The development of financial markets in the Philippines and its interaction with monetary policy and financial stability[1]

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Abstract

This paper analyses financial market development in the Philippines and its interaction with monetary policy and financial stability. The interlinkages between financial market development and monetary policy were evident in the Philippines even prior to the global financial crisis (GFC). Rapid developments in financial intermediation due to the financial liberalisation in the 1980s led to shifts in the monetary policy framework, particularly the introduction of an inflation targeting framework in 2002. Strong capital inflows in the post-GFC period contributed to the weakening of the interest rate channel of monetary policy. This prompted a reassessment of monetary policy operations, which eventually led to the implementation of the Interest Rate Corridor (IRC) System in 2016. The increasing reliance of IRC on market-based instruments is expected to aid the development of the domestic money and capital markets in the country.

Meanwhile, financial market development increases market resilience and reduces risk concentration in the country's bank-centric financial system. However, it may also engender greater systemic risk, encourage the growth of shadow banking, amplify global spillovers, and raise the leverage of the non-financial sector. Notwithstanding, the domestic financial markets remain resilient owing to the continued implementation of structural and financial reforms. Based on various financial market indicators, the country has made significant improvements in terms of financial stability and efficiency and is now on a continued path towards improving financial depth and accessibility.

To be at par with its neighbours in terms of financial market development, the country will endeavour to implement the consolidated roadmap for local currency debt market development. The country is also coordinating with other central banks in Asia for the establishment of a local currency settlement framework that would allow a foreign currency to be directly priced against the Philippine peso, and vice versa. The Bangko Sentral ng Pilipinas (BSP) will continue to pursue the reform agenda on macroprudential and microprudential tools to strengthen financial supervision, mitigate financial stability risks, and strengthen financial risk surveillance. The BSP will also closely monitor and assess future developments such as the emergence of new players from fintechs to big techs. It will keep a watchful eye on possible signs of market imbalances in carrying out its price and financial stability mandates.

JEL classification: D53, E52, E58, G15, G32.

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Introduction

Financial markets in the Philippines have developed considerably since the Asian Financial Crisis (AFC). Financial liberalisation, prudential supervision, and regulatory reforms have significantly improved the stability, efficiency, depth, and accessibility of the domestic financial markets and institutions. Although the financial system remains dominated by banks, there have been important changes in the structure of financial intermediation. Among the most striking changes are the expansion in the share of foreign funding and a rise in the external indebtedness of the non-financial sector, owing largely to the prolonged period of low global interest rates and ample global liquidity after the global financial crisis (GFC).

Financial market development provides important information to policymakers given their intrinsic links with monetary policy[3] and financial stability. It has propelled changes in the BSP's monetary policy framework beginning in the second half of the 1990s until inflation targeting was adopted in 2002, including the adoption of measures to improve monetary operations of the BSP. While financial market development helps reduce risk concentration and increase market resilience, greater global integration has also increased systemic risk.

This note discusses how financial market development has affected monetary policy and financial stability in the Philippines. It starts with a discussion on the development of financial markets in the country since the AFC (Section 2), followed by the interaction of financial market development with monetary policy (Section 3), and financial stability (Section 4), and finally with a discussion of recent challenges and corresponding policies in the last section (Section 5).

Financial market development in the Philippines

There has been significant improvement in terms of financial stability and, to a certain extent, efficiency in the Philippine financial markets. They are on a sustained path towards improving their financial depth and accessibility as compared with those of selected EMEs in South East Asia (World Bank (2016)).[4]

Financial depth in the Philippines has improved since the AFC. Based on the traditional indicator of financial deepening, the country's broad money (M3)-to-GDP ratio increased by more than 2,000 basis points (bp) from 42.1%[5] in 1999 to 67.3%[6] in 2017, further rising to 69.7%[5] in 2019.[7] The improvement in depth has been observed for both financial institutions and financial markets. The depth of financial institutions measured in terms of the ratio of domestic private credit to the real sector by deposit money banks to GDP averaged 41.7% from 2015–17, a slight improvement

[3] Hildebrand (2006).

[4] World Bank (2016). This approach was also based on Milo (2019).

[5] For 1999, BSP data based on monetary survey.

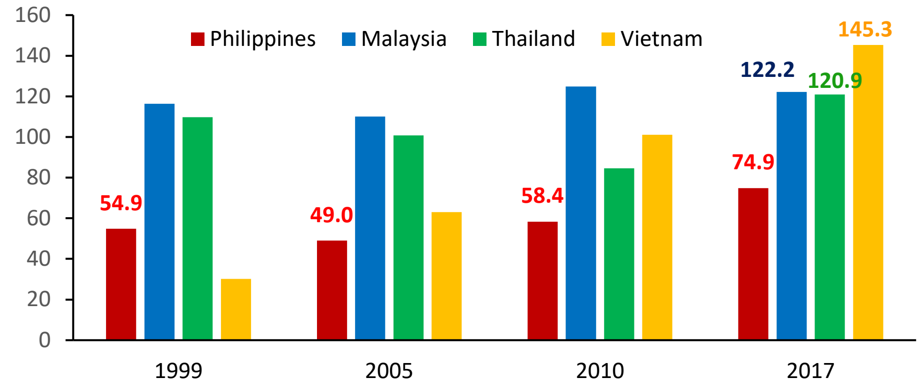
[6] BSP data based on the Standardized Report Forms (SRFs).

[7] The marked increase in the Philippines' M3-to-GDP ratio is corroborated by the data from the World Bank,[7] which showed a 2,000 bp increase in liquid liabilities to GDP ratio, from 54.9% in 1999 to 74.9% in 2017.

from 39.2% in 1999,[8] but much better than the 35.1% average of lower-middle-income economies for 2015–17.[9] The depth of financial markets in terms of the ratio of stock market capitalisation to GDP has averaged 81.0% from 2015–17, a marked improvement from 47.9% in 1999. The figure is also much higher than the 54.8% and 33.6% recorded for upper middle income and lower middle-income economies, respectively, for the same period.[10]

However, the country's financial depth is modest compared with neighbouring EMEs. Relative to selected EMEs in South East Asia, the country's 2017 ratio pales in comparison with that of Malaysia (122.2%), Thailand (120.9%) and Vietnam (145.3%) as shown in Graph 1.

Liquid liabilities-to-GDP ratio (in %, 1999–2017) Graph 1



Source: World Bank (2019a).

A similar story can be seen in the Philippines' share of domestic credit to the private sector to GDP (Graph 2). While it increased from 38.5% in 1999 to 47.8% in 2017 and 50.2% in 2019,[11] the 2017 share is still low compared with those of Malaysia (118.8%), Thailand (145.0%), and Vietnam (130.7%). The size of the banking sector in the country is also smaller as the ratio of total assets of deposit money banks to GDP in 2017 was only 58.3%,[12] compared with 131.9% in Malaysia, 139.0% in Thailand, and 137.4% in Vietnam.

8 World Bank (2019a).

9 World Bank (2019b).

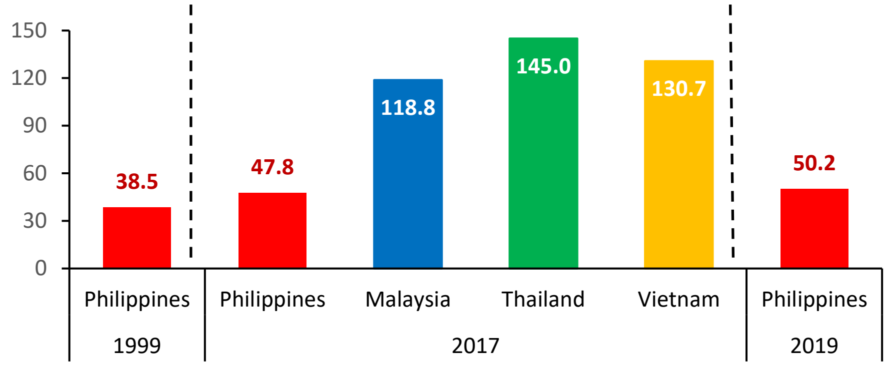
10 World Bank (2019b).

