composition of this Watch List will incorporate feedback from market participants and other index stakeholders.

⁵ Market eligibility is currently reviewed on a continual basis for both the FTSE World Government Bond Index (WGBI) and FTSE Emerging Markets Government Bond Index (EMGBI). Once a market has met all the requirements, including both objective criteria and market accessibility thresholds, an announcement is made that this market is eligible for inclusion into the index. If it continues to meet all the requirements for three consecutive months after the announcement, the market will join the index at the end of the three months that follow.

Accessibility Levels for other local markets, including inflation linked and credit instruments, will be reviewed at a later date, but will draw from the framework derived as part of this consultation.

The required degree to which a criterion must be met (full or partial) depends on the Market Accessibility Level (0, 1 or 2). Assessment will take place across the same four high level dimensions for each level, however, it is also possible that a given dimension / factor will not be applicable for all levels. Assessment of each of these four high level categories will be based on suitable fulfillment of the requisite satisfaction (full or partial) of each of the more granular sub-categorizations.

A local currency government debt market must have a value of “2” to satisfy the accessibility criteria for the flagship investment grade WGBI and a value of at least “1” for the local currency EMGBI. Market Accessibility Levels will also be used as inclusion criteria for other regional and bespoke government benchmarks.

Details of the specific market criteria which will be considered to assign a Market Accessibility Level are given in the framework below:

1. Market, Macroeconomic and Regulatory Environment

- **Sustainable Issuance** – Formal commitment and/or clear evidence of a commitment from local debt management agents/treasury to sustain issuance across the yield curve. This prevents new markets from entering a flagship index and becoming illiquid due to lack of issuance. It should be interpreted in absolute terms, but also at specific tenor points (i.e. lack of issuance at the long-end, where there was previously issuance might cause replication issues).⁶
- **Transparent and Open Monetary Policy Framework** – Consideration will be given to perceived credibility of monetary policy and inflation targets; communication of policy rates and parameters; regularity and frequency of committee meetings, etc.
- **Foreign Exchange Policy and Communication** – FX risks are an important consideration for fixed income portfolio managers, as currency returns can form significant portion of bond returns for global fixed income managers, (especially for EM investors). Therefore, the following variables will be assessed:
 - Repatriation risk should be minimal;
 - Transparent FX policy environment where policies and parameters are clearly articulated and communicated to all market participants;
 - Core FX fixings are predominately formed through open market mechanisms; and
 - Limited failed trades
- **Investment Restrictions/Quotas** – Includes restrictions on investment into eligible assets or repatriation of principal/cash flows or FX of eligible assets for foreign investors. Restrictions may take a number of different forms, including investment quotas and capital controls. The degree to which a market is required to either fully or partially meet this criterion will be based on the degree to which these are not present (i.e., a market would not be eligible for WGBI if it imposed prohibitive or unduly discriminatory quotas or capital controls towards foreign investors).

2. Foreign Exchange and Fixed Income Derivatives

- **FX Liquidity and Investability** – “Hedgeable”, freely convertible and tradable spot FX and one-month forward contracts. Measured by spot and forward daily turnover, compared to index peer group as a proxy for FX liquidity.

⁶ For inflation-linked markets, to be assessed at a later date, sufficient nominal issuance underpinning the linker issuance for purposes of breakeven analysis is a prerequisite for inclusion in global linker benchmarks, such as the FTSE WorldILSI. However this rule would likely be less stringently applied to emerging market inflation-linked indexes.

- **FX Forwards** – Evidence of an established and developed forward market or non-deliverable forward (NDF) market. Minimal divergence between on and offshore NDF markets, where appropriate.
- **Fixed Income Derivatives** – Sufficiently developed and liquid fixed income derivative markets that underpin the local currency treasury market. Instruments included in the assessment include repo, bond forwards/futures CDS and interest rate derivatives, such as swaps.

