

FTSE World Government Bond Index Turnover Analysis

Due to extreme stress in the global financial markets, FTSE Russell postponed the March 2020 month-end rebalances for monthly rebalanced fixed income indexes.¹ When rebalances are resumed as normal for April 2020 month-end, all turnover for the month of March will be incorporated at April month-end. To assist index users through this rebalancing, FTSE Russell provides further details on the projected turnover for the FTSE World Government Bond Index (WGBI) for May 2020 profiles, as well as historical monthly turnover figures to provide context for these projected figures.

Turnover Calculations and Components

The turnover for an index is an estimate of its compositional change based on securities entering and exiting the index. The sources of turnover are a function of the underlying index rules and rebalancing mechanics, and can also include one time events, such as a rules change that impacts the eligibility of an entire market or asset type. Turnover figures can be thought of as a proxy for the level of trading activity that may be required by investors tracking an index in response to the market activity through a given period which the index rebalancing captures. Turnover can also be calculated for sub-indexes, such as those based on a bond's time to maturity, where there may be compositional shifts based on more narrow definitions absent any change to inclusion in the overall index.

In the following announcement, the monthly turnover percentage is calculated as the sum of the market value of bonds exiting the index (based on their market value at the beginning of the period) and the market value of bonds entering the index (based on their market value at the end of the period) divided by the total market value at the beginning of the period. It is presented on both a net basis, where the impact of bonds exiting the index offsets the impact of bonds entering the index, and on a gross basis, where index entries and exits are summed on an absolute basis.

Projected Turnover for the FTSE WGBI May 2020 Profile

For the April 2020 month-end rebalance, the projected turnover for the WGBI incorporates normal sources of composition changes in accordance with published rules (i.e., newly issued bonds being added, bonds falling below one year to maturity exiting), in addition to one-time changes to market inclusion; Israel will be added to the index as previously announced and South Africa will be removed as a result of its recent credit rating downgrade by Moody's. The projected turnover figures also reflect adjustments to government bond par outstanding amounts for quantitative easing activities in accordance with published index methodologies.

Figure 1 shows the projected WGBI turnover by component for the May 2020 profile, which is estimated at -0.9% on a net basis and 9.2% on a gross basis as of April 17, 2020.

¹ For further details, please see: <http://www.yieldbook.com/m/indexes/FTSE-indexes/message.shtml?id=278>.

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Figure 1. FTSE WGBI Projected Turnover as of April 17, 2020 for May 2020 Profiles

Turnover Component	Change in Market Value*	Bond Count	Net Turnover	Gross Turnover
Repurchases / Buybacks	-601.5	447	-2.49%	2.49%
Bond Exits	-511.3	23	-2.12%	2.12%
South Africa Market Exit	-106.9	13	-0.44%	0.44%
New Bond Adds	449.5	26	1.86%	1.86%
Reopenings	488.8	225	2.03%	2.03%
Israel Market Inclusion	71.2	14	0.30%	0.30%
Total	-210.2	748	-0.87%	9.24%

*Market value in USD billions. The denominator for turnover calculations is the total market value for the March 2020 profile, which was USD 24,132bn. Data are as of April 17, 2020. Source: FTSE Russell.

Historical Turnover for the FTSE WGBI

The historical monthly observed turnover figures provide useful context for the level of turnover that is projected for the May 2020 profiles. The average turnover for the 12 month period ending March 2020 was 0.37% on a net basis and 2.93% on a gross basis. Figure 2 shows the monthly turnover figures on a net and gross basis for this period.

Figure 2. FTSE WGBI Historical Monthly Turnover for the 12 Month Period Ending March 2020

Index Profile Month*	Net Turnover	Gross Turnover
March 2020	0.24%	2.64%
February 2020	1.01%	3.20%
January 2020	0.23%	2.60%
December 2019	-0.36%	2.48%
November 2019	0.72%	3.25%
October 2019	0.15%	3.51%
September 2019	-0.01%	1.86%
August 2019	0.96%	3.53%
July 2019	0.38%	2.93%
June 2019	0.43%	2.99%
May 2019	0.45%	3.00%
April 2019	0.23%	3.14%
Total Turnover for 12 Month Period	4.43%	35.13%

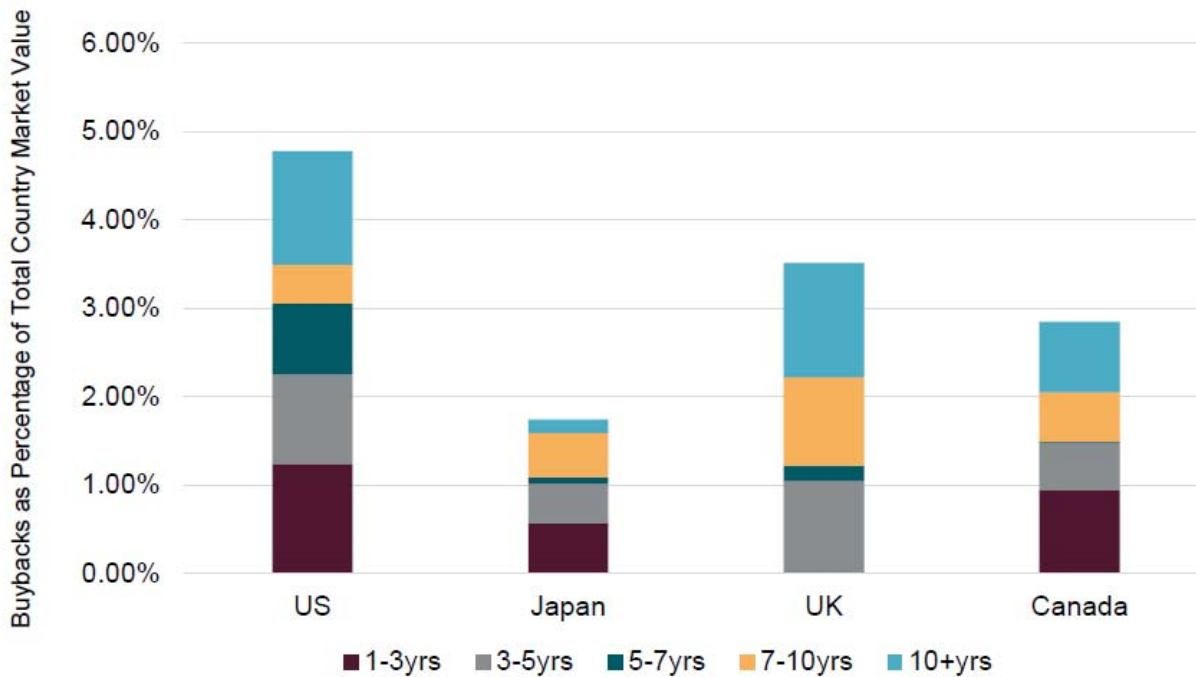
*The turnover for the listed index profile month is reflective of the prior month's turnover, which was incorporated into that month's profile. Source: FTSE Russell.