11 Based on both BSP and World Bank data.

12 Based on BSP data, the total assets-to-GDP ratio of the Philippine banking system was 95.9% in 2017 and 95.7% in end-October 2019 while that of universal/commercial banks was 87.1% in 2017 and 88.1% in end-October 2019.

Domestic credit to private sector-to-GDP

(in %, 1999, 2017, October 2019) liquid liabilities-to-GDP ratio (in %, 1999–2017) Graph 2



Sources: World Bank (2019a), Bangko Sentral ng Pilipinas.

While the 82.1% share of stock market capitalisation-to-GDP of the Philippines in 2017 is greater than the world's average for middle income economies, it is still small compared with those of Malaysia (128.1%) and Thailand (109.5%).[13] The total value of stocks traded-to-GDP even declined from 18.3% in 1999 to 10.8% in 2017, lagging behind Malaysia (37.0%), Thailand (74.3%), and Vietnam (15.7%). Moreover, the country's ratio of corporate bond issuance volume-to-GDP marginally increased from 0.6% in 2004 to 0.9% in 2017. This is also lower than those of Thailand (3.7%), Malaysia (4.2%), and Indonesia (1.3%).[14]

The provision of financial services in the country has expanded but lags behind EMEs. Relative to working population, the share of individuals[15] with an account at a financial institution increased from 26.6% in 2011 to 31.8% in 2017. However, this is lower than the 39.7% average for lower-middle income economies from 2015–17 and 2017 data of Malaysia (85.1%), Thailand (81.0%), and Indonesia (48.4%) (Graph 3).

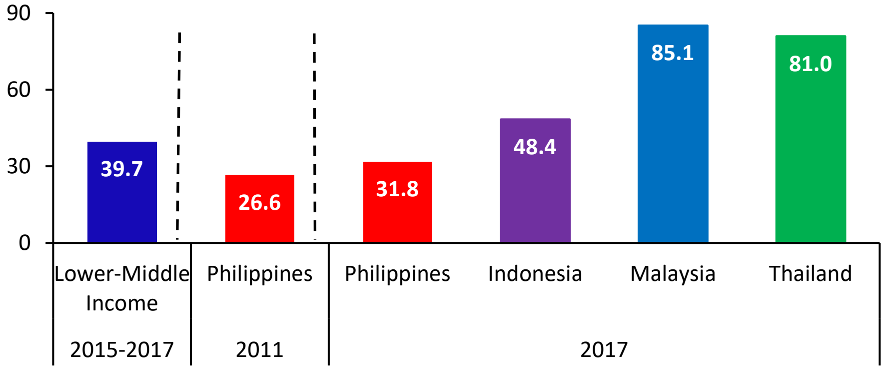
13 Based on BSP data, stock market capitalisation to GDP of the Philippines was 111.2% in 2017 and 89.8% in 2019.

14 The country's ratio is higher than that of Vietnam (0.1%). In terms of insurance, the country is in a similar position to that of Indonesia and Vietnam as the volume of life and non-life insurance premium to GDP in the country was still less than 2% in 2017 and the share of insurance company assets to GDP did not improve that much and remained below 10%. Malaysia and Thailand continued to lead among EMEs in the region, with 20% of GDP worth of insurance company assets and around 5% share of volume of life and non-life insurance premium to GDP.

15 Total population of 15 years old and above.

Individuals who reported an account at a financial institution

(in % of 15 and above years old population, 2011, 2015–17, 2017) Graph 3



Sources: World Bank (2019a).

The country also trails behind its neighbouring countries in terms of access to banking services. The number of deposit accounts per 1,000 adults increased only to 510.1 in 2017 from 394.6 in 2006, which is relatively low compared with 846.3 in Malaysia and 1,270 in Thailand (no data available for Vietnam and Indonesia). The country's shares of population above 15 years old that used debit cards and made use of digital payments in the past year were 21.0% and 13.6%, respectively, in 2017. These are also low compared with Malaysia (73.8% and 60.1%), Thailand (59.8% and 43.2%), Vietnam (26.7% and 16.1%), and Indonesia (30.8% and 26.8%).

Nevertheless, financial institutions in the country are fairly efficient in managing their investment portfolios. Efficiency means the ability of financial institutions to successfully intermediate resources and facilitate transactions.[16] With a net interest margin (NIM)[17] of 4.1% in 2017, banks in the Philippines are the most profitable among those of South East Asian EMEs after those of Indonesia (6.0%). This improvement in the NIM of banks in the Philippines, from 2.8% in 1999 to 4.1% in 2017, indicates a relatively more efficient investment of funds than in Malaysia (2.3%), Thailand (3.5%) and Vietnam (3.6%) in 2017[18] (Graph 4).

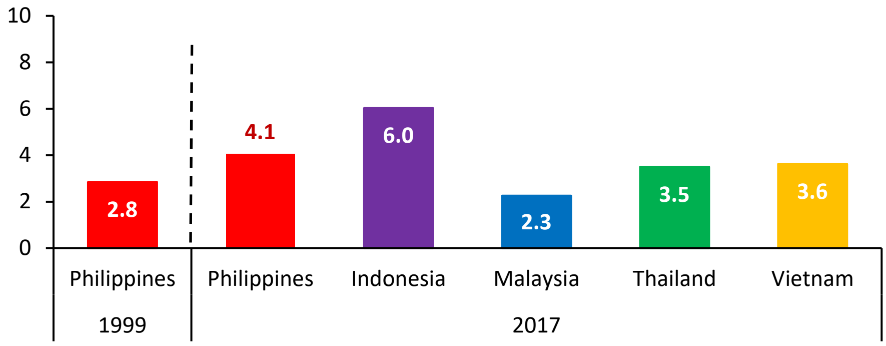
16 World Bank (2019b).

17 Difference between interest income earned and interest paid relative to interest-earning assets (Milo (2019)).

18 A similar story can be seen using BSP and IMF data, which showed that the interest margin-to-gross income ratio as of September 2019 was at 73.4% in the Philippines, higher than in either Malaysia (57.5%) or Indonesia (65.9%).

Net interest margin

(in %, 1999, 2017) Graph 4



Source: World Bank (2019a).

Almost the same is implied by the latest return-on-assets (RoA) and return-on-equity (RoE) data of banks in these Asian EMEs. As of September 2019, the RoA of banks in the Philippines at 1.5% is comparable with that of Malaysia, although lower than in Indonesia (2.5%).[19] The RoE of banks in the country at 13.8% is better than that of Malaysia (12.9%), but still lower than in Indonesia (16.0%).[20]

In the stock market, however, the turnover ratio[21] declined from 48.8% in 1999 to 13.1% in 2017. This indicates a less liquid stock market compared with selected South East Asian economies (Malaysia at 34.1%, Thailand at 68.1%, Vietnam at 45.1% and Indonesia at 19.6%).

