Bloomberg GDP Weighted Index Methodology

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Bloomberg

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Introduction

The Bloomberg GDP Weighted Bond Indices are an alternative-weight index family that uses economy size as measured by gross domestic product(GDP) to determine country bloc/country weights in benchmark bond indices. This document details the specific index design, methodology, and mechanics used to construct the different types of GDP weighted indices and has been divided into three subsections:

1. GDP Weighted by Bloc
2. GDP Weighted by Country
3. GDP Scaled by Country

This methodology is intended to be read in conjunction with the Bloomberg Fixed Income Index Methodology.

GDP Weighted by Bloc Indices

Section 1: Overview

Gross domestic product (GDP) weighted by Bloc benchmark indices are an alternative weight index family that weight index-eligible country blocs by the size of their economies, rather than the amount of outstanding debt and borrowing. Country blocs with more index-eligible debt outstanding (on a market value basis) than their percent of global GDP have a lower weight in a GDP weighted index compared with a market value weighted index; country blocs with less debt outstanding than their percentage of global GDP will have a higher allocation to reflect their larger GDP share.

The underlying composition of a GDP weighted by Bloc benchmark is the same as that of a traditional market value weighted index. However, instead of weighting each security by its natural market value contribution, fixed GDP weights are applied to ten country blocs (three from the Americas; four from Europe, the Middle East, and Africa; and three from Asia) composed of all index-eligible securities from that country bloc or geographic region. Only countries with a meaningful representation in the overall index will contribute to a bloc's fixed GDP weight, although all bonds are included in the benchmark.

After GDP weights are applied at a bloc level, index-eligible securities will remain market value weighted within each bloc to reflect the investment choice set within that region.

Section 2: Index Construction Process

Classifying Bonds by the Country of Risk of the Issuer

GDP weighted indices classify bonds into country blocs based on the country of economic risk of its issuer, not the currency of the bond. This ensures that the indices are not simply a basket of currency overweights/underweights, but instead give a more accurate classification of the geographic and economic risk of index eligible debt[1]. For example, Mexico debt issued in USD is classified as part of the Latin America bloc, along with other MXN-denominated debt from Mexico.

GDP Source Data

GDP weights are calculated annually using updated GDP data from the October edition of the IMF World Economic Outlook as a trailing three-year weighted average of each country's nominal GDP in US dollars.

- GDP weights are based on historical numbers starting with the previous year-end. Each October, only first- and second-quarter GDP has been recorded for the current year; the remaining portion of the current year is forecast. Therefore, the historical series used to determine index weights will begin with the actual GDP as of the previous year-end.
- In some cases, the previous year's GDP of a country may still be presented as an estimate by the IMF in the October WEO database. In those cases, the previous year's estimate is used for the weights in conjunction with numbers from other countries that have actual reported GDP.
- Subsequent revisions, including those of estimated to actual GDP, are reflected only in the following October's recalculation of target benchmark weights. Historical weights will not be restated, but updated target weights will incorporate any revisions.
- Countries represented in an underlying bond index without a reported GDP by the IMF are mapped to a country bloc based on their geography but will not contribute to the GDP weight of that region.

[1] This rule is meant to best classify issuers that more frequently tap the global debt markets with foreign currency debt than local currency debt.

GDP Country Blocs

GDP weighted by Bloc indices are based on calculated GDP weights for the following ten country blocs:

1. US
2. Canada
3. Latin America EM and rest of region
4. Euro area
5. UK
6. Other Europe (Sweden, Switzerland, Norway, Denmark)
7. Europe, Middle East, and Africa EM and rest of region
8. Japan
9. Australia/New Zealand
10. Asia EM and rest of region

Details on the specific countries that map to each bloc can be found in Figures 1 and 2.