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Government Purchases by Tenor for Select WGBI Markets

As a result of prevailing market conditions, many governments increased their purchasing programs in March 2020. Figure 3 provides projected buyback levels by maturity band for the US, UK, Japan and Canada², expressed as a percentage of each country’s total market value. These four countries account for 98.2% of the total turnover attributed to buybacks.³

Figure 3. Projected Buyback Turnover by Tenor for Select FTSE WGBI Markets



Data are as of April 17, 2020. Source: FTSE Russell.

² Published WGBI methodology references adjustments for Canadian government bonds specifically as “Bank of Canada Cash Management bond buybacks”. This specific program has recently been discontinued by the Bank of Canada. FTSE Russell clarifies that the activities of its replacement, a new secondary market purchase program announced on 27 March 2020, will be reflected in par outstanding amounts, as normal.

³ The amount outstanding for Eurozone markets are not adjusted for European Central Bank purchases based on WGBI methodology.

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Figure 4. Redistribution Impact of May 2020 Rebalance by Country

The projected country level weight changes between the March 2020 WGBI profile and the May 2020 WGBI profile are given in Figure 4.

	March Profile				Projected May Profile				Difference			
	Count	Market Value*	MV%	Eff Dur	Count	Market Value*	MV%	Eff Dur	Count	Market Value*	MV%	Eff Dur
United States	244	9,601	39.79	6.91	243	9,515	39.99	7.10	-1	-86	0.21	0.19
Japan	262	4,457	18.47	11.65	260	4,317	18.15	11.68	-2	-139	-0.32	0.03
France	45	1,922	7.96	9.39	44	1,853	7.79	9.21	-1	-69	-0.18	-0.18
Italy	73	1,735	7.19	7.27	73	1,624	6.82	7.14	0	-112	-0.37	-0.13
UK	42	1,249	5.18	14.70	43	1,265	5.32	14.90	1	16	0.14	0.20
Germany	51	1,217	5.04	8.38	49	1,379	5.79	8.43	-2	161	0.75	0.05
Spain	41	1,082	4.48	8.33	43	1,064	4.47	7.97	2	-18	-0.01	-0.36
Belgium	29	473	1.96	10.53	30	461	1.94	10.19	1	-11	-0.02	-0.34
Canada	33	376	1.56	7.13	33	363	1.53	7.24	0	-12	-0.03	0.11
Australia	23	367	1.52	7.21	24	373	1.57	7.05	1	7	0.05	-0.16
Netherlands	19	359	1.49	8.92	20	358	1.51	8.72	1	-1	0.02	-0.20
Austria	23	278	1.15	11.95	25	281	1.18	11.23	2	4	0.03	-0.72
Mexico	16	169	0.70	5.38	16	139	0.59	5.23	0	-30	-0.12	-0.15
Ireland	15	140	0.58	9.25	16	141	0.59	8.96	1	1	0.01	-0.29
Poland	17	115	0.48	4.13	16	113	0.47	4.26	-1	-3	-0.00	0.13
Finland	19	111	0.46	7.89	18	105	0.44	8.06	-1	-6	-0.02	0.17
South Africa	13	107	0.44	7.32	-	-	-	-	-13	-107	-0.44	-
Denmark	7	97	0.40	9.50	7	94	0.39	9.21	0	-4	-0.01	-0.29
Malaysia	35	94	0.39	6.94	36	94	0.39	7.00	1	-1	0.00	0.06
Singapore	19	81	0.34	7.29	20	85	0.36	7.48	1	3	0.02	0.19
Israel	-	-	-	-	14	71	0.30	6.87	14	71	0.30	-
Sweden	7	55	0.23	6.58	7	53	0.22	6.37	0	-2	-0.01	-0.21
Norway	9	48	0.20	4.67	9	45	0.19	4.65	0	-2	-0.01	-0.02
Total	1,042	24,132	100.00	8.72	1,046	23,794	100.00	8.76	5	-340	0.00	0.04

*Market value in USD billions. Data for the March profile are as of February 29, 2020. Data for the projected May 2020 profile are as of April 17, 2020. Source: FTSE Russell.

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Index Announcements | April 22, 2020

Index users can also reference "Daily Preview" files, which are produced for a select group of flagship FTSE fixed income indexes including the WGBI, for the daily projections of the next month's index profiles at the security-level.

Please contact fi.index@ftserussell.com with any questions or feedback.

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