

FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust

v1.7



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Section 1

Introduction

1. Introduction

1.1 FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust

- 1.1.1 The FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust (“Index”) measures the performance of the US Treasury bonds with maturity greater than or equal to 20 years that are in the FTSE World Government Bond Index – Japanese Investment Trust (WGBI-JIT) except that it excludes the 20-Year on-the-run US Treasuries.
- 1.1.2 The FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust does not take account of ESG factors in its design.

1.2 FTSE Russell

FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc. and FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, The Yield Book Inc. and Beyond Ratings.

- 1.2.1 FTSE Russell hereby notifies users of the index that it is possible that factors, including external factors beyond the control of FTSE Russell, may necessitate changes to, or the cessation, of the index and therefore, any financial contracts or other financial instruments that reference the index or investment funds which use the index to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index.
- 1.2.2 Index users who choose to follow this index or to buy products that claim to follow this index should assess the merits of the index’s rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell for any losses, damages, claims and expenses suffered by any person as a result of:
- any reliance on these Ground Rules, and/or
 - any inaccuracies in these Ground Rules, and/or
 - any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
 - any inaccuracies in the compilation of the Index or any constituent data.

Section 2

Management responsibilities

2. Management responsibilities

2.1.1 FTSE is the benchmark administrator of the index series¹.

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index series and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out the periodic index reviews of the index series and apply the changes resulting from the reviews as required by the Ground Rules;
- disseminate the indices.

2.2 Amendments to these Ground Rules

2.2.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they best reflect the aim of the index series. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

2.2.2 As provided for in the Statement of Principles for FTSE Russell Fixed Income Indices, where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the Statement of Principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Ground Rules should subsequently be updated to provide greater clarity.

¹ The term administrator is used in this document in the same sense as it is defined in Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation). FTSE Fixed Income LLC administers the Index Series in line with the third country transitional provisions contained within Article 51(5) of the European Benchmark Regulation and the third country transitional provisions as amended by Article 42(5) of the UK Benchmark Regulation.

Section 3

FTSE Russell index policies

3. FTSE Russell index policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed using the links below or by contacting fi.index@lseg.com. These policies are reviewed annually and any changes are approved by the FTSE Russell Index Governance Board.

3.1 Statement of Principles for FTSE Fixed Income Indices (the Statement of Principles)

Indices need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Ground Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles for FTSE Fixed Income Indices which summarises the ethos underlying FTSE Russell's approach to index construction. The Statement of Principles is reviewed annually and any changes proposed by FTSE Russell are presented to the FTSE Russell Index Advisory Board for discussion before approval by the FTSE Russell Index Governance Board.

The Statement of Principles for Fixed Income Indices can be accessed using the following link:

[Statement of Principles Fixed Income Indices.pdf](#)

3.2 Queries and Complaints

FTSE Russell's complaints procedure can be accessed using the following link:

[Benchmark Determination Complaints Handling Policy.pdf](#)

3.3 Recalculation Policy and Guidelines

The Recalculation Policy and Guidelines for Fixed Income Indices document is available from the FTSE Russell website using the link below or by contacting fi.index@lseg.com.

[Fixed Income Recalculation Policy and Guidelines.pdf](#)

3.4 Index Policy in the Event Clients are Unable to Trade a Market or a Security

3.4.1 Details of FTSE Russell's treatment can be accessed using the following link:

[Index Policy in the Event Clients are Unable to Trade a Market or a Security.pdf](#)

3.5 Policy for Benchmark Methodology Changes

Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:

[Policy for Benchmark Methodology Changes.pdf](#)

3.6 FTSE Russell Governance Framework

3.6.1 To oversee its indices, FTSE Russell employs a governance framework that encompasses product, service and technology governance. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to meet the requirements of the IOSCO Principles for Financial Benchmarks², the European benchmark regulation³ and the UK benchmark regulation⁴. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

3.7 Real Time Status Definitions

3.7.1 Please refer to the following guide for details of real time status definitions for indices that are calculated in real time.

[Real Time Status Definitions.pdf](#)

² IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

³ Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

⁴ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Composition and design criteria

4. Composition and design criteria

4.1 The Index is based on the FTSE World Government Bond Index – Japanese Investment Trust. For more information, please see the FTSE Fixed Income Index Guide.

Design criteria and calculation assumptions for the FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust

Coupon	Fixed-rate
Minimum maturity	At least 20 years, excluding the 20-Year on-the-run US Treasuries
Minimum issue size	USD 5 billion public amount outstanding (excludes Federal Reserve holdings)
Weighting	Market capitalisation
Rebalancing	Once a month on the last business day of the month
Reinvestment of cash flows	Intra-month cash flows from interest and principal payments are not reinvested as part of monthly index total return calculations. ⁵
Pricing	Previous local market close, Refinitiv 4:00 p.m. (New York)
Exchange rate	MUFG Bank telegraphic transfer spot middle rate (TTM) as quoted at 10:00 a.m. Tokyo time ⁶
Calculation frequency	Daily
Settlement date	Monthly: Settlement is on the last calendar day of the month. Daily: Same day settlement except if the last business day of the month is not the last calendar day of the month; then, settlement is on the last calendar day of the month.
Fixing date	Each month, the upcoming month's index constituents are "fixed" on the profile fixing date. Each year's scheduled fixing dates are published on the website.
Base date	December 31, 2005

4.2 Holiday calendar

4.2.1 The index is calculated Monday through Friday except Christmas Day (observed) and New Year's Day (observed). Each local market will observe its own holiday calendar; if a local market is on holiday, the closing prices used for that day will be the closing prices from the previous day.

