FTSE Russell

Your global partner across asset classes

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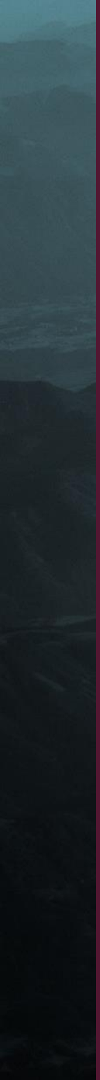
October 22, 2021

ftserussell.com



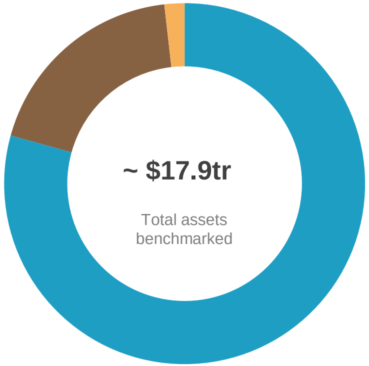
Contents

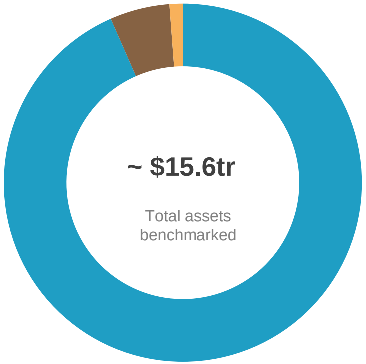
Section 1

How can we add value to your investment process?

A leader across asset classes

	FTSE Russell[1]			S&P Dow Jones[2]			MSCI[3]		
By asset class	79% Equity	19% Fixed Income	2% Other	94% Equity	5% Fixed Income	1% Other	99% Equity	0% Fixed Income	1% Other





Above data is estimated by FTSE Russell.

1. FR: Data as of December 31, 2020, as reported on April 1, 2021, by eVestment for active institutional funds, Morningstar for active retail mutual funds, insurance products, and ETFs, and passive assets directly collected by FTSE Russell. AUM includes blended benchmarks and excludes futures and options. AUM data does not include active and passive assets not reported to a 3rd party source or FTSE Russell. For funds where the AUM was not reported as of December 31, 2020, the previous period AUM was used as an estimate. No assurances are given by FTSE Russell as to the accuracy of the data.
2. S&P Dow Jones: S&P Dow Jones Indices Annual Survey of Assets, 12-2019. investorfactbook.spglobal.com/sp-dow-jones-indices/sp-dow-jones-indices-worlds-leading-provider-of-financial-market-indices/
3. MSCI: For total benchmarked assets: MSCI.com, data as of 12-2020. For asset class breakout: asset class shares estimated by FTSE Russell as of 12-2020.

Your global and local index partner

The leader across asset classes in both global and local markets

FTSE Russell Index Coverage to top investors and issuers around the world

Global Equity	Global Equity	Regional Equity	Domestic Equity
Global Fixed Income	Government Bonds	Corporate Bonds	EM Bonds
	High Yield	Inflation	Municipals
	Securitised	FRNs	
Cash & Money Markets	Bills		Rates / Deposits
Intermediate Securities	Preference Shares	Hybrid Securities	Convertible Bonds
Real Assets	Public Real Estate	Public Infrastructure	Commodities
Private Assets	Private Equity		Venture Capital
Currency	Currencies / FX	Crypto	

At the heart of global markets

FTSE Russell offers buy and sell-side communities an integrated multi-asset platform of proprietary data, analytics and indexes, with products designed for the world's most demanding institutions.

98/100
top asset managers use FTSE Russell indexes[1]

Top 10
investment banks use FTSE Russell indexes[2]

72 COUNTRIES
clients served in countries around the world[7]

~120
Index linked Futures and Options listed on 15 global exchanges[5]

15/15
top global ETF issuers work with FTSE Russell[6]

$17.9T
in reported fund AUM for FTSE Russell benchmarks[3]

$3.4T
…of which tracks our fixed income benchmarks[3]

~610
ETFs benchmarked to FTSE Russell indexes[4]

~$988B
ETF-linked assets benchmarked[4]

~918B
In equity ETF assets benchmarked[4]

Above data is estimated by FTSE Russell.

1. Based on FTSE Russell clients as of March 2021 and Pension & Investments list of top 100 worldwide asset managers.
2. Based on FTSE Russell clients as of April 2019 and Dealogic list of top 10 investment banks.
3. Data as of December 31, 2020, as reported on April 1, 2021, by eVestment for active institutional funds, Morningstar for active retail mutual funds, insurance products, and ETFs, and passive assets directly collected by FTSE Russell. AUM includes blended benchmarks and excludes futures and options. AUM data does not include active and passive assets not reported to a 3rd party source or FTSE Russell. For funds where the AUM was not reported as of December 31, 2020, the previous period AUM was used as an estimate. No assurances are given by FTSE Russell as to the accuracy of the data.
4. Morningstar, April 2021.
5. FTSE Russell, May 2021.
6. Morningstar, December 2020.
7. FTSE Russell 2019.
8. FTSE Russell, 2019

Adding value to your process

Partnering with our clients so they can make critical decisions with confidence

How an institutional investor such as a defined benefit pension plan may use indexes

Step	Example(s)	How indexes are used
Set investment objectives	Maximize surplus or adequately fund liabilities	Indexes help the plan, its trustees, and consultant(s) set objectives and make asset allocation decisions. Indexes provide a framework for portfolio construction
Determine asset allocation	Usually divided between asset classes such as public equity, fixed income, real estate, and private equity to ensure diversification	
Identify strategic allocation to sub-asset categories	Divide public equities allocation into the separate categories of international equity and domestic equity	
Define ranges, or buffers, around target allocations to allow for tactical investment decisions to be made as market conditions change	Allocation to international equities is set at 10% with buffers +/- 2% to allow for tactical investment decisions	
Communicate investment goals to investment manager(s)	Goals and objectives are communicated to the investment manager chosen for the international equities allocation	Indexes are often used to establish the universe of securities from which the manager will likely invest
Determine whether the plan objectives are being met and how (or why not)	Analyze the different components of the investment portfolio to attribute performance to manager success, market growth, strategic positioning or other sources	Indexes are used to measure the performance of the entire investment portfolio relative to that of the established asset allocation targets (sometimes referred to as the "policy benchmark"). Indexes therefore allow for performance attribution

Section 2

FTSE Russell Indexes: The true measure of your market

We combine global expertise with local market knowledge

Global partnerships and collaborations result in best-of-breed solutions

Exchanges around the world choose FTSE Russell to calculate their local market benchmarks – e.g. JSE, Bursa Malaysia, TWSE Taiwan

Asia
ASEAN Exchanges
Bursa Malaysia
Nomura
Singapore Exchange
SPH
The Stock Exchange of Thailand
TWSE

