



PDS Group

Philippine Dealing System Holdings Corp.

Bond Forward Program Manual

Release Version 1.3

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1. Program and Product Description

- 1.1 PDS Bond Forward Program.** The PDS Bond Forward Program refers to the market framework and infrastructure for Bond Forward Contracts to be traded, cleared, and settled through the PDEX Fixed Income Market. The Bond Forward Program shall be operated by the following:
- 1.1.1 Philippine Dealing & Exchange Corp. (PDEX)** shall provide within its SEC-registered Market, one or more Bond Forward Trading Board/s on its Trading System; develop and implement Trading Rules and Conventions for these Forward Board/s through its Self-Regulatory Organization (SRO) and publish pertinent price and transaction data as warranted to its market stakeholders.
 - 1.1.2** Designated Forward Contract Delivery versus Payment System shall provide the settlement location for the settlement of Bond Forward transactions on their designated settlement date/s.
- 1.2 General Definition of Bond Forwards.** A Bond Forward is a contract to deliver a specified debt security on a specific future date at a specified price. In simpler terms, this instrument may be described as an outright bond transaction with the settlement date set for future delivery.
- 1.2.1** The forward price and forward settlement value of the bond can be calculated using the standard bond valuation method, using the forward settlement date as the date up to which the bond's cash flows get discounted. A forward yield to maturity may be implied from the forward price.
 - 1.2.2** The forward settlement value and forward price is related to the spot settlement value and spot price of the bond through a "funding rate" applicable to the number of days between the standard spot settlement date up to the forward settlement date (see more of the elements of valuation in Chapter 5).
 - 1.2.3** The scope of this PDS Bond Forward Program will be the Fixed-Date Forward Bond Structure (as explained in Chapter 2).

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- 1.3 Objective of the Bond Forward Program.** The primary objective of this Forward Bond Program as structured is to create an interest rate hedge market for use by market participants and stakeholders that have interest rate exposures, through bond positions or portfolios. The hedging medium is the set of forward bond transactions that create the following:
- 1.3.1 Defined price risk exposure/s that can offset the opposite risk exposures, i.e., “short” or “oversold” forward positions offset “long” or “overbought” risk positions natural within bond portfolios. The combination of the forward and spot positions alter the total market risk exposure of a bond portfolio.
 - 1.3.2 The profit or loss from forward bond positions may be from Marked-to-Market (MTM) profit or loss on MTM dates, or Realized profit or loss from settled transactions netted prior to or fully settled on the forward date. These profits or losses serve to counter the loss or profit from opposite spot positions.

2. Fixed-Date Forward Bond Contracts

2.1 Description. The **Fixed-Date Bond Forward** is a forward contract that sets a fixed day on each designated month in the future, i.e., a so-called “contract month”, as a standard settlement date (for example, every 20th day of each of the “contract months” of March, June, September, and December). Under this structure:

2.1.1 On each trading day prior to the future delivery date, every forward contract traded will invoke the same forward settlement date.

2.1.2 As each trading day progresses, the forward tenor (or the time between the trade date and the fixed forward settlement date) shall decrease.

2.1.3 Like an interest rate futures contract which it mimics, the liquidity, fungibility, and tradability of this type of bond forward contract is maximized because of the same forward settlement date fixed by convention. For example, a March 2021 bond forward for the sale/purchase of a specific GS traded on 08 Oct 2020 may be offset by a March 2021 forward contract for the purchase/sale of that GS on the next business day 09 Oct 2020, and so on until the last trading day of the forward contract.

2.2 This structure shall have the following key features:

2.2.1 Eligible Securities. For the purposes of maintaining liquidity and tradability, the eligible securities for the Fixed-Date Forward Bond Board shall be limited to any of so-called “Large Issue Bonds” issued by the Philippine Government, defined as those Government bonds with an outstanding issue size of PHP 50 Billion or higher, having a remaining maturity of three (3) Years or longer and, ranking within the top twenty five (25) most traded bonds for a rolling twelve (12) month window refreshed every three (3) months. The table below is an example of the list of eligible Large Issue Bonds as of October 2021:

Rank	Security Name	Security Code	Years Remaining	Outstanding Amount as of Oct 2021 (in PhP MM)	Total One-Sided Volume (in PhP MM)
1	PIID0525H130	RTB 05-13	3.78	516,340.79	377,057.10
2	PIBD0728D649	FXTN 07-64	6.48	260,971.00	292,436.19
3	PIBD0526D772	FXTN 05-77	4.44	155,000.00	292,147.10
4	PIBD1027E617	FXTN 10-61	5.51	248,936.00	251,791.22
5	PIBD1025I608	FXTN 10-60	3.86	288,659.52	139,990.13
6	PIBD1030G655	FXTN 10-65	8.69	165,000.00	78,619.00
7	PIBD1031G662	FXTN 10-66	9.73	154,950.00	69,829.60
8	PIBD0726B627	FXTN 07-62	4.29	147,602.00	57,307.96
9	PIBD2031G171	FXTN 20-17	9.72	255,837.15	38,750.85
10	PIBD1029A644	FXTN 10-64	7.20	185,000.00	37,795.20
11	PIBD0728H654	FXTN 07-65	6.79	169,893.00	36,516.66
12	PIBD2540I116	FXTN 25-11	18.87	217,558.01	35,854.70
13	PIBD2033C206	FXTN 20-20	11.39	127,340.35	19,765.28

Note: There is a potential shortening of the above list based on the suggestion from Members of the Market Governance Board to concentrate market focus and liquidity.

2.2.2 Standard Forward Settlement Dates. To concentrate liquidity and improve tradability of the bond forward contracts, the forward settlement dates for the Fixed Date Bond Forward Board shall be fixed on the same forward date. To facilitate the creation of forward series useful for hedging interest rate exposures, forward settlements will be spaced three months apart.