4.3 Index quality

4.3.1 An index quality is assigned to each index bond as of profile fixing. The quality is first mapped to the Standard & Poor's Financial Services LLC ("S&P") rating. If a bond is not rated by S&P but it is rated by Moody's Investors Service, Inc ("Moody's"), the S&P equivalent of the Moody's rating is assigned to the index quality. If a bond is rated by neither S&P nor Moody's, the bond is not assigned an index quality. If a bond is rated as investment-grade by one rating agency and high-yield by the other, the S&P equivalent of the investment-grade rating is assigned to the index quality. These ratings remain unchanged for the entire performance month.

⁵ Prior to 1 August 2023, reinvestment income was included in the total return calculation.

⁶ WM/Refinitiv quotes are used for currencies during periods in which MUFG Bank quotes are not available.

4.4 Market value and return calculations

4.4.1 The following notations are used in the formulas. The notation of World Government Bond Index (WGBI) and WGBI-JIT refers to the returns and analytics of each individual bond in the US Treasury 20+ Years sector of the two indices, excluding 20-year on-the-run treasury.

Notation	
t	Today
m	Current month
e	Last business day of previous month
P_WGBI	WGBI clean price
A_WGBI	WGBI accrued interest
P_WJIT	WGBI-JIT clean price
A_WJIT	WGBI-JIT accrued interest
WGBI_PAR	WGBI par amount
WGBI_MODALUR	WGBI modified duration
WGBI_RORP	WGBI daily principal return
WGBI_MTDROP	WGBI month-to-date principal return
WGBI_MTDROI	WGBI month-to-date income return
WGBI_HGAMT	WGBI hedged amount
WJIT_RORP	WGBI-JIT daily principal return
WJIT_MTDROP	WGBI-JIT month-to-date principal return
WJIT_MTDROI	WGBI-JIT month-to-date income return
WJIT_MTDORT	WGBI-JIT month-to-date total return
WJIT_HGAMT	WGBI-JIT hedged amount

4.5 Market value computation

4.5.1 For the WGBI, the current month's index profile market value is calculated using the prices and accrued interests of the last business day of the previous month for all its constituents. For the WGBI-JIT, the prices of the previous business day would be applied.

$$WJIT_MKV(m) = (P_WJIT(m) + A_WJIT(m)) \times WGBI_PAR(m) = (P_WGBI(e-1) + A_WGBI(m)) \times WGBI_PAR(m)$$

4.5.2 To convert the market value into JPY, the spot exchange rates used are the telegraphic transfer middle (TTM) rates provided by Bank of Tokyo–Mitsubishi UFJ.

$$WJIT_MKV(m)_{JPY} = WJIT_MKV(m) \times FX_SPOT(e)$$

4.6 Return computation

4.6.1 The returns are computed by modifying the previous day's principal return as well as the current day's income return.

4.7 Month-to-date returns in local currency terms

4.7.1 Step 1: Calculate the first business day principal return

The first business day principal returns of WGBI-JIT constituents are computed first as they will be utilised throughout the WGBI-JIT calculations. For the existing bonds of the WGBI/WGBI-JIT, their principal returns of the first day are calculated using on the WGBI prices and accrued interests of the last two business days before month end.

$$WJIT_RORP(1) = \frac{P_WGBI(m) - P_WGBI(e-1)}{P_WGBI(e-1) + A_WGBI(m)} \times 100$$

For the bonds that are newly added to the WGBI/WGBI-JIT, their principal returns of the first day are calculated based the WGBI-JIT principal returns of the bonds that have the closest WAL (weighted average life) to each of them respectively. These WGBI-JIT principal returns are adjusted by duration ratios to account for the differences in modified duration.

$$WJIT_RORP(1) = WJIT_RORP_{CLOSEST(1)} \times \left(\frac{WGBI_MODDUR(m)}{WGBI_MODDUR_{CLOSEST(m)}} \right)$$

4.7.2 Step 2: Calculate the month-to-date principal return

The month-to-date principal return is calculated by compounding the previous day's WGBI_MTDROP and the first business day's WJIT_RORP. This is equivalent to shifting the prices of all securities by one day.

$$WJIT_MTDRORP(t) = WJIT_RORP(1) + WGBI_MTDRORP(t-1) \times \left[1 + \left(\frac{WJIT_RORP(1)}{100} \right) \right]$$