3. Technical and Market Structure

- **Bond Conventions** – Replicable and vanilla bond conventions that support unconstrained calculation of returns and analytic. More exotic conventions tend to apply to niche markets, such as the inflation-linked and EM markets. To receive the minimum level of “0”, which is required for a local market to be tracked by FTSE Russell, reliable terms and conditions data, and supported analytics capabilities must be freely available.
- **Bond Pricing** – Availability of suitable pricing, which is representative and conforms to the local/appropriate convention (i.e. bid/mid or dirty). To receive the minimum level of “0”, which is required for a local market to be tracked by FTSE Russell, reliable prices for benchmark purposes must be seamlessly available.
- **Transaction Costs (sub-divided into Fiscal and Post-Trade Costs)** – The cost of investment for foreign investors should be reasonable and not prohibitive. The investment costs are assessed across the full continuum, including but not limited to FX, taxation/fiscal, dealing, clearing, custody and settlement.
 - **Fiscal and Administrative Costs** – Includes taxes for foreign investors applied to FX, coupons or principal payments; tax administration; and ease of tax collection
 - **Fees associated with Post-Trade: Transactional** – Includes costs related to transaction capture and processing; pre-matching and matching efforts; transaction reporting (including regulatory reporting); and CSD costs specifically relating to transactions
 - **Fees associated with Post Trade: Custody** – Includes costs related to services such as safekeeping; corporate actions maintenance/asset servicing; and CSD charges
- **Bond Liquidity** - Representative, vibrant two-way pricing should be available from multiple sources. Relative liquidity will be measured against its specific peer group and will be continually monitored given its dynamic nature. Examples of metrics that may be used to assess the liquidity of a local market include, but are not limited to level of foreign ownership, average bid/offer spreads (contemporary and historic), trading volume and turnover ratios (recent and past).

4. Global Settlement and Custody

- **Settlement** – Settlement via a global clearing agency, such as Euroclear, is desirable; otherwise an equivalent seamless and frictionless solution that does not restrict local market access to foreign investors should be evident. Important considerations include, but are not limited to:
 - Availability of delivery versus payment (DVP);
 - Absence of prefunding (T+0) , unless a longer settlement cycle is available for foreign investors;
 - Minimal failed trades.

- **Custody** – Multiple custody options from both global and domestic custodians. Important considerations include, but are not limited given to:
 - Availability of both omnibus and segregated account structures;
 - Account opening procedures without high operational hurdles (i.e., simple / unbureaucratic, low latency, pre-approval not required, etc.).

Table 1 summarizes the requirements that must be met for 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 a criterion only needs to be **partially met** for a market to meet the overall accessibility threshold. If a sufficient number of the listed sub-categories are met, then in aggregate, the high-level criteria could be deemed satisfactory fulfilled, even if some of the remaining sub-criteria are not sufficiently met. Certain sub-categories can be considered minor vs. more important ones in determining the fulfilment each of the three top line criteria.
- A criterion marked with indicates that the criterion does not apply to the evaluation of the accessibility factor.

Each of the sub-criteria will first be assessed individually to determine whether the four main categories are sufficiently met. For example, it is possible for a market to fully meet FX Liquidity and FX Forwards, but only partially meet Fixed Income Derivatives, but still fulfill the overall FX and FI Derivatives accessibility requirement.

Table 1: Market Accessibility Values for Local Market Fixed-Rate Government Markets

Market Accessibility Level	Level 2 (i.e., WGBI)	Level 1 (i.e., EMGBI & Regional Indices)	Level 0
Criteria/Factors	Minimum Requirements	Minimum Requirements	Minimum Requirements
Market, Macroeconomic and Regulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sustainable Issuance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monetary Policy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FX Framework	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investment Restrictions / Quotas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foreign Exchange and Fixed Income Derivatives	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FX Liquidity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FX Forwards	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fixed Income Derivatives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical and Market Structure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bond Conventions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bond Pricing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Transaction Costs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bond Liquidity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Global Settlement and Custody	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Settlement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Custody	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Implementation of the FTSE Fixed Income Country Classification Framework⁷

Based on market feedback, we plan to refine the proposed FTSE Fixed Income Country Classification Framework as needed and publish a final version in October 2018.

In implementing the Country Classification Framework, we propose grandfathering a level of “2” to existing WGBI markets and a level of “1” to existing EMGBI markets that are not WGBI-eligible (i.e., crossover markets will be assigned a level of “2”). Minimum Market Accessibility Level will also be incorporated formally as part of the published methodology for these two benchmarks. Local markets not tracked by either the WGBI or the EMGBI, including candidate markets that may warrant introduction of FTSE Russell local currency government benchmark tracking for, will have their level reviewed and formally assigned in March 2019. We propose assigning a minimum level of “1” for those markets not tracked by the WGBI or EMGBI, but tracked by one of the regional benchmarks for purposes of the March 2019 review. Markets tracked by the FTSE EMGBI Additional Markets Index are assigned a level of “0”. Market Accessibility Level review will commence its annual cycle in September 2019.