The Philippine financial system is also one of the most stable among EMEs in the region. The Philippine financial system's Z-score[22] declined from 22.7 in 1999 to 17.7 in 2017. However, this level is still high, next to Malaysia (23.4) but better than in Vietnam (12.3), Thailand (7.9) and Indonesia (6.2). The country's average Z-score from 2015–17 at 18.0 is also higher than the 13.6 of upper-middle income and 14.6 of lower-middle income economies.

Moreover, the ratio of non-performing loans-to-gross loans of banks in the country substantially declined from 14.6% in 1999 to 1.6% in 2017.[23] This latest NPL ratio is comparable with that of Malaysia (1.5%) and much better than that of Thailand (3.1%), Indonesia (2.6%) and Vietnam (2.3% in 2015) (Graph 5).

19 Data cited were sourced from BSP and IMF. Using World Bank data, the RoA of banks in the Philippines improved from 0.3% in 1999 to 1.2% in 2017. This is better than that of Thailand (1.3%) and Vietnam (1.0%), but lower than those of Indonesia (1.9%) and Malaysia (1.6%).

20 Data cited were sourced from BSP and IMF. Using World Bank data, the RoE of banks in the Philippines improved to 11.0% in 2017 from 1.7% in 1999. This is slightly lower than in Vietnam (14.2%), Indonesia (12.8%) and Malaysia (12.3%) but better than in Thailand (9.6%).

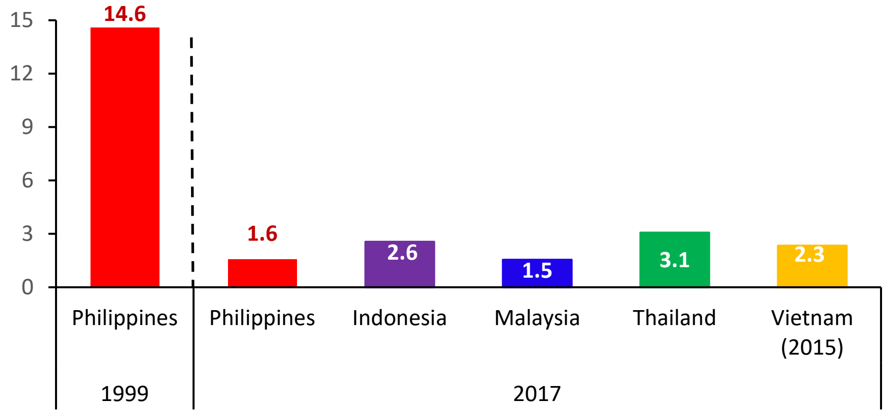
21 Value of domestic shares traded divided by market capitalisation.

22 Defined as the ratio of capitalisation and return-on-assets to the volatility of return-on-assets.

23 Data cited were sourced from the World Bank. Using BSP data, the NPL ratio of the Philippines declined from 12.3% in 2009 to 1.2% in 2017, although it increased to 1.6% in 2019.

Non-performing loans to gross loans ratio

(in %, 1999, 2017) Graph 5



Source: World Bank (2019a).

Meanwhile, the country's financial system continues to be dominated by the banking sector. According to the ASEAN+3 Bond Market Guide 2017,[24] the corporate bond market is relatively small despite a significant pickup in recent years. This is reflected by the 1.2% average share of corporate bond issuance volume to GDP from 2015–17 data for the Philippines.[25] The Philippine domestic bond market also continued to be dominated by Treasury notes and bonds. Further, banks continued to be the preferred source of financing due mainly to the relative ease of accessing bank loans compared with the issuance of bonds.

The current stability of the Philippine financial system benefits from the lessons learned from the AFC and the GFC. The experiences from the two crises significantly shaped the emerging regulatory and supervisory architecture of the Philippine financial system. The AFC revealed weaknesses in risk measurement and management as well as vulnerability to currency and maturity mismatches. The GFC further underlined the importance of monitoring not only the strength of individual banks but of the financial system and of effective collaboration between the central bank and other regulators in maintaining financial stability.[26]

Notwithstanding the crisis episodes, the country's economic fundamentals have been generally strong, backed by a resilient and stable banking system. Even with the increasing exposure of the country's financial system to global shocks in recent years, its economic strength has been reinforced by more prudent policies and conservatism in the banking system. The country also maintains sufficient reserves that have helped to absorb shocks. The BSP's implementation of banking reforms, such as disclosure requirements, enhanced risk management framework, and consolidated supervision, has enabled financial markets to withstand domestic and global shocks.[27]

[24] Asian Development Bank (2017).

[25] World Bank (2019a).

[26] Diokno (2019).

[27] Guinigundo (2011).

Interaction of financial market development with monetary policy

Financial market developments are expected to affect monetary policy since the latter is implemented mainly via the financial markets. The various channels – which include the interest rate, credit (eg bank lending and balance sheet), exchange rate, asset price or wealth, and expectations – through which monetary policy affects the real economy largely depend on the structure of the financial system, particularly on the level of financial market development.[28] In general, improvements in financial market development are expected to make the conduct of monetary policy more efficient and effective. Meanwhile, monetary policy and its operations also have implications for the development of the financial markets. These could promote or limit financial market development and in recent years, these include not only domestic but also external monetary policy decisions, particularly of the advanced economies.

Prior to the GFC, financial market primarily affected monetary policy through its role in transmitting monetary policy changes to the real sector via short-term interest rates. A hike in the policy rate usually leads to an increase in the short-term market interest rate, which in turn could lead to higher borrowing and lending rates.[29] This could also result in higher long-term interest rate and asset prices through the expected future path of short-term interest rates.[30] According to Mohanty and Rishabh (2016), since banks are at the centre of financial intermediation in most EMEs, the effects of monetary policy have been largely determined by developments in the banking system in these countries. While the financial system was already relatively open during this period, capital flows were still limited, so that domestic interest rates were tightly linked to the central bank's key monetary policy instruments. The introduction of inflation targeting by many EMEs in the 1990s, together with interest rate reforms, the strengthening of central bank credibility and the development of local bond markets also increased the role of interest and exchange rates[31] in monetary policy transmission.[32]

However, major modifications have occurred in the pattern of financial intermediation in EMEs since the GFC. The quantitative easing policies of advanced economies have led to an abundant supply of short-term and volatile global liquidity in the financial markets and a decline in global interest rates. These have resulted in the expansion of credit markets and the availability of low-cost borrowing for EMEs. These factors may have improved the strength of monetary policy transmission since financial deepening (ie a higher share of financial assets and liabilities relative to income) makes the behaviour of savers and borrowers more sensitive to interest rate

[28] Singh et al (2008).

[29] Mohanty and Rishabh (2016).

[30] Based on the Expectations Theory of the Term Structure, expected future short-term interest rates primarily determine bond yields. The longer is the maturity of the long-term rates, the weaker is the link of long-term rates with the current short-term rates. This is due to uncertainty about the future evolution of short-term interest rates and time-varying risk premiums (see Hildebrand (2006)).

[31] The exchange rate is the fastest transmission channel for monetary policy. This is affected by monetary policy via the yield curve of both the home and foreign countries (ie interest rate parity relations). However, in practice, exchange rate movements often deviate significantly from what interest rate differentials indicate (Source: Hildebrand (2006)).

