



Product Profile | Fixed Income

FTSE GDP-Adjusted World Government Bond Index: Sovereign debt allocations based on economic output

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Executive summary¹

The global sovereign debt market is one of the largest securities markets in the world, constantly monitored for both investment opportunities and research. The traditional method of benchmarking the sovereign debt market is a market-capitalisation weighted index, such as the flagship FTSE World Government Bond Index (WGBI), which determines allocations by constituent market value. This methodology boasts low turnover and simple rebalancing, allowing for a self-weighting portfolio conducive to a “set it and forget it” investment style and only requiring involvement for new entries and reconstitutions. However, by construction, it reflects the size of outstanding debt markets, which leads to higher allocations to more indebted sovereign issuers.

The FTSE GDP-Adjusted World Government Bond Index uses nominal GDP to determine allocations across eligible sovereign markets, with each market reset to its target allocation at the monthly rebalance. Within each country, bonds retain their relative market value weights, leaving the underlying WGBI universe unchanged. Semi-annually published IMF GDP data introduces a systematic reweighting schedule, mitigates the relative concentration of high-debt sovereigns and anchors country weights to their economic output.

¹ Elements of the discussion in this paper are adapted from the following equity index research, which contains an analysis of the equity equivalent for the FTSE GDP-Adjusted World Government Bond Index. This analysis has been developed for sovereign bond benchmarks. Schroeder, Andreas, and Janki Khatri. *Moving from Measuring Markets to Measuring the Real Economy: The FTSE All-World GDP Adjusted Index*. FTSE Russell, May 2026.

Contents

Introducing GDP-Adjusted Fixed Income Indices 4

 Market-cap weighting..... 4

 GDP weighting methodology 4

Arguments for GDP-weighting..... 6

 Recognising underrepresented economies in global debt markets 6

 Country exposures and performance..... 7

 Increased diversification across sovereign issuers 9

Nominal versus PPP-adjusted GDP 10

Conclusion 11

Introducing GDP-Adjusted Fixed Income Indices

Market value and economic size offer distinct starting points for sovereign bond allocation. Market value weighting an index allocates weight to each country based on its eligible outstanding debt relative to other constituent countries. That is a design choice with strong implementation merits for broad benchmarking: it is investable, requires less frequent monitoring and automatically adjusts for market capacities. For debt markets, however, it also makes the liabilities of the issuer the sole determining factor on which the weighting is based.

This matters because sovereign debt issuance is not a pure measure of economic opportunity or market growth. Issuance can reflect government expenditure decisions or emergency financing needs just as much as it reflects the issuer's economic size. Two countries with similar economic scale can therefore occupy vastly different positions in a market value weighted index not because of their economic footprint or long-term prospects, but just because one has issued more eligible debt.

This paper introduces an alternative weighting mechanism for sovereign debt markets: Gross Domestic Product (GDP). It primarily examines a version of the FTSE World Government Bond Index (WGBI), the flagship benchmark for global sovereign debt markets, with country weights allocated by their relative nominal GDP values. The same underlying WGBI eligibility and liquidity framework is retained, with constituents within each country allocated pro-rata by their relative market value after the country weight is determined.

This paper focuses on nominal GDP in U.S. dollars as the primary anchor, consistent with the methodology of the FTSE GDP-Adjusted World Government Bond Index. [The wider fixed income suite produced by FTSE also explores Purchasing Power Parity \(PPP\)-adjusted GDP](#), which can be a way to isolate real economic production across countries with different price levels. Both approaches share the same central proposition in that they move country exposure away from the size of outstanding debt and towards the size of the economy.

Market-cap weighting

Market value weighting is the traditional method of fixed income benchmarking, largely because of its operational ease. It is self-rebalancing, broadly representative of the investable market and does not require a passive product to take an explicit view on a country's desired level of debt. As governments issue more eligible bonds, or as those bonds appreciate, the issuer's index weight rises automatically.