We also intend to make a “Watch List” of markets whose accessibility levels will be considered in March 2019 available once the framework has been established based on these initial Market Accessibility Level assignments.

Application of Objective Benchmark Inclusion Criteria

Given the proposed annual nature of the review for Market Accessibility Levels, we would like to solicit feedback on the manner in which objective criteria (market size and credit rating) are used in local market inclusion for the flagship FTSE World Government Bond Index (WGBI) and FTSE Emerging Markets Government Bond Index (EMGBI). Currently local market eligibility is reviewed on a continual basis for both benchmarks as summarized below.

Market Size

- Current market size rules for the FTSE WGBI state that to qualify for entry, 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.⁸ After a market has met the criteria for three consecutive months, an announcement is made that it will join the WGBI at the end of the 3 months that follow.
- When the outstanding amount of a market’s eligible issues falls below half of the entry-level market size criteria (USD 25 billion, EUR 20 billion and JPY 2.5 trillion) for three consecutive months, the market will be removed from the WGBI at the next month’s rebalancing.⁹
- To be included in the FTSE EMGBI, the amount outstanding for of 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), for three consecutive months, the market will be removed at the next month’s rebalancing.

⁷ Appendix 2 summarizes flagship FTSE multi-currency fixed-rate government bond benchmarks and their proposed inclusion criteria using Market Accessibility Levels as defined in this proposal. Appendix 3 overview of local government markets tracked by various FTSE fixed income benchmarks, and their current inclusion in flagship benchmarks.

⁸ Each Eurozone market must meet the market size criteria with its own eligible issues.

⁹ At each month-end, the ≥ 1 year fixed rate debt from each market is aggregated and then spotted into each of the currencies aforementioned (USD, JPY and EUR) to determine the market size. The inclusion of the sub-1 year debt prolongs inclusion in the index and may minimize turnover.

Credit Rating

- To qualify for entry into the WGBI, 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 would not exit until its credit rating fell below BBB- by S&P and Baa3 by Moody's. Downgraded markets exit the index at the next monthly rebalance.
- EMGBI countries must have a minimum rating of C by S&P and Ca by Moody's.

Enhancements to application of these objective criteria with respect to implementation of any changes to index inclusion that we would like to consider with users include:

- Implementation of any benchmark inclusion changes due to market size or credit rating upgrade moved to the same annual cycle as the review of Market Accessibility Levels; and
- Consideration of sub-one year-to-maturity and / or other fixed-rate local currency bonds that do not meet minimum bond-level amount outstanding in total debt outstanding for market size assessment. This would allow markets that are close to the exit threshold to count bonds towards the total through their final maturity, which would potentially help reduce turnover.

Appendix 1

The Distinctions between Fixed Income and Equity Country Classifications

In their simplest sense, benchmark families define peer groups: peer groups of investments by asset class (fixed income vs equities; government vs corporate); by industry (industrial vs financial); by country (developed vs emerging), and so on... with endless possible permutations thereafter. The method by which this grouping or classifying is achieved has been fundamental to the evolution of many established and widely used benchmarks, across asset classes.

The classification process for countries employed by FTSE Russell for global equity indexes, for example, is a transparent and evidence driven process, which ensures that country classification, is judged objectively and meets the needs of index users. At first glance, one could envisage the same rigorous and transparent criteria could also be applied to local markets represented by fixed income benchmarks. However doing so would ignore the important idiosyncrasies discussed below that warrant a more tailored approach to account for them.