Index Calculation and Weighting

Step 1: Create Country Bloc Subindices

- All bonds in the underlying market value weighted index are assigned to a country bloc subindex using the groupings in Figures 1 and 2. This ensures that the alternative weight index still tracks the same universe of securities as its market value weighted equivalent.
- Country bloc subindices are determined by the country of risk of the underlying bonds, rather than the currency of denomination, as discussed earlier. For a benchmark such as the Global Treasury Index, these would be the same, but for the Global Aggregate, the subindices may include bonds in multiple currencies to reflect the appropriate country risk of global issuers. For example, USD-denominated sovereign bonds would fall within the bloc of their local issuer, not the US bloc. Likewise, EUR- denominated debt from a US-based corporate issuer would fall in the US bloc, not the Euro Area bloc.
- Exceptions include index-eligible supranational bonds, which are mapped to a country bloc based on the currency denomination of the index-eligible bonds. In addition, bonds with a country of risk that is a common offshore legal domicile, such as Bermuda, Jersey Islands, Guernsey, Cayman Islands, etc., are classified by the underlying currency of the bond. For example, USD- denominated bonds with a country of Cayman Islands would be classified in the US bloc and not in the Latin America EM bloc.
- The constituents within each bloc are market value weighted to give a more accurate representation of the investment universe within each bloc.

Step 2: Calculate Country Bloc GDP Weights

- Country GDP: A trailing 3-year weighted average of each country's nominal GDP (in USD) is calculated using updated IMF data reported each October. The most recent year of actual data available are weighted 1/2, two years prior are weighted 1/3, and three years prior are weighted 1/6. For example, GDP values for 2024(calculated using data from the October 2023 edition of the IMF WEO) will use full-year actual GDP data from 2022 (50% weight), 2021 (33% weight) and 2020 (17% weight). This balances the desire for weights to reflect recently reported data while maintaining some historical perspective that will make index composition less volatile on a y/y basis.
- Country Bloc GDP: The aggregated GDP of the country bloc is calculated using only the GDP of countries that are meaningfully represented in the underlying index (countries with local currency eligible debt)[2]. Although all bonds will still be measured in each country bloc, the objective is not to artificially inflate the GDP weight of a country bloc based on the GDP of countries with thinly traded bond markets.

[2] Prior to the 2015 rebalancing on January 1, 2015, countries with a meaningful representation in the index were defined as countries with >0.25% market value weight (as of October month-end of the previous calendar year) or local currency eligible debt. The definition was revised following a consultation in November 2014.

- Country Bloc GDP Weights: Each bloc's GDP target weight is calculated as its percentage of the sum of all ten country bloc GDP values. These weights are reset annually on December 1[3].

$$GDP\ Weight\%_{Country\ Bloc} = \frac{GDP_{Country\ Bloc}}{\sum(GDP_{Country\ Bloc})}$$

Step 3: Construct GDP Weighted by Bloc Benchmark Indices

- Each country bloc's GDP weight, calculated in Step 2, is applied to the appropriate country bloc subindex, created in Step 1, to create a fixed weight composite GDP weighted index.
- The index will thus rebalance back to the target GDP weight for each country bloc subindex on a monthly basis.

Index Rebalance

The GDP weights by Bloc are updated on an annual basis in the projected universe in early November to impact returns starting in December. In between the annual rebalancing dates, the index rebalances back to the annual target GDP weights by Bloc on a monthly basis.

[3] Prior to 2016 rebalancing, the annual rebalancing date was January 1. The annual rebalancing date was revised following a consultation in November 2014.