[32] Mohanty and Rishabh (2016).

movements.[33] However, these have also led to a shift in the structure of financial intermediation as the share of foreign funding, both in terms of foreign-denominated funds from domestic sources and direct external financing, has significantly increased. Financial intermediation through debt markets has also expanded, with most of the debt issued internationally.[34] This has also been observed in the increased issuance of international debt by non-financial corporations.[35] As a result, the role of banks has declined, although they continue to be driver of credit allocation in EMEs, particularly in Asia.[36]

Structural changes in financial intermediation post-GFC affect the monetary policy transmission in EMEs. The larger share of foreign currency in the domestic assets and liabilities of EMEs after the GFC may have weakened the influence of monetary policy. This is because policy rates are mainly effective through domestic currency assets and liabilities.[37] Moreover, foreign funding is less sensitive to monetary policy as it is more influenced by foreign interest rates and global financial conditions. The limited pass-through of monetary policy and the greater influence of foreign interest rates could cause market interest rates to deviate from the policy rate. Aside from the interest rate and credit channels of monetary policy, financial market developments after the GFC have also affected the exchange rate channel, whereby exchange rate-induced capital flow movements affect domestic financial conditions and hence, increase the transmission of global financial markets developments to the domestic economy.

A number of studies point to an increasing correlation of EME long-term interest rate with global long-term rates, particularly the US long-term rate, after the GFC. Some studies even indicate that global factors exert a much stronger influence on long-term interest rates than do local factors such as the domestic business cycle or monetary policy.[38] The growing importance of global factors makes the management of domestic financial conditions more challenging for central banks in EMEs.[39] The weakened role of policy rate in the transmission mechanism also creates risks to monetary and financial stability due to the reduced effectiveness of policy responses by the central bank to shocks. However, some studies indicate otherwise. For instance, Mohanty and Rishabh (2016) suggest that India's monetary policy may have been relatively insulated from global shocks due to the country's cautious approach to securities or financial market liberalisation.

In the Philippines, the liberalisation of the financial sector beginning in the 1980s has led to rapid development in financial intermediation and shifts in the monetary policy framework in the 1990s. Rapid developments in financial intermediation and proliferation of various forms of financial innovations (eg increased use of ATMs, plastic money and other modern financial products and

33 Alper et al (2015).

34 Op cit.

35 Ibid.

36 Ibid.

37 Alper et al (2015).

38 Op cit.

39 Op cit.

services) resulted in volatility in money demand in early 1990s.[40, 41] The "structural breaks" in the income velocity of money and volatilities and instabilities in the money multiplier,[42] weakened the link between quantitative monetary targets and inflation. As the BSP found it increasingly difficult to attain its domestic liquidity target and price stability, it modified its monetary aggregate targeting framework in the mid-1990s, putting greater emphasis on price stability instead of strict observance of the targets set for monetary aggregates. However, the unstable relationship between money, output and inflation increasingly complicated the conduct of monetary targeting.[43] This eventually led to a shift in the monetary policy framework to inflation targeting, which was first considered in the late 1990s and then implemented in 2002.

Under the inflation targeting framework and continued financial market development, the conduct of monetary policy in the country has become more efficient and effective. Based on Guinigundo (2015), financial development in the country has led to stronger interest rate pass-through, particularly since the inflation targeting regime was introduced. Guinigundo argues that monetary policy has become more effective in influencing the cost of funds in the country. He attributed this to enhanced transparency and accountability in a stronger banking system and greater banking convenience through technology and market innovations.

However, strong liquidity growth brought about by strong capital inflows poses a significant challenge to the BSP. The prolonged period of accommodative monetary policy in the major economies, and the country's greater financial market openness, created an excess structural liquidity condition. This drove short-term interest rates in the country to unusually low levels and the government's short-term Treasury bill rate (ie traditional benchmark reference rate) fell outside the corridor of BSP interest rates. This put pressure on monetary operations as market interest rates began to disconnect from the BSP's policy rate. This, in turn, hampered the ability of the BSP to implement monetary policy and manage liquidity effectively. The situation was exacerbated by the BSP's institutional constraints, such as its inability to issue its own debt instruments and its limited capitalisation.

In response, the BSP initially turned to alternative instruments such as the Special Deposit Account (SDA) as a means of absorbing excess liquidity. Banks and other qualified financial institutions (such as trust entities) place their excess funds in the SDA instead of deploying these to other productive uses (eg credit, interbank loans etc). This hindered the development of the domestic money market as counterparties considered the SDA to be an investment vehicle rather than a tool for monetary policy and liquidity management. As a result, market interest rates gravitated towards the SDA rate, which was far below the BSP's official policy rate or the overnight RRP rate. To address this, the BSP ultimately rationalised the SDA by prohibiting non-resident funds from being placed in the SDA facility in 2012 and by limiting the access of trust institutions to the facility in 2013.

To help strengthen the transmission of monetary policy to market interest rates, amid a huge structural liquidity surplus due to strong capital inflows, the BSP adopted the Interest Rate Corridor (IRC) System in 2016. Under the IRC, the operational framework for monetary policy implementation was redesigned to

40 Guinigundo (2005).

41 Guinigundo and Cacnio (2019).

42 Lim (2008).

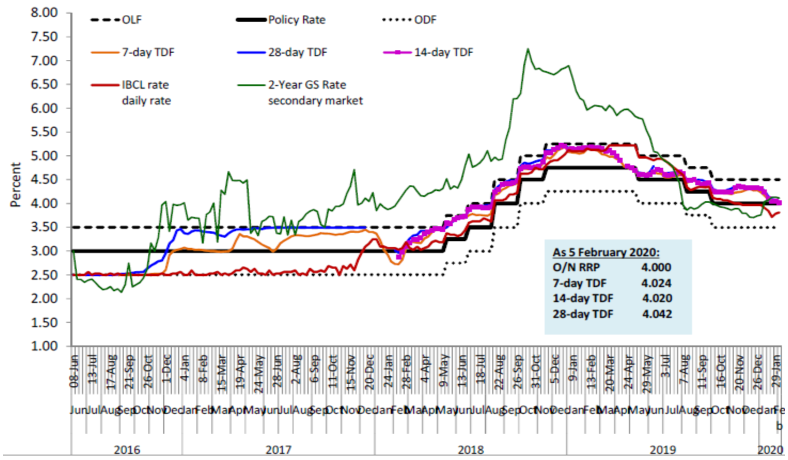
43 Guinigundo and Cacnio (2019).

accommodate a varying balance of monetary instruments, including rules-based and market-based instruments. The BSP allowed for more active liquidity management with the use of market-based instruments for open market operations to steer short-term market interest rates towards the policy rate. Moreover, access to the term deposit facility (TDF) was limited only to aid in the development of the domestic money market, particularly the interbank market.

Market rates have moved in line with the BSP's policy rate since 2018 (Graph 6). A closer relationship between the policy rate and the market interest rates enables the BSP to generate a more effective policy signal. The BSP also introduced further refinements to the IRC framework to encourage active and dynamic liquidity management by banks as well as provide the BSP with greater operational flexibility.[44] These refinements help lessen the BSP's reliance on reserve requirements to manage liquidity in the financial system over the medium term. This, in turn, should reduce intermediation costs and free up resources to finance productive economic activities.[45]

Market rates closely track BSP policy rate

(in %, June 2016-February 2020) Graph 6



Source: Bangko Sentral ng Pilipinas.

With the increasing reliance on market-based instruments, the IRC is expected to aid the development of the domestic money and capital markets. IRC will support increased money market transactions as well as promote more active liquidity management by individual financial institutions. The BSP also encourages the development of an active and liquid repo market that will support the establishment of interest rate benchmarks and strengthen the monetary policy transmission process. The repo market allows market-makers to consistently provide two-way prices for traded securities, improving price discovery. This environment will help provide valuable information on the prevailing cost of liquidity, thereby, facilitating the establishment of sound interest rate benchmarks.