- In the global equity index world, a clearly defined graduation pathway for individual countries to progress from frontier through emerging through to developed classification exists, with benchmark inclusion mutually exclusive. Conversely, in the design of flagship investment grade multi-currency fixed income benchmarks for global portfolios, credit quality tends to supersede formal emerging markets (EM) definitions creating what are commonly referred to as “crossover markets”. Benchmarks such as the WGBI are comprised of high quality, generally developed markets, but have overlap with dedicated EM benchmarks such as the EMGBI. Current examples of crossover markets include South Africa and Mexico. This is broadly an accepted feature of the fixed income market, which we believe merits preservation within a fixed income benchmark design.
- Within fixed income benchmarks, currency denomination of a security is used to determine local market inclusion and an issuer’s country of risk is used to determine inclusion in hard currency emerging markets and high yield indexes. The diversity of sub-asset classes represented by fixed income benchmarks can require assignment of different accessibility levels within a grouping of securities denominated in the same currency (i.e. fixed rate treasury vs inflation-linked). Local market inclusion within broad-based multi-sector benchmarks, such as the FTSE World Broad Investment Grade Index (WorldBIG®), for example, will include considerations for which asset classes and sectors should be included once a currency becomes eligible. This is particularly relevant for smaller local currency markets and crossover markets where determinations must be made around whether investment grade corporate, quasi-sovereign and securitized issuance in a given local currency are appropriate for inclusion.
- Unlike equities, fixed income instruments are generally not exchange listed. This means the quality and sourcing of pricing can present challenges for certain markets and must be formally considered as part of the fixed income country classification framework.
- Fixed income sub-asset classes can exhibit specific idiosyncrasies which may mean recalibrating either the market size, credit quality or market accessibility criteria accordingly across distinct flagship multi-currency benchmarks. For example, central government issuance patterns of inflation-linked debt can vary greatly from its issuance of nominal debt. Similarly, the degree to which issuance exhibits exotic or non-standard conventions can vary across a single government issuer for these types of assets. Global high yield and EM hard currency markets are other examples where the factors considered as part of the country classification framework may warrant tailoring to asset-class specific conventions.

- Within fixed income, additional variables such as coverage of local bonds from international rating agencies and availability of a deep and vibrant derivatives market are also among variables important to foreign investors.

Despite these caveats, there are many shared features in the country classification assessment across equities and fixed income: a country's regulatory environment, foreign exchange market, and dealing landscape are just a few of the considerations that will apply to both frameworks (perhaps with a different outcome). Our goal as a multi-asset index provider is to draw inspiration from the equity country classification process to create a transparent framework for fixed income index users, while at the same time acknowledging and preserving the clear and important differences between the two asset classes.

Appendix 2

Summary of flagship FTSE multi-currency fixed-rate government bond benchmarks and their proposed inclusion criteria using Market Accessibility Levels as defined in this proposal.¹⁰

	FTSE WGBI	FTSE EMGBI	Regional Benchmarks (i.e. FTSE AGBI)
Market Accessibility Level	2	1	1, 2
EM vs DM Requirement	n/a	EM	n/a
Objective Criteria: Credit Rating	A3 / A-	C	n/a
Objective Criteria: Market Size	USD 50 billion, EUR 40 billion, AND JPY 5 trillion	USD 10 billion	USD 5 billion (AGBI only)

FTSE World Government Bond Index (WGBI) – A flagship measure of fixed-rate, local currency, investment-grade sovereign bonds. For inclusion in the WGBI, a market can be considered either developed or EM (according to FTSE’s fixed income EM definition).

FTSE Emerging Markets Government Bond Index (EMGBI) – A flagship measure of fixed-rate, local currency emerging markets debt. Countries classified as developed are excluded by rule from the EMGBI.

Regional Local Currency Government Indexes¹¹ – Fixed-rate, multi-currency, regional government bond benchmarks, intended to capture local region preferences and tailored to specific geographic areas, and have crossover with both the WGBI and EMGBI:

- **FTSE Asia Government Bond Index (AGBI)** – Covers select Asian government bond markets including China, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand. Japan is explicitly excluded by rule from this benchmark.
- **FTSE Asia Pacific Government Bond Index (APGBI)** – Covers select Asian and Asian Pacific government bond markets including China, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand, with the addition of government bonds from Australia and New Zealand. Japan is explicitly excluded by rule from this benchmark.
- **FTSE Latin American Government Bond Index (LATAMGBI)** – Covers select Latin American government bond markets including Brazil, Chile, Colombia Mexico, and Peru.
- **FTSE Central and Eastern Europe, Middle East, and Africa Government Bond Index (CEEMEAGBI)** – Covers select CEEMEA markets including Czech Republic, Hungary, Israel, Poland, Romania, Russia, South Africa and Turkey.

¹⁰ Hence, a combination of accessibility levels and quantitative criteria such as market size and credit ratings will determine market eligibility for flagship fixed-rate local currency government benchmarks, such as WGBI, EMGBI and AGBI.