4.7.3 Step 3: Calculate the month-to-date income return

The month-to-date income return is calculated based on the current month's market value at the beginning of the month. It is adjusted by the first business day principal return.

$$WJIT_MTDRORI(t) = WGBI_MTDRORI(t) \times \left[1 + \left(\frac{WJIT_RORP(1)}{100} \right) \right]$$

4.7.4 Step 4: Calculate the month-to-date total return

The total return is the sum of the month-to-date WGBI-JIT principal and income returns.

$$WJIT_MTDRORT(t) = WGBI_MTDRORP(t) + WJIT_MTDRORI(t)$$

4.8 Month-to-date total return in JPY terms

The WGBI-JIT uses the same standard calculation to convert the local currency returns to base currency returns. The exchange rates used are the telegraphic transfer middle (TTM) rates provided by Bank of Tokyo–Mitsubishi UFJ. If the TTM rates are not available, the WM/Refinitiv rates are used.

$$WJIT_MTDRORT(t)_{JPY} = \left\{ \left[1 + \left(\frac{WJIT_MTDRORT(t)_{LCL}}{100} \right) \right] \times \left[1 + \left(\frac{CRCY_RTN(t)_{TTM}}{100} \right) \right] - 1 \right\} \times 100$$

4.9 Hedge amount computation

The calculation of the hedge amount of the WGBI-JIT follows the standard index methodology as defined in the FTSE Fixed Income Index Guide.

1. Reduce the par amount of the bond by any sinking fund payments, calls, prepaids, etc.
2. Allow for these cash receipts plus any re-investment income on these amounts to the end-of-period date.
3. Add any coupons that will be paid during the period, together with re-investment income
4. Re-price the remaining par amount, using the beginning-of-month yield and the end-of-period date as the new settlement date, including Accrued Interest on this date.

5. The sum of these amounts (2, 3 and 4) will be the amount of foreign currency sold forward.
6. This amount, converted back to base currency at the appropriate forward rate to give the “assumed hedged value,” will be the predominant component of the end-of-period value in currency-hedged base-currency terms.

Note that in step 4, the beginning-of-month yield of the WGBI-JIT is the WGBI yield of the previous business day before month-end. For the bonds that are newly added to the WGBI, the WGBI-JIT hedge amounts are calculated based on the WGBI hedge amounts adjusted by the WGBI-JIT principal returns of the first business day.

$$WJIT_HGAMT_{(t)} = WGBI_HGAMT_{(t)} / [1 + (WJIT_RORP_{(1)} / 100)]$$

4.10 Month-to-date returns in JPY terms (hedged)

In order to calculate WGBI-JIT in JPY (Hedged) return, we use forward rates that are consistent with publication timing of TTM spot rates.

$$WJIT_MTDRORT_{(t)JPY_HEGDED} = WJIT_MTDRORT_{(t)JPY} + \{[WJIT_HGAMT_{(t)} \times (FX_FWD_{(e,t)} - FX_SPOT_{(t)})] / WJIT_MKV_{(m)JPY}\} \times 100$$

Note that intra-month forward rates are linearly interpolated from the spot rates and one-month forward rates at the end of the previous month rather than derived from the forward rate term structure.

4.11 Daily total return in local currency and JPY terms

Daily total return is calculated using today’s and the previous day’s month-to-date returns.

$$WJIT_RORT_{(t)} = \{[(1 + WJIT_MTDRORT_{(t)} / 100) / (1 + WJIT_MTDRORT_{(t-1)} / 100)] - 1\} \times 100$$

$$WJIT_RORT_{(t)JPY} = \{[(1 + WJIT_MTDRORT_{(t)JPY} / 100) / (1 + WJIT_MTDRORT_{(t-1)JPY} / 100)] - 1\} \times 100$$

$$WJIT_RORT_{(t)JPY_HEGDED} = \{[(1 + WJIT_MTDRORT_{(t)JPY_HEGDED} / 100) / (1 + WJIT_MTDRORT_{(t-1)JPY_HEGDED} / 100)] - 1\} \times 100$$

4.12 Ticker for the FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust

Ticker	Index
CFIIUJ2C	FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust, currency-hedged in JPY terms
CFIIUJ20	FTSE US Treasury 20+ Years Select Index - Japanese Investment Trust, in JPY terms

4.13 Chronological summary of events

- 4.13.1 The construction of the FTSE US Treasury 20+ Years Select Index – Japanese Investment Trust is driven by the same events that mark the FTSE World Government Bond Index – Japanese Investment Trust, for more information, please see the FTSE Fixed Income Index Guide.

Unless otherwise stated, the Index follows the general methodology for FTSE fixed income indices. For details, please see *FTSE Fixed Income Index Guide*.

Appendix A

Further information

A Glossary of Terms used in FTSE Russell's Ground Rule documents can be found using the following link:

[Fixed Income Glossary of Terms.pdf](#)

For contact details please visit the FTSE Russell website or contact FTSE Russell client services at fi.index@lseg.com.

Website: www.lseg.com/en/ftse-russell/

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