2.2.2.1 The standard contract months shall be March, June, September, and December of every year.

2.2.2.2 The standard settlement date within each forward contract month above shall be the 20th day of the contract month. If the forward settlement date falls on a non-business day or holiday, it shall be adjusted to the next succeeding business day which is not a legal holiday.

2.2.3 Trading System. The Fixed-Date Bond Forward trades can be executed on the designated PDEX Trading System using the Trade Confirmation Ticket.

2.2.3.1 The ticket shall allow the forward participants to send proposal for the forward transactions.

2.2.3.2 When a trade proposal is affirmed by the Receiving Party, the Forward Bond Trade shall be reflected in the Trade Blotter of both parties.

2.2.4 Outright Bond Forward Contracts. The Bond Forward transacted under this structure shall be Outright Forward Contracts for any of the Eligible Bonds above. That is:

2.2.4.1 The forward contract shall bind the Seller to deliver the specified eligible bond to and receive proceeds from the Buyer based on the specified price on the set future settlement date.

2.2.4.2 The forward contract shall bind the Buyer to accept delivery of the specified eligible bond from and pay the proceeds to the Seller based on the specified price on the set future settlement date.

2.2.5 Settlement of Fixed-Date Bond Forward Contracts

2.2.5.1 DvP Settlement. The contractual commitments of the Seller and the Buyer make each PDEX Fixed-Date Bond Forward transaction eligible to settle through a designated Forward Contract Delivery versus Payment System.

2.2.5.1.1 By default, all Bond Forward Contracts shall be sent for authorization on the settlement queue of the PDEX Trading Participant on the designated Forward Contract Delivery versus Payment System.

2.2.5.1.2 Each forward trade authorized by both Trading Participants can then proceed for settlement on a gross basis on the designated Forward Contract Delivery versus Payment System on the settlement date.

2.2.5.2 Bilateral Net Settlement. Because of the number of trading days prior to a fixed forward settlement date, two forward trading counterparts may accumulate a high number of forward purchases and sales against each other. A Fixed-Date Bond Forward Buyer and a Fixed-Date Bond Forward Seller can therefore choose to fulfill their settlement obligations by offsetting their purchase and sale contracts of the same security, the same face amount, and the same forward date to one another and determine a single net settlement obligation.

2.2.5.2.1 Each Forward Participant is responsible for the bilateral net settlement arrangement it establishes with each of its counterparties.

2.2.5.2.2 Participants that opt for net settlement may utilize a PDEX system for Bilateral Net Settlement to confirm and authorize which fixed-date forward contracts on their bilateral settlement queue shall be offset for the net settlement and hence be netted for final settlement at the designated Forward Contract DvP System on settlement date.

2.2.5.2.3 In a bilateral net settlement process for the same face amount of forward purchases and sales, the resulting obligation on the forward settlement date shall be a net cash payment by the “losing” party to the “gaining” party because the purchase and sale face amounts offset perfectly.

2.2.5.2.4 This Net Cash Payment shall be effected through a regular *PhilPaSS* interbank payment instruction.

3. Bond Forward Program Participants

This section describes the qualifications and responsibilities of the Bond Forward Program Participants.

3.1 Eligible Trading Participants. A Bond Forward Program Participant must be a Forward Contract Delivery versus Payment System Participant which can either be a:

3.1.1 Dealing Participant including a Dealing Participant executing trades by its QIB Clients; or

3.1.2 Brokering Participant for QIB Clients.

3.2 Program Operator. PDEx as the Bond Forward Program Operator shall ensure that all Bond Forward Program Participants abide by the Bond Forward Program Rules and provide the following services:

3.2.1 Set criteria for the admission of Bond Forward Program Participants.

3.2.2 Provide the Bond Forward Trading Facility that will allow:

3.2.2.1 Entry of Bond Forward Transactions

3.2.2.2 Electronic confirmations of Bond Forward Transactions

3.2.2.3 Publication of Daily Bond Forward market statistics such as Time and Sales Reports and the open, high and low Bond Forward prices done for standard tenors.

3.2.2.4 Upload Bond Forward trades to the designated Forward Contract Delivery versus Payment System for settlement processing.

3.2.3 Develop and monitor adherence to the Bond Forward Program Trading Conventions as well as the Bond Forward Program Settlement Conventions.

3.2.4 Oversee arbitration proceedings arising from settlement disputes and impose sanctions on errant participants when required.

3.2.5 Monitor the orderly conduct of daily activities in the Bond Forward market.

4. PDS Bond Forward Trading Mechanics

4.1 Pre-Transaction Process - Counterparty Limits.

- 4.1.1 Bond Forward Participants shall ensure availability of counterparty credit lines (Pre-settlement risk limits) for other participants.
- 4.1.2 Bond Forward Participants, through their authorized Credit Officers, shall be responsible for ensuring that aggregate counterparty limits for QIB Bond Forward Participants do not exceed the Tier 1 Capital Limit for their FIQB.
- 4.1.3 For simplicity, Participants shall be asked to input the total face amount that will be allowed against each of its Bond Forward Counterparties within the trading system.

4.2 Trade Execution. The following trade execution guidelines shall be observed:

- 4.2.1 A Calling Party shall send a trading ticket to a Receiving Party (the Calling Party's trade counterpart) with the Forward Bond Trade proposal.
- 4.2.2 The Receiving Party shall then review, affirm, or reject the trade proposal.
- 4.2.3 When the trade proposal is affirmed by the Receiving Party, the Forward Bond Trade shall be reflected in the Trade Blotter of both parties.
- 4.2.4 The Forward Bond Counterparties shall each send a copy of the trade confirmation ticket to PDEX Market Operations, until such time that a centralized Forward Bond Trade Blotter is provided by the technology provider.