For investors seeking to hold the market, this can be desirable, but for investors using global sovereign bonds as a strategic allocation, this can equally be a limitation. A market value weighted sovereign bond index gives more portfolio weight to issuers with more eligible debt without discernment as to whether that debt is matched by a broader tax base or a stronger capacity to meet long-term interest obligations. Unlike with global equity markets, this favours allocation towards liabilities rather than assets. Despite being traditional and operationally convenient, the benchmark can in this way seem counterintuitive².

GDP weighting methodology

Each country's target weight is calculated from its share of the combined nominal GDP of the eligible WGBI countries. The calculation uses the IMF World Economic Outlook (WEO) series expressed in U.S. dollars, allowing the country figures to be aggregated on a common basis. The WEO dataset uses a regularly updated and transparent methodology, enabling the rules-based design required for indexing. GDP is applied as a pure-weighted factor, offering a measure of economic scale for country weighting rather than using the amount of government debt outstanding. This is particularly relevant in a sovereign context, as GDP can be closely related to domestic demand and the size of the tax base which ultimately supports public finances.

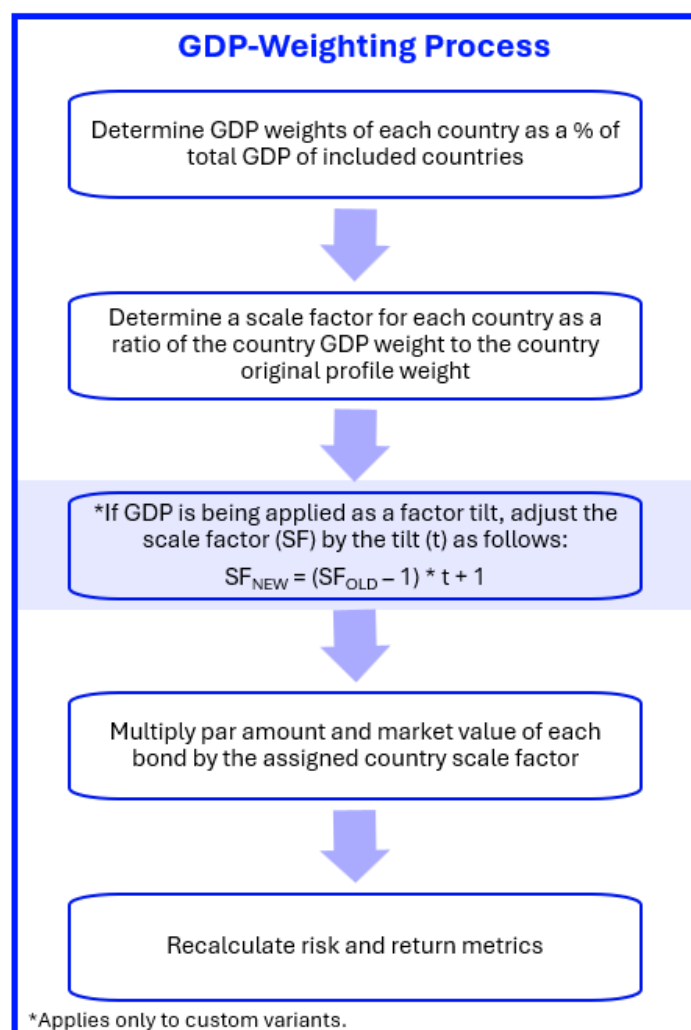
The implementation of each index, after the country allocation, proceeds using the tested methodology of the WGBI. The eligible bonds retain their relative market value weights and the country and security

² The debtor bias of the FTSE World Government Bond Index, and of market-capitalisation weighted sovereign bond benchmarks in general, is not a new concern. The FTSE Debt Capacity World Government Bond Index (DCWGBI) was launched in 2014 as an alternative which captures relative differences in sovereign debt/GDP ratios and debt-service costs. See a 10-year analysis of the DCWGBI here: Marshall, Robin, and Nelson Huang. Government Debt Sustainability: An Examination of the FTSE Debt Capacity World Government Bond Index after 10 Years. FTSE Russell, 15 July 2025, <https://www.lseg.com/en/ftse-russell/research/government-debt-sustainability>.

universe, and the reconstitution and rebalancing schedule, remain exactly those of the WGBI. Country targets are reset at each monthly rebalance using the latest available GDP data, and the GDP inputs themselves are refreshed semi-annually. Country weights between rebalances are allowed to drift with market returns.

