

EXECUTIVE SUMMARY

The Bangko Sentral Ng Pilipinas (BSP), together with the other financial sector regulators and the Department of Finance (DoF), made significant progress in developing a framework for macroprudential supervision. The BSP plays a central role as the bank and payment system supervisor, as well as macroprudential authority with its financial stability mandate obtained in 2019, and the chair of inter-agency coordination mechanisms (Financial Stability Coordination Council, FSCC). The FSCC was established in 2011 as a voluntary interagency body (without decision-making powers) to coordinate macroprudential policies and crisis management and include the BSP, Securities Exchange Commission (SEC), Insurance Commission (IC), Philippine Deposit Insurance Commission (PDIC) and the DoF. Within the BSP, a financial stability “unit” (OSRM, established in 2017) works on macroprudential analysis and policy preparation. BSP’s Financial Stability Policy Committee (FSPC), a Monetary Board (MB) subcommittee established in 2020, decides on macroprudential issues, while policy decision making on monetary policy and financial sector supervision takes place in the MB.

Collaboration and coordination within the BSP should be further enhanced to conduct essential macroprudential risk analysis and assure a balanced decision-making process.

- **Financial stability analysis:** Currently, the supervision sector implements all bank-related analysis and set prudential tools except for countercyclical buffer (CCyB), and OSRM focuses on non-financial corporates (NFCs) and sectors and their link to banks and CCyB.¹ Meanwhile, macro-scenario stress testing—one of the essential tools for financial stability analysis—is missing despite the strong capacity of the staff. The BSP should start such an exercise. For instance, a macroprudential bank solvency stress test similar to this FSAP’s work could be implemented with inputs from research (macro scenario), supervision (bank stress test), and OSRM (second round effects and bank-NFC liquidity linkages). However, there is no single best practice about how to organize stress testing work. Several units and sectors could work jointly, or different sections could conduct distinct exercises depending on their objective.
- **Decision-making process:** Monetary and supervision sectors and OSRM should enhance their coordination at technical and senior levels, so that all the three perspectives are reflected when deciding on monetary, micro-prudential, and macro-prudential policies with a clear mechanism to resolve any conflicting policy views. There are multiple institutional arrangements that could facilitate cooperation. For instance, the FSPC could be complemented with an advisory committee that facilitates technical-level cooperation, similar to the arrangement for monetary and supervision sectors, before MB discussion. Also, OSRM’s Assistant Governor could be given the general right to attend MB meetings to participate in discussions on monetary policy and financial supervision. (similar to the DGs, who are attending FSCP meetings). In the medium-term, OSRM’s status could be raised to a “sector” (like for monetary policy and financial sector supervision). The legal standing and policy making process of the FSPC also needs to be strengthened.

¹ There are three sectors in the BSP: (i) Monetary and Economic Sector, (ii) Financial Supervision Sector, and (iii) Corporate Services Sector. Each sector is headed by a Deputy Governor.

The influence of FSCC decisions—the interagency financial stability committee—can be enhanced. So far, the FSCC has been focusing on risk monitoring. To mitigate potential inaction bias, the FSCC should obtain powers (and a clear Charter or Terms of Reference)² to make formal recommendations to its member agencies with a comply-or-explain mechanism. Providing a financial stability objective to the IC, SEC, and PDIC could also strengthen the influence of FSCC’s recommendations.

The BSP needs to expand its macroprudential policy toolkit and establish operational procedures to set them in a more systemic risk-based manner. So far, CCyB is the only prudential tool that is explicitly recognized as a macroprudential toolkit for banks. Nonetheless, there are many other prudential tools that are used explicitly as macroprudential tools in other jurisdictions. While the BSP has many of these tools (e.g., LTV, liquidity, FX positions), these have been so far set from micro-prudential perspectives in the sense that they are not explicitly calibrated in a countercyclical manner to build buffers during the expansion period. Indeed, operational procedures to set macroprudential tools in a more risk-based and countercyclical manner are missing for CCyB as well. Such a procedure, for example, would identify and monitor relevant systemic risk indicators and analyses with thresholds that trigger a discussion to activate tools and mitigate a potential inaction bias.