Africa
ASEA
Casablanca Stock Exchange
JSE
Nairobi Securities Exchange

Europe
Athens Exchange
BME
EPRA
Euronext
MTS
Tradeweb
Yasaar Limited

Middle East
Nasdaq Dubai

Australia
ASFA

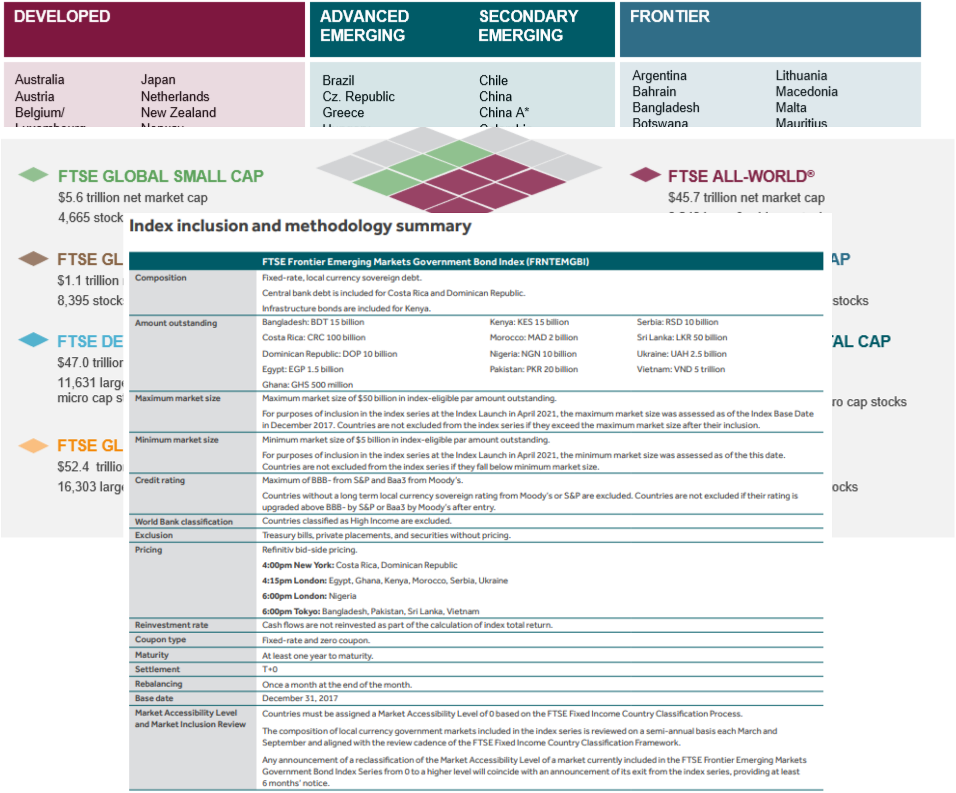
North America
BIVA
Curex
Mountain Pacific
Nareit
PIP
Research Affiliates

Building a better benchmark

Principle 1: Objectivity and accuracy - Delivering an unbiased, complete view of the market

Principle 2: Modularity

Principle 3: Reliability. Use a disciplined, reliable maintenance process (methodology)



Index inclusion and methodology summary

	FTSE Frontier Emerging Markets Government Bond Index (FRNTEMGBI)		
Composition	Fixed-rate, local currency sovereign debt. Central bank debt is included for Costa Rica and Dominican Republic. Infrastructure bonds are included for Kenya.		
Amount outstanding	Bangladesh: BDT 15 billion Costa Rica: CRC 100 billion Dominican Republic: DOP 10 billion Egypt: EGP 1.5 billion Ghana: GHS 500 million	Kenya: KES 15 billion Morocco: MAD 2 billion Nigeria: NGN 10 billion Pakistan: PKR 20 billion	Serbia: RSD 10 billion Sri Lanka: LKR 50 billion Ukraine: UAH 2.5 billion Vietnam: VND 5 trillion
Maximum market size	Maximum market size of $50 billion in index-eligible par amount outstanding. For purposes of inclusion in the index series at the Index Launch in April 2021, the maximum market size was assessed as of the Index Base Date in December 2017. Countries are not excluded from the index series if they exceed the maximum market size after their inclusion.		
Minimum market size	Minimum market size of $5 billion in index-eligible par amount outstanding. For purposes of inclusion in the index series at the Index Launch in April 2021, the minimum market size was assessed as of the this date. Countries are not excluded from the index series if they fall below minimum market size.		
Credit rating	Maximum of BBB- from S&P and Baa3 from Moody's. Countries without a long term local currency sovereign rating from Moody's or S&P are excluded. Countries are not excluded if their rating is upgraded above BBB- by S&P or Baa3 by Moody's after entry.		
World Bank classification	Countries classified as High Income are excluded.		
Exclusion	Treasury bills, private placements, and securities without pricing.		
Pricing	Refinitiv bid-side pricing. **4:00pm New York:** Costa Rica, Dominican Republic **4:15pm London:** Egypt, Ghana, Kenya, Morocco, Serbia, Ukraine **6:00pm London:** Nigeria **6:00pm Tokyo:** Bangladesh, Pakistan, Sri Lanka, Vietnam		
Reinvestment rate	Cash flows are not reinvested as part of the calculation of index total return.		
Coupon type	Fixed-rate and zero coupon.		
Maturity	At least one year to maturity.		
Settlement	T+0		
Rebalancing	Once a month at the end of the month.		
Base date	December 31, 2017		
Market Accessibility Level and Market Inclusion Review	Countries must be assigned a Market Accessibility Level of 0 based on the FTSE Fixed Income Country Classification Process. The composition of local currency government markets included in the index series is reviewed on a semi-annual basis each March and September and aligned with the review cadence of the FTSE Fixed Income Country Classification Framework. Any announcement of a reclassification of the Market Accessibility Level of a market currently included in the FTSE Frontier Emerging Markets Government Bond Index Series from 0 to a higher level will coincide with an announcement of its exit from the index series, providing at least 6 months' notice.		

Building blocks for the right index

Comprehensive modular framework for global investing that covers all major asset classes, regions, sectors, styles and investment themes

Market	Global	Single country	Region	Global ex country	Region ex country	Inclusion (e.g. China A Inclusion)	
	Developed	Emerging	Advanced Emerging	Secondary Emerging	Frontier		
Size	Large cap	Mid cap	Small cap	Micro cap			
Sector (ICB)	Industries (11)	Super Sectors (20)	Sectors (45)	Sub-sectors (173)			
Sustainability & Shariah	Climate	ESG	Green Revenues / Environmental Markets	TPI	Global Compact	Real Estate	FTSE4Good
	Paris-aligned	Ex Fossil Fuel	Carbon	Sovereigns	Exclusions / Screens / Choice	Women on Boards	Shariah
Non-market cap / Theme / Strategy	Industry-specific	Factor	Volatility	Fundamental	Equally Weighted	Dividend	Risk-based
	GDP	Fair Value	Yield	Domestic & Global Exposure	Super Liquid	Target date	Smart sustainability

Source: FTSE Russell, data as of September 21, 2020 market open.
*The FTSE Frontier Index Series is maintained separately from FTSE GEIS. For more information please reference the FTSE Frontier Index Series Ground Rules.