Figure 1
Americas and Asia Country Blocs Used for GDP Weighted by Bloc Indices

Americas Country Blocs		Asia Country Blocs	
Bloc	**Country**	**Bloc**	**Country**
1. US	United States	Japan	Japan
2. Canada	Canada	Australia/NZ	Australia
3. Latin America EM & Rest of Region	Antigua and Barbuda		New Zealand
	Argentina	3. Asia EM & Rest of Region	China
	Bahamas, The		India
	Barbados		Bangladesh
	Belize		Bhutan
	Bolivia		Brunei Darussalam
	Brazil		Cambodia
	Chile		Fiji
	Colombia		Hong Kong SAR
	Costa Rica		Indonesia
	Dominica		Kiribati
	Dominican Republic		Korea
	Ecuador		Kyrgyz Republic
	El Salvador		Lao People's Democratic Republic
	Grenada		Malaysia
	Guatemala		Maldives
	Guyana		Mongolia
	Haiti		Myanmar
	Honduras		Nepal
	Jamaica		Papua New Guinea
	Mexico		Philippines
	Nicaragua		Samoa
	Panama		Singapore
	Paraguay		Solomon Islands
	Peru		Sri Lanka
	St. Kitts and Nevis		Taiwan Province of China
	St. Lucia		Tajikistan
	St. Vincent and the Grenadines		Thailand
	Suriname		Timor-Leste, Dem. Rep. of
	Trinidad and Tobago		Tonga
	Uruguay		Uzbekistan
	Venezuela		Vanuatu
			Vietnam

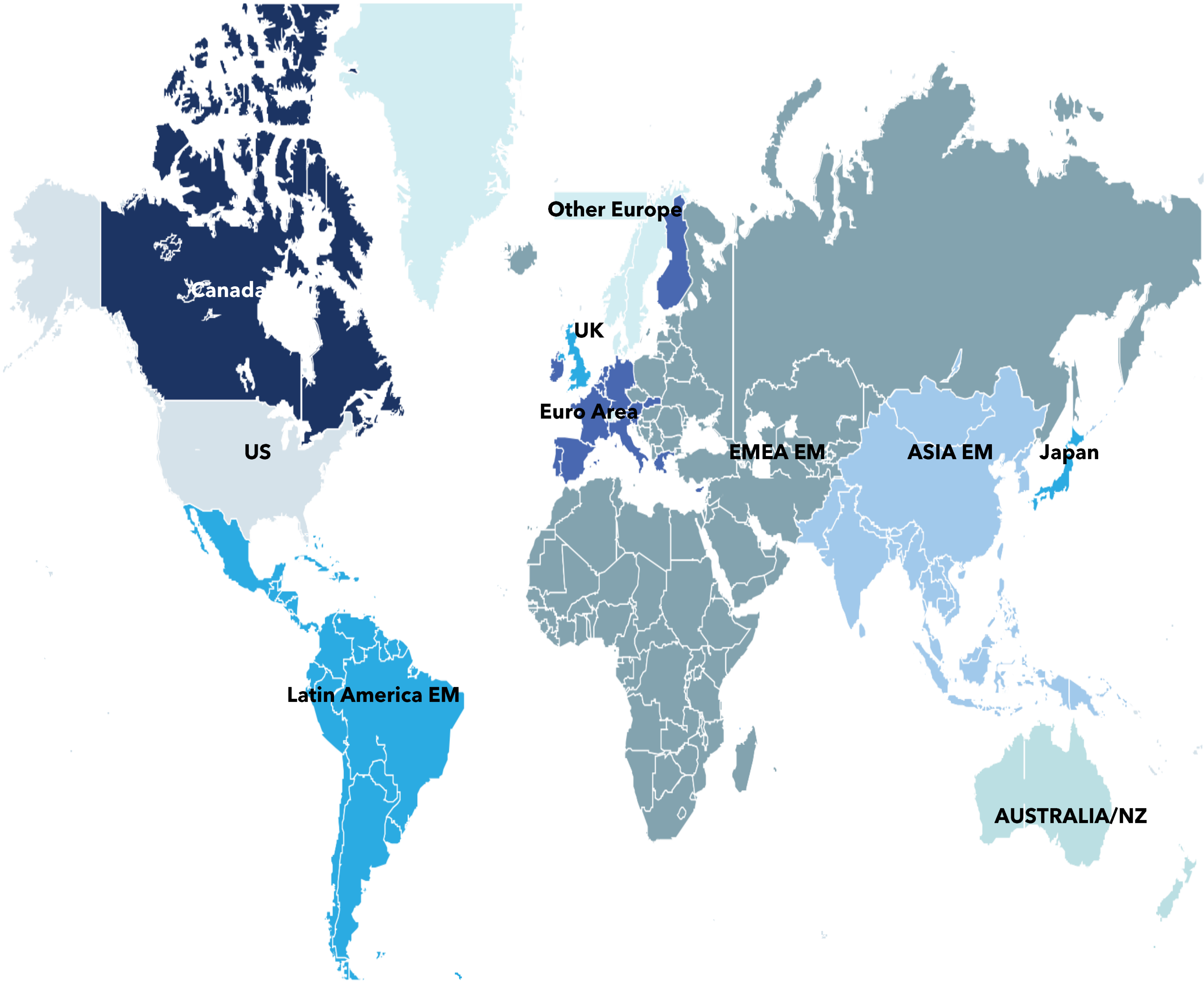
Source: Bloomberg (As of May 2024)