For custom implementations, GDP can also be calibrated as a factor tilt rather than as a pure country weight. This allows the strength of the re-weighting to be scaled, which can be useful where investors want the economic value of GDP weighting but also want to balance active allocations relative to the WGBI.

Figure 1: GDP-Weighting Process



Source: FTSE Russell. June 2026. Please see the end for important legal disclosures.

Arguments for GDP-weighting

This section details why we believe GDP weighting can be a useful alternative weighting schema for global government bond indices.

Recognising underrepresented economies in global debt markets

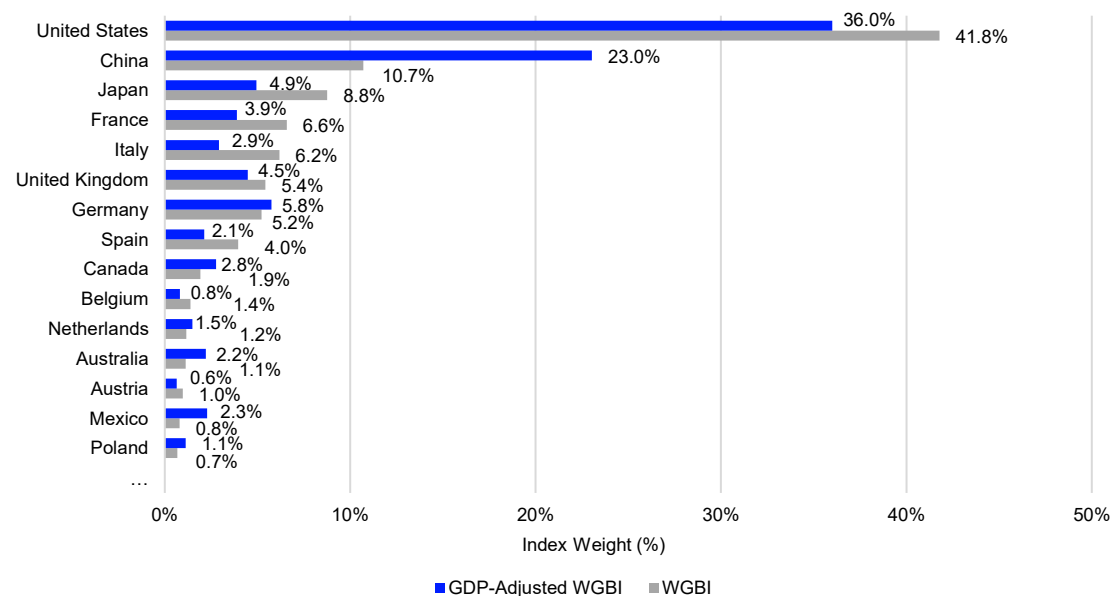
Traditional bond benchmarks naturally favour markets with large eligible debt issuance. The United States, Japan and several Western European countries carry large weights because of their government bond markets' depth and liquidity. While they maintain dominant positions in both market-weighted and GDP-weighted schemas, GDP-weighting more closely reflects the economic size of smaller markets by global output.

GDP adjustment provides an alternative to the notion of neutrality by market weights in sovereign bond markets. [Emerging economies broadly have lower debt, relative to their GDP, than developed markets](#)³. With the thesis that this could provide them with increased fiscal flexibility over a long enough time period, adjusting country weight exposures by GDP allows for increased exposure to growing economies without severe reallocation methods compromising investability. Countries whose output is large relative to their debt issuance are raised, whereas countries with lower proportional output are reduced in weight.