¹¹ In due course, we plan to solicit feedback through the relevant FTSE Russell fixed income internal and external governance committees on any refinements that may be warranted for these regional indexes. For example, Japan is excluded from the AGBI as many Asian investors prefer to track Japan separately from other Asian government markets – does this continue to be representative / desired? Perhaps a version of the AGBI whereby Japan is capped at 10% for example, is a better representing of the regional fixed rate government bond market.

Appendix 3

Overview of local government markets tracked by various FTSE fixed income benchmarks, and their current inclusion in flagship benchmarks.

Region	Country	Currency	EM vs DM Designation	FTSE WGBI	FTSE WGBI Additional Markets	FTSE EMGBI	FTSE EMGBI Additional Markets	Regional Benchmarks *	FTSE WorldILSI*	Index Credit Rating	Market Size*
Americas	US	USD	Developed	•					•	AA+	7,571,706
	Canada	CAD	Developed	•					•	AAA	330,425
	Mexico	MXN	Emerging	•		•		•	•	A	136,775
	Brazil	BRL	Emerging		•	•		•		BB	100,006
	Chile	CLP	Emerging		•	•		•		AA	25,212
	Colombia	COP	Emerging		•	•		•		BBB	58,027
	Peru	PEN	Emerging		•	•		•		A	25,677
EMEA	United Kingdom	GBP	Developed	•					•	AA	832,032
	Eurozone Markets*	EUR	Developed	•					•	Varies	Varies
	Denmark	DKK	Developed	•						AAA	71,858
	Norway	NOK	Developed	•						AAA	31,631
	Sweden	SEK	Developed	•					•	AAA	48,975
	Switzerland	CHF	Developed	•						AAA	16,263
	Poland	PLN	Developed	•		•		•	•	A	90,147
	South Africa	ZAR	Emerging	•		•		•	•	BBB	91,499
	Greece, Portugal	EUR	Developed		•					Varies	Varies
	Czech Republic	CZK	Developed		•			•		AA	32,388
	Israel	ILS	Developed		•			•	•	A+	45,527
	Russia	RUB	Emerging		•	•		•		BBB	56,602
	Hungary	HUF	Emerging		•	•		•		BBB	33,652
	Romania	RON	Emerging		•	•		•		BBB	22,294
	Turkey	TRY	Emerging		•	•		•		BB+	56,743
APAC	Japan	JPY	Developed	•					•	A+	413,394,646
	Australia	AUD	Developed	•				•	•	AAA	37,891,206
	Singapore	SGD	Developed	•				•		AAA	7,221,862
	Malaysia	MYR	Emerging	•		•		•		A	9,288,885
	New Zealand	NZD	Developed		•			•		AA+	3,644,231
	South Korea	KRW	Developed		•			•		AA	51,420,462
	Hong Kong	HKD	Developed		•			•		AA	1,146,412
	China Onshore	CNY	Emerging		•	•		•		A+	142,597,837
	Indonesia	IDR	Emerging		•	•		•		BBB	12,124,314
	Philippines	PHP	Emerging		•	•		•		BBB	4,746,934
	India	INR	Emerging		•		•			BBB	76,847,772
	Sri Lanka	LKR	Emerging		•		•			B+	1,134,229
	Taiwan	TWD	Developed		•					AA	12,922,096
	Thailand	THB	Emerging		•	•		•		A	9,517,857
	China Offshore	CNH	Emerging							A+	9,406

*As of July 2018, Eurozone markets eligible for the WGBI include: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, and Spain.

*WorldILSI Euro Markets include France, Germany, Italy, Spain. Currently no Poland bonds qualify for index inclusion.

* Regional benchmarks include: FTSE Central and Eastern Europe, Middle East, and Africa Government Bond Index (CEEMEAGBI), FTSE Latin America Government Bond Index (LATAMGBI), FTSE Asian Government Bond Index (AGBI), FTSE Asia Pacific Government Bond Index (APGBI)

*Market Size shown in millions in USD / EUR / JPY by region and includes index eligible instruments only. Data are as of July 2018



Consultation questions

Market Accessibility Levels

As part of the proposed FTSE Fixed Income Country Classification Framework, we propose four high level criteria for assigning Market Accessibility Levels. Please indicate in the following section whether you endorse the criteria outlined in the proposal contained in this document. If further refinement is required, in your view, please use the comments section to provide details or contact us to schedule a meeting to discuss.