FTSE Global Equity Index Series (FTSE GEIS)

DEVELOPED		
Australia	Ireland	Singapore
Austria	Israel	South Korea
Belgium/Luxembourg	Italy	Spain
Canada	Japan	Sweden
Denmark	Netherlands	Switzerland
Finland	New Zealand	UK
France	Norway	USA
Germany	Poland	
Hong Kong	Portugal	

EMERGING			
ADVANCED EMERGING		SECONDARY EMERGING	
Brazil	Mexico	Chile	Pakistan
Czech Republic	South Africa	China	Philippines
Greece	Taiwan	Colombia	Qatar
Hungary	Thailand	Egypt	Romania
Malaysia	Turkey	India	Russia
		Indonesia	Saudi Arabia
		Kuwait	UAE

Americas Asia Pacific Europe MEA

FRONTIER		
Bahrain	Jordan	Palestine
Bangladesh	Kazakhstan	Peru
Botswana	Kenya	Republic of North Macedonia
Bulgaria	Latvia	Serbia
Côte d'Ivoire	Lithuania	Slovak Republic
Croatia	Malta	Slovenia
Cyprus	Mauritius	Sri Lanka
Estonia	Morocco	Tanzania
Ghana	Nigeria	Tunisia
Iceland	Oman	Vietnam

FTSE Global All Cap Index (Large, Mid, Small)

FTSE Frontier (Large, Mid, Small)

FTSE All-World Index (Large & Mid)

FTSE Developed Index (Large, Mid)

FTSE Emerging Index (Large, Mid)

FTSE World Index (Large & Mid, Developed & Advanced Emerging)

FTSE Global Small Cap Index

FTSE Global Micro Cap Index

FTSE Global Total Cap Index (Large, Mid, Small, Micro)

FTSE Developed Total Cap Index (Large, Mid, Small, Micro)

FTSE Emerging Total Cap Index (Large, Mid, Small, Micro)

Source: FTSE Russell, data as of September 21, 2020 market open.
*The FTSE Frontier Index Series is maintained separately from FTSE GEIS. For more information please reference the FTSE Frontier Index Series Ground Rules.

Spanning the entire fixed income spectrum to open new opportunities for investors

GLOBAL
FTSE World Government Bond Index (WGBI)[1]
FTSE World Government Bond Index – Developed Markets
FTSE World Government Bond Index – Extended
FTSE World Government Bond Index – Japanese Investment Trust[2]
FTSE World Broad Investment-Grade Bond Index (WorldBIG®)[2]
FTSE World Inflation-Linked Securities Index (WorldILSI)
FTSE World Money Market Index
FTSE Eurodollar Bond Index
FTSE Eurosterling Bond Index
FTSE Euroyen Bond Index

EMERGING MARKETS
FTSE Emerging Markets Government Bond Index (EMGBI)[3]
FTSE EMGBI – Japanese Investment Trust
FTSE Emerging Markets USD Government Bond Index[3]
FTSE Frontier Emerging Markets Government Bond Index
FTSE Emerging Markets USD Broad Bond Index[3]
FTSE Emerging Markets Inflation-Linked Securities Index

AMERICAS
FTSE US Treasury Bill Indexes
FTSE US Treasury 0-1 Year Indexes
FTSE US Treasury Floating Rate Note Index
FTSE Latin American Government Bond Index
FTSE US Broad Investment-Grade Bond Index (USBIG®)
FTSE US Large Pension Fund Index
FTSE US High-Yield Market Index[3]
FTSE US High-Yield Market Capped Index
FTSE US Treasury STRIPS Index
FTSE US Mortgage Index
FTSE US Municipal Tax-Exempt Investment-Grade Bond Index
FTSE US Money Market Index

Government
Broad
Corporate
Other

ASIA PACIFIC & JAPAN
FTSE Asian Government Bond Index (AGBI)[3]
FTSE Chinese Government and Policy Bank Bond Index (CNGPBI)
FTSE Asian Pacific Government Bond Index
FTSE Vietnamese Government Bond Index
FTSE Asian Broad Bond Index (ABBI)
FTSE Chinese (Onshore CNY) Broad Bond Index
FTSE Dim Sum (Offshore CNY) Bond Index
FTSE Australian Broad Investment-Grade Bond Index (AusBIG®)
FTSE Chinese (Onshore CNY) Green Bond Index

EMEA
FTSE CEEMEA Government Bond Index
FTSE EMU Government Bond Index (EGBI)
FTSE Swiss Government Bond Index
FTSE Portuguese Government Bond Index
FTSE Greek Government Bond Index
FTSE Saudi Arabia Government Bond Index
FTSE Nigerian Government Bond Index
FTSE Euro Broad Investment-Grade Bond Index (EuroBIG®)
FTSE MENA Broad Bond Index

THEMATIC	
Climate Risk-Adjusted World Government Bond Index (CLMTWGBI)	FTSE Advanced Climate Risk-Adjusted World Government Bond Index (ACLMTWGBI)
Climate Risk-Adjusted Euro Government Bond Index (CLMTEGBI)	FTSE Advanced Climate Risk Adjusted Euro Government Bond Index (ACLMTEGBI)
Debt-Capacity World Government Bond Index (DCWGBI)	FTSE RAFI World Corporate Investment-Grade Bond Index
MPF World Government Bond Index (MPF WGBI)	FTSE Time-Weighted US Fallen Angel Bond Index
FTSE RAFI Sovereign Developed Markets Bond Index Series	FTSE Ideal Ratings Sukuk Index

A comprehensive flexible suite of benchmarks

5+ comprehensive packages

50+ headline indexes

5,000+ granular sub-indexes

5,000,000+ risk and return statistics reported daily

Spanning the entire spectrum of fixed income opportunities

Underpinned by transparent, rules-based construction and best-in-class governance

Powered by global perspective and collaboration

An integrated set of solutions for every stage of the investment process

Sustainable Investment indexes

MOTIVATION

"I want to achieve broad market returns and index characteristics with improved ESG attributes."

MOTIVATION

"I want to integrate ESG into specific factor or smart beta strategies."

MOTIVATION

"I want selective investments that align with my ESG objectives."