Figure 2 below illustrates the profile impact. In the January 2026 profile of the base WGBI, the United States represented 41.79% and China 10.71% of index allocation to global debt. In the GDP-Adjusted WGBI, the United States fell to 36.01% and China rose to 23.04%.

The same pattern appears across other countries, at smaller magnitudes: Japan falls from 8.76% → 4.94%, France from 6.57% → 3.88% and Italy from 6.19% → 2.92%. Conversely, Mexico, Poland and several other smaller markets received higher weights to offset.

Figure 2: Country Exposures as of January 2026 Profile



Source: FTSE Russell. January 2026. The data includes backtested, hypothetical performance. Please see the end for important legal disclosures.

³ Marshall, Robin. "When Bigger Isn't Better." LSEG, 27 May 2026, www.lseg.com/en/insights/ftse-russell/when-bigger-is-not-better.

Country exposures and performance

Over the back-tested period from May 2015 to January 2026, the GDP-Adjusted WGBI recorded an annualised return of 0.97%, compared with 0.38% for the base WGBI.⁴ Higher weights to China and Mexico supported positive relative returns, while the lower weights to underperforming European countries and Japan over the period reduced overall downside.

Figure 3: Weight Delta and Country Level Returns as of January 2026 Profile (%)

Country	GDP Weight	WGBI Weight	GDP less WGBI Weight	10Y Annualised Return
Austria	0.64	0.97	-0.33	0.15
Australia	2.21	1.12	1.08	1.30
Belgium	0.82	1.38	-0.56	0.31
Canada	2.76	1.91	0.85	1.16
China*	23.04	10.71	12.34	2.13
Germany	5.76	5.21	0.55	0.02
Denmark	0.52	0.19	0.34	0.13
Spain	2.12	3.96	-1.84	1.80
Finland	0.37	0.47	-0.11	0.19
France	3.88	6.57	-2.69	0.35
United Kingdom	4.48	5.43	-0.95	-1.10
Ireland	0.75	0.39	0.36	0.73
Israel*	0.67	0.37	0.29	1.94
Italy	2.92	6.19	-3.27	2.27
Japan	4.94	8.76	-3.82	-4.13
Mexico	2.28	0.81	1.48	7.13
Malaysia	0.52	0.47	0.05	4.83
Netherlands	1.49	1.15	0.34	-0.05
Norway	0.59	0.15	0.44	-0.26
New Zealand*	0.32	0.28	0.04	5.52
Poland	1.12	0.67	0.45	4.47
Portugal*	0.38	0.54	-0.16	8.93
Sweden	0.74	0.16	0.58	-0.29
Singapore	0.67	0.35	0.32	3.65
United States	36.01	41.79	-5.78	1.14