44 BSP (2019).

45 BSP (2019).

Meanwhile, the BSP continues to implement a flexible exchange rate regime, which serves as the country's first line of defence against external shocks. By helping reduce spillovers to the economy, adherence to a flexible exchange rate strengthens the BSP's monetary policy autonomy. The flexible exchange rate regime allows the BSP to intervene only if volatility in the foreign exchange market is perceived to adversely affect the inflation outlook. In recent years, a number of studies have shown that exchange rate pass-through has declined, particularly under the IT regime.[46]

Moreover, the BSP has been using macroprudential policies to complement monetary policy in the face of financial market developments. Monetary policy is considered better suited to managing aggregate demand and addressing broader macroeconomic conditions.[47] Using monetary policy to mitigate the effects of financial distortions can be destabilising, as seen in the 1970s and the 1980s. Hence, the BSP has made several regulatory reforms to further strengthen risk management practices in the banking system and enhance capital buffers against possible unforeseen shocks. Currently, the BSP also has an ongoing rationalisation of reserve requirement policy that aims to promote a more efficient financial system and to reduce market distortions. The BSP also constantly refines its monetary operations and continues to closely monitor developments in domestic credit and liquidity conditions in conjunction with the evolving inflation outlook in order to assess the need for further adjustments, as necessary.

The BSP also continues to use financial market development indicators in aid of monetary operations and monetary policy formulation, given that financial market prices reflect market expectations about future economic developments.[48] The BSP evaluates the information contained in financial market data, together with other monetary and economic indicators.

For instance, the BSP continues to use the information contained in the yield curve to gauge inflation expectations. Also, following the implementation of the IRC in 2016, transactions in the interbank call loan (IBCL) market have increased in volume, with the average IBCL rate now closely tracking the policy rate. Notwithstanding increased activity in the IBCL market, the IBCL rate may not always be a precise indicator of aggregate liquidity conditions due to market segmentation, with smaller banks often unable to borrow at the IBCL rate. Hence, the BSP supplements the IBCL with other market-determined rates, eg the term deposit facility (TDF) rates. The BSP also looks at credit thresholds developed by the Bank for International Settlements and the International Monetary Fund to help identify periods of excessive credit growth, as well as the NPL ratio, NIMs, the loans-to-deposit ratio (LDR) of the Philippine banking system, and residential real estate prices (RREPI) to monitor house price inflation.

Together with financial market development, communication has become a more important tool for monetary policy through the policy signalling channel. The BSP believes that the effectiveness of its monetary policy depends largely on its ability to anchor the public's expectations, particularly of its key stakeholders. Clear and credible communication is an indispensable tool in anchoring economic agents' expectations. For instance, following the BSP's adoption of the IRC system in June

[46] Dakila et al (2019); Delloro et al (2017); Glindro et al (2016); Tuano-Amador et al (2009).

[47] Guinigundo and Cacnio (2019).

[48] Hildebrand (2006).

2016, clear and effective communication was very important in allaying market concerns. The BSP clarified that the changes implemented were mainly operational adjustments that did not involve a change in the stance of monetary policy. Moreover, the IRC reforms were specifically calibrated to have a neutral impact on monetary conditions upon implementation. At the same time, the expected migration of liquidity from the overnight deposit facility (ODF) to auction-based instruments (such as the TDF and the RRP facility) is seen to bring market interest rates closer to the BSP policy interest rate.

The BSP's monetary policy communication strategy has been generally consistent even as the domestic financial market continues to evolve. It follows a targeted approach in its monetary policy communications, with financial market participants as the key target audience. Alignment of commentaries of financial market analysts with the BSP's messaging is seen to reflect the effectiveness of BSP in conveying its key monetary policy messages to its main target audience. Meanwhile, the BSP also hopes to reach a wider audience, especially the non-financial sector public, to help in managing inflation expectations. To do this, the BSP has recently been expanding its online presence on various social media platforms via infographics and live streams of its press conferences on monetary policy decisions and data releases.

Interaction of financial market development with financial stability

Financial market development is intended to control systemic risk and to promote price discovery and transparency, with the ultimate goal of ensuring the stability and effectiveness of the financial system. A well functioning financial market helps avoid disruptions and provides an avenue for the smooth functioning of the financial system. Financial stability is needed to ensure smooth flow of financial transactions and efficient allocation of resources, in which financial asset prices are in synch with economic fundamentals.[49]

The BSP strongly supports financial market reforms for a more balanced financial ecosystem where a "well-functioning banking system is complemented by deep and liquid debt and equity markets and where there are viable alternative sources of financing for long-term investments, including the development of necessary financial market infrastructures" (Espenilla (2017b)). Financial market development could help reduce risk concentration in the banking sector, specifically the inherent maturity mismatches in the banking books. A less-than-balanced financial system could make the banking sector more vulnerable than it would be, had other complementary markets been better developed. Moreover, well developed financial market segments (eg capital, money market, derivatives and foreign exchange) are necessary in credit intermediation as they promote efficiency, productivity and innovation. For instance, a well developed foreign exchange market allows investors to hedge or mitigate exchange rate risk.

Recognisably, financial market development may result in greater systemic risk. The concept of systemic risks, arising from correlation risks and the interlinked behaviour of the agents in the system, gives vulnerability assessments a new

[49] See the Bank of Korea's definition of financial stability.

perspective beyond the usual risk analysis involving credit, liquidity and market risks. Interlinkages between products, market players and institutions are now recognised to have a greater significance in the assessment of risks as they can serve as channels for transferring risks and amplifying vulnerabilities in the financial system.

The growth of shadow banking is an offshoot of greater financial market development. Since the purpose of financial markets is to manage risk, there could be a shift in the pattern of financial intermediation from banks to the non-bank sector. On one hand, this may foster the growth of "shadow banking" as financial market development strengthens credit intermediation not only in the banking sector but also provides access to non-bank financial institutions (NBFIs). On the other hand, the proliferation of "shadow banks" could likewise be a risk to financial stability unless appropriate monitoring and regulations are in place.

Financial market development enables the broadening and deepening of the financial sector and encourages the entry of foreign investors. Initiatives to develop the financial market have increased the external positions of different sectors. Based on the international investment position data of the Philippines, external financial liabilities increased particularly for deposit-taking corporations (banks except BSP), general government, and NBFIs. The increase in external financial liabilities was mostly due to investments in equity capital and debt instruments (Table 1).

International investment position of the Philippines (BPM6) Table 1

	2009	End-Sep 2019
Assets growth rate (%, 2009 vs 2006; end-Sep 2019 vs 2009)	53.7	140.9
Contribution to asset growth (in ppt)		
Direct investment	15.3	54.9
Portfolio investment	-2.4	23.3
Financial derivatives	0.2	0.4
Other investment	-0.4	10.7
Reserve assets	40.9	51.7
Liabilities growth rate (%, 2009 vs 2006; end-Sep 2019 vs 2009)	11.1	107.6
Contribution to liabilities growth (in ppt)		
Direct investment	6.2	55.2
Portfolio investment	1.6	39.8
Financial derivatives	0.2	0.2
other investment	3.2	12.5
Liabilities (without direct investment) by sector growth rate (%, 2009 vs 2006; end-Sep 2019 vs 2009)		
Deposit-taking corporations, except central bank	-28.7	218.7
Other sectors	11.4	74.8
General government	17.7	24.3
Central bank	-54.2	-28.4

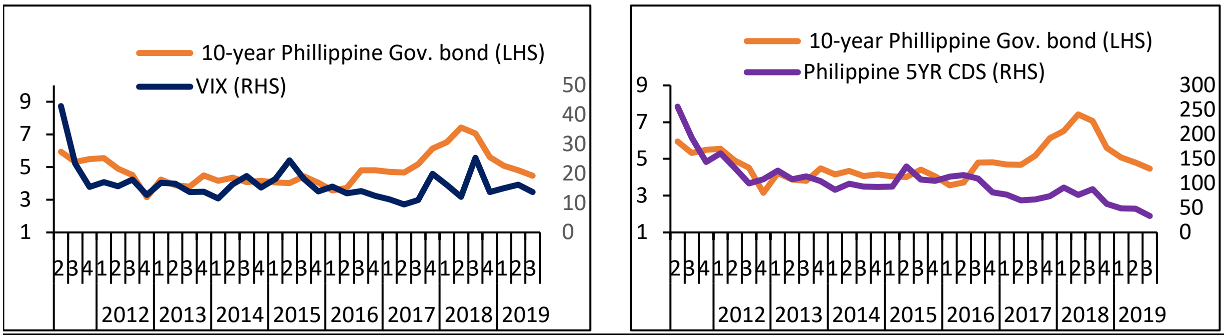
Source: Bangko Sentral ng Pilipinas.