Sustainable Investing Data

- ESG Ratings
- Controversial Conduct
- Carbon Emissions
- Fossil Fuel Reserves
- Green Revenues
- Product Screens

FTSE ESG Index Series
Industry neutral and ESG-tilted weighting; no exclusions

FTSE Blossom Japan Index
Industry neutral weighting, with selection based on comprehensive ESG ratings

FTSE Green Revenues Index series
Weighting based on percentage of company revenue from green products. No exclusions

FTSE Global Climate Index Series
Tilting based on three climate parameters. CO_2 emissions, fossil fuel reserves, green revenues

FTSE Women on Boards Leadership Index Series
Weighting based on Women on Boards ratio and Social Pillar score; no exclusions

FTSE Climate Balanced Factor index
Tilting based on three climate parameters plus four risk factors (Quality, Volatility, Size and Value)

FTSE4Good RAFI Index Series
ESG selection aligned with the FRSE4Good Index Series and RAFI (smart beta) weighting applied

FTSE4Good Global Minimum Variance Index
ESG screening aligned with FTSE4Good and Minimum Variance weighting applied

FTSE4Good Index Series
Inclusion based on comprehensive ESG rating, with some negative exclusions (coal, weapons, tobacco), market capitalization weighted

FTSE Environmental Markets Index Series
Inclusion based on percentage of revenue from green products, market capitalization weighted

FTSE Divest-Invest Index Series
Exclusions of fossil fuels and "re-invest" based on percentage of revenue from green products

FTSE ex Fossil Fuels Index Series
Exclusion of fossil fuels, market capitalization weighted

Section 3

FTSE Frontier Emerging Markets Government Bond Index Series

Spanning the entire fixed income spectrum to open new opportunities for investors

GLOBAL
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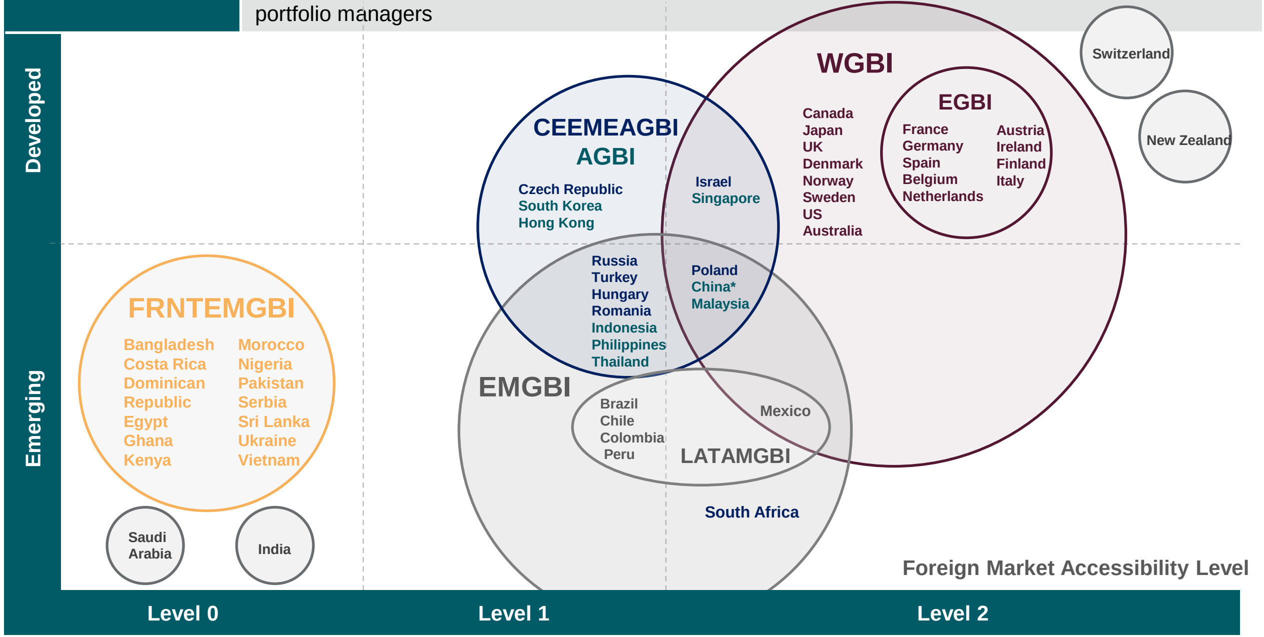
Powered by global perspective and collaboration

An integrated set of solutions for every stage of the investment process

FTSE Local Government Bond Market Approach

FTSE provides a comprehensive view across the entire global government bond market development spectrum

FTSE WGBI	FTSE WGBI captures liquid, investment-grade, highly accessible local government bond markets
FTSE EMGBI	FTSE EMGBI caters to EM investors looking for liquid, accessible exposure
FTSE FRNTEMGBI	FTSE Frontier EMGBI offers a ground-breaking approach to tracking emerging government bond markets that may not yet be considered mainstream, but are still sufficiently investable for global portfolio managers



FTSE RUSSELL

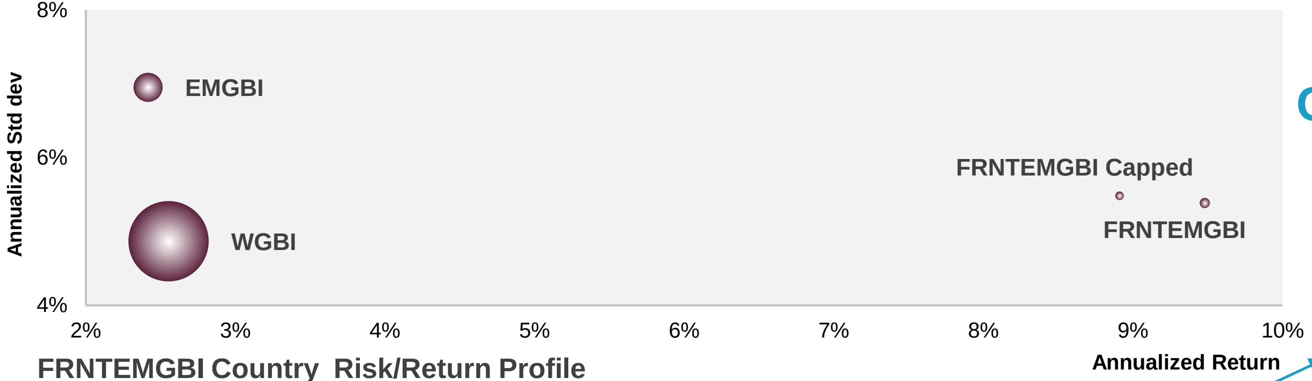
FTSE Frontier Emerging Markets Government Bond Index Series

- FTSE Russell leverages expertise in indexing global government bond markets to offer first solution for tracking 'frontier emerging markets'
- New index provides performance metric for high yielding and expanding part of global debt markets