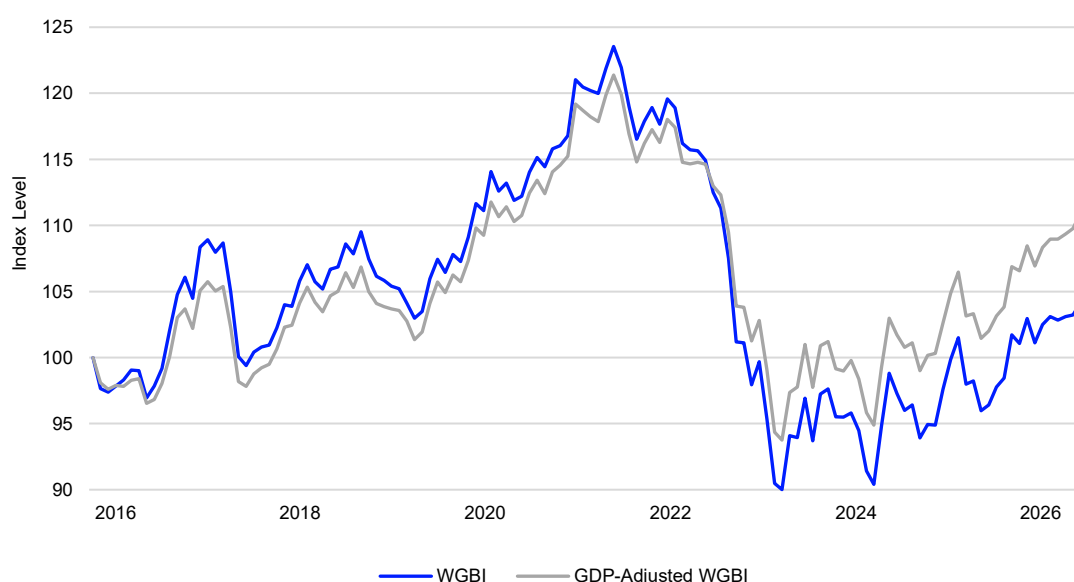
Source: FTSE Russell. 31 January 2016 – 31 January 2026. The data includes back-tested, hypothetical performance. Returns are in USD unhedged. China, Israel, New Zealand and Portugal annualised returns are calculated since their respective WGBI inclusions. Past performance is no guarantee of future results. Returns shown for the FTSE GDP-Adjusted World Government Bond Index are hypothetical and for illustrative purposes only. Please see the end for important legal disclosures.

⁴ These results are hypothetical and do not reflect live index performance.

The country return profiles help explain part of the historical result, but it should not be interpreted as a simple ex-post allocation towards winners. The allocation reduces exposure to Italy, which performed well, and Portugal, which has exhibited strong returns since its WGBI inclusion in 2024. The United States also has a positive allocation effect on the WGBI, and historical tests would have benefited from a higher U.S. weighting to the GDP-Adjusted index. However, by under-weighting exposure to highly developed economies and offsetting that allocation with exposure to fast-growing markets, GDP-weighting benefits from a stable market with growth across EMs and the developing world.

Even during periods of underperformance, the index remains close to the WGBI, maintaining an overall correlation of 99.15%. Figure 4 shows that the GDP-Adjusted WGBI broadly moves in line with the market-weighted WGBI, with long-term returns deviations being a result of incremental changes rather than sudden shifts due to concentrated differences. The recent outperformance can largely be explained by excess allocation to China since its inclusion in the WGBI in November 2021, with the difference further emphasised by lower allocation to underperforming European countries.

Figure 4: GDP-Adjusted WGBI vs WGBI Returns Comparison, May 2015 – January 2026, in USD



	FTSE WGBI	FTSE GDP-Adjusted WGBI
Geometric return p.a. (%)	0.38	0.97
Volatility p.a. (%)	6.72	5.97
Tracking error p.a. (%)	-	1.12

Source: FTSE Russell. 30 April 2015 to 31 January 2026. The data includes backtested, hypothetical performance. Returns in USD unhedged. Please see the end for important legal disclosures.