Moreover, foreign transactions in the Philippine stock exchange have accounted for the majority of the total value traded in recent years. From a 28.6% share after the AFC in 1999 to a 32.5% share after the GFC in 2009, foreign transactions started accounting for more than half of the total value traded in 2016 with a 51.5% share, and rising further to 57.4% in the first two months of 2020.

As a result, financial market development amplifies, to some degree, the global spillovers to Philippine financial markets. With the development of domestic money, bond and equity markets, offshore players have found increasing investment opportunities in the Philippines, leading to substantial inflows of foreign funds. As the Philippine financial markets have grown more integrated with the global economy, domestic asset prices and the Philippine peso have become more responsive to economic developments that affect investor sentiment abroad (Graph 7). This was also shown by Guinigundo (2014)[50] in his vector autoregressive model analysis, which indicated that the degree of pass-through from the US 10-year bond to the Philippine 10-year bond became more significant between 2008 and 2013 than in the pre-crisis period of 2003–07. This can be a source of vulnerability, as foreign investors have increasingly displayed a tendency toward risk aversion and are now quick to rebalance their portfolios.

Risk appetite (VIX), CDS and 10-year Philippine government bond interest rate

(in %, Q1 2011-Q4 2019) Graph 7



Sources: Bureau of Treasury; Bloomberg.

The low domestic interest rate environment and greater availability of credit after the GFC could also pose potential risks to financial stability. One possible risk is the rise in leverage of non-financial corporations (NFCs) as firms channel the funds sourced from both the banking system and the capital markets to fund regular business operations and investments in financial assets. Initial findings from the Corporate Financial Trends Survey (CFTS) conducted by the BSP in August 2018[51] show a continued rise in corporate borrowings. This can also be seen in the increase in bank lending to the non-bank private sector in the country in recent years (Graph 8).[52] The increase in corporate debt exposes firms to greater interest rate and foreign exchange risks.

50 Guinigundo (2014).

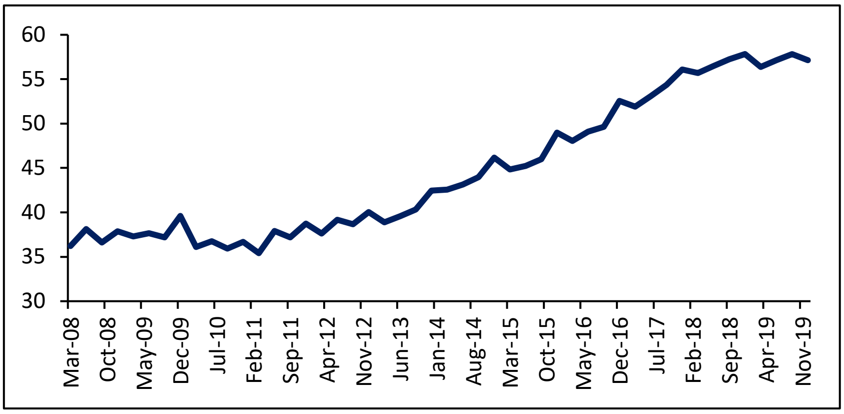
51 Preliminary results are still subject to the approval of the Monetary Board as of writing.

52 Based on limited data, household debt in the Philippines remained modest. Data from the Family Income and Expenditures Survey show that from 2000 to 2015, total household debt had a compounded annual growth rate of 6.5% (BSP Financial Stability Report (2017)) but in terms of its ratio to GDP, it declined from 2.0% in 2000 to 1.4% in 2015. Guinigundo (2015) also made a similar observation but using outstanding consumer loans data.

Bank credit to non-financial private sector

(in % of GDP, March 2008–November 2019)

Graph 8

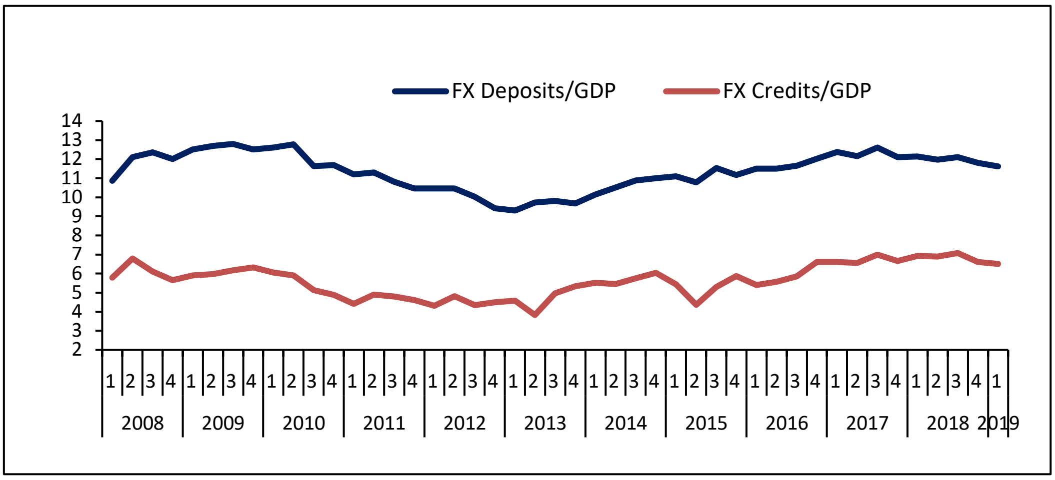


Source: Bangko Sentral ng Pilipinas.

The Philippine financial markets have demonstrated resilience in the face of recent economic pressures and geopolitical tensions. This resilience is attributed to the implementation of structural and financial reform programmes that expand the depth and breadth of financial markets as well as enhance their efficiency in funds intermediation. This may also be partially traced to the flexible exchange rate regime and close monitoring of foreign currency exposures in the public and private sectors, with the aim of ensuring that foreign borrowing remains manageable. The BSP's presence in the market, together with the BSP's regulations, keeps the peso's volatility at levels comparable with that of regional peers. Data from universal and commercial banks indicate that FX funds in the country have been relatively stable in recent years as shown by the ratios of FX deposits and credit to GDP (Graph 9) and to the UKB's balance sheets (Graph 10).