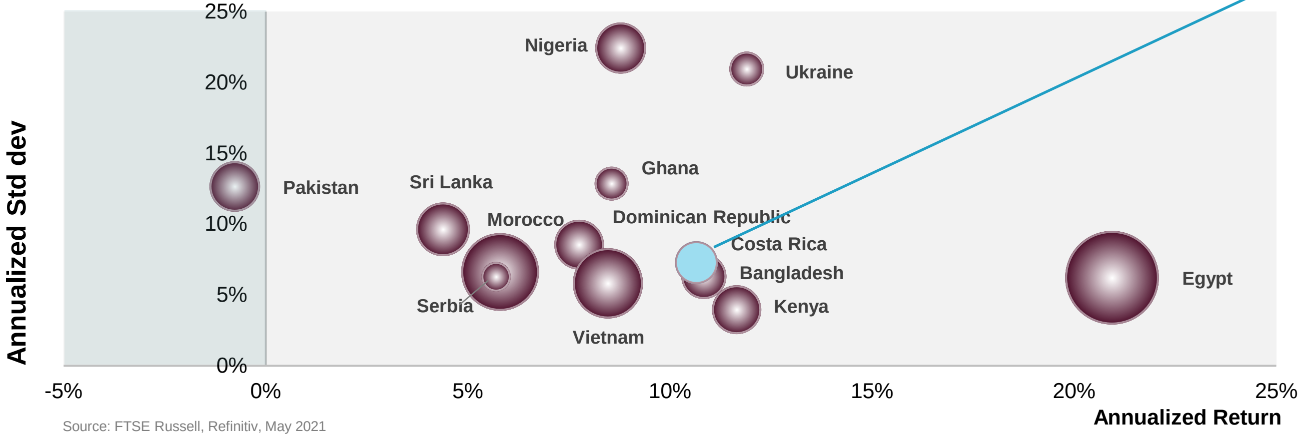
Representative:	The index provides broad, comprehensive coverage of frontier emerging markets with the following countries eligible at index launch: Bangladesh, Costa Rica, Dominican Republic, Egypt, Ghana, Kenya, Morocco, Nigeria, Pakistan, Serbia, Sri Lanka, Ukraine and Vietnam.
Transparent:	The index is constructed according to a transparent, publicly available set of rules that were designed incorporating extensive feedback from market participants.
Pricing:	The index is underpinned by best in class pricing and reference data sourced from Refinitiv with history available from January 2018.
Customizable:	The index is fully customizable based on a wide range of attributes, including currency and term.
Market Inclusion:	Reviewed on a semi-annual basis each March and September, aligned with the FTSE Fixed Income Country Classification Process.

Government Bond Market Risk Return Profiles

FRNTEMGBI, FRNTEMGBI Capped vs WGBI and EMGBI



FRNTEMGBI Country Risk/Return Profile



Costa Rica Government Bond sub-indexes

IndexTicker	NumIssues	Coupon	Price	YldtoMat
FRNTEMGBI_CR	34	10.1205	119.2716	5.3792
FRNTEMGBI_CR_1-3	12	9.4648	111.6566	3.2715
FRNTEMGBI_CR_3-5	7	9.9468	117.6592	4.971
FRNTEMGBI_CR_5-7	4	10.2885	121.3533	5.9006
FRNTEMGBI_CR_7-10	5	10.5119	123.9251	6.7075
FRNTEMGBI_CR_10-15	6	11.1127	129.6822	7.4807
FRNTEMGBI_CR_1-5	19	9.6589	114.0737	3.9783
FRNTEMGBI_CR_5-10	9	10.4243	122.9166	6.3951
FRNTEMGBI_CR_1-10	28	9.9926	117.9297	5.0771
FRNTEMGBI_CR_10+	6	11.1127	129.6822	7.4807

Source: FTSE Russell, Refinitiv, May 2021

Methodology highlights FRNTEMGBI

	FTSE Frontier Emerging Markets Government Bond Index (FRNTEMGBI)		
COMPOSITION 1	Fixed-rate, local currency sovereign debt. Central bank debt is included for Costa Rica and Dominican Republic. Infrastructure bonds are included for Kenya.		
AMOUNT OUTSTANDING 2	Bangladesh: BDT 15 billion	Kenya: KES 15 billion	Serbia: RSD 10 billion
	Costa Rica: CRC 100 billion	Morocco: MAD 2 billion	Sri Lanka: LKR 50 billion
	Dominican Republic: DOP 10 billion	Nigeria: NGN 10 billion	Ukraine: UAH 2.5 billion
	Egypt: EGP 1.5 billion	Pakistan: PKR 20 billion	Vietnam: VND 5 trillion
	Ghana: GHS 500 million		
MAXIMUM MARKET SIZE 3	Maximum market size of $50 billion in index-eligible par amount outstanding. For purposes of inclusion in the index series at the Index Launch in April 2021, the maximum market size was assessed as of the Index Base Date in December 2017. Countries are not excluded from the index series if they exceed the maximum market size after their inclusion.		
MINIMUM MARKET SIZE 4	Minimum market size of $5 billion in index-eligible par amount outstanding. For purposes of inclusion in the index series at the Index Launch in April 2021, the minimum market size was assessed as of the this date. Countries are not excluded from the index series if they fall below minimum market size.		
MARKET ACCESSIBLITY LEVEL	Countries must be assigned a Market Accessibility Level of 0 based on the FTSE Fixed Income Country Classification Process.		
CREDIT RATING	Maximum of BBB- from S&P and Baa3 from Moody's. Countries without a long term local currency sovereign rating from Moody's or S&P are excluded. Countries are not excluded if their rating is upgraded above BBB- by S&P or Baa3 by Moody's after entry.		
WORLD BANK CLASSIFICATION 5	Countries classified as High Income are excluded.		
EXCLUSION	Treasury bills, private placements, and securities without pricing		
PRICING 6	Refinitiv bid-side pricing. 4pm New York: Costa Rica, Dominican Republic 4.15pm London: Egypt, Ghana, Kenya, Morocco, Serbia, Ukraine 6:00 pm London: Nigeria 6:00 pm Tokyo: Bangladesh, Sri Lanka, Vietnam, Pakistan		
REINVESTMENT RATE	Cash flows are not reinvested as part of the calculation of index total return.		
COUPON TYPE	Fixed-rate and zero coupon		
MATURITY	At least one year to maturity		
SETTLEMENT	T+0		
REBALANCING	Once a month at the end of the month		
BASE DATE	December 31, 2017		

Key Features and Differentiators

1. Tracks the full investment choice set for each market, ensuring the index serves as an accurate, comprehensive performance measure
2. Locally calibrated minimum amount outstanding thresholds ensure the most liquid issuance is captured
3. Market size criteria are designed to capture emerging markets that are not yet mainstream, but are sufficiently investable for global sovereign EM investors
4. Builds on the FTSE Fixed Income Country Classification Framework, adding 13 new markets to FTSE's Fixed Income local market tracking.
5. Ensures country inclusion is governed by a transparent, forward looking review process which incorporates feedback from market participants
6. Powered by robust bid-side pricing and reference data from Refinitiv

