BPI Index

BPI Philippine Corporate Bond Index Guide

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2 DEFINITIONS

Base Date	25 April 2016
BPI	Bank of the Philippine Islands
BSP	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)
Business Day	Monday through Friday, excluding Philippine public holidays
Business Group	A collection of companies with a common source of control
Calculation Agent	BPI Investment Management Inc. (BIMI)
Constituent	Representing a security in the Index
Data Disruption	An event which causes any data to become unobtainable by the Calculation Agent including but not restricted to: data network failure, computer systems failure
Eligible securities	See Section 4.1
Index	BPI Philippine Corporate Bond Index
Index Rules	This document
Index Universe	See Section 4
Market Capitalization	Philippine Peso Market Value at a given date
Market Disruption	An event which affects the normal operation of one or more financial markets on which Constituents or their currencies are traded
Monthly Review	Review of the Index Universe, and rebalancing of constituents and weightings in the Indices
Monthly Review Date	The last Business Day of each month when the Index is active
Net of tax	Computed net of the Philippine withholding tax rate (currently at 20%)
PDEx	Philippine Dealing & Exchange Corporation
PDST-R2	Default risk-free benchmark reference rates used as basis for market valuation of Philippine Government securities and other PHP-denominated fixed income securities computed every Business Day by PDEx
PHP	Philippine Peso
Sponsor	Bank of the Philippine Islands

3 INTRODUCTION

3.1 Index Overview

The BPI Philippine Corporate Bond Index (the Index) is administered by the Bank of the Philippine Islands (the Sponsor). The Sponsor is responsible for the design of the BPI Index and the issuance of these Rules.

The Index intends to reflect the performance of Philippine Corporate issued fixed-rate bonds denominated in Philippine Peso. It is intended to be a template for passive, diversified fixed income investment portfolios where securities are held in proportion to the market value (Market Capitalization) of the issued securities. It aims to provide accurate and objective benchmarks by which to assess the performance of the Philippine Corporate bond market.

The Index is priced based on multiple data inputs as described in Section 3.8.

This document covers the Index structure, rules and calculation methodology.

The Index Rules and their application will be governed by the BPI Index Committee.

3.2 Weighting by Market Capitalization

Every security in the Index is held in proportion to its Market Capitalization to reflect returns matching that of the average investment strategy.

3.3 Construction Overview

The Index Universe consists of Philippine Corporate fixed-rate bonds denominated in Philippine Peso meeting the requirements for inclusion (See Section 4.2).

After the Index Universe has been identified, a weight is computed for each Constituent. This weight will be proportional to the Philippine Peso Market Value of the security relative to the Market Capitalization of the Index (See Section 4.3).

3.4 Rebalancing of Index

Constituents and weightings of the Index are reviewed (the Monthly Review) at the end of each month at the Monthly Review Date. It involves adding securities, which were not members formerly, to the Index Universe where their size, maturity, and other characteristics meet requirements; and, removing securities which were members, which now no longer meet the requirements for inclusion. A new Index Universe is constructed and new weights are computed.

The Index is rebalanced to match the new Index Universe and new weights, and is implemented as soon as is reasonably practicable.

3.5 Initial Values

The Index shall have a value of One Hundred (100.00) as of the Base Date.

3.6 Daily Index Values

Index Values, including Index Analytical Values, are computed at the end of every Business Day and released at approximately 11:00 AM (Philippine time) of the following Business Day.

Index data is published in the Bank of the Philippine Islands website (www.bpiindex.com), and possibly through other electronic platforms

3.7 Calculation Agent

The Sponsor has engaged a Calculation Agent to provide independent calculation of the periodic value of the BPI Index and to make various determinations and adjustments, in each case in accordance with the Index Rules.

The Calculation Agent is responsible for obtaining information for inclusion or use in the calculation of the BPI Index. The Calculation Agent will not independently verify such information and does not guarantee the accuracy or completeness of any Index or any data included therein.

The Sponsor has agreed with the Calculation Agent the terms by which the BPI Index shall be maintained, calculated and distributed.