Ratios of universal/commercial banks FX credit and FX deposits
Q1 2008–Q1 2019

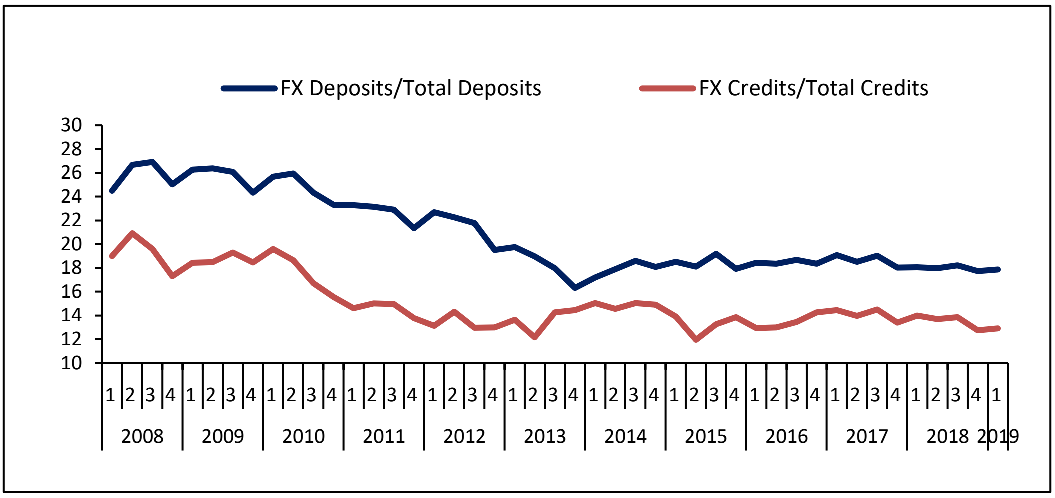
(in % of GDP) Graph 9



Source: Bangko Sentral ng Pilipinas.

Ratios of universal/commercial banks FX credit and FX deposits
Q1 2008–Q1 2019

(in % share of total deposits/credits) Graph 10



Source: Bangko Sentral ng Pilipinas.

While greater foreign participation in the domestic markets may lead to increased sensitivity to global risk dynamics, it may actually increase market resilience. Increased participation by offshore investors in the domestic financial markets makes these markets deeper and more liquid. The influx of funds also contributes to the growth of the real economy, as the supply of capital to finance productive endeavours increases. Moreover, as investor types diversify, selling pressures during periods of increased global uncertainty may lessen, as increased interest from one group of investors may serve to offset divestments by another group. Also, the presence of foreign investors encourages Philippine issuers to adopt global best practice in governance and disclosure frameworks.

Major reforms in the local currency debt market lead to lower financing costs at home, providing an incentive to reduce foreign currency exposure. The BSP believes that a sound local currency debt market supports the development of the country's financial sector and efficiently channels foreign capital into the economy. This could be a valuable source of long-term financing. As pointed out by Espenilla (2017a), this is important for more efficient fiscal operations since a robust local currency debt market supports a sustainable, market-oriented debt strategy at reasonable cost and with a desirable mix of maturities. A more liquid money market could also strengthen the monetary transmission mechanism.

The development of the domestic currency debt market is valuable to the private sector as it broadens investment opportunities and paves the way for increased availability of financial products (Espenilla (2017a)). This may include hedging instruments that could help boost the country’s economic resilience to external shocks. The development of interest rate and foreign exchange-related hedging instruments supports risk management and hence financial stability as these allow market participants to mitigate risks related to rising interest rates and volatilities in the exchange rate. Also, developments in non-residents’ use of the Philippine peso, particularly in the non-deliverable forwards (NDF) market, are important from a policy perspective. For instance, there are important linkages between the onshore markets and the offshore NDF market. For one, there could be volatility spillovers from the NDF market to the onshore spot market, particularly during uncertain market conditions. NDF prices also provide useful information for policymakers about market expectations of potential pressures on the exchange rate or changes in perception about country risk.

The development of the local money market plays an important role in the evolution of FX cash and derivatives markets. Reforms to further deepen the domestic money markets (eg the IRC system and the development of the overnight indexed swap market) are essential to adequately price FX risk-management (or hedging) instruments such as forwards and swaps, and to improve liquidity to support the growing hedging market. Deepening the domestic money market could strengthen the county’s resilience against external shocks such as capital flow volatility and FX volatility. Hedging markets are important when pressures arise from sudden flight of capital due to narrow return differentials in a domestic financial market. The ability of market participants to hedge their exposures reduces the impulse for destabilising capital flight.

Borrowing in local currency may help overcome “original sin”[53] or a situation in which a country is unable to borrow abroad in its own currency, resulting in a currency mismatch in the balance sheet. However, while the local currency bond market could protect the borrowing country from the adverse effects of large currency depreciations, this does not totally ensure financial stability when the share of foreign participants in the market is large. The country will still be susceptible to capital flow reversals when foreign exchange risk materialises.

The BSP has also been coordinating with other central banks in Asia for the establishment of a local currency settlement framework (LCSF), which, in a way, may help overcome “original sin”. An LCSF would allow a foreign currency to be

[53] Eichengreen et al (2003).

directly priced against the Philippine peso, and vice versa. This could reduce foreign exchange risks and encourage a wider use of both currencies. This is expected to boost trading and investment volume and is also viewed as a good opportunity to deepen bilateral economic and commercial ties between the countries involved. A well developed financial market paves the way for smooth and easy cross-border capital movements. This financial market infrastructure could also foster risk-sharing between resident borrowers and foreign investors in terms of foreign exchange risk and interest rate risk, as well as credit risk.

For instance, the Philippines has signed three pairs of bilateral letters of intent on LCSFs with Indonesia,[54] Thailand[55] and Malaysia[56] in 2019. The bilateral arrangement between two central banks centres on the use of their local currencies for the settlement of trade in goods and services, which may later include direct investments and other similar activities such as income transfers. The framework promotes use of the local currency and reduces reliance on the US dollar, and it could also strengthen economic linkages among countries, thereby moderating financial stability risks. It also supports the development of domestic financial markets due to increasing demand for regional currencies and ultimately support regional economic and financial integration. Aside from ASEAN, the Philippines is also coordinating with other countries in Asia.[57]

While important strides have been made in deepening the Philippine capital market, further reforms are needed for the country to be at par with its neighbours. To date, the local currency bond market in the country consists mostly of public issuances and the corporate bond market remains small. This is partly due to the strong policy bias of the national government in favour of domestic borrowing in order to reduce foreign exchange risks and support the development of the domestic bond market. Based on investor profile data, domestic investors, mostly banks and investment houses, hold the largest share of government bonds. The availability and take-up of hedging solutions in the domestic market in the country appear to be limited at present.[58]

To further develop the local debt market, the BSP will spearhead the implementation of the consolidated roadmap for local currency debt market development, which was jointly introduced by the BSP with other government agencies[59] in 2017. It comprises harmonised programmes and policies that specify a set of steps to expand market depth and breadth as well as encourage active trading and the development of market-based benchmarks. The initiatives follow a deliberate, sequenced programme of immediate to medium-term action plans to ensure that urgent and important issues are tackled without disrupting the financial markets. The

54 A BSP-BI bilateral meeting was held on 8 August 2019 to discuss the technical details of the proposed LCSF, which include the criteria and process for the selection of ACCDs and the foreign exchange administration flexibilities that may be extended to support the proposed LCSF.

55 The BSP is currently reviewing the list of regulations that will be affected by the implementation of LCSF with Thailand.

56 In November 2019, the BNM delegation informed the BSP that it is undertaking a review of its existing LCSF agreements with BOT and BI before proceeding with discussions with the BSP.

57 With Japan, China and Russia.

58 Based on the 2019 Financial Stability Report, the total outstanding notional amount of derivatives positions as of December 2018 was lower than its level three years previously (in 2015) and is equivalent to 2% of the total resources of all Philippine UKBs.