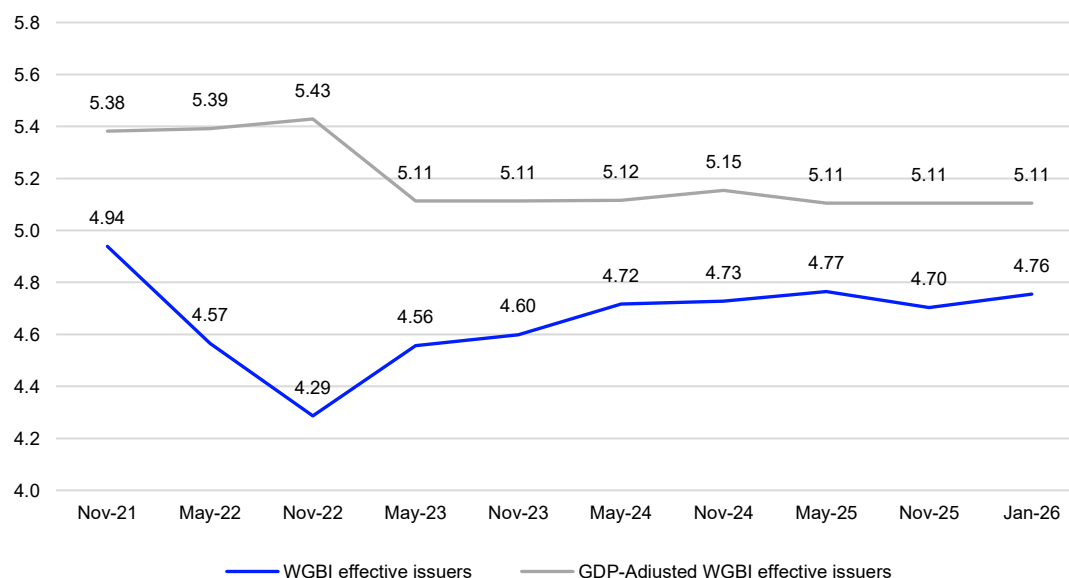
Increased diversification across sovereign issuers

Fixed income allocations generally rely on the sheer size of the asset class to limit excessive concentration to a single issuer or security. However, when the investment is a portfolio of sovereign issuers, market value weighted investments can quickly become heavily concentrated in high-debt issuers, creating undesired exposure to a few countries' financial risks. The relevant concentration metric for the WGBI is therefore the distribution of country weights, including the size of the largest allocations, and GDP-based weighting has historically diversified that distribution without adding countries or securities to the eligible universe.

GDP is generally correlated with market capacity and therefore does not eliminate concentration. The largest debt issuers remain large, and the nominal GDP design continues to hold a substantial allocation to the United States. Under this approach, however, additional borrowing does not in itself increase an issuer's target allocation; the target depends on its share of GDP among eligible countries. This creates a built-in check on concentration risk, so sudden excessive debt issuance by any single issuer does not disproportionately impact index allocation. GDP also often adjusts more gradually over time, reducing the overall volatility in concentration.

The January 2026 weight allocations in Figures 2 and 3 provide a good overview of how GDP-adjustment tends to reduce concentration at the highest levels, under-weighting the largest markets and increasing exposure to EMs with smaller debt markets. Figure 5 below shows a more robust analysis of concentration, showcasing that GDP-weighting exhibits a lower concentration risk. This chart compares the distribution of sovereign weights using the effective number of issuers calculated from the country-level Herfindahl-Hirschman Index (HHI), illustrated for both the WGBI and GDP-Adjusted WGBI since their inclusion of China. This measure allows the two weighting approaches to be assessed on the same eligible universe, rather than treating the number of bonds held as a measure of diversification. Moreover, unlike an equal-weighted benchmark or similar forms of aggressive diversification, the GDP-Adjusted index takes into consideration economic size differences, helping preserve index investability.

Figure 5: Effective Number of Issuers since China inclusion, November 2021 – January 2026



Source: FTSE Russell. November 2021 to January 2026. The data includes backtested, hypothetical performance. Effective number of issuers calculated from HHI. Please see the end for important legal disclosures.

Nominal versus PPP-adjusted GDP⁵

In any thematic benchmark, the choice of weighting input is as important as the decision to move away from market value weighting. The choice is between two GDP measures: nominal GDP and purchasing power parity (PPP)-adjusted GDP. Both are measures of economic output, but they answer different questions. Nominal GDP measures economic size at market exchange rates, whereas PPP-adjusted GDP measures economic size after controlling for differences in local price levels. Both have valid arguments in favour and against, and FTSE therefore has both in production. The FTSE GDP-Adjusted World Government Bond Index, the primary focus of this paper, utilises nominal GDP in U.S. dollars. The standard [FTSE GDP-Weighted World Government Bond Index](#) and related indices employ a PPP-adjusted GDP metric from the same IMF World Economic Outlook source.

