Bond and Note Transactions and Trading Market Infrastructure

A. Trading of Bonds and Notes

In the Philippines, the traditional trading venues for debt securities, whether in the OTC market or on exchange, are fused into a single platform.

Pursuant to the OTC Rules issued by the SEC in 2006, the trading of debt securities in the Philippine bond market may only be done on an organized market registered with the SEC. Like an exchange, an OTC market needs to be registered with the SEC, and a group or organization operating an OTC market should be registered as an SRO in accordance with Section 39 of the SRC.

PDEx operates such an organized market. The trading of debt securities between counterparties in the secondary market happens through the facilities of PDEx; these PDEx facilities are, hence, commonly referred to as the "organized" or "regulated" market.

Debt securities—both government securities and corporate bonds and notes—traded in the secondary market need to first be listed or enrolled on PDEx. The listing or enrollment and trading on PDEx is subject to the PDEx Rules and limited to participants that are licensed for capital market activities by the SEC (see also Chapter III.I and Chapter III.J).⁴¹

To facilitate trading, inter-dealer brokers also operate in the secondary market, prearranging deals between counterparties, which are then entered into the PDEx trading system by the counterparties for incorporation into the price discovery, clearing and settlement, and SRO processes.

In the Philippines, the term Over-the-Counter is typically associated with a specific issuance method of government securities by the BTr, in which government agencies, GOCCs, and other eligible entities submit noncompetitive bids to be awarded government securities (please see Chapter III.E for details). These "OTC transactions" are part of the primary market and are conducted by the BTr in addition to the competitive auction process on ADAPS (see section B above).

B. Government Securities Auction Platform

ADAPS is an electronic platform through which the Government of the Philippines, represented by the BTr, sells government securities to a network of GSEDs in the primary market. The GSEDs are connected to BTr's ADAPS through terminals that are linked to the processing system of Thomson Reuters. ADAPS is accessible only to GSEDs and not to other investors, including the general public. The system was established in November 1995. There is no publicly viewable website for ADAPS.

⁴¹ See http://www.pds.com.ph/index.html%3Fpage id=852.html

Instead, auction results, which are known as Summary of Award, may be downloaded as a PDF file for each auction through the BTr website (Figure 4.1).

Figure 4.1: Example of Government Securities Summary of Award BUREAU OF THE TREASURY Auction Committee SUMMARY OF AWARD Instrument Treasury Bill PIBL0317H097 Instrument Treasury Bill PIBL1217B021 Instrument Treasury Bill Series Series Series PIBL1217H141 Auction Date
Orig. Issue Date:
Re-issue Date
Coupon Rate/YTM
Offering Series :
Auction Date :
Orig. Issue Date:
Re-issue Date :
Coupon Rate/YTM :
Offering : Series :
Auction Date :
Orig. Issue Date:
Re-issue Date :
Coupon Rate/YTM :
Offering : 07/31/2017 P6,000.00M P5,000.00M P4,000.00M Maturity Period : Maturity Date : Maturity Period : Maturity Period : 92 Day 11/02/2017 182 Day 01/31/2018 364 Day 08/01/2018 Maturity Date Maturity Date APPROXIMATE ANNUAL APPROXIMATE APPROXIMATE ANNUAL LEVEL LEVEL LEVEL Average Average Average 2.100 2.399 High 99.442 High 98.699 High 97.056 3.000 Comp. Stop-Out N-C Awarded Comp. Stop-Out N-C Awarded Comp. Stop-Out N-C Awarded 54.127 59.590 39.669 TENDERED ACCEPTED REJECTED TENDERED ACCEPTED REJECTED TENDERED ACCEPTED REJECTED (M) (M) (M) 6,151.00 3,000.00 9,751.00 3,600.00 4,245.00 1,245.00 5,493.00 2,400.00 3,093.00 Non-Comp. 6.050.00 2,400.00 3,650,00 3,695,00 2,000.00 1,695.00 2,685.00 1,600.00 1.085.00 15,801.00 6.000.00 9.801.0 7.940.00 5,000.00 2.940.0 8,178,00 4.000.00 4.178.0

Source: Bureau of the Treasury. Government Securities. Summary of Award. http://www.treasury.gov.ph/wp-content/uploads/2017/07/T-Bills-Auction-Result-7312017.pdf

In ADAPS, GSEDs tender their bids (both competitive and noncompetitive) by keying in the amount (minimum of PHP10 million) and yield of their choice (for a maximum of seven competitive bids and one noncompetitive bid per tenor, using their terminals connected to ADAPS. ADAPS immediately collates the bids for display on the BTr terminal. After the cut-off time of 1 p.m., the consolidated bids are viewed by the Auction Committee, which then decides on the award. The auction award is sent to the respective terminals of the winning GSEDs.