The first, ground-breaking way of measuring frontier emerging markets

Offers a yield pickup relative to emerging markets

Offers diversification away from USD and foreign exchange appreciation from exposure to local currencies with stronger economic growth

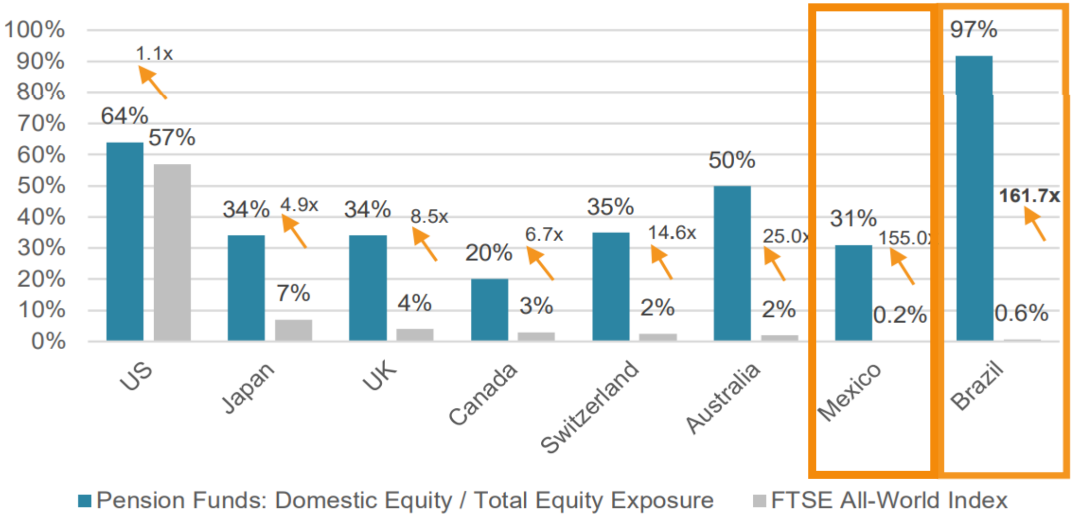
Builds on the FTSE Fixed Income Country Classification Framework, adding new markets to FTSE Fixed Income local market tracking

Source: FTSE Russell. FTSE Frontier Emerging Markets Government Bond Index, April 2021.

FTSE Russell

LatAm vs DMs

Pension Funds Domestic Exposure Relative to Total Equity Weight and FTSE All-World Country Exposure 2020e (%)

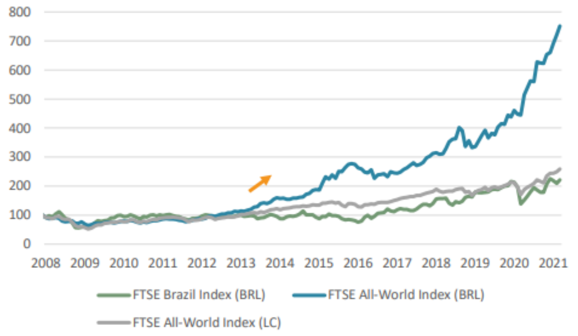


Towers Watson "Global Pension Assets Study 2021", 2020e, CONSAR as of Dec 2019, FTSE Russell & ABRAPP as of Dec 2020.

Chart 5: Cumulative total returns of the FTSE Mexico Index and the FTSE All-World Index (MXN & local currency), rebased – Absolute

Source: FTSE Russell from December 31, 2007 to September 30, 2020 (Q3 2020). Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Chart 5: Cumulative total returns of the FTSE Brazil Index and the FTSE All-World Index (BRL & local currency), rebased – Absolute



Source: FTSE Russell from December 31, 2007 to March 31, 2021 (Q1 2021). Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Index and index data are used across all client segments throughout their investment processes

Indexes are used across institutional and retail investors as well as academic institutions

- Asset Owners
- Consultants
- Custodians
- Investment Managers
- Hedge Funds
- Brokers
- Derivative Traders
- Wealth Managers
- Exchanges
- Financial Advisors
- Analytics Providers
- Individual Investors
- Professors / Students
- Third-party platforms

WHY? **For many reasons…**

- ✓ Analyze active manager performance
- ✓ Understand and model asset classes
- ✓ Performance and weighting for allocation decisions
- ✓ Be aware of active bets
- ✓ Equitize cash
- ✓ Manage passive funds
- ✓ Market timing bet (short)
- ✓ Index arbitrage
- ✓ Risk management
- ✓ Offer passive alternatives
- ✓ Purchase passive alternatives such as ETFs, passive mutual funds, etc.
- ✓ Study markets

…and evolving

Importance of a benchmark


Funds Society
OPINIÓN EVENTOS ESTILO ¿QUIÉN ES QUIÉN? REVISTAS
NOTICIAS
NEGOCIO NORMATIVA PRIVATE BANKING NOMBRAMIENTOS MERCADOS ETF ALTERNATIVOS PENSIONES

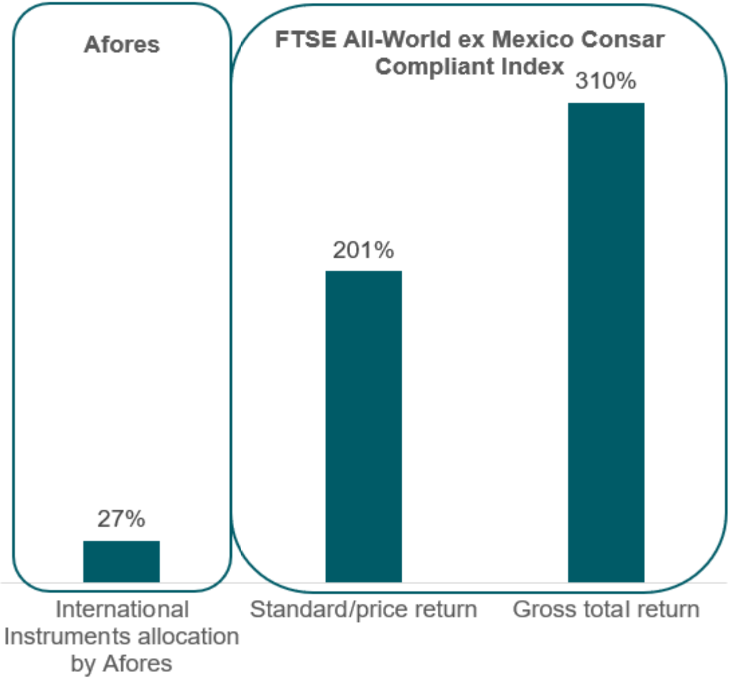
Última actualización: 11:27 / Miércoles, 21 Julio 2021
Inicio› Pensiones

Ya hay 130 fondos entre los que elegir

Las inversiones en activos internacionales contribuyen a más del 21% de los rendimientos de las Afores

Are we aware of the active bets in our portfolios?
Are fees and commissions aligned to the actual returns we are getting?