Figure 2
Europe, Middle East, and Africa Country Blocs Used for GDP Weighted by Bloc Indices

Europe, Middle East, and Africa Country Blocs					
Bloc	**Country**	**Bloc**	**Country**	**Bloc**	**Country**
1. Euro Area	Austria	4. EMEA EM (contd)	Chad	4. EMEA EM (contd)	Oman
	Belgium		Comoros		Pakistan
	Cyprus		Congo, Dem Republic		Poland
	Finland		Congo, Republic of		Qatar
	France		Côte d'Ivoire		Romania
	Germany		Czech Republic		Russia
	Greece		Djibouti		Rwanda
	Ireland		Egypt		São Tomé and Príncipe
	Italy		Equatorial Guinea		Saudi Arabia
	Luxembourg		Eritrea		Senegal
	Malta		Ethiopia		Serbia
	Netherlands		Gabon		Seychelles
	Portugal		Gambia, The		Sierra Leone
	Slovak Republic		Georgia		South Africa
	Slovenia		Ghana		Sudan
	Spain		Guinea		Swaziland
	Latvia		Guinea-Bissau		
	Lithuania		Hungary		Syrian Arab Republic
	Estonia		Iceland		Tanzania
	Croatia		Iran, Islamic Republic of		Togo
2. UK	United Kingdom		Iraq		Tunisia
3. Other Europe	Denmark		Israel		Turkey
	Norway		Jordan		Turkmenistan
	Sweden		Kazakhstan		Uganda
	Switzerland		Kenya		Ukraine
4. EMEA EM &Rest of the Region	Afghanistan		Kuwait		United Arab Emirates
	Albania		Lebanon		Yemen, Republic of
	Algeria		Lesotho		Zambia
	Angola		Liberia		Zimbabwe
	Armenia		Libya		
	Azerbaijan		Macedonia		
	Bahrain		Madagascar		
	Belarus		Malawi		
	Benin		Mali		
	Bosnia & Herzg.		Mauritania		
	Botswana		Mauritius		
	Bulgaria		Moldova		
	Burkina Faso		Morocco		
	Burundi		Mozambique		
	Cameroon		Namibia		
	Cape Verde		Niger		
	Cent African Rep		Nigeria		

Source: Bloomberg (As of May 2024)

Figure 3
Country Blocs for GDP Weighted by Bloc Indices



GDP Weighted by Country Indices

Section 1: Overview

Gross domestic product (GDP) weighted by Country benchmark indices are an alternative weight index family that weight index-eligible countries by the size of their economies, rather than the amount of outstanding debt and borrowing. While the GDP Weighted by Bloc Indices use GDP to weigh index-eligible country blocs, with market value weights used within each multi-country bloc; the GDP Weighted by Country indices apply GDP weights by Country. They are for investors seeking a more granular application of GDP weights. The GDP weighted by Country indices are Treasury only, the more granular application of GDP weights would otherwise force a large weight on thin markets if applied to Aggregate style indices[4].