4.3 Trade Ticket Screen. This image is a sample trade ticket for the Bond Forward transactions.

BUY TICKET

RPGB 3 % 09/09/25 Corp		SEND	SETTINGS
Trade Date <input type="text"/>			
Trade Information			
Trader <input type="text"/>			
At <input type="text"/>			
BUY	<input type="text"/>	M	of RPGB 3 % 09/09/25
Gross Price <input type="text"/>	Gross Yield <input type="text"/>		
Net Price <input type="text"/>	Net Yield <input type="text"/>		
Settlement <input type="text"/>			
Trade Numbers			
View Amounts in PHP			
Principal Type	<input checked="" type="radio"/> Gross	<input type="radio"/> Net	
Principal	PHP		0.00
Tax (on Discount/Premium)			0.00
Accrued (0days)			0.00
Tax on Accrued [20.00 %]			0.00
Total	PHP		0.00

SELL TICKET

RPGB 3 % 09/09/25 Corp		SEND	SETTINGS
Trade Date <input type="text"/>			
Trade Information			
Trader <input type="text"/>			
At <input type="text"/>			
SELL	<input type="text"/>	M	of RPGB 3 % 09/09/25
Gross Price <input type="text"/>	Gross Yield <input type="text"/>		
Net Price <input type="text"/>	Net Yield <input type="text"/>		
Settlement <input type="text"/>			
Trade Numbers			
View Amounts in PHP			
Principal Type	<input checked="" type="radio"/> Gross	<input type="radio"/> Net	
Principal	PHP		0.00
Tax (on Discount/Premium)			0.00
Accrued (0days)			0.00
Tax on Accrued [20.00 %]			0.00
Total	PHP		0.00

- 4.4 Bond Forward Trading Blotter.** The image below shows the Bond Trading Blotter which shall display all the Bond Forward trades done by a Bond Forward Participant for the day.

					Voice Confirmation		
B/S	Amount	Security	Price	Counterparty	Status	Trade Date	Settlement Date
B	50,000,000	RPG 3 5/8 09/09/25	98.7954	ABC Corp.	Accepted	11/08/2021	12/20/21
B	50,000,000	RPG 3 5/8 09/09/25	99.2812	DEF Corp.	Accepted	11/08/2021	12/20/21
S	100,000,000	RPG 2 5/8 08/12/25	98.7934	GHI Corp.	Accepted	11/08/2021	12/20/21
S	100,000,000	RPG 6 7/8 01/10/29	98.6987	JKL Corp.	Accepted	11/08/2021	12/20/21

- 4.5 Forward Bond Transactions Time and Sales Publication.** PDEX shall publish the consolidated bond forward transactions of all Forward Participants in PDEX's Publication pages (i.e., MarketPage and PDS Website) that will be separate from Spot GS transaction Time & Sales.

5. Pricing and Valuation

5.1 This section describes one approach that may be used in determining the forward price for a specified bond to assist Bond Forward Participants in formulating forward prices. Bond Forward Participants, however, remain ultimately responsible for the pricing models they will utilize when transacting Bond Forwards.

5.2 Pricing Framework. The Bond Forward price framework below is premised on the assumption that the forward price of a bond is linked to the spot price of a bond via a funding rate as shown in the following diagram:



5.2.1 The link market can be seen by combining activities an institution would take to offset a forward position in the spot market. The following combinations show that an established repo market is a natural funding reference between the spot and Bond Forward markets.

5.2.1.1 A Bond Forward purchase may be offset by a spot bond sale, and a firm effectively creates a repo position (spot sale and forward purchase).

5.2.1.2 A Bond Forward sale may be offset by a spot bond purchase and a firm effectively creates a reverse repo position (spot purchase and forward sale).

5.2.2 However, any other money market interest rate may apply as the funding reference rate between the spot settlement date and forward settlement date as shown in this diagram:



5.2.2.1 The Funding Reference Rate applied to the Spot Gross Settlement Price of the Bond (Dirty Price After Tax) results in a Forward Gross Settlement Price of the Bond Forward.

5.2.2.2 The Forward Clean Price (used for accounting) can then be derived from traded Forward Gross Settlement prices (Forward Dirty Prices After Tax).

5.3 Step by Step Pricing Methodology

- 5.3.1 Determine Spot Gross Settlement Price of the Bond (Dirty Price After Tax)
- 5.3.2 Establish a Funding Reference Rate (i.e., repo rate or suitable proxy from money market)
- 5.3.3 Apply Funding Reference Rate with adjustment for final withholding tax to Spot Gross Settlement Price to derive Unadjusted Forward Gross Settlement Price
- 5.3.4 Determine if a coupon payment will occur prior to forward settlement date and Forward Gross Settlement price needs to be adjusted
 - 5.3.4.1 If YES, then Adjustment = - [Net Coupon Payment¹ + (Net Coupon Payment x Funding ref. rate / 360 x days from coupon date to forward settlement date) x (1-FWT)]
 - 5.3.4.2 If NO, then Adjustment = 0
- 5.3.5 Forward Gross Settlement Price / Amount has the direct link to Spot Gross Settlement Price / Amount. This is the fastest reference for forward traders to gauge the movement against spot prices.