Total period performance
(Jan 2009 to Mar 2021)



Source: Funds Society, Consar, FTSE Russell

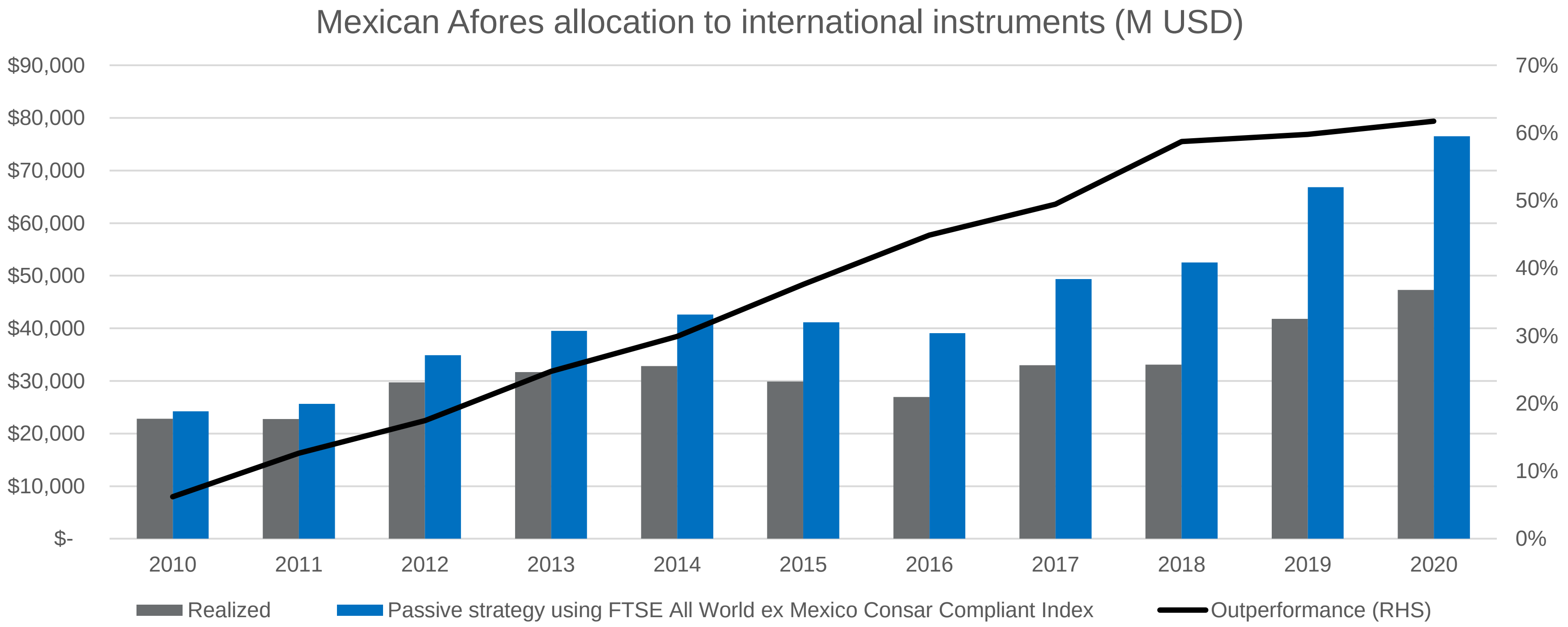
Is licensing an index a good investment? (1/2)

Table 4: Correlation of Emerging Market bond index returns with other asset classes

Asset class index	EMGBI (LC)	EMUSDGBI (USD)	EMUSDBBI (Corp Capped) (USD)	EGBI Govt (LC)	US BIG (Credit) (USD)	US High Yield (USD)	US Trsy (USD)	FTSE USA (Equity) (USD)
EMGBI (LC)	1.00							
EMUSDGBI (USD)	0.70	1.00						
EMUSDBBI (USD)	0.64	0.95	1.00					
EGBI (LC)	0.34	0.20	0.45	1.00				
US BIG (Credit) (USD)	0.61	0.75	0.84	0.35	1.00			
US High Yield (USD)	0.33	0.73	0.85	-0.08	0.60	1.00		
US Treasury (USD)	0.47	0.08	0.03	0.46	0.38	-0.34	1.00	
FTSE USA (Equity) (USD)	0.20	0.61	0.58	-0.07	0.36	0.71	-0.37	1.00

Source: FTSE Russell estimates January 2008 - April 13, 2020, EM Corp (USD) data is from 2013-April 13, 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

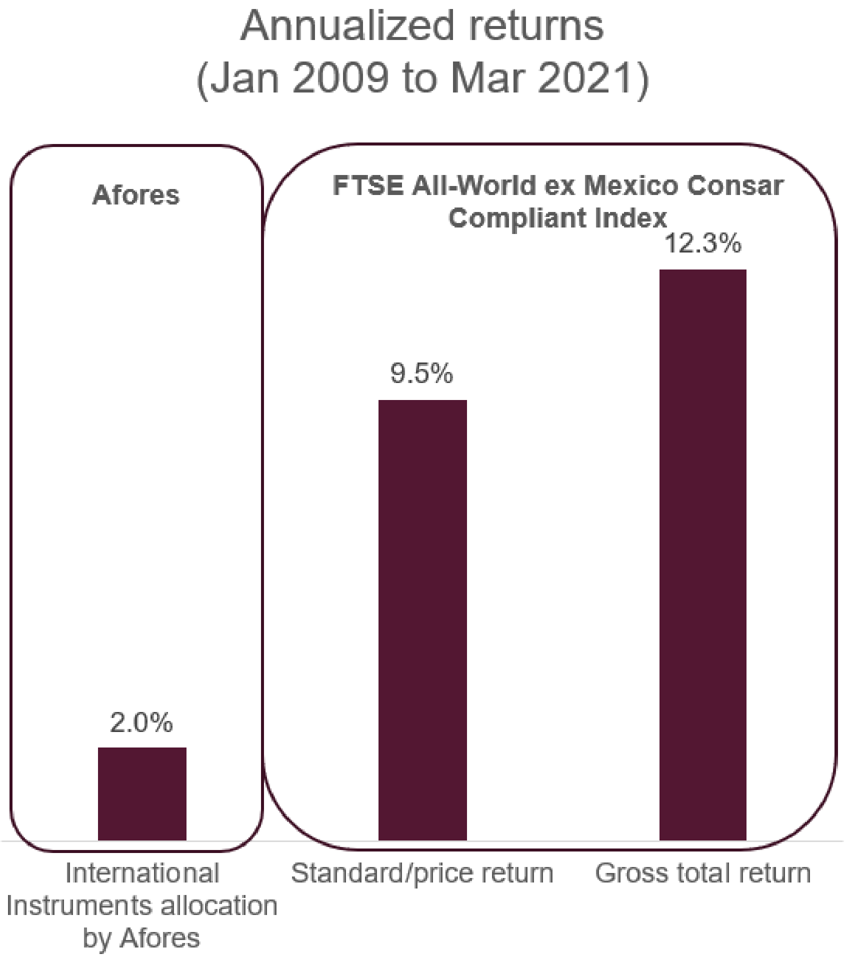
Is licensing an index a good investment? (2/2)