1. **Do you endorse the proposed criteria for the Market, Macroeconomic and Regulation component of the market accessibility component of the framework?**

Yes

No

Please provide any additional feedback you may have:

2. **Do you endorse the proposed criteria for the FX and Fixed Income Derivatives component of the market accessibility component of the framework?**

Yes

No

Please provide any additional feedback you may have:

3. Do you endorse the proposed criteria for the Technical and Market Structure component of the market accessibility component of the framework?

Yes

No

Please provide any additional feedback you may have:

4. Do you endorse the proposed criteria for the Global Settlement and Custody component of the market accessibility component of the framework?

Yes

No

Please provide any additional feedback you may have:

5. Are there any other criteria that should be considered when assessing Market Accessibility Levels, not included in the proposed framework?

Please provide any additional feedback you may have:

6. Are there any factors in the proposed framework that should not be considered when assessing Market Accessibility Levels?

Please provide any additional feedback you may have:

Fixed Income Market Accessibility Watch List

In between the formal annual review of Market Accessibility Levels, FTSE Russell will maintain a “Watch List” of local currency markets that potentially meet the eligibility criteria of a higher or lower level for consideration at the next review date. In implementing the FTSE Country Classification Framework, we propose grandfathering a level of “2” to existing WGBI-eligible markets and a level of “1” to existing EMGBI-eligible markets. Local markets not tracked by either of these benchmarks, including candidate markets to introduce FTSE Russell fixed income benchmark tracking for, will have their level reviewed and formally assigned in March 2019 once the framework is established. We propose assigning a minimum level of “1” for those markets not tracked by the WGBI or EMGBI, but tracked by one of the regional benchmarks for purposes of the March 2019 review. Markets tracked by the FTSE EMGBI Additional Markets Index will be assigned a level of “0”.

7. Which countries do you believe should be on the Watch List for further consideration of Market Accessibility Level in March 2019 based on their proposed initial assignment? Check all that apply.

- Malaysia
- Israel
- China
- South Korea
- Nigeria
- Vietnam
- Saudi Arabia
- Other (please indicate below)

Comments:

Application of Objective Benchmark Inclusion Criteria

Given the proposed annual nature of the review of Market Accessibility Levels, we would like to solicit feedback on the manner in which objective criteria are used to determine inclusion in flagship benchmarks. Currently, local market eligibility is reviewed on a continual basis for both the WGBI and EMGBI. Once a market has met all criteria (market size, credit rating and barriers to entry thresholds), an announcement will be made that it is eligible for inclusion into the index. If it continues to meet all the requirements for three consecutive months after the announcement, the market will join the index at the end of the three months that follow. If a market no longer meets the minimum market size criteria for exit (half of the minimum for entry), an announcement will be made and if it continues to no longer meet the requirement for three consecutive months after the announcement, it will exit the index at that time. If a market no longer meets the minimum credit quality criteria for exit, it will exit the index at the next rebalance.

8. Do you believe that market size should be reviewed on an annual basis, along with Market Accessibility Levels, for purposes of local market WGBI and EMGBI inclusion?

- Yes, changes to local market inclusion for the WGBI and EMGBI should be made for changes in market size on the same annual cycle as review of Market Accessibility Level
- No, prefer the current handling of entry and exit of local markets due to changes in market size, which takes place continually
- Other (please comment in the space provided below)

Comments:

9. What is your preference for the universe of securities that is used to determine market size?

- Only those securities that would qualify for index inclusion based on other rules (i.e., amount outstanding, time to maturity, etc.) should be considered
- Both securities that are currently eligible and were at some point eligible, including securities that fall below the minimum time to maturity, should be considered
- All fixed-rate local currency government issuance should be considered, regardless of whether it meets other rules, such as amount outstanding
- Other (please comment in the space provided below)

Comments:

10. If a country newly meets the credit rating minimum applied for entry to the WGBI and EMGBI, what is your preference for when any resulting index inclusion changes are made?

- Changes to local market inclusion for credit rating upgrade should be made on the same annual cycle as review of Market Accessibility Level
- Entry of local markets for credit rating upgrade can be implemented at any point during the year in line with current handling
- Other (please comment in the space provided below)

Comments:

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

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