59 Includes the Securities and Exchange Commission (SEC), the Department of Finance (DoF), and the Bureau of the Treasury (BTr).

BSP has also further liberalised foreign exchange rules to facilitate the flow of foreign portfolio investments to fuel the development of the local debt market. These reforms aim to promote greater ease in the use of the foreign exchange resources of the banking system for legitimate needs by relaxing FX rules and streamlining procedures and requirements.

Meanwhile, to further strengthen the Philippine banking system, the BSP has consistently pursued a reform agenda on macroprudential and microprudential tools to strengthen financial supervision and mitigate financial stability risks. After the AFC, the BSP learned that while micro regulatory oversight is crucial in ensuring that financial institutions continue to be safe and sound, this is insufficient for maintaining financial stability. This is because the interlinkages within the financial network create risk behaviours that are distinct from the risks that are seen at the firm level. As a result, the BSP started to implement macroprudential measures to mitigate systemic risk or the likelihood of failure of a significant part of the financial system. The early implementation of combined macroprudential and microprudential measures is one of the reasons why the country was not as heavily affected as other emerging economies when the GFC hit in 2008.[60] The GFC also underscores the need for a more systematic and wide-ranging macroprudential supervision due to the great potential damage from systemic breakdowns.[61] Based on the BSP's experience, macroprudential measures are effective if these are administratively manageable and can alter risk behaviours by, for example, making banks more risk-sensitive and prudent in managing their risk-taking activities. Meanwhile, effective microprudential measures require not only adherence to the technical and quantitative aspects of regulatory standards, but also the development of an appropriate culture within a sound corporate governance framework.

The BSP also continues to strengthen its financial risk surveillance. With high-quality data, timely insights on system-wide and idiosyncratic risks can be derived. The BSP has put in place a number of tools to enhance data capture in support of its financial stability framework. These tools enable the BSP to provide a holistic assessment of the condition and performance of the banking system, identify emerging vulnerabilities and risks confronting the banking sector and their potential impact on financial stability. They also allow the BSP to make more informed and calibrated policy decisions in areas that require careful supervisory action. Aside from strengthening the surveillance of the financial system to identify and manage these risks, clear, transparent and timely communication is essential for a more effective financial stability framework. The BSP communicates financial system vulnerabilities and corresponding actions or responses primarily through media releases, interviews and speeches within a communications framework.

Future challenges and policies

Due to their intrinsic links, financial market developments interact with monetary policy and financial stability. Hence, central banks should closely monitor and assess

[60] Fonacier (2019).

[61] Ibid.

future developments in the financial market as these could affect the efficiency and effectiveness of monetary policy as well as the stability of the financial system.

Central banks in EMEs also grapple with the emergence of new players from fintechs to big techs[62] that may disrupt some sectors of the financial market. These innovations include new business models such as peer-to-peer (P2P) payments and lending, crowdsourced funding and social network credit scoring, as well as enhanced solutions to traditional businesses in the payments sphere. While new entrants could bolster market competition and enhance financial inclusion efforts, these firms may also pose financial stability risks. These businesses could be a destabilising force for banking businesses and the payments system. For one, they could also be a channel for capital outflows, promoting currency speculation and capital flight, over which the central bank would have little control. Moreover, new lending platforms may introduce financial stability risks if the credit activity of new entrants were to grow, given the uncertainties in the quality of data being used in assessing risks and the lending standards. Risks may also arise from the increasing utilisation of cloud services as these may be exposed to cyber threats or widespread disruption in the financial system should cloud services malfunction or be inaccessible.

In response, regulators should recognise that they are now operating in a more complex financial landscape, where traditional banks compete or cooperate with these new players. As new forms of risks arise, the goal of policymakers is to find the right balance such that rules do not become a burden to the entry of innovative players while ensuring that new entrants not entail financial stability risks.

The BSP remains dedicated and committed to supporting beneficial innovations through an enabling policy and regulatory environment. It openly engages with fintech players and innovators through a flexible "test and learn" environment or the "regulatory sandbox", which enables it to fully understand emerging business models while assessing the attendant risks. The BSP is also undertaking capacity-building programmes that would help operationalise the institution's duty to ensure resilience against the risks that new technologies may bring to the financial system. Training opportunities are being deployed to provide regulators with the proficiency and competence to keep track of fast-evolving innovations. The BSP is crafting a roadmap that espouses collaborative engagement, capacity-building initiatives, and commensurate regulation.

Going forward, the BSP will keep a watchful eye on possible signs of imbalances in the market in carrying out its price and financial stability mandates. In particular, the digitalisation of the payments system, the adoption of new forms of electronic payments and stores of value, and the issuance of digital currency could fundamentally affect money demand. As these forces take root in the Philippines, the BSP will need to assess how any resulting changes in money demand could affect its liquidity forecasts for monetary operations. In this regard, it is also exploring the use of big data to supplement its current data needs for monitoring liquidity conditions.

The BSP envisions its monetary policy operations and financial policy to be more flexible and dynamic to adapt to emerging financial market developments. It will continue to calibrate monetary tools to address the greater role

[62] Big techs are large technology firms providing digital services such as messaging services, search engines, and e-commerce platforms. In the process, they have accumulated large amounts of data which can be used to further expand their businesses.

of financial markets in policy transmission. It will also push for continuous and sequenced reforms of its financial policies as well as the modernisation of its internal processes through the adoption of technology-enabled solutions. It will transform its supervisory assessment framework into a seamless, dynamic and more-forward-looking supervisory model.

Monetary operations will be supported by the restoration of the BSP's ability to issue debt securities under the Republic Act No 11211 [63] ***on 14 February 2019.*** The restoration of the BSP's authority to issue its own debt securities even in normal times[64] provides the BSP with additional tool for managing financial system liquidity. Issuance of BSP securities will be used for the absorption of any structural liquidity surplus in the face of persistently large capital inflows as well as for siphoning off liquidity released from the planned operational reductions in reserve requirements over the medium term. At the same time, issuance of BSP securities will help in the development of the domestic bond market as it facilitates the construction of the benchmark yield curve at the short end.

Moreover, the Charter further strengthens the BSP's capability to promote the stability of the financial system and addresses supervisory gaps in the areas of data and information-gathering[65] as well as wider institutional coverage, among others. For instance, BSP's regulatory and examination powers have been expanded to include the quasi-banking operations of NBFIs (eg money service businesses and credit granting entities) to manage the build-up of systemic risks such as those that could possibly stem from shadow banking. The law also paves the way for the BSP to implement a more forceful inspection and disciplinary authority over the banks and other financial institutions it regulates nationwide.

Lastly, the BSP is committed to implementing timely, necessary, and appropriate measures to address any turbulence in the financial market. While the Philippine financial system remains sound with adequate capital and liquidity buffers, the volatility in the domestic financial market in the early part of 2020 due to uncertainties over the impact of Covid-19 has led the BSP to undertake extraordinary measures to support domestic liquidity, shore up market confidence, and ensure the proper functioning of the financial market.[66]

[63] An Act Amending R.A. No 7653, otherwise known as the "New Central Bank Act".

[64] Prior to the approval of the amended BSP Charter (RA 11211) on 14 February 2019 (which amended RA 7653), the BSP was allowed to issue its own debt securities only during periods of extraordinarily high inflation.

[65] On data information and gathering, the new law provides the BSP with the authority to require from any person or entity, including government offices and instrumentalities, or government-owned or –controlled corporations, any data, for statistical and policy development purposes in relation to the proper discharge of its functions and responsibilities.

[66] BSP (2020).

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