5.4 Worked Example for two Forward Bond Transactions. The following are worked examples for determining the price of a Bond Forward contract for two bonds: a.) with no coupon payment between, and b.) with coupon payment between for settling on June 20, 2020, as valued from April 08, 2022 (73 days back):

5.4.1 Spot Market Value of Bond

Bond Type	T- Bond 1		T-Bond 2	
Series Name	FXTN 10-66		RTB 20-01	
Next Coupon Date	22-Jul-2022		01-Jun-2022	
Maturity Date	22-Jul-2031		01-Mar-2032	
Valuation Date	08-Apr-2022		08-Apr-2022	
Remaining Tenor (t) years	9.29 yrs.		9.90 yrs.	
Coupon	4.0000%		5.8750%	
Yield to Maturity (ytm)	5.8000%		5.8000%	
	Price	Amount	Price	Amount
Face Amount (PHP)		100,000,000.00		100,000,000.00
Clean Price	87.20567322	87,205,673.22	100.55920143	100,559,201.43
Adjusted Clean Price (ACP)	89.22853410	89,228,534.10	100.47235850	100,472,358.50
Accrued Interest (AI)	0.84444444	844,444.44	0.60381944	603,819.44
Tax on Accrued	0.16888889	168,888.89	0.1207689	120,763.89
Net Accrued Interest (NAI)	0.67555556	675,555.56	0.48305556	483,055.56
Spot Gross Settlement Price (ACP+NAI)	89.90408966	89,904,089.7	100.95541406	100,955,414.06

¹ Net Coupon Payment = Coupon Payment x (1-FWT)

5.4.2 Calculation of Forward Price

Forward Calculations	FXTN 10-66		RTB 20-01	
Forward Settlement Date	20-Jun-2022		20-Jun-2022	
Funding Reference Rate	1.5000%		1.5000%	
Forward Tenor (t)	73 days		73 days	
Need for Forward Adjustment (Y/N)	No		Yes	
	Price	Amount	Price	Amount
Spot Gross Settlement Value	89.90408966	89,904,089.66	100.95541406	100,955,414.06
+ Funding Interest Net of Tax	0.21876662	218,766.62	0.24565817	245,658.17
= Unadjusted Fwd. Gross Settlement	90.12285627	90,122,856.27	101.20107223	101,201,072.23
- Net Cpn. Payment before Fwd Date	0.00000000	-	1.17500000	1,175,000.00
- Net Cpn. Reinvestment to Fwd Date	0.00000000	-	0.00074417	744.17
Adjusted Fwd. Gross Settlement	90.12285627	90,122,856.27	100.02532806	100,025,328.06

5.4.3 Reverse Calculations From Forward Gross Price to Forward Clean Price (for Accounting)

Reverse Calculations	Price	Amount	Price	Amount
Adjusted Fwd. Gross Settlement	90.12285627	90,122,856.27	100.02532806	100,025,328.06
Forward Clean Price	86.70481287	86,704,812.87	99.73558939	99,735,589.39
Forward Adjusted Clean Price	88.80730072	88,807,300.72	99.77727251	99,777,272.51
Forward Price Adjustment	-2.10248785	(2,102,487.85)	-0.04168312	(41,683.12)
Forward Acc Interest	1.64444444	1,644,444.44	0.31006944	310,069.44
Forward Tax on AI	0.32888889	328,888.89	0.06201389	62,013.89
Forward Net Acc Interest	1.31555556	1,315,555.56	0.24805556	248,055.56
Forward Dirty Price	88.34925731	88,349,257.31	100.04565883	100,045,658.83
Forward YTM	5.9112%		5.9108%	

5.5 Valuation Framework. The above approach determines the pricing linkage between the spot and Bond Forward markets.

5.5.1 Once the Bond Forward markets have traded prices, the Forward Gross Settlement Prices transacted between Bond Forward Participants form a quick market valuation reference for traders' outstanding GS Bond Forward positions. The Forward Gross Prices also provide a direct comparative reference to Spot Gross Prices.

5.5.2 For accounting purposes, with the fixed forward settlement date, the outstanding Bond Forward contract rate can be compared against the daily Closing Forward Gross Settlement Price of that contract month (or the weighted average thereof). This can then be reverse calculated to the Forward Clean Price so that a mark-to-market profit and loss for the forward position can be accounted for daily.

6. Accounting for Bond Forward Transactions

6.1 Accounting Standard. The following accounting approach is compliant with Philippine Financial Reporting Standard 9 (PFRS 9) that provides guidelines for the recognition and derecognition, classification and measurement of financial assets and financial liabilities, impairment, and hedge accounting. Institutions will have to make the appropriate adjustments to their entries if the forward transactions will be used as hedges to their securities portfolio.

6.2 Approach in Accounting for Bond Forward Transactions. The approach in accounting for a forward bond contract can be divided into the following three stages: a) Contract Initiation; b) Term of the Contract; and c) Settlement.

6.2.1 Contract Initiation. During contract initiation, market participants enter bond forward contracts either taking the position of a buyer or a seller, and consequently, act as a counterparty to each other. In this stage, the market participants agree on the tenor of the forward contract, the underlying government bond, and the forward price.

6.2.1.1 Under the settlement date accounting, the market participants (buyer and seller) shall not recognize a separate financial asset or liability upon the inception of the forward bond contract, as there have been no transfers or delivery of the underlying debt instrument.

6.2.1.2 Both the buyer and the seller will just record a memo entry in their books.

6.2.1.3 The amount in the memo entry is the forward dirty price after tax, which represents the total amount to be paid at the settlement date. This amount is referenced as an off-balance sheet item on the books of the seller and the buyer.

6.2.2 Term of the Contract. During the term of the forward contract, market participants recognize mark-to-market adjustments by adjusting for changes in the fair value of the forward contracts, resulting to the recognition of a derivative asset or liability.

6.2.2.1 Both buyer and seller will recognize fair value adjustments daily and recognize either a derivative asset or liability in the Statement of Financial Position.