The underlying universe of securities of a GDP weighted by Country benchmark is same as that of a traditional market value weighted index. GDP weights are not used to pick which securities are included in a benchmark, but rather how large a weight they have in the overall index. Therefore, each GDP weighted by Country bond index will have the same number of securities as its market cap weighted equivalent. GDP weighted by Country indices will tend to overweight countries with a higher contribution to global GDP than their proportion of global debt and underweight countries that borrow in excess of their contribution to global GDP.

Section 2: Index Construction Process

Classifying Bonds by the Country of Risk of the Issuer

GDP weighted by Country indices assign bonds to countries based on the country of economic risk of its issuer, not the currency of the bond[5].

GDP Source Data

GDP weights are calculated annually using updated GDP data from the October edition of the IMF World Economic Outlook as a trailing three-year weighted average of each country's nominal GDP in US dollars.

- GDP weights are based on historical numbers starting with the previous year-end. Each October, only first- and second-quarter GDP has been recorded for the current year; the remaining portion of the current year is forecast. Therefore, the historical series used to determine index weights will begin with the actual GDP as of the previous year-end.
- In some cases, the previous year's GDP of a country may still be presented as an estimate by the IMF in the October WEO database. In those cases, the previous year's estimate is used for the weights in conjunction with numbers from other countries that have actual reported GDP.
- Subsequent revisions, including those of estimated to actual GDP, are reflected only in the following October's recalculation of target benchmark weights. Historical weights will not be restated, but updated target weights will incorporate any revisions.

Index Calculation and Weighting

Step 1: Create Country Subindices

- All bonds in the underlying market value weighted index are assigned to a country subindex based on the country of risk of the bond. This ensures that the alternative weight index still tracks the same universe of securities as its market value weighted equivalent.
- The constituents within each country are market value weighted

Step 2: Calculate Country GDP Weights

- Country GDP: A trailing 3-year weighted average of each country's nominal GDP (in USD) is calculated using updated IMF data reported each October. The most recent year of actual data available are weighted 1/2, two years prior are weighted 1/3, and three years prior are weighted 1/6. For example, GDP values for 2024(calculated using data from the October 2023 edition of the IMF WEO) will use full-year actual GDP data from 2022 (50% weight), 2021 (33% weight) and 2020 (17% weight). This balances the desire for weights to reflect recently reported data while maintaining some historical perspective that will make index composition less volatile on a y/y basis.

[4] GDP Weighted by Bloc indices are available for both Aggregate style and Treasury Indices; GDP Weighted by Country indices are Treasury only.
[5] For GDP Weighted by Country indices which are Treasury only, the country and currency index weights are the same. Assignment of a bond based on the country of risk is more relevant for GDP Weighted by Bloc Aggregate style indices where country weights and currency weights are not the same.

- Country GDP Weights: Each country's GDP target weight is calculated as its percentage of the sum of all countries in the index. These weights are reset annually on December 1[6].

$$GDP\ Weight\%_{Country} = \frac{GDP_{Country}}{\sum(GDP_{Country})}$$

Step 3: Construct GDP Weighted by Country Benchmark Indices

- Each country's GDP weight, calculated in Step 2, is applied to the appropriate country subindex, created in Step 1, to create a fixed weight composite GDP weighted index.
- The index will thus rebalance back to the target GDP weight for each country subindex on a monthly basis.

Index Rebalance

The GDP weights by Country are updated on an annual basis in the projected universe in early November to impact returns starting in December. In between the annual rebalancing dates, the index rebalances back to the annual target GDP weights by Country on a monthly basis.

[6] Prior to 2016 rebalancing, the annual rebalancing date was January 1. The annual rebalancing date was revised following a consultation in November 2014.