3.8 Data Sources

The Calculation Agent obtains closing prices and coupon payments used for both calculation and maintenance of Index Values each day from Bloomberg.

Closing prices of securities are based on daily PDST-R2 rates from the Philippine Dealing & Exchange Corp. (PDEx). The PDEx (PDST Pricing Methodology) conforms to the prescribed methodology of the *Bangko Sentral ng Pilipinas* (BSP) (BSP Circular No. 813) for the market valuation of government securities.

Data from Bloomberg may be supplemented with other sources at the Calculation Agent's absolute discretion. Whilst the Calculation Agent publishes the Index Values in good faith, it does not independently verify such data. The Calculation Agent does not guarantee, represent or warrant the accuracy or completeness of the Index or of the data compiled therein nor can it be held responsible for any delays in publishing the Index.

3.9 Data Disruption and Market Disruption

In the event of a Data Disruption, the Calculation Agent shall use reasonable endeavors to source data from alternative sources with the aim of publishing Index Values by 11:00 AM (Philippine time) of the following Business Day on the day of calculation. The unavailability of data shall not be considered sufficient reason to delay the calculation of Index Values and until such time data is once again available the Calculation Agent shall continue using the last data available for the maintenance of the Index.

In the event of a Market Disruption, the Calculation Agent shall use the last data available for calculating the Index Values until such time as the Market Disruption is over and it believes it can once again accurately calculate the Index Value.

3.10 Termination of Index

The publication and maintenance of the Index is discretionary. The Sponsor may suspend or terminate the publication and maintenance of the Index at any time. In the event that the Index is suspended or terminated, neither the Sponsor nor the Calculation Agent accepts any responsibility for any losses incurred by any party whether incidental or consequential arising out of any reliance on the continued existence and publication of the Index.

Any announcements, including the termination of publication and maintenance of the Index shall be made on the Sponsor's website (www.bpiindex.com).

3.10 Governance

The BPI Index Committee is comprised of select senior management members from the Sponsor. Its principal purpose is to maintain oversight and management of all BPI indices. In particular, it is responsible for deciding changes to the Index Rules governing the Index. It is also responsible for deciding how unforeseen events which are not covered by this document, and which in the opinion of the Calculation Agent or the Sponsor require attention, should be dealt with.

In fulfilling its responsibilities, the BPI Index Committee has full and complete discretion to (i) amend, apply, or exempt the application of Index Rules and policies as circumstances may require and (ii) add, remove, or by-pass any bond in determining the composition of the Index.

4 INDEX CONSTITUENTS

4.1 Eligible Securities

The broad investment universe comprise of listed Philippine Corporate, fixed-rate bonds denominated in the Philippine Peso. The full features of eligible securities are found in the table below:

Issuer	Philippine Corporations
Currency	Philippine Peso
Bond type	Fixed-Rate, Straight, Callable, or Puttable Senior Domestic Bonds
Security type	Corporate Bonds
Exclusions	Global Peso Notes (GPN), Bank Capital, LTNCDs, Perpetual Securities and other Hybrid Instruments

4.2 Selection Criteria

To become a constituent of the BPI Philippine Corporate Bond Index, a security must meet the following criteria:

	Minimum Amount Outstanding	***Time to Maturity***
BPI Philippine Corporate Bond Index	PHP 7.5 billion	Greater than 1 year

4.3 Constituent Weighting

Every security in the Index Universe is held in proportion to its Market Capitalization.

Market capitalization of each security is computed based on its dirty price with coupon accrual computed net of withholding tax rate (currently at 20%). The calculation method is provided in Appendix A.

4.4 Constituent Limits

Aggregate weighting of securities from a single issuer may not be more than 15% of the Index. Furthermore, aggregate weighting of securities issued by companies from a single Business Group may not exceed 35% of the Index. It is at the full discretion of the BPI Index Committee to act upon any circumstance that may prevent the implementation of this provision.