The data gap needs to be reduced to improve systemic risk monitoring and operationalize macroprudential tools. The quality of risk analysis is constrained by data gaps such as the lack of information on granular credit risk, including a fully operational national credit registry, current collateral values and loan-to-value ratios, small and unlisted NFCs, and household indebtedness and survey, and detailed depositor information due to the bank secrecy. In this context, the new BSP power to collect information from broader economic sectors for stability analysis and SEC’s initiatives to digitalize more comprehensive NFC data are welcome progress. Closing the data gap is essential for systemic risk analysis, which cover some key vulnerabilities, such as real estate, nonfinancial corporations condition (the offshore and foreign currency borrowing) and its link to conglomerate groups and banks, that need to be closely monitored.

The new powers provided in the NCBA to collect data and information need to be operationalized. The NCBA bestows the BSP with expanded powers to collect information from all persons and entities (including from the government and government controlled entities) for statistical and policy development purposes. This should increase the BSP capability in providing a more comprehensive and accurate analysis, including for financial stability. However, this power still needs to be operationalized.

BSP should assure that OSRM is adequately staffed to be able to fulfil its objectives. Compared to its allocated budget, OSRM appears to be understaffed. In addition, given that the scope of the

² Post assessment, on 06 July 2021, the Office of the President of the Philippines issued Executive Order No. 144 s. 2021 which institutionalizes the FSCC and formalizes its objectives.

work of the financial stability unit is still evolving, BSP should periodically assess if the allocated staffing is adequate.

Table 1. Philippines: Recommendations on Macroprudential Policy Framework and Tools	
Recommendations (responsible authority)	Timing*
<i>Institutional Arrangements</i>	
1) Enhance collaboration within the BSP to conduct essential macroprudential risk analyses and assure a balanced decision-making process (¶14, 15, 51).	NT
2) Strengthen the legal standing of FSPC to support its role in BSP's decision making process on macroprudential prudential issues (¶15).	NT
3) Consider providing the financial stability unit internally the same status as the monetary policy and financial supervision sectors (¶16).	MT/LT
4) Allow the financial stability unit to consider a broader range of prudential tools for macroprudential purposes (¶17).	NT
5) Adopt internal arrangements for data and information sharing between sectors for financial stability analysis (¶18).	NT
6) Assure that the financial stability unit is sufficiently staffed to fulfill its objectives (¶19).	NT
7) Strengthen the influence of FSCC decisions by adding a comply-or-explain mechanism and providing sectoral regulators with a financial stability objective (¶22, 23).	MT
<i>Systemic Risk Monitoring</i>	
8) Enhance the macroprudential strategy framework by improving the construction of the ultimate policy target and further elaborating the macroprudential toolkit (¶24).	NT
9) Introduce macroprudential stress testing exercises (¶27).	NT
10) Enhance the scope and granularity of data collected for systemic risk monitoring purposes (¶28, 41, 49).	NT
<i>Macroprudential Toolkit</i>	
11) Expand macroprudential policy toolkit and establish operational procedures to set them in a more systemic risk-based manner, including for property lending (such as LTV) and forex exposure (NOP based on capital) (¶33, 34, 41, 45).	NT
12) Consider implementing a positive "normal" CCyB buffer rate before imbalances start to build up (¶35).	MT
13) Consider adopting a foreign currency LCR (¶45).	NT
14) Strengthen BSP's existing interconnectedness analysis, such as connecting the network analysis to bank stress tests and utilise other sources of data (¶49).	NT
* I = immediate (within one year); NT = near term (within 1-2 years); MT = medium term (within 3-5 years)	

INTRODUCTION³

1. The past few years the Philippines made significant progress on developing their financial stability framework. The financial stability mandate is a formal mandate that is uniquely ascribed to the Bangko Sentral Ng Pilipinas (BSP). The mandate is stipulated for in the amended BSP Charter (Republic Act No. 11211), also known as the New Central Bank Act (NCBA), which was signed in February 2019. This mandate (which completes BSP's prior mandates on monetary policy, banking supervision, and payment system oversight) provides the BSP the power to monitor and mitigate systemic risks that could affect the financial system, assuring that it is able to support the real economy in normal times while remaining resilient when disruptions arise. As required by its Charter, the BSP works hand in hand with other financial authorities, including the Insurance Commission (IC), Securities Exchange Commission (SEC), Philippine Deposit Insurance Corporation (PDIC) and the Department of Finance (DoF), through interagency cooperation mechanisms to achieve this objective. With the "new" financial stability mandate on its Charter, the BSP has further developed its financial stability framework and is evolving its macroprudential framework to tackle systemic risk.