GDP Scaled by Country Indices

Section 1: Overview

The GDP Scaled by Country Benchmark Bond Indices address investor concerns with the turnover of GDP Weighted by Country Indices, which use fixed monthly weights, reset annually. During periods of heightened FX volatility, replication is more difficult using weights that do not adjust for FX moves and with the turnover that comes with resetting to fixed monthly weights. The GDP Scaled by Country Indices reduce turnover by converting annual GDP weights using spot FX into fixed annual scaling factors that are applied to monthly market value weights. Like the GDP Weighted by Country indices, the GDP Scaled by Country bond indices are Treasury only.

The underlying universe of securities of a GDP Scaled by Country benchmark is same as that of a traditional market value weighted index. GDP Scaling is not used to pick which securities are included in a benchmark, but rather how large a weight they have in the overall index. Therefore, each GDP Scaled by Country bond index will have the same number of securities as its market cap weighted equivalent.

Section 2: Index Construction Process

Classifying Bonds by the Country of Risk of the Issuer

GDP Scaled by Country indices assign bonds to countries based on the country of economic risk of its issuer, not the currency of the bond[7].

Source Data

The GDP Scaled by Country Bond Indices convert GDP weights calculated using nominal GDP in local currency and spot FX into a fixed annual scaling factor that is applied to monthly market value weights.

GDP Source Data: Nominal GDP in local currency is calculated for each country annually using updated GDP data from the October edition of the IMF World Economic Outlook as a trailing three-year weighted average of each country's nominal GDP in local currency.

- Nominal GDP in local currency for each country is based on historical numbers starting with the previous year-end. Each October, only first- and second-quarter GDP has been recorded for the current year; the remaining portion of the current year is forecast. Therefore, the historical series used to determine the Nominal GDP in local currency for each country will begin with the actual GDP as of the previous year-end.
- In some cases, the previous year's GDP of a country may still be presented as an estimate by the IMF in the October WEO database. In those cases, the previous year's estimate is used in conjunction with numbers from other countries that have actual reported GDP.
- Subsequent revisions, including those of estimated to actual GDP, are reflected only in the following October's recalculation of target benchmark weights. Historical weights will not be restated, but updated target weights will incorporate any revisions.

FX Spot Source Data: The spot exchange rate as of the month-end prior to the annual rebalancing date is used to convert the Nominal GDP in local currency to Nominal GDP in US Dollars. The Bloomberg Fixed Income Indices source FX spot rates from WM Refinitiv. FX rates are taken at 4pm London time[8].

Index Calculation and Weighting

Step 1: Create Country Subindices

- All bonds in the underlying market value weighted index are assigned to a country subindex based on the country of risk of the bond. This ensures that the alternative weight index still tracks the same universe of securities as its market value weighted equivalent.
- The constituents within each country are market value weighted

Step 2: Calculate Country GDP Weights

- Country GDP: A trailing 3-year weighted average of each country's nominal GDP (in local currency) is calculated using updated IMF data reported each October. The most recent year of actual data available are weighted 1/2, two years prior are weighted 1/3, and three years prior are weighted 1/6. For example, GDP values for 2024(calculated using data from the October 2023 edition of the IMF WEO) will use full-year actual GDP data from 2022 (50% weight), 2021 (33% weight) and 2020 (17% weight). This balances the desire for weights to reflect recently reported data while maintaining some historical perspective that will make index composition less volatile on a y/y basis.

[7] For the GDP Scaled by Country and GDP Weighted by Country indices which are Treasury only, the country and currency index weights are the same. Assignment of a bond based on the country of risk is more relevant for GDP Weighted by Bloc Aggregate style indices where country weights and currency weights are not the same.
[8] Where FX rates from WMR are delayed or become inactive, to the extent it will delay the production of the indices, the indices will switch to using FX rates from Bloomberg BFIX, administered by Bloomberg Index Services Limited (BISL) for that session.