6.2.2.2 The changes in the fair value of the forward bond contracts are recognized under Profit or Loss in the Statement of Comprehensive Income.

6.2.2.3 Cumulative fair value increase (decrease) can be determined by comparing forward adjusted clean prices at the Inception Date and at Mark-to-Market Date.

6.2.3 Settlement by Close-Out². During the settlement stage, market participants may close out the forward bond contract prior to forward settlement date or settle the transaction at the forward settlement date.

6.2.3.1 The buyer and the seller will recognize a fair value adjustment equal to the difference between the (1) forward bond adjusted clean price as at close out date, at a tenor equal to the remaining term of the forward bond contract, against (2) the forward bond adjusted clean price used to value the derivative yesterday.

6.2.3.2 Reversal of memo entry on the purchase/sale of forward bond contract.

6.2.3.3 At settlement to close-out, the buyer(seller) will receive a net cash from the seller (buyer).

6.2.4 Settlement on the Forward Date. Upon settlement of the forward bond contract, the market participants (buyer and seller) will derecognize the carrying amount of the derivative asset or liability, recognize (derecognize) the government security and the related accrued interest after tax, and the resulting gain or loss.

6.2.5 Worked Example for a Bond Forward Transaction. The following sample data are used for the pro-forma entries.

Sample Forward Bond Transaction

Inception date	Nov. 19, 2020
Forward Settlement Date	Mar. 20, 2021
Government Security Series	FXTN 10-60
Face Value	PHP 100,000,000
Forward Adjusted Clean Price	94.5869045
Forward Dirty Price After Tax	94.6352379

6.2.5.1 Contract Initiation. The buyer and the seller shall record a memo entry in their books.

- **Buyer Purchased** a forward bond contract (Bond Reference Number) for ₱ 94,635,237.90, including accrued interest net of taxes (₱ 48,333.40), for future delivery in March 20, 2021 (Settlement date).
- **Seller Sold** a forward bond contract (Bond Reference Number) for ₱ 94,635,237.90, including accrued interest net of taxes (₱ 48,333.40), for future delivery in March 20, 2021 (Settlement date).

² **Close-out** refers to a reversing sale/purchase of the same bond at the same amount and at the forward settlement date with the original seller/buyer.

6.2.5.2 Term of the Contract. The buyer and the seller shall record the mark-to-market adjustments.

6.2.5.2.1 Increase in the fair value of the forward bond contract resulting in gain (Buyer) and loss (Seller).

Scenario. Assuming as of November 20, 2020, the forward bond contract adjusted clean price is at 95.497277.

Forward bond adjusted clean price:

At inception date	94.5869045
At mark-to-market (MTM) date	95.497277
Cumulative fair value increase (decrease)	<u>0.9103725</u>

6.2.5.2.2 Decrease in in the fair value of the forward bond contract resulting in loss (Buyer) and gain (Seller).

Scenario. Assuming as of November 20, 2020, the forward bond contract adjusted clean price is at 93.381302.

Forward bond adjusted clean price:

At inception date	94.5869045
At mark-to-market (MTM) date	93.381302
Cumulative fair value increase (decrease)	<u>(1.2056025)</u>

6.2.5.3 Settlement by Close-Out.

6.2.5.3.1 As at close out date, increase in the fair value of the forward bond contract resulting in gain (Buyer) and loss (Seller).

Scenario. Assuming that the buyer decided to close out the position on November 21, 2020, at a forward price of 96.013801.

Forward bond adjusted clean price:

As at yesterday	95.497277
As at "close out date"	96.013801
Gain (loss) from closing out the derivative	<u>0.516524</u>

6.2.5.3.2 The memo entry to record the sale of forward bonds should also be reversed. Cancelled memo entry on forward bond purchased (buyer)

and forward bond sold (seller) on November 19, 2020, by entering into an opposite transaction with the same counterparty at a forward price of 96.013801.

6.2.5.3.3 At settlement date, the seller will pay net cash to the buyer. The net cash settlement reflects the running MTM adjustments of ₱910,372.54 on November 20, 2020, and ₱516,524.00 on November 21, 2020.

6.2.5.4 Delivery of Bond and Payment of Forward Price at Settlement Date.

6.2.5.4.1 Upon settlement of the forward bond contract, the market participants (buyer and seller) will derecognize the carrying amount of the derivative asset or liability, recognize (derecognize) the government security and the related accrued interest after tax, and the resulting gain or loss.

Scenario. Assuming that the government securities' spot rate as at settlement date is 97.038519 and balance of derivative asset (liability) is ₱1,426,896.54.

6.2.5.4.2 Upon settlement of the derivative forward bond contract, the buyer records the acquisition of the underlying government security and the related accrued interest.

6.2.5.4.3 The memo entry to record the purchase of forward bonds should also be reversed.

6.2.5.4.4 Upon settlement of the derivative forward bond contract, the seller records the sale of the underlying government security and the derecognition of the related accrued interest.

Bond Forward Program

6.2.6 Bond Forward Accounting Entries. The following are the Accounting Entries reflecting the set of activities of a Forward Seller and Forward Buyer while the forward contract is outstanding.

Stage 1. Contract Initiation

BUYER	SELLER
MEMO ENTRY. Purchased a forward bond contract (Bond Reference Number) for ₱ 94,635,238, including accrued interest net of taxes (₱48,333), for future delivery on March 20, 2021 (Settlement date).	MEMO ENTRY. Sold a forward bond contract (Bond Reference Number) for ₱94,635,238, including accrued interest net of taxes (₱48,333), for future delivery on March 20, 2021 (Settlement date).