2. This technical note evaluates the Philippine macroprudential framework and provides recommendations to strengthen it. This is the first evaluation of the framework for macroprudential arrangements, policies and tools in the context of a Financial Sector Assessment Program (FSAP). The assessment is conducted based on the IMF guidance, which is laid out in the Staff Guidance Note ([IMF, 2014a](#)), its background note ([IMF, 2014b](#)), and other IMF's policy papers. It also assesses current financial vulnerabilities in the Philippines, including the ones related to the on-going COVID-19 pandemic, and provides recommendations to help address these.

3. The rest of this note is structured as follows. Section II reviews the current institutional arrangements and potential challenges. Section III discusses the systemic risk monitoring framework, including the current approaches, and existing challenges such as coordination and data gaps. Section IV assesses systemic risks and maps the assessment into recommendations on the macroprudential policy and the policy tools used.

INSTITUTIONAL FRAMEWORK

A. Progress Since the Previous FSAP

4. Since the last FSAP in 2010, the BSP has accomplished significant progress in developing its institutional arrangements and prudential framework.

- In 2011 the Financial Stability Coordination Council (FSCC) was established to promote the collaboration and coordination on financial stability issues between the relevant financial

³ This technical note was prepared by Irman Pardede (external). The mission team would like to thank the BSP, IC, SEC, Department of Finance, and representatives from the private sectors for the excellent cooperation and fruitful discussions.

sector authorities and the government. The council's members are the heads of financial authorities in the Philippines and the DoF. The Treasury also is invited to the meetings, but has no voting rights.

- In 2017 a dedicated financial stability unit, Office for Systemic Risk Management (OSRM), was established within the BSP. OSRM is responsible for financial stability analysis and policy preparation and also acts as the secretariat for the FSCC. OSRM is headed by an Assistant Governor (AG).
- BSP introduced some of the key elements of the Basel III framework including the Countercyclical Capital Buffer (CCyB), that is time-varying in nature to address procyclicality, and a framework and capital buffers for Domestic-Systemically Important Bank (D-SIBs). The CCyB has been kept at zero percent since its introduction in December 2018.
- In June 2018 the BSP published the first Financial Stability Report (FSR). It was then published annually to provide a thematic approach and an in-depth analysis of recent developments and potential risks that may have financial stability implications for the Philippine financial system. Going forward, the BSP is planning to publish the FSR semiannually. In November 2020, the BSP has published the first second semester of the FSR for the year 2020.
- In February 2019 BSP's assumed financial stability mandate was formalized with the amendment of the NCBA.
- Beginning 2020 BSP created an internal decision-making body for financial stability, the Financial Stability Policy Committee (FSPC). BSP discusses financial stability issues and policies proposal in the FSPC before putting them on the agenda of the FSCC for inter-agency discussion.
- In June 2020 the FSCC published the Philippine Macroprudential Policy Strategy.

B. Financial Authorities and Inter-Agency Cooperation Mechanism

5. The BSP is the sole regulator with a financial stability mandate and objective in the Philippines financial system. The formal mandate of financial stability is included in the NCBA, as amended in February 2019. The BSP defines financial stability as a state in which the financial system responds to the evolving market conditions and effectively addresses the varied needs of financial consumers while avoiding potential disruptions that can negatively impact the rest of the economy (emphasis added):

“Financial stability is the state when *prospective systemic risks* are mitigated so as to allow financial consumers, both individuals and corporate entities, to pursue viable economic goals while avoiding disruptions to the *smooth functioning of the financial system* that can negatively affect *the rest of the economy*”.⁴

⁴ Macroprudential Policy Strategy Framework: The Case of the Philippines, June 2020.

6. BSP's macroprudential powers are articulated in the Macroprudential Policy Strategy Framework as was published by the FSCC in June 2020. Subsequent to the stipulation of financial stability mandate in the NCBA, the BSP developed its macroprudential policy strategy to define the macroprudential framework, including how the framework interacts with its other mandates to achieve the financial stability objective. As stated in the framework, the macroprudential policy executes the financial stability agenda by limiting system-level risks over time and across market components. The policy is distinct from microprudential supervision which focuses on the safety and soundness of financial institutions. The macroprudential policy focuses on the risks created through the interaction of markets, institutions, and the choices of agents, while fully cognizant of the fallacy of composition.