- The trailing 3-year weighted average GDP in local currency is then converted to US dollars using spot exchange rate as of the month-end prior to the annual rebalancing date.
- Country specific GDP weights are calculated using the GDP in US dollars

$$GDP\ Weight\%_{Country} = \frac{GDP_{Country}}{\sum(GDP_{Country})}$$

Step 3: Calculate Country Scaling Factors

- Annual country specific GDP/market value scaling factors are calculated by scaling GDP weights (from Step 2) using market value weights as of the month-end prior to the annual rebalancing date[9].

$$Scaling\ Factor_{Country} = \frac{GDP\ Weight\%_{\ Country}}{Market\ Value\ Weight\%_{Country}}$$

- The country scaling factors are reset annually as of the annual rebalancing date of December 1[10].

Step 4: Construct GDP Scaled by Country Benchmark Indices

- The annual country scaling factors calculated in Step 3 are applied to the appropriate country subindex, created in Step 1, to create a floating weight composite GDP Scaled by Country index. The annual scaling factors are thus applied to the monthly market value weights between the annual rebalancing dates.

Index Rebalance

The GDP Scaling Factors by Country are updated on an annual basis in the projected universe in early November to impact returns starting in December. In between the annual rebalancing dates, the annual Scaling Factors by Country are applied to monthly market value weights.

[9] The GDP Scaled by Country indices were launched in November 2015. For historical rebalancings prior to the 2016 rebalancing on December 1, 2015, spot FX rates and the market values as of the annual rebalancing date were used to calculate the annual Country Scaling factors. For annual rebalancings after that, FX rates and market values from the month-end prior to the annual rebalancing date were used to be able to see the projected universe ahead of the annual rebalancing date.

[10] Prior to 2016 rebalancing, the annual rebalancing date was January 1. The annual rebalancing date was revised following a consultation in November 2014.

Turnover

As mentioned previously, the GDP Scaled by Country Benchmark Bond Indices address investor concerns with the turnover of GDP Weighted Indices, which use fixed monthly weights, reset annually. During periods of heightened FX volatility, replication is more difficult using weights that do not adjust for FX moves and with the turnover that comes with resetting to fixed monthly weights.

Figure 4 summarizes the sources of turnover for the market-value weighted, GDP-weighted by Bloc/Country and GDP Scaled indices.

- Market-value weighted indices experience natural turnover because of bonds entering and leaving the index at each monthly rebalancing.
- GDP weighted by Bloc and GDP Weighted by Country indices are fixed-weight composite indices that reset to fixed Country Bloc/Country specific GDP weights at the end of each month. This reset back to fixed GDP weights results in additional turnover.
- For the GDP Scaled indices, the weights drift in line with market value weights because they are anchored to baseline market value weights. This monthly drift results in lower turnover than the GDP weighted by Bloc/Country indices which are reset back to fixed GDP weights at the end of each month.

Figure 4
Sources of Turnover

	Market Value Weight	GDP Weighted by Bloc/Country	GDP Scaled
Monthly Turnover	• Relative Net Issuance	• Rebalancing to Fixed Weights • Relative Local Market Returns • Relative FX Returns • Relative Net Issuance	• Rebalancing to Dynamic Weights • Relative Net Issuance
Additional Sources of Turnover at Annual Rebalancing	-	• Updated Historical Average Local GDP • Updated Historical Average FX[11]	• Updated Historical Average Local GDP • Updated Annual Spot FX • Updated market value weights

[11] The GDP Weighted by Bloc and GDP Weighted by Country indices use the GDP in US dollars published by IMF for the annual rebalancing; the GDP in US dollars published by the IMF is GDP in local currency converted to US dollars using yearly average market exchange rates.

Appendix 1: Accessing GDP Weighted Indices

Index tickers that display the total return index levels are available on the Bloomberg Terminal. A list of total return tickers for major indices can be found in Figure 5.