Stage 2. During the Term of the Contract

Mark-to-Market Adjustments

- a. Increase in the fair value of the forward bond contract resulting in gain (Buyer) and loss (Seller)

BUYER			SELLER		
DR	Derivative Asset - Forward Bond Contract	910,372.54	DR	Loss from Forward Bond Contract ³	910,372.54
CR	Gain from Forward Bond Contract*	910,372.54	CR	Derivative Liability - Forward Bond Contract	910,372.54

³ *Different account titles may be used depending on each market participant's internal accounting policies and its need for detailed reporting on realized and unrealized gains or losses.

- b. Decrease in the fair value of the forward bond contract resulting in loss (Buyer) and gain (Seller)

BUYER			SELLER		
DR	Loss from Forward Bond Contract	1,205,602.54	DR	Derivative Asset - Forward Bond Contract	1,205,602.54
CR	Derivative Liability - Forward Bond Contract	1,205,602.54	CR	Gain from Forward Bond Contract	1,205,602.54

Stage 3. Settlement

- a. As at close out date, increase in the fair value of the forward bond contract resulting in gain (Buyer) and loss (Seller)

BUYER			SELLER		
DR	Derivative Asset - Forward Bond Contract	516,524.00	DR	Loss from Forward Bond Contract*	516,524.00
CR	Gain from Forward Bond Contract ⁴	516,524.00	CR	Derivative Liability - Forward Bond Contract	516,524.00

⁴ *Different account titles may be used depending on the market participants' accounting policies and the need for detailed reporting on realized and unrealized gains or losses

b. Reversal of memo entry on the purchase/sale of forward bond contract

BUYER	SELLER
MEMO ENTRY. Cancelled memo entry on forward bond purchased (Bond Reference Number) on November 19, 2020, by entering an opposite transaction with the same counterparty at a forward price of 96.013801.	MEMO ENTRY. Cancelled memo entry on forward bond sold (Bond Reference Number) on November 19, 2020, by entering an opposite transaction with the same counterparty at a forward price of 96.013801.

c. The buyer (seller) will receive net cash from the seller (buyer)⁵

BUYER			SELLER		
DR	BSP Demand Deposit Account (DDA)	1,426,896.54	DR	Derivative Liability - Forward Bond Contract	1,426,896.54
CR	Derivative Asset - Forward Bond Contract	1,426,896.54	CR	BSP Demand Deposit Account (DDA)	1,426,896.54

NOTE: The net cash settlement reflects the running MTM adjustments of PHP 910, 372.54 on 20 Nov 2020 & PHP 516, 524.00 on 21 Nov 2020 in the “Derivative Asset - Forward Contract” account, which gets closed upon receipt of the actual net cash settlement from the original selling counterparty.

⁵ Cash settlement, which is based on the balance of the derivative asset, will still be adjusted for taxes and effect of time value of money. Determining the effects of such is outside the scope of this report

Delivery of Bond and Payment of Forward Price at Settlement Date

BUYER			SELLER		
DR	GS Bond Purchased (FVTPL, FVTOCI or AC)	97,038,519	DR	BSP DDA	94,635,237
	Acc. Interest Rec. -	48,333		Derivate Liability -	1,426,897
	GS Bond Purchased			Forward Bond Contract	
CR	BSP DDA	94,635,237		Loss from Forward Bond	1,024,718
	Derivate Asset -	1,426,897		Contract	
	Forward Bond Contract			GS Bond Sold (FVTPL, FVTOCI or AC)	97,038,519
	Gain from Forward	1,024,718		Acc. Interest Rec. -	48,333
	Bond Contract ⁶			GS Bond	
				Sold	

Reversal of memo entry on the purchase/sale of forward bond contract:

BUYER	SELLER
MEMO ENTRY. Cancelled memo entry on forward bond purchased (Bond Reference Number) on November 19, 2020, by purchasing the bonds at the forward price.	MEMO ENTRY. Cancelled memo entry on forward bond sold (Bond Reference Number) on November 19, 2020, by selling the bonds at the forward price.

⁶ Different account titles may be used depending on the market participants' accounting policies and the need for detailed reporting on realized and unrealized gains or losses

7. Risk Assessment & Management

7.1 Market Risk. A Bond Forward transaction creates a “long” or “short” forward debt securities position for a Buyer or Seller and shall create profit and loss based on the fluctuations of interest rates.

7.1.1 The instrument will be affected by two interest rates, the longer-term interest rate affecting the spot price of the bond purchased or sold, and the shorter-term interest rate affecting the link instrument (e.g., repo) between the spot and forward settlement date.

7.1.2 Like other debt securities instruments, market risk for Bond Forward positions should be controlled by Trading Participants through their internal Interest Rate Limits (e.g., Interest Rate VAR Limits, Securities Position Limits, Stop Loss Limits etc.)

7.2 Counterparty Credit Risk. A Bond Forward transaction creates reciprocal obligations between a Seller and a Buyer, i.e., the obligation for the Seller to deliver the Bond against the Buyer’s obligation to pay the cash proceeds at the forward settlement date.

7.3 Credit Risk. Bond Forward Contracts involve purchases or sales of Phil. Government Securities, and these exposures should be included in Trading Participants’ Credit Risk limits controlling exposures to the Philippine Government.

7.3.1 Because forward settlement is to be done on a DVP basis, the primary risk becomes the Pre-Settlement Risk (PSR) quantified as the cost of replacing the Bond Forward contract due to a credit event on the counterparty.

7.3.2 For the auto-matched Bond Forward transactions, Bond Forward Participants can manage their Counterparty Credit risk by utilizing the credit limit module on the trading system that control the face amount of forward contracts that can be matched.