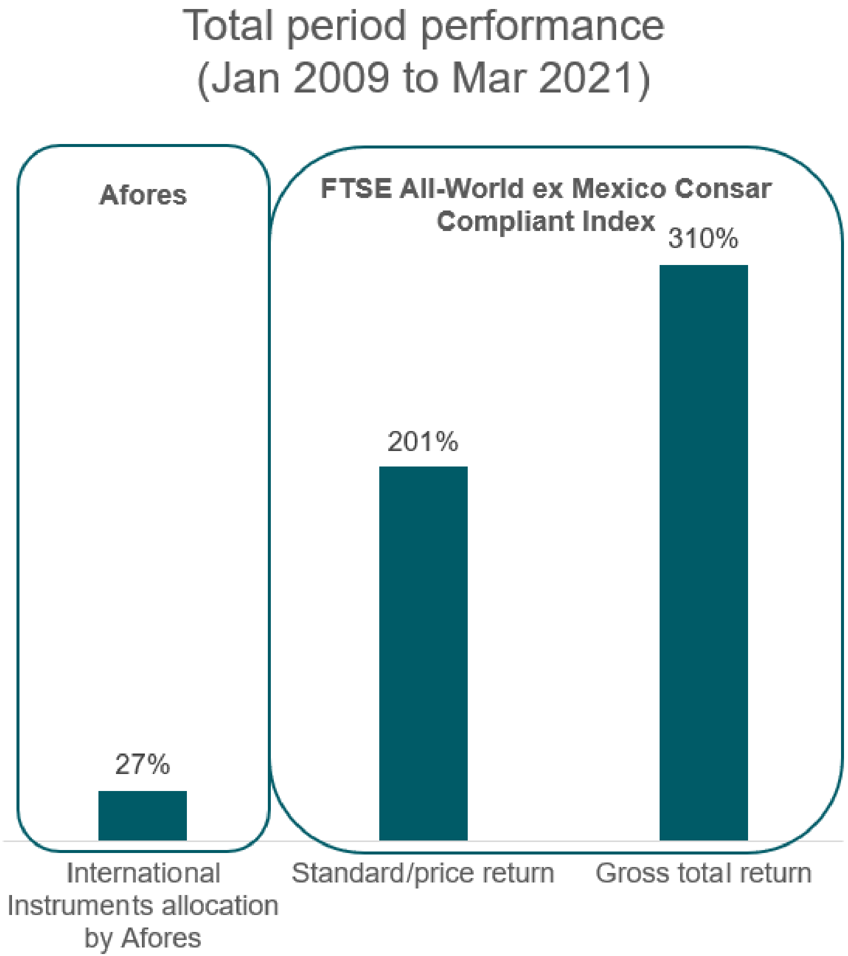


Sources

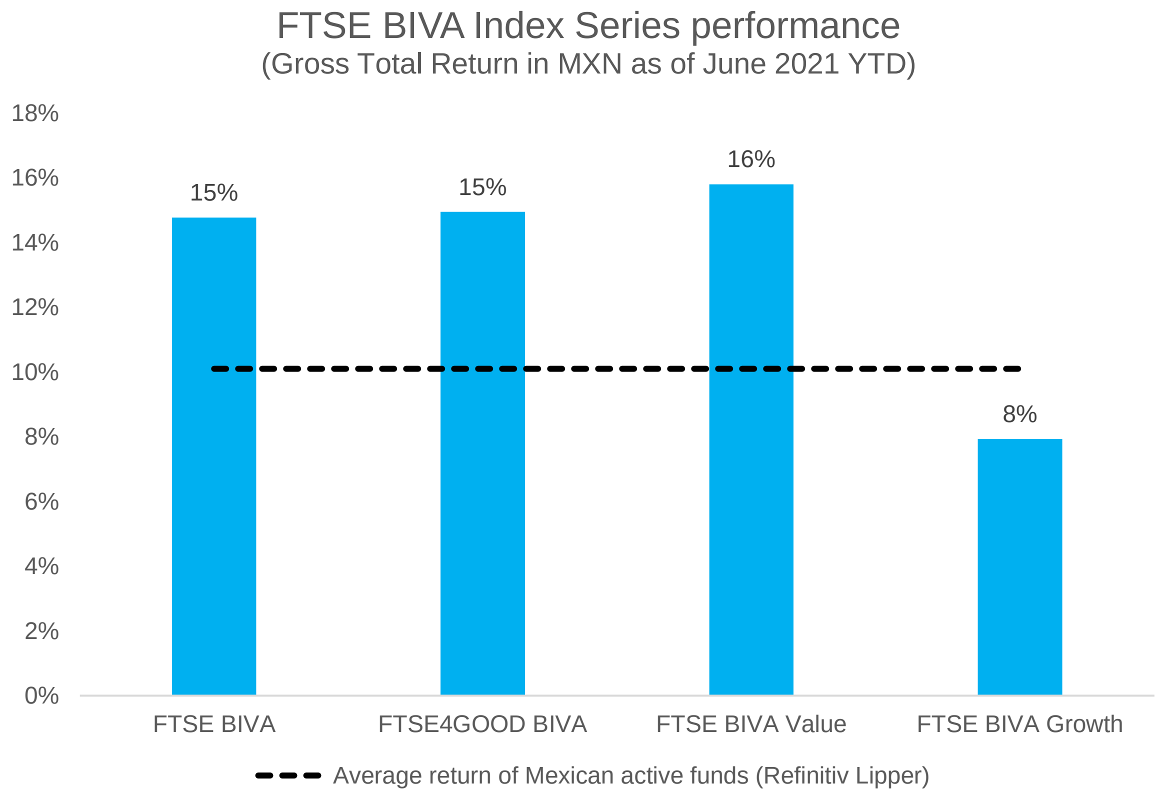
- FTSE Russell data
- Building a better benchmark | FTSE Russell
- Indexes and benchmarks made clear | FTSE Russell
- FTSE Frontier Emerging Markets Government Bond Index (product overview)
- Consar
- Appraising home bias exposure – Mexico
- Appraising home bias – Brazil
- Emerging Market Fixed Income - Development and characteristics of the asset class | FTSE Russell

Appendix





Sources: CONSAR, FTSE Russell


FTSE BIVA Index Series performance
(Gross Total Return in MXN as of June 2021 YTD)
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
15%
15%
16%
8%
FTSE BIVA
FTSE4GOOD BIVA
FTSE BIVA Value
FTSE BIVA Growth
Average return of Mexican active funds (Refinitiv Lipper)

Important information

FTSE Russell