Figure 5
Bloomberg Tickers for flagship GDP Weighted Indices

Index	GDP Weighting Type	Ticker	Base Currency
Global Aggregate GDP Weighted	GDP Weighted by Bloc	I21272US	USD Unhedged
Global Treasury GDP Weighted	GDP Weighted by Bloc	I21273US	USD Unhedged
Global Treasury Universal (Global Treasury + EM Local Currency Government Universal) GDP Weighted	GDP Weighted by Bloc	I21360US	USD Unhedged
Global Treasury Universal (Global Treasury + EM Local Currency Government Universal) Plus GDP Weighted	GDP Weighted by Bloc	I21433US	USD Unhedged
Emerging Markets Government Universal GDP Weighted	GDP Weighted by Bloc	I21591US	USD Unhedged
Global Treasury GDP Weighted by Country	GDP Weighted by Country	I23542US	USD Unhedged
Euro Treasury GDP Weighted by Country	GDP Weighted by Country	I22935US	USD Unhedged
Global Treasury Universal (Global Treasury + EM Local Currency Government Universal) GDP Weighted by Country	GDP Weighted by Country	I23383US	USD Unhedged
EM Local Currency Government GDP Weighted by Country	GDP Weighted by Country	I23234US	USD Unhedged
GDP Scaled Global Treasury	GDP Scaled by Country	I32035US	USD Unhedged
GDP Scaled Euro Treasury	GDP Scaled by Country	I32034US	USD Unhedged
GDP Scaled Global Treasury Universal (Global Treasury + EM Local Currency Government)	GDP Scaled by Country	I32032US	USD Unhedged
GDP Scaled EM Local Currency Government	GDP Scaled by Country	I32033US	USD Unhedged

Appendix 2: Backtest Assumptions and Limitations

Backtest Assumptions

The rules outlined above are applied historically, however the following assumptions have been made:

Unless otherwise specified, the calendars and pricing used at the time of calculating the backtest are assumed to reflect those available at the time.

Limitations of the Index

Though the Index is designed to be representative of the markets it measures or otherwise aligns with its stated objective, it may not be representative in every case or achieve its stated objective in all instances. It is designed and calculated strictly to follow the rules of this Methodology, and any Index level or other output is limited in its usefulness to such design and calculation.

Markets can be volatile, including those market interests that the Index measures or upon which the Index is dependent to achieve its stated objective. For example, illiquidity can have an impact on the quality or amount of data available to the administrator for calculation and may cause the Index to produce unpredictable or unanticipated results.

Appendix 3: Benchmark Oversight and Governance

Benchmark Governance, Audit, and Review Structure

Please refer to the BISL Benchmark Procedures Handbook available here.

Index and Methodology Changes

Please refer to the BISL Benchmark Procedures Handbook available here.

Expert Judgement and Discretion

Please refer to the BISL Benchmark Procedures Handbook available here.

Conflicts of Interest

Please refer to the BISL Benchmark Procedures Handbook available here.

Restatement Policy

Please refer to the BISL Benchmark Procedures Handbook available here.

Cessation Policy

Please refer to the BISL Benchmark Procedures Handbook available here.

Appendix 4: Environmental, Social and Governance (ESG) Disclosure

The Bloomberg GDP Weighted Bond Indices do not take into account any ESG factors or pursue any ESG objectives. Please refer to the Bloomberg Fixed Income Methodology for ESG disclosures.

Publication Currency

Bloomberg may offer the GDP Weighted bond indices in additional currencies for both unhedged and hedged indices.

- See Appendix 2 of the Bloomberg Fixed Income Index Methodology for Currency Hedging and Currency Returns.
- See Appendix 12 of the Bloomberg Fixed Income Index Methodology for Index Identification and Publication Currency.

Version History

Date	Update
May 2024	Publication

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