7. The NCBA requires the BSP to closely work with the National Government and other financial sector authorities in achieving its financial stability objective. The relevant financial sector authorities are the:

- **Securities and Exchange Commission (SEC).** The SEC is the national government regulatory agency with jurisdiction and supervision over corporate sector (corporations, partnerships or associations), capital market participants (regulatory jurisdiction over investment companies, investment company advisors, financing companies and lending companies) and the securities and investment instruments markets. In addition to its regulatory functions, the SEC also maintains the country's register.
- **Insurance Commission (IC).** The IC is a national government regulatory agency which supervises and regulates the operations of life and non-life insurance companies, reinsurance companies, mutual benefit associations, trusts for charitable uses, insurance intermediaries and other auxiliary services. It issues licenses to insurance agents, general agents, resident agents, underwriters, brokers, adjusters, and actuaries. It has also the authority to suspend or revoke such licenses. It has authority under R.A. No. 9829 (Pre-Need Code) and Executive Order 192 (series of 2015) and Health Maintenance Organizations (HMOs), respectively.
- **Philippine Deposit Insurance Corporation (PDIC).** The PDIC is a government-run corporation providing deposit insurance coverage to member banks. PDIC serves as the principal liquidator and receiver of closed banks. Banks' membership of the deposit insurance scheme is mandatory. The scheme provides protection up to PHP 500,000 per depositor per bank.

8. The financial sector authorities, together with the Department of Finance (DoF), form the Financial Stability Coordination Council (FSCC) to cooperate on financial stability and crisis management issues. The FSCC was established in 2011, is a voluntary body, and meets on a quarterly basis to discuss industry wide perspectives in identifying financial issues and contemplating macroprudential regulation to mitigate systemic risk. The FSCC members are the Heads of the financial sector authorities and the DoF Secretary, and meets on quarterly basis. Most of strategic decisions on macroprudential issues are discussed in the FSCC, including the macroprudential strategy framework that was published under the flag of FSCC. The BSP Governor chairs the FSCC. OSRM plays as technical secretariat to support the FSCC.

9. Another relevant cross-sectoral coordination mechanism is the Financial Sector Forum (FSF), which plays a key role in the coordination of prudential supervision. The FSF, formed in July 2004, is made up of the BSP, SEC, IC and PDIC, and meets six times per year. The FSF is a purely regulatory forum where various supervisors meet and exchange views on immediate topics with respect to financial sector regulation and supervision. This is different with the FSCC meetings that take a longer-term global and macroprudential view. As with the FSCC, the FSF is chaired by the BSP.

10. Within the BSP, the Financial Stability Policy Committee (FSPC) is responsible for macroprudential decision-making.⁵ The committee was recently, in January 2020, established as a subcommittee of the Monetary Board (MB),⁶ replacing the previous Financial Stability Committee in the BSP.⁷ All MB members are also members of the FSPC and its meetings are also attended by the Assistant Governor (AG) for financial stability, as well as the Deputy Governors (DGs) responsible for monetary policy and financial sector supervision. The committee does not have any external members. The FSPC meets every two months to discuss issues on financial stability with technical supports, including the discussion materials, from OSRM. FSCC agenda items are pre-discussed in the FSPC.

11. The analytical work and financial stability policy preparation is performed by BSP's financial stability unit, which is called Office for Systemic Risk Management (OSRM). This office, established in 2018, is headed by an AG. OSRM does not belong to a specific sector within the BSP but reports directly to the Governor.⁸ The BSP published its first Financial Stability Review (FSR) in June 2018. The FSR is published semi-annually and provides a thematic approach and in-depth analysis of recent developments and potential risks that may have financial stability implications to the Philippine financial system.

12. For monetary policy and prudential supervision decision-making is taking place in the MB and there are no separate decision-making committees. The charter of MB allows the DG of each sector to attend the MB meetings with “the right to be heard” (the DGs have no voting rights). This makes all the sectors have their own representatives in the MB meeting while financial stability is represented by the Governor and not by the Assistant Governor heading the financial stability unit.

13. Strong institutional arrangements are essential for effective implementation of macroprudential policy. The following sections evaluates the institutional arrangements against three key principles in the IMF guidance (IMF, 2014a). These are: (1) *the willingness to act* in the face

⁵ The institutional set-up in the Philippines is similar to Model 1 as discussed in paragraph 81 of the [Staff Guidance Note](#) (SGN).