Two days after the auction, the government securities are credited to the Securities Principal Account of the winning GSEDs in RoSS, and their Demand Deposit Accounts at the BSP are debited in favor of the Treasurer of the Philippines for the cost of the government securities awarded to the GSED concerned. This completes the transaction in the primary market.

Government securities auctioned via ADAPS may be listed and traded on the organized secondary market on PDEx, in particular benchmark issuances.

C. Trading Platforms

PDEx operates a market with an electronic trading platform for debt securities. Individual dealers may also use Bloomberg or similar global trading system providers and/or an in-house trading system to capture bids or quotes.

Philippine Dealing & Exchange Corporation 1.

On 22 January 2008, the SEC granted PDEx authority to operate an OTC market and to function as an SRO under the framework of the OTC Rules. PDEx's electronic trading platform for debt securities currently supports an OTC bilateral market where trading can occur through either a quote-driven or an order-driven system.

In addition to being licensed as an operator and an SRO for the OTC market, PDEx is also licensed by the SEC as an exchange under the provisions of the SRC. In this capacity, PDEx provides a centralized infrastructure for trading, clearing, and settlement of fixed income securities, which ensures price discovery, transparency, and investor protection.

In March 2005, PDEx launched the Negotiated Dealing Trading Board for the interdealer market. It is a quote-driven system that allows dealers to electronically quote and request quotes from one another. Once both counterparties agree on the details of the transaction, it automatically gets confirmed through the system.

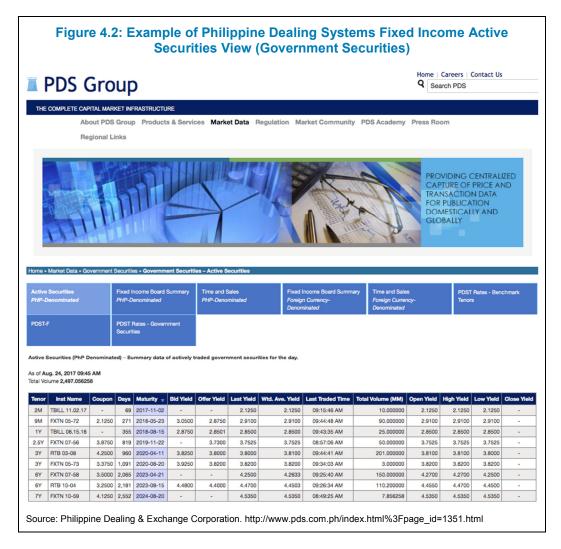
In November 2006, PDEx launched the Auto-Matching Trading Board to complement the negotiated dealing system. It is an order-driven system that allows Trading Participants to enter bids and offers in a central order book that automatically matches these orders based on bilaterally set trading limits, price, and time. It provides the basic structure for trading between public investors.

In February 2008, PDEx opened its trading platforms to the public market where broker participants can enter orders and transact on behalf of their clients. This was further expanded in June 2009 when PDEx launched its Fixed Income Broker Internet Order System (FI-BIOS), which allowed broker participants to enter orders for their clients in the Auto-Matching Trading Board remotely via an Internet-accessible electronic interface. This expanded the reach of PDEx's trading platform to municipalities and regions outside of Manila.

2. **Trading System and Features**

The PDEx trading system provides direct and speedy electronic access to the registered fixed income market intermediaries. It allows multiple modes of execution across market segments, including dealers, qualified investors, and public investors (through their brokers). Trades are centrally captured and linked straight through to delivery-versus-payment settlement systems via PDS Clear.

PDEx provides diverse access solutions for bilateral transactions among its Trading Participants. Trading Participants may engage in negotiated dealing through a Quote-Driven Engine, or be matched via algorithm through an Order-Driven engine. The online trading platforms help Trading Participants to instantaneously view the prices in the market and efficiently execute the transactions relevant to their own or their client investors' asset portfolios.



As for trading conventions, government securities, corporate bonds, and commercial paper are traded in lots of PHP5,000 (face value) or the minimum denomination of a bond or note based on the terms and conditions set by the issuer. Price quotations use the clean price (i.e., without any accrued interest component), expressed as a percentage up to four decimal places. Government securities may be quoted at yield to maturity or using the clean price.

For further information on the trading system and fixed income trading rules and conventions, as amended, please visit the PDS website.⁴²

3. Philippine Dealing Systems Fixed Income Market Trading Hours

On the PDS Fixed Income Securities Market, the trading day consists of two main trading sessions and a preopen session (Table 4.1). Trading sessions are the hours when Trading Participants may transact and conclude trades on the PDEx platform. A preopen session is a set period prior to the trading session when Trading Participants may begin to post quotes. However, no deals can be made until the trading session officially begins.

⁴² See http://www.pds.com.ph/index.html%3Fpage_id=11301.html

4 p.m.

Session	Start	End
Preopen Session	8:30 a.m.	9 a.m.
Morning Session	9 a.m.	12 noon
Trading Break	12 noon	2 p.m.
Afternoon Session	2 p.m.	4 p.m.

Table 4.1: Philippine Dealing Systems Fixed Income Market—Trading Hours

Source: Philippine Dealing & Exchange Corporation. http://www.pds.com.ph/index.html%3Fpage_id=1637.html

Trading days are every day except for Saturdays, Sundays, legal holidays, and days when the Philippine Clearing House Corporation's operations are suspended.

Data Dissemination 4.

End of Trading Day

PDEx Trading Participants may view on a real-time basis live bid and offer prices and/or yields and market-wide trade on debt securities listed and traded on PDEx through the trading system or through the PDEx MarketPage, a data publication facility. Access to the MarketPage is free of charge for PDEx Trading Participants. It is also available to non-Trading Participants on a paid subscription basis.

Real-time data is also viewable through the Reuters terminal and PDEx's FI-BIOS. which is available through the Internet. Price and trade data are available on a delayed basis on the PDEx website. Information on the terms and conditions of listed corporate debt securities—including the issue date, maturity date, and coupon rate—may likewise be found in the respective prospectuses, offering circulars, and information memoranda posted on the PDEx website.

D. Mandatory Trade Reporting

Pursuant to Section 16 of the OTC Rules, brokers and dealers are required to post or publish in their quotation system all transactions executed in said system within 1 minute of execution. Brokers and dealers are principally required to report done trades on securities in a central trade-reporting system.

To provide market transparency, the captured trades are viewable on the PDS Group website within about 15 minutes of execution (see example in section C Figure 4.2), and are provided by the PDS Group in data feeds to Trading Participants as well as by a number of commercial information vendors.

The reported market trades include repo and securities borrowing and lending transactions.

E. Market Monitoring and Surveillance in the Secondary Market

In July 2006, the SEC formally recognized PDEx as an SRO in the inter-dealer market. It is thus vested with the responsibility of formulating the requisite market rules, undertaking surveillance, and enforcing compliance in the inter-dealer market.

In November 2007, the SEC expanded the SRO registration of PDEx to cover the inter-professional market; in February 2008, its SRO authority was expanded to cover its members in all markets within the PDEx trading system, including the public market through their brokers, which had entered the market at that time.

Under the SRC, an SRO is registered to enforce compliance with its provisions, rules, and regulations. It is also mandated to make and enforce its own rules. An SRO should enforce fair, ethical, and efficient practices in the securities industry. With this mandate, PDEx has created a comprehensive governance structure that is designed to insulate the market governance function from its corporate governance structure that sees to the business needs of PDEx as a commercial enterprise.

PDEx Rule 15 governs market surveillance. This function is carried out by the Compliance and Surveillance Department. In addition to surveillance of market activities, the Compliance and Surveillance Department investigates trading and other rule violations, and conducts regulator examinations of Trading Participants. It has the power to impose trading halts or suspensions pending the investigation of any irregularities or violations of the SRC or the PDEx Rules, and to recommend to the Market Compliance and Discipline Committee the institution of disciplinary proceedings and imposition of appropriate sanctions or penalties on violators.

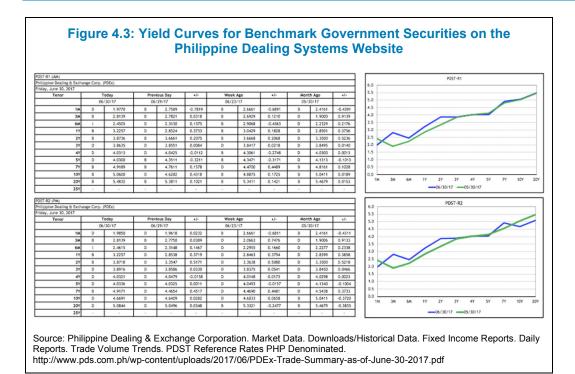
F. Yield Curves and Bond Indexes

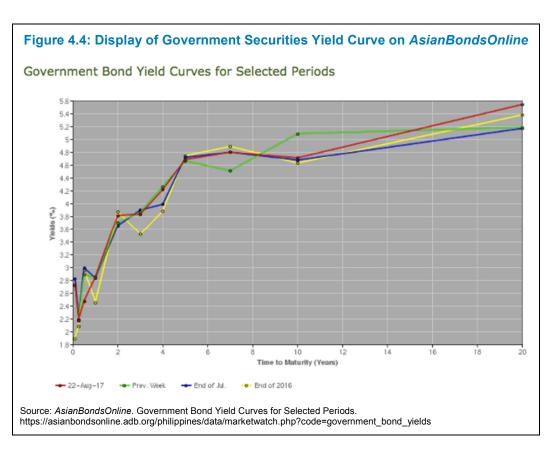
1. Yield Curves for Government Securities

Since the trading of debt securities, including government securities, in the secondary market in the Philippines occurs on the PDS Fixed Income Securities Market, yield curves and other trading statistics are available via the PDS Group website. The yield curve for benchmark issues is available, together with other statistics on the daily market activities, as a PDF file from about 4:20 p.m. each trading day. Figure 4.3 displays an example of such data available.

A yield curve for government securities is also available for selected periods on *AsianBondsOnline*, an ASEAN+3 initiative supported by ADB, under the generic label Government Bond Yield Curves (Figure 4.4). This yield curve is updated daily. ⁴³

⁴³ See https://asianbondsonline.adb.org/philippines/data/marketwatch.php?code=government_bond_yields





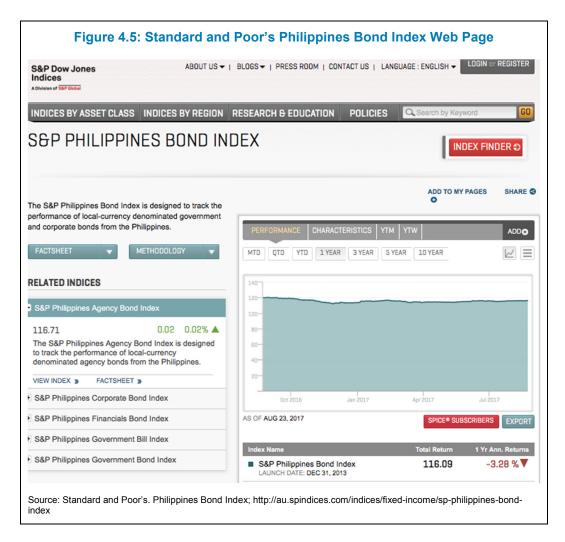
2. **Other Bond Yields Curves**

One of the distinctions of the Philippine corporate bond market is the prevalence of issuers with strong credit ratings. Yet, this apparent homogeneity has not led to the

creation of a single or consolidated corporate bond yield curve as issuers and their bond and note issuances continue to typically be assessed on an individual basis and yield differentials within the same peer group are common.

3. Philippine Bond Indexes

A number of international information vendors calculate and publish indexes for the Philippine bond market. One example is the Standard and Poor's (S&P) Dow Jones Indexes LLP, a unit of McGraw Hill Financial. The company tracks the S&P Philippines Bond Index (ticker symbol: SPBPHCOT), which is a composite index across all government and corporate bonds issued in the Philippines. Please see Figure 4.5 for an example.



At the same time, a number of individual Philippine bond indexes are available from S&P Dow Jones, including

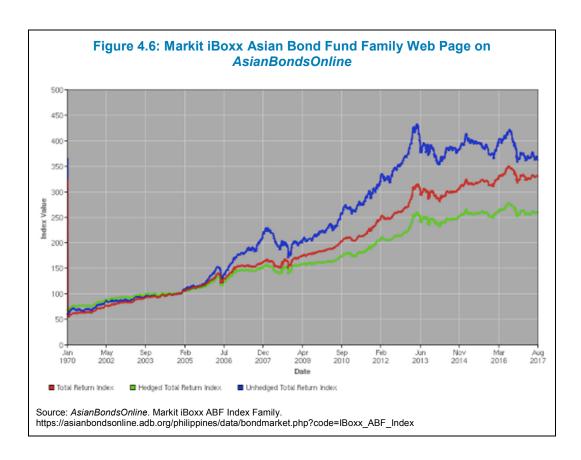
- (i) S&P Philippines Corporate Bond Index,
- (ii) S&P Philippines Financials Bond Index,
- (iii) S&P Philippines Government Bill Index, and
- (iv) S&P Philippines Government Bond Index.

S&P Philippines Bond Indexes are available to registered S&P Dow Jones subscribers and via public domain websites.

4. **Inclusion of Philippine Bond in Other Indexes**

Bonds and notes issued in the Philippines are also included in a number of regional bond indexes such as the Markit iBoxx Asian Bond Fund Index Family and HSBC Asian Local Currency Bond Returns Index.44

The Markit iBoxx ABF Index Family is a series of indexes that serve as benchmarks under the second phase of the Asian Bond Fund (ABF2). Local currency bond indexes are constructed covering eight ASEAN+3 markets, including the Philippines, along with two pan-Asia indexes. The International Index Company and the Executives Meeting of East Asia and Pacific Central Banks developed the indexes. The composition of the indexes follows the market capitalization of the eight ASEAN+3 markets. Interested parties may also view the Markit iBoxx Asian Bond Fund Index Family on AsianBondsOnline (Figure 4.6).



HSBC publishes the Asian Local Currency Bond Returns Index. This indicator is based on the HSBC Asian Local Bond Index (ALBI). Bonds included in the ALBI adhere to a set design criteria: local-currency-denominated, high quality, liquid bonds in Asia ex-Japan. Bond returns for each market can be tracked by the individual market indexes that make up the ALBI. The HSBC Asian Local Currency Bond Returns Index may also be viewed on AsianBondsOnline.45

⁴⁴ For a factsheet of the Markit iBoxx ABF Indexes, please see http://content.markitcdn.com/corporate/ResourceManager/Bczx3R0al3yQY1ovVq7qkQ2/d/f/6353163035590 88135/Content/Documents/Products/Factsheets/iBoxx/MKT_iBoxx_ABF_Index_factsheet.pdf

⁴⁵ See https://asianbondsonline.adb.org/philippines/data/bondmarket.php?code=Asian Local bond RI



G. Repurchase Market

1. Repurchase Market Overview

The country's interbank repo market is in its early stages of development. Although there were purportedly repo transactions in the Philippines dating back to the 1980s, a platform was only formalized in 2008.⁴⁶ In August 2008, the PDS Group launched the PDEx Inter-Professional Repurchase Agreement Market Program, which is known as PDS Repo, to provide the necessary cash liquidity to dealers. PDEx provides the repo trading platform and PDTC provides third-party collateral management.

Trade volumes have been relatively low, reaching a peak of about PHP13 billion on a daily basis in 2011. However, the platform has not been in use since 2012 pending clarification on the documentary stamp tax (DST) treatment on repo transactions. Moreover, the Philippine market has been operating under abundant liquidity for many years and, as such, market participants have had limited demand for repo transactions. Some participants also noted that these types of transactions were expensive compared to other borrowing options.

2. Market Structure

The repo market developed in the Philippines in the 1980s, primarily among banks and their retail customers. Being a capital market transaction, repos proved to be an efficient tool for banks to finance their balance sheets while providing their customers better returns than offered by regular deposits. They also provided better security for the customers due to the collateralized nature of the transaction.

This, however, posed problems for the monetary authorities as repos weakened the effectiveness of monetary tools for controlling monetary aggregates. In particular, repos enabled the faster creation of credit as they were not subject to reserve requirements given that the transaction happened off balance sheet as a deposit substitute. The BSP eventually applied reserve requirements on these deposit substitutes, which spelled the end of the product.

3. Philippine Dealing Systems Repo

PDS Repo is a repurchase agreement market that supports the cash liquidity of financial institutions duly admitted as PDEx Members and provides secured short-term investment outlets to PDEx Trading Participants and Qualified Investors. All repo trades are centrally captured and linked straight through to settlement via PDS Clear.

Both PDS Repo and PDS Securities Lending are market programs approved by the SEC and each is covered by a "no-objection" letter by the BSP that enables BSP-regulated entities to participate in these markets. The BSP also imposed lower reserve requirements for repo transactions on PDEx.

Crucially, this also opened the way for other professional market participants—including trusts, mutual funds, pension funds, insurance companies, and other qualified institutional investors—to become providers of cash to dealers. At its peak in 2011, there were 13 repo sellers and 27 repo buyers.

Currently, only government securities are allowed as the subject of a repo transaction. Repurchased securities are transferred on the near leg to the account of the repo

⁴⁶ Selected statements adapted from Executives Meeting of East Asia—Pacific Central Banks. 2014. *EMEAP Repo Markets: State of Play—A Report by the EMEAP Working Group on Financial Markets*. http://www.emeap.org/emeapdb/upload%5CWGMeeting%5CEMEAP_Working_Group_on_FinancialMarkets ___Report_on_EMEAP_Repo_Markets_....pdf

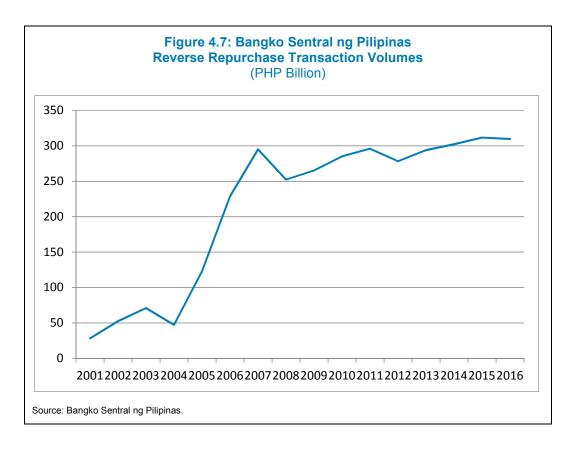
buyer (investor) at PDTC and are held there during the tenor of the repo, after which it is returned to the repo seller on the far leg.

PDEx provides the trading platform and monitors compliance of all participants as well as providing clearing services for repo transactions. Price discovery is achieved through the PDEx electronic platform. The platform is structured in a tripartite form with PDTC serving as the centralized collateral manager. Apart from holding the securities subject to the repo transactions, PDTC also performs daily valuation of the collateral, and calculates and calls margin on a daily basis in case of a shortfall of value. Settlement is on a delivery-versus-payment basis.

The rules for PDS Repo, also referred to as Repo Rules, are available from the PDS Group website.47

Repo as Part of Bangko Sentral ng Pilipinas Open Market Operations 4.

The BSP also conducts repo agreements and RRP agreements with banks as part of its open market operations outside of PDS Repo. The BSP uses repo transactions to implement monetary policy and manage reserve balances.



The interest rate for the overnight RRP facility signals the monetary policy stance and serves as the BSP's primary monetary policy instrument. The RRP facility is offered to qualified counterparties daily using a fixed-rate and full-allotment method, where individual bidders are awarded a portion of the total offered amount depending on their bid size. Repos transacted with the BSP are not conducted on the PDEx platform. Figure 4.8 presents the volumes of bilateral RRP transactions over the last 15 years.

⁴⁷ See http://www.pds.com.ph/wp-content/uploads/2013/08/REPO-Rules.pdf

5. Acceptance of Standards

The PDEx Master Repo Agreement was crafted to align with global standards on risk management, incorporating daily mark-to-market valuation of repurchased securities, daily valuation of repo obligations versus collateral obligations, daily margin calls and margin releases as applicable, and margining securities for price volatility.

6. Specific Repurchase Practices

a. Type of Repurchase

The key feature of PDS Repo is a transfer of title and does not involve a pledge with a third-party collateral management function. This repo practice follows the "classic repo" type of outright sale and purchase. PDS Repo is not cash borrowing and it is also not intended for re-lending. The objectives are for failed trade management and dealer liquidity.⁴⁸

From a legal perspective, securities are transferred to the lender. In case of default, the lender could liquidate the bonds in the market to settle any obligations of the borrower.

b. Size and Tenure

PDS Repo tenors range from overnight to 3 months, with the majority of the trading volume occurring for tenors between 1 month and 1.5 months. The peak repo volume outstanding was PHP38 billion in 2011.

c. Eligible Debt Securities as Collateral

At the time of PDS Repo's operation, securities eligible for repo included securities issued by the Government of the Philippines via the BTr, as listed on PDEx.

The substitution of collateral securities is permitted with the consent of the repo buyer, provided that the assets offered as substitutes are also eligible as collateral securities under the PDEx Repo Rules.

Collateral eligible for repo with the BSP is defined in the BSP's charter. The BSP may buy and sell in the open market for its own account: (i) evidences of indebtedness issued directly by the Government of the Philippines or by its political subdivisions; and (ii) evidences of indebtedness issued by government instrumentalities and fully guaranteed by the Government of the Philippines. The evidences of indebtedness acquired under the provisions of this section must be freely negotiable and regularly serviced and must be available to the general public through banking institutions and local government treasuries in denominations of PHP1,000 or more.

d. Margin

PDTC, as a collateral management institution, issues margin calls or effects margin releases as appropriate. Margins are determined daily as part of the mark-to-market of the collateral securities for each repo transaction.

⁴⁸ Adapted by ADB Consultants for SF1 from a 2016 ASEAN+3 SRO Working Group case study on repo markets, with the kind permission of the author.

e. Accounting and Tax Treatment

A final tax of 20% is applied to repo interest and is withheld by the repo seller from repo buyers at maturity only to repo buyers that are duly certified or chartered as TEIs (e.g., pension funds).

For the repo market in the Philippines, one of the challenges is the pending Bureau of Internal Revenue (BIR) clarification regarding the application of the DST.

Market Participants

Repo Sellers in PDS Repo transactions must be Dealing Participants on PDEx. Repo Buyers in PDS Repo transactions apart from Dealing Participants also include Qualified Investors that are permitted by their primary regulators to participate in PDS Repo.

Market participants in bilateral repo with the BSP have to be constituents of the interbank market (i.e., BSP-supervised entities such as banks or NBFIs with quasi-banking license).

The bilateral repo market is limited to domestic entities, including the branches of foreign financial institutions under the supervision of the BSP.

H. Securities Borrowing and Lending

Since 2007, PDEx has operated a securities borrowing and lending facility in the Philippine bond market. However, it is currently inactive.

1. **PDS Securities Lending Transactions Program**

PDS SLTP is a securities lending program that supports the securities liquidity requirements of financial institutions duly admitted as PDEx Members.

Both PDS Repo and PDS SLTP are market programs approved by the SEC and covered by the "no-objection" letters of the BSP that enable BSP-regulated entities to participate in these markets. Under PDS SLTP, the beneficial owner of debt securities may use the services of a lending agent or a party authorized to lend the securities on behalf of the beneficial owners. The lending agent must be a Depository Participant.

The lending of debt securities is facilitated through a lending pool operated by PDTC. Eligible lenders, or their lending agents, transfer their debt securities into this lending pool from which debt securities are lent to eligible borrowers. The PDEx SLTP Trading Board is updated with the available debt securities accordingly and interested borrowers can conclude transactions by selecting appropriate debt securities for their needs. All Trading Participants may be borrowers. Lenders must sign a Participation Agreement to participate in PDS SLTP but need not be Trading Participants of PDEx.

The rules for PDS SLTP, also referred to as PDEx SLTP Rules, are available from the PDS Group website.49

2. **Eligible Debt Securities**

The following are the types of securities acceptable for lending under the PDEx SLTP:

⁴⁹ See http://www.pds.com.ph/wp-content/uploads/2013/08/PDEx-SLT-Program-Rules.pdf

a. Fixed Income Instruments (PHP-denominated)

- (i) securities issued by the BTr
- (ii) securities issued by the BSP
- (iii) securities issued by municipal governments or Local Government Units and listed in PDEx
- (iv) private corporate debt securities listed on PDEx

b. Fixed Income Instruments (USD-denominated)

- (i) securities issued by the Government of the Philippines
- (ii) private corporate debt securities listed on PDEx

There is a separate set of eligible debt securities for Securities Lending Transactions that are published on the PDS Group website. The eligible securities are determined on a monthly basis using the criteria of issue size and market liquidity.

3. Tax Treatment

BIR Revenue Regulation 05-2007 governs the tax regime of the Securities Lending Transactions Program.

I. Bond Market-Related Derivatives

Presently, the SEC is open to accepting market-driven initiatives for hedging tools, such as overnight index swaps. The SEC is also currently looking into proposals with regard to Philippine peso overnight index swap and repo markets.