The principal case for nominal GDP is its closer alignment to the way global sovereign bond portfolios are implemented and measured. The bonds in the WGBI are priced in local currencies, translated into investor reporting currencies through market exchange rates and accessed through markets which trade at those exchange rates. Nominal GDP therefore anchors country weights to economic output while retaining the same current-dollar framework used to aggregate portfolio exposures, returns and risk. PPP-adjusted GDP may provide a stronger measure of real production, particularly for emerging market economies, but it can also move the benchmark further from the framework in which sovereign bond portfolios are actually traded.

Nominal GDP also creates a more moderate expression of the GDP-weighted concept relative to PPP adjustment. It reduces the debt issuance bias of the WGBI without imposing the extent of reallocation required by PPP adjustment. In January 2026, the United States held 41.79% of the WGBI while China held 10.71%. The nominal GDP weighting moved those weights to 36.01% and 23.04% respectively, while the PPP-adjusted version moved them even further, to 25.63% and 33.42%. The excess allocation to China over the U.S. may seem like it makes excessive active allocation decisions over the WGBI if viewed in line with the dominance and reserve-currency role of U.S. financial markets. Furthermore, PPP-adjusted GDP could raise transaction costs in passive products due to the higher weighting of EMs with generally less liquid markets. Nominal GDP therefore offers a more balanced compromise: it recognises China's large economic footprint and materially reduces the issuance bias embedded in the WGBI, while remaining substantially closer to the structural allocation of the WGBI.

The trade-off is that nominal GDP is sensitive to exchange rates, since currency depreciation can reduce a country's nominal USD GDP even when domestic real output has not declined by the same amount, which can understate economies with lower price levels or temporarily weak currencies. PPP-adjusted GDP addresses this by filtering price-level and currency effects, making it a stronger measure for real production and long-term comparisons of economic value.

PPP-adjusted GDP therefore has a clear role in the broader index suite. It provides a more direct real-output allocation, increases exposure to economies whose domestic production is larger than market exchange-rate GDP suggests and can be more stable through currency cycles. Its disadvantage is that it moves further away from the market investability and reporting structure, and for better or worse, can result in larger active weights with greater exposure to emerging market currencies and bond markets.

⁵ See below for a more detailed decomposition of a PPP-adjusted index variation, including an analysis of the design outcomes and country-breakdowns as compared to the base WGBI and nominal GDP-Adjusted WGBI.

Marshall, Robin. "Getting Smarter—the Case for Global GDP Weighted Sov. Bond Indexes Strengthens?" *LSEG*, 10 Apr. 2026, www.lseg.com/en/insights/ftse-russell/getting-smarter-the-case-for-global-gdp-weighted-sov-bond-indexes-strengthens.

Conclusion

The GDP-Adjusted WGBI changes the distribution of capital across sovereign markets while leaving the eligible bond universe intact. The central allocation decision is whether country weights should follow the value of eligible government debt or the economic output of the issuing countries. The January 2026 comparison illustrates the consequences, showing the United States, Japan and several European markets underweighted, with most of the reallocation going to China. These positions help explain the historical differences discussed in the paper, and the broader theme surrounding redistribution caused by GDP weighting.

Nominal and PPP-adjusted GDP offer different implementations of this allocation choice. Assessing either approach requires attention to the resulting country positions and their departures from the WGBI, rather than treating GDP weighting as an unqualified improvement on the conventional benchmark. The active decision is made at the country level, where GDP offers a transparent alternative to outstanding debt, and both GDP-weighting approaches attempt to retain the investability of the WGBI by preserving the underlying bond eligibility and market accessibility criteria.

The GDP-Adjusted WGBI introduces deliberate country exposure differentials compared to the base WGBI, which is integral to the design. For investors who want their global sovereign bond allocation to broadly represent the economic state of its constituents, the FTSE GDP-weighted government bond indices can be understood as a benchmark design choice rooted in the evolving structure of the global economy.

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