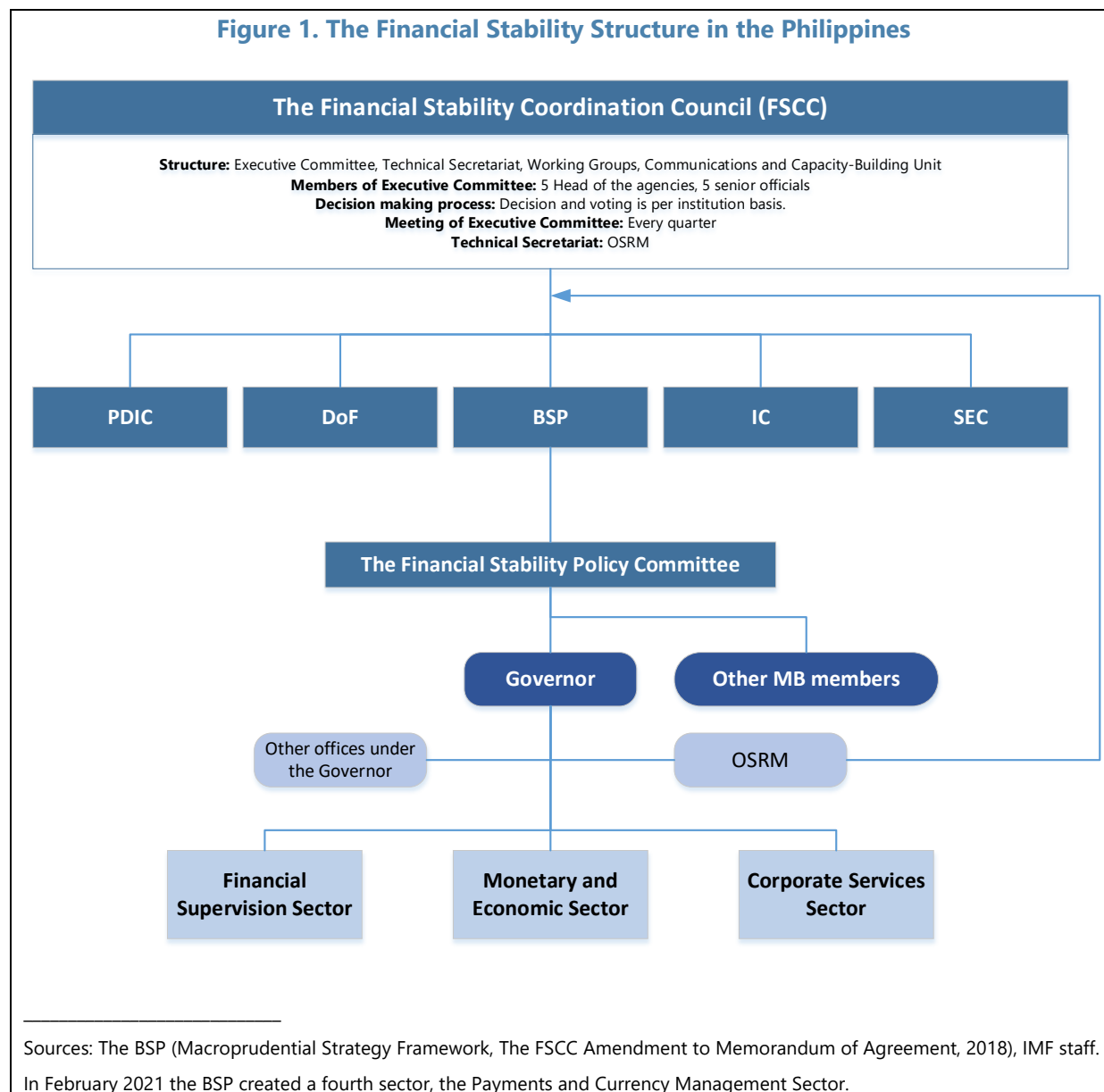
⁶ The MB is the highest body of the BSP.

⁷ The FSComm was a high-level committee within the BSP, chaired by the Governor and composed of senior executives from various functions of the BSP. It monitored and exchanged views on financial stability issues with the aim to mitigate the buildup of systemic risk. Unlike the FSPC, the FSComm did not have decision making power.