5 MONTHLY REVIEW

5.1 Timing

The Monthly Review of the Index Universe takes place at the end of the last Business Day of each month at the Monthly Review Date.

Changes to the Index Universe resulting from the Monthly Review are effective immediately after reasonable allowance for checking of Index computations and rebalancing of tracking portfolios.

5.2 Review Process

The Monthly Review process resets the Index portfolio to reflect a new Index Universe.

The new Index Universe comprises of all eligible securities meeting the requirements for inclusion (See Section 4.2) as of the end of the last Business Day of each month.

Securities meeting eligibility requirements which were not members are added, while securities which were members, which no longer meet the requirements for inclusion, are removed. New weights are computed based on the new Index Universe.

The Index is rebalanced to match the new Index Universe and new weights.

6 DAILY REVIEWS

6.1 Daily Index Weighting

In between Monthly Reviews, the index weights change so as to mimic a "passive" portfolio. That is a portfolio where trading is minimized. This means that the index weights drift with the prices of the corresponding bonds as bond prices change, interest is accrued, and coupon payments received.

6.2 Receipt of Coupon Payments

Cash coupon payments are computed net of tax.

In between Monthly Reviews, the cash coupon payments are held as cash intra-month and do not accrue any return. The cash coupon payments are reinvested in the Index at the succeeding Monthly Review Date.

6.3 New Issuances

New issuances of eligible securities in between Monthly Reviews shall be taken into consideration for inclusion in the Index Universe on the next Monthly Review Date.

6.4 Issuer Actions

Effects of any issuer action in between Monthly Reviews such as re-issuances and bond swaps shall be taken into account on the next Monthly Review Date.

6.5 Bonds with Call Options

Cash proceeds from bonds that are called by the issuer shall be held in cash intra-month and do not accrue any return. The cash proceeds are reinvested in the Index at the succeeding Monthly Review Date.

6.6 Bond Defaults

In between Monthly Reviews, defaulted bonds are held in the Index Universe weighted at its Market Capitalization using latest published market prices reflecting the bond default. In case there is no published market price for defaulted bonds, the bonds shall be priced by the Calculation Agent using perceived recovery value.

6.7 Addition or Removal of Constituents

No securities are added or removed from the Indices in between Monthly Reviews.

7 DAILY CALCULATIONS

Closing values, including Index Analytical Values of the Index are calculated and distributed once daily on each following Business Day. The approximate publication time is 11:00 AM (Philippine time).

Index data is published in the Bank of the Philippine Islands website (www.bpiindex.com), and may be distributed to various electronic platforms.

7.1 Index Return

Index Return is calculated after the end of each Business Day (See Appendix A.3 for calculation formula).

The computation of the Index Return on the first Business Day after the Monthly Review will use the previous day Market Capitalization of the new Index Universe as basis.

On non-Business Days, returns will reflect coupon accruals only.

7.2 Index Values

Index Values are calculated after the end of each Business Day (See Appendix A for calculation formulae).

7.3 Index Analytical Values

Index Analytical Values are calculated after the end of each Business Day (See Appendix B for calculation formulae of Index Analytical Values).

7.4 Calculation Errors

If an error in calculation is discovered, the Calculation Agent may revise the Index Value provided that the error occurred within ten Business Days from the date of discovery. If an error is discovered beyond ten Business Days, the Index Value will no longer be corrected unless it is deemed significant by the BPI Index Committee.

8 ANNOUNCEMENTS

8.1 Monthly reviews

The Calculation Agent typically announces Monthly Review constituent changes at the first Business Day of every month. However, this is not a binding commitment on the part of the Calculation Agent, and there may be delays before such announcements are made.

8.2 Amendments

If an announcement needs to be amended, then the Calculation Agent issues a replacement announcement as soon as is reasonably practicable. The Calculation Agent makes every attempt to be as accurate as possible, and it cannot be held responsible for any actions subscribers take relating to announcements which are subsequently amended.

8.3 Dissemination

Announcements are available on the Sponsor's website (www.bpiindex.com).