7.4 Operational Risk refers to losses resulting from inadequate or failed internal processes, people, systems, and external factors. For Bond Forward transactions, risk could arise from operational errors that cause late or non-settlement of deliverable securities, inaccurate reporting of Bond Forward positions, or miscalculations of value.

7.5 Regulatory Risk pertains to adverse impact on the Bond Forward Participants positions from changes and adjustments in rules and regulations within the Philippines. All pertinent rules and regulations affecting Bond Forward transactions must be monitored and updated consistently and at all times enforced.

8. Documentation

- 8.1 Bond Forward transactions will be executed on the PDEX Trading System and electronic records as well as printed trading tickets, if any, will document firm obligations of the Bond Forward Program Participants to deliver securities or remit payment to each other on the specified future settlement date.
- 8.2 For good order, all forward bond obligations between each pair of forward trading bilateral counterparties should be governed by a master agreement, such as but not limited to, the International Swap & Derivatives Association (ISDA) Master Agreement.
- 8.3 In addition, the ISDA also provides Credit Support Annex (CSA) templates that are intended to govern the bilateral margining arrangements between each pair of forward trading counterparties.
- 8.4 These bilateral agreements are to be negotiated and agreed upon by both counterparties participating in the forward bond market and remain the responsibility of each forward trading participant.

9. Regulatory Matters

- 9.1 The PDEX FI Market is a Philippine Securities & Exchange Commission (SEC) licensed market and PDEX as an exchange is also a licensed Self-Regulatory Organization (SRO). The Forward Bond Program and the forward market are also covered under all SEC market regulations. The appropriate approvals from the primary regulator will be sought for this Program.
- 9.2 In addition, bond forwards are first-generation financial derivative instruments covered under the macro-prudential regulations of the Bangko Sentral ng Pilipinas for its Supervised Financial Institutions (BSFIs). Specifically, BSP Circular No. 1119 (Amendments to Derivatives Regulations of Banks, Quasi-Banks and Trust Corporations) allows for derivative products that are traded under duly licensed organized markets to be categorized under its “Generally Authorized Derivatives Activities” or “GADA”. To this end, the GADA categorization shall also be sought from the BSP for this Program.

10. Dispute, Enforcement and Resolution

- 10.1 Any and all disputes between or among Trading Participants arising out of or in connection with the Bond Forwards under this program shall be resolved in accordance with the relevant provisions of Rule 11 of the PDEX Rules for the Fixed Income Securities Market, as amended.

11. Fees

11.1 A trading activity fee-based fee schedule shall be implemented with fees to be charged by PDEX to each eligible Forward Participants on a per transaction basis.

11.2 The trading activity fee shall be charged to both parties in the Forward Bond Transaction, i.e., the Forward Buyer, and Forward Seller.

Fee Type	Billing Frequency	Applicable to:	Fee
Trading Activity Fee	Monthly	Forward Bond transaction charged to both parties i.e. the Forward Buyer and Forward Seller	0.0025% of the Face Amount (FA)

12. Bond Forward Trading and Settlement Conventions

The following table contains the Over-the-Counter Trading and Settlement Conventions for Forward Bond Transactions.

Trading and Settlement Conventions for Bond Forwards

1. Coverage

- 1.1. These Conventions on the Trading and Settlement Environment of Forward Bond Transactions (“Forward Bond Trading and Settlement Conventions”) shall be applicable to the trading and settlement activities among the eligible Trading Participants of the Philippine Dealing & Exchange Corp. (PDEX) for Forward Bond Transactions (also referred to as “Forwards”).
- 1.2. A PDEX Trading Participant involved in the trading of Forwards shall be bound by these Forward Bond Trading and Settlement Conventions and the PDEX Rules for the Fixed Income Securities Market, as Amended.
- 1.3. All the secondary forward bond transactions executed on the PDEX trade reporting platform shall be subject to the PDEX trading rules set and as approved by the Securities and Exchange Commission (“SEC”).

2. Definition of Terms

- 2.1. **‘Forward Bond’** is a contract between two (2) Trading Participants to deliver a specified debt security on an agreed specific future date at an agreed price.
- 2.2. **‘Eligible Bonds for Forward Transactions’** - shall refer to the set of securities qualified among the eligibility criteria set forth by PDEX.

Bond Forward Program

- 2.3. **‘Eligible Forward Bond Settlement Date’** - shall refer to the agreed settlement date for forward bond transactions up to the maximum allowable duration set by PDEX.
- 2.4. **‘Forward Bond Trade Reporting Platform’**- shall refer to the trade reporting ticket wherein the forward bond can be executed.
3. **Criteria for Eligibility of Bonds to be Included on Forward Board (Eligible Forward Bond Securities).** The set of securities to be eligible for trading on the trade reporting platform shall be limited based on the following criteria:
- 3.1. **Type of Issuer.** Only Government Bonds or sovereign bonds issued by National Government will be eligible for forward trading.
- 3.2. **Liquidity.** The liquidity of the Government bond will be defined by the two sub criteria of:
- 3.2.1. **Issue Liquidity.** The outstanding issue size of a Government Bond must be at least PHP 50 Billion as of the date of the transaction.
- 3.2.2. **Market Liquidity.** The Government Bond must be within the list⁷ of top 25 most traded issues within the PDEX trading system within the most recent one-year period set by PDEX.
- 3.3. **Tenor.** The Government Bond must have a minimum tenor of three (3) years remaining to maturity to be eligible for forward trading.
4. **List of Eligible Bonds.** The initial list of Government Bonds eligible for forward trading is at **Annex A** of this document. Such list of Eligible Bonds for Forward Transaction shall be reviewed, updated, announced to Trading Participants and disseminated by PDEX through its regular mediums of publication.