⁸ There are three sectors in the BSP: (i) Monetary and Economics Sector, (ii) Financial Supervision Sector, and (iii) Corporate Services Sector. Each sector is headed by a Deputy Governor.

of opposition through a clear mandate, supported by dedicated units, and accountability; (2) *the ability to act*, through regulatory powers and access to data; and (3) *cooperation* across all agencies at the domestic and international levels. The relevant recommendations are provided after reviewing each of these aspects of the current institutional framework.

Figure 1. The Financial Stability Structure in the Philippines



C. Willingness to Act

14. Internal decision-making could be enhanced by improving the coordination between the monetary and supervision sectors and OSRM at technical and senior levels. All the three perspectives should be reflected in decision-making on monetary policy, financial supervision and macroprudential policy, with a clear mechanism to resolve any conflicting policy views. While OSRM material generally are circulated prior to FSPC meetings for comments, or shared with the other sectors through the FSPC, it would be useful to involve other sectors more closely in the technical

preparations of these materials and policy proposals (similarly, OSRM should be given the chance to provide its views on monetary and financial sector supervision material, before being elevated to the MB). There are multiple institutional arrangements that could facilitate cooperation. In order to improve the cooperation at a technical level, the FSPC could for example be supported by an advisory committee that facilitates technical-level cooperation, similar to the arrangement for monetary policy.⁹

15. For any arrangement that the BSP would finally set, the most important thing is to keep the decision-making process in line with the good governance principles in the BSP. The financial stability unit should have access to deliver their financial stability and macroprudential view, not only financial stability issues, but also, where relevant, on monetary and financial sector supervision issues/proposals. In this regards, the AG responsible for financial stability and macroprudential policy could be given broader access to MB meetings when monetary policy and financial supervision issues/proposals are discussed (similar as the DGs). The FSPC legal standing and role should also be set clearly to support its function in BSP's decision making process on financial stability an macroprudential issues.¹⁰

16. In the medium to longer term, consideration should be given to provide the financial stability unit internally the same status as the monetary policy and financial supervision sectors. The sector should over time become the point of reference for systemic risk, macroprudential and financial stability issues in the Philippines and consideration should be given to raising its status accordingly.¹¹

17. BSP should allow OSRM to consider all available prudential tools also for macroprudential policy purposes. In the current internal set-up, the prudential tools that can be used by OSRM appear to be limited to the countercyclical capital buffer (CCyB), while the Financial Supervision Sector (FSS) is responsible for all other prudential tool related to the banking sector. Dividing the responsibilities for the setting of prudential tools between FSS and OSRM ignores the fact that most prudential tools can be used for micro- as well as macro- prudential purposes. Views on the setting of a certain prudential tool could however differ depending on the perspective taken; microprudential or macroprudential. To summarize:

- *BSP should not divide the right to use prudential tools between FSS and OSRM, but allow both to develop their views and policy proposals, each from their own perspective; microprudential and macroprudential.* For instance, the FSS should focus on setting prudential tools to contain institution-specific risk, while the financial stability unit focus on setting prudential tools to

⁹ Before monetary policy issues are discussed at the MB, technical discussions and preparatory decision-making is taking place in an advisory committee in which all sectors, including OSRM are represented.

¹⁰ More in general, the NCBA does not specify whether any power is allocated to the MB to establish committees (of the Board); nor is there any specified power in the law to establish committees of the BSP. Furthermore, There is no reference to further rules on the proceedings and procedures of the MB (or any committee) to be specified in an internal by-law or (MB) charter. As a starting point, an internal Charter, clarifying the standing and the role of the FSPC, could be adopted.

¹¹ Providing it the same status does not mean that it should have a similar size as the monetary and economics sector and financial supervision sector.

contain time-varying (cyclical) and cross-sectional systemic risks with clear activation and relaxation criteria.

- *Establish a mechanism to push strong collaboration and coordination among FSS and OSRM when formulating and calibrating prudential tools.* Each of the sectors should have sufficient access to data and the ability to convey their views in the relevant forum when proposals regarding the use of prudential tools are discussed. The financial stability unit should be enabled to convey their view on systemic risk to when FSS calibrates prudential tools, and vice versa.

18. Internal arrangements for data and information sharing arrangement between sectors and OSRM should be put in place. There is no formal data and information exchange between OSRM and other departments in different sectors. For specific information, such as stress test results from the FSS, OSRM relies on public sources, which only cover aggregate result published by the FSS. Similarly, OSRM's systemic risk analysis, such as corporate vulnerabilities and interconnectedness analysis, should be shared and discussed with the FSS. Currently this information appears to be mainly shared through the published FSR. This silo approach undermines BSP's capability to develop a comprehensive picture of financial system stability and correspondent policies to address risks.

19. BSP should assure that OSRM is adequately staffed to be able to fulfil its objectives. Compared to its allocated budget, OSRM appears to be understaffed. In addition, OSRM has experienced turn-over of staff. Even when staffed according to its budget, it will take time to integrate new staff and build their experience and skills related to financial stability analysis and macroprudential policy. Finally, BSP should periodically assess if the allocated staffing to OSRM is adequate given its tasks, as these are still developing.

D. Ability to Act

20. The BSP has "hard power" to implement macroprudential instruments, but the publication of Macroprudential Strategy Framework under FSCC could raise accountability issue. The BSP is empowered to issue, amend, or revoke regulations to implement macroprudential policy instruments. It has also powers to control and calibrate the macroprudential tools. Nevertheless, the recent publication of macroprudential strategic framework under the FSCC flag could raise an indication that the FSCC is accountable for the macroprudential power. This perception is also amplified by the publication of Financial Stability Review (FSR) by the FSCC. The approach to include the FSCC in such publications is a result of the intention to involve all agencies in supporting financial stability. However it could raise questions on who effectively has the macroprudential mandate.

21. The new powers provided in the NCBA to collect data and information need to be operationalized. The NCBA bestows the BSP with expanded powers to collect information from all persons and entities (including from the government and government controlled entities) for statistical and policy development purposes. This should increase the BSP capability in providing a more comprehensive and accurate analysis, including for financial stability. However, this power still needs to be operationalized.

E. Effective Coordination and Cooperation

22. The influence of FSCC decisions—the interagency financial stability committee—should be enhanced. The FSCC is underpinned by a formal memorandum of understanding (MoU) put in place in 2014. Due to its voluntary nature, the FSCC has no legal framework for decision-making and no formal powers, not even to make recommendations. The implementation of FSCC's decision mostly depends to the good intention of each agency to fully impose the FSCC's decision according to their area of responsibility. To mitigate potential inaction bias, the FSCC should obtain powers (and a clear Charter or Terms of Reference)¹² to make formal recommendations to its member agencies with a comply-or-explain mechanism.¹³ As financial stability is affected by other agencies' policies, this is needed to ensure that there is a mechanism to "direct" the other agencies, while preserving their institutional autonomy, to support financial stability. This power may already be exercised in practice and adding legal backing would enhance effectiveness and accountability of macroprudential policy, while at the same time keep the transparency of the cooperation with other agencies.

23. In addition, providing a financial stability objective to the IC, SEC, and PDIC could also strengthen the influence of FSCC's recommendations. Sharing a financial stability objective among relevant agencies would be useful for strong coordination.¹⁴ As financial stability is also affected by the soundness of individual institutions in the system, providing the financial stability objective would support other agencies for not only focusing on the safety and soundness of individual institutions, but also contributing to the system-wide stability. This is important, for example, to avoid shadow banking activities that take benefit from regulatory arbitrage. The mechanism could also provide strong accountability, particularly when microprudential instruments are altered for macroprudential purposes. However, while macroprudential and microprudential authorities can share common objective, it is important that their functions (or task) and power be still segregated to avoid confusion and to maintain independence.

¹² Post assessment, on 06 July 2021, the Office of the President of the Philippines issued Executive Order No. 144 s. 2021, which institutionalized the FSCC. The Executive Order specifies in section 3 that the purpose and objectives of the FSCC are to enhance the stability of the financial system by mitigating systemic risks through timely macroprudential policy interventions and formulate a Macroprudential Policy Strategy Framework, which shall guide its policy interventions.

¹³ Without prejudice to preserving the BSP as macroprudential authority.

¹⁴ Please note that the terms "mandate" and "objective" are sometimes used inter-changeably, while it would be useful to distinguish them here: the mandate consists of objectives, functions (or tasks), and powers.

SYSTEMIC RISK MONITORING

24. The macroprudential strategy framework released in June 2020 could be improved.¹⁵

- The emphasis on GaR as primary measure of macroprudential tools stated in the strategy paper seems to be inconsistent with practice, in which the BSP looks at broader measure. The macroprudential strategy framework states that the BSP uses Growth at Risk as the ultimate target of macroprudential policies. This GaR approach is constructed using some macro and market variables that do not include some of the systemic risk indicators that the BSP has already developed and is using for its monitoring.

GaR Framework

$$\min_{\rho_t} \mathcal{L}_t \equiv E_t \left\{ \sum_{i=0}^T \beta^i [f(GaR_{t+i}) - \phi y_{t+i}] \right\}$$

• Variable in the model:

- Money supply, market prices, a cross-border yield differential, local returns of equity.

Systemic risk indicators

- Interconnectedness analysis, contagion risk model
- Excess credit analysis,
- Debt-to-earning borrowers test (DEBT) and Borrowers Interconnectedness Index (BII).
- Delta CoVAR dan MES

The use of GaR would not be enough to capture different types of systemic vulnerabilities and risks. In particular, while a GaR framework can be useful in calibrating broad-based tools, such as the CCyB, along with other metrics, the appropriate policy setting for other tools will typically need to draw on wider and different set of indicators. In order to link the target and the monitoring process to each another, the BSP should consider constructing the ultimate target of macroprudential policy according to the objective of macroprudential policy and analysis, which is to mitigate systemic risk.¹⁶

- The strategy framework could elaborate the macroprudential toolkit. An explicit presentation of macroprudential toolkit could be useful to communicate the macroprudential policy and how it differs with the microprudential one.

25. The corporate stress test run by the OSRM focuses on non-financial corporates' (NFCs') and their link with the banking system.

With regard to corporates, OSRM conducts two types of tests: (1) Debt-to-Earnings Borrowers Test (DEBT), and (2) Borrowers Interconnectedness Index (BII). The DEBT aims to strengthen systemic risk surveillance amidst accumulation of debt and ensure capacity of both individual and corporate borrowers to pay in periods of rising interest rates and peso depreciation. The BII determines which are the main common borrowers/debtors of the banking system. Large corporates accumulate loans from multiple banks, and hence their performance/failure may have a systemic impact on the system. The test also covers the analysis of corporates' performance, including sales, profit, funding and liquidity conditions linked to

¹⁵ For a more complete overview of the macroprudential strategy framework, please refer to FSCC's "Macroprudential Policy Strategy Framework: The Case of the Philippines," June 2020.

¹⁶ Please see Staff Guidance Note (SGN) on Macroprudential Policy, The International Monetary Fund, December 2014 (and in particular tables 1 and 2 which provide an overview of indicators for different policy instruments).

macroeconomic conditions. In addition, OSRM also conducts interconnectedness and contagion analysis of corporates and banks. The analysis covers the impact of corporates failures on other corporates within the same conglomerate and on banks that lend to the corporates and the conglomerate of which they may be part. The analysis focuses on the direct exposures among corporates and between corporates or conglomerates with the banks. The OSRM is currently also developing an interconnectedness analysis among banks using payment system data.

26. Stress testing for banks is conducted by the FSS with the objective to assess the resilience of individual banks. The stress testing consists of single factor sensitivity tests and does not cover a comprehensive stress scenario that captures dynamics in macroeconomic conditions. Results are used mostly for supervisory actions, and the aggregate results are published periodically. The main single factor stress tests consists of:

- Real Estate Stress Test (REST) for Real Estate Exposure (REE), which includes a single factor shock of a 25 percent write-off rate on REE and Real and Other Properties Acquired (ROPA)/Non-Current Assets Held for Sale (NCAHS). The stress test uses a hurdle rate of 10 percent of the CAR and 6.0 percent of CET1, on both solo and consolidated basis. The REST has a broad coverage as it includes all residential and commercial real estate loans as well as real estate investments, ROPA and NCAHS. The REST exercise is conducted quarterly and covers all UKBs and TBs.
- Uniform Stress Testing, which covers credit and market risks. The credit stress test imposes a 20 percent and 50 percent write-off on the net carrying value of credit exposures, while the uniform stress test for market risk covers the two main sources of market risk movements in interest rates and foreign exchange rates, based on simplified assumptions. The credit risk exercise covers all UKBs and TBs while market risk exercise covers all UKBs and their subsidiary TBs, as well as stand-alone TBs with total assets of at least 5 PHP billion or total capital of at