9 DISTRIBUTION

9.1 Index Values

Final Index Values and Index Analytical Values are normally sent to electronic data systems by 11:00 AM (Philippine time) of the following Business Day. Any actual delay of the publication of such data by electronic platform providers will depend on the internal procedures of each provider. The Calculation Agent cannot be held responsible for any errors, intentional or unintentional, on the part of the data provider.

9.2 Constituent Data

Constituent data is only available from the Sponsor and at the absolute discretion of the Sponsor.

9.3 Index Data

Index data, other than Index data available through authorized electronic platforms, is only available directly from, and at the absolute discretion of, the Sponsor.

10 ABOUT THE SPONSOR AND CALCULATION AGENT

10.1 The Sponsor

The Sponsor is Bank of the Philippine Islands. For information about the Index, obtaining a license to use the Index and for products associated with the Index, contact the Sponsor:

Bank of the Philippine Islands
BPI Building, 6768 Ayala Avenue, corner Paseo de Roxas,
Makati City 1226
Metro Manila, Philippines

10.2 The Calculation Agent

For information relating to these Rules and other services provided by the Calculation Agent, please contact the latter at:

BPI Investment Management Inc.
bpi_investment@bpi.com.ph
18th Floor, BPI Building, 6768 Ayala Avenue, corner Paseo de Roxas,
Makati City 1226
Metro Manila, Philippines

APPENDIX A: INDEX CALCULATION

A.1 Market Capitalization

$$\boldsymbol{MC_t} = \sum_{j=1}^{n} \boldsymbol{A_j} \times \{\frac{\boldsymbol{P_{j,t}}}{\mathbf{100}} + [\boldsymbol{r_j}(\mathbf{1}-\boldsymbol{T}) \times \boldsymbol{d_{j,t}}]\}$$

Where:

MC_t = *Index Market Capitalization on day t*

A_j = *Amount outstanding of security j as of index rebalancing date (in PHP)*

$P_{j,t}$ = *Clean price of security j on day t*

r_j = *Coupon rate of security j (in %)*

T = *Withholding tax rate of 20%*

$d_{j,t}$ = *Time since last coupon payment of security j on day t (in years, using 30/360 day count convention)*

A.2 Constituent Weighting

$$W_{j,t} = \frac{\boldsymbol{A_j} \times \{\frac{\boldsymbol{P_{j,t}}}{\mathbf{100}} + [\boldsymbol{r_j}(\mathbf{1}-\boldsymbol{T}) \times \boldsymbol{d_{j,t}}]\}}{MC_t}$$

Where:

$W_{j,t}$ = *Index weight of security j on day t*

A.3 Index Return

The Index return is a weighted average return of its constituent companies, where the weights are calculated as described in section 7.2.1 of the main document.

$$R_t = \frac{MC_t + \sum_{i=1}^{t} C_i}{MC_{t-1} + \sum_{i=1}^{t-1} C_i} - 1$$

Where:

R_t = *Index return on day t*

C_i = *Total coupons received from all securities in the index on the* i^{th} *working day of the month*

A.4 Index Level

$$I_t = I_{t-1} \times (1 + R_t)$$

Where:

I_t = *Index level on day t*

APPENDIX B: OTHER DAILY CALCULATIONS

B.1 Average Yield to Maturity

$$Y_t = \sum_{j=1}^{n}(Y_{j,t} \times W_{j,t})$$

Where:

Y_t = *Index yield on day t*

$Y_{j,t}$ = *Yield of security j on day t*

B.2 Average Modified Duration

$$D_t = \sum_{j=1}^{n}(D_{j,t} \times W_{j,t})$$

Where:

D_t = *Index duration on day t*

$D_{j,t}$ = *Duration of security j on day t*

B.3 Average Time to Maturity

$$L_t = \sum_{j=1}^{n}(L_{j,t} \times W_{j,t})$$

Where:

L_t = *Index life on day t*

$L_{j,t}$ = *Life of security j on day t (in years, using 30/360 day count convention)*

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