Bond Forward Program

- 5. Eligible Trading Participants.** A Bond Forward Program Participant must be a Forward Contract Delivery versus Payment System Participant which can either be a:
 - 5.1. Dealing Participant including a Dealing Participant executing trades by its QIB Clients; or
 - 5.2. Brokering Participant for QIB Clients.
- 6. Trading Days and Hours**
 - 6.1. **Trading Day:** All Forward Bond transactions must be dealt on a business day.
 - 6.2. **Trading Hours:** The Bond Forward Markets shall have two trading sessions daily with the AM Session from **9.00 AM to 12.00 PM** and the PM Session from **2.00 PM to 4.00 PM**.
- 7. Trading Mechanics.** The Trading Participants shall use the trade reporting platform to transact and conclude their trades, except otherwise provided in these Conventions.
 - 7.1. Trade Execution.** The following trade execution guidelines shall be observed:
 - 7.1.1. The initiating party shall send Trade Confirmation Ticket to another counterparty.
 - 7.1.2. The trade ticket recipient shall then review, affirm, or reject trade offer.
 - 7.1.3. When a Deal Proposal is confirmed by the trade ticket recipient, the forward deal shall be reflected in the Trade Confirmation blotter of both parties.
 - 7.1.4. Both counterparties shall send copy trade confirmation ticket to PDEx Market Operations.
 - 7.2. Handling of Error Trade:** Incorrect executed deals may be cancelled at the instance of the Trading Participants involved, Provided, That: (1) both parties shall inform PDEx in writing regarding the reason for trade cancellation within the same Trading Day, (2) the correction is based on manifest error of the parties (e.g., wrong security, yield, wrong tenor); and (3) the correct deal as intended by the parties is executed by them on the same Trading Day.

8. Settlement of Forward Bond Transactions.

8.1. All forward bond transactions executed on the Forward Bond Transactions Trade Reporting ticket shall be sent to the designated settlement authorization portal in accordance with the PDEX Rules. The securities shall settle at the designated Forward Contract Delivery versus Payment System while PHP cash proceeds shall settle at the designated PHP payment and transfer system.

8.2. All forward bond transactions shall be fully delivered on the forward date using the Delivery-versus-Payment (DvP) settlement on forward settlement value date to ensure that delivery of the securities occurs only when payment occurs.

9. Standard Forward Tenors. Every 20th day of the contract months of March, June, September, and December. If the forward settlement date falls on non-business day or holiday, it should be adjusted to the next succeeding business day which is not a legal holiday.

10. Pricing Convention. Quotations for Forward Bond transactions shall be expressed in terms of Forward Gross Settlement Price.

10.1. The Funding Reference Rate applied to the Spot Gross Settlement Price of the Bond (Dirty Price After Tax) results in a Forward Gross Settlement Price of the Forward Bond.

10.2. The Forward Clean Price (used for accounting) can then be derived from traded Forward Gross Settlement Prices (Forward Dirty Prices After Tax).

11. Trading Lot Conventions

11.1. **Standard Trading Amount.** Trading for Bond Forwards shall occur in lots of PHP Fifty Million (PHP 50,000,000) Face Amount of the security.

11.2. **Incremental Trading Lot.** Bond Forwards shall trade in increments PHP One Million (PHP 1,000,000) Face Amount of the security.

Bond Forward Program

- 12. Day Count Standards.** Bond Forwards shall follow the same day count standard for Philippine Government Bonds, i.e., 30E/360 ISMA non end of month.
- 13. Closed Period and Record Date.** For proper calculation, allocation, and payment of coupon proceeds for government security, there is a “closed period” for which settlements and transfers may not occur. This closed period starts from the record date, which is the second (2nd) business day prior to the relevant Interest Payment Date and ends on the day prior to the security’s coupon payment date. Forward trades may be readjusted to fall on forward settlement after the closed period.
- 14. Determination of Forward Settlement Value.** Forward Settlement Values shall be a function of the Face Amount of the security traded multiplied by the Forward Dirty Price after Tax divided by one hundred (100). The Forward Dirty Price after Tax is the sum of the Forward Clean Price after Tax plus the Forward Net Accrued Interest (Accrued Interest less the Tax on Interest) of the security.
- 15. Data Publication.** The daily trading activity for forward bond transactions shall be published in the PDEx’s publication pages.

Bond Forward Program

ANNEX A Eligible GS For Forward Bond Transactions Based on Eligibility Criteria

Rank	Security Name	Security Code	Years Remaining	Outstanding Amount as of Oct 2021 (in PHP MM)	Total One-Sided Volume (In PHP MM)
1	PIID0525H130	RTB 05-13	3.78	516,340.79	377,057.10
2	PIBD0728D649	FXTN 07-64	6.48	260,971.00	292,436.19
3	PIBD0526D772	FXTN 05-77	4.44	155,000.00	292,147.10
4	PIBD1027E617	FXTN 10-61	5.51	248,936.00	251,791.22
5	PIBD1025I608	FXTN 10-60	3.86	288,659.52	139,990.13
6	PIBD1030G655	FXTN 10-65	8.69	165,000.00	78,619.00
7	PIBD1031G662	FXTN 10-66	9.73	154,950.00	69,829.60
8	PIBD0726B627	FXTN 07-62	4.29	147,602.00	57,307.96
9	PIBD2031G171	FXTN 20-17	9.72	255,837.15	38,750.85
10	PIBD1029A644	FXTN 10-64	7.20	185,000.00	37,795.20
11	PIBD0728H654	FXTN 07-65	6.79	169,893.00	36,516.66
12	PIBD2540I116	FXTN 25-11	18.87	217,558.01	35,854.70
13	PIBD2033C206	FXTN 20-20	11.39	127,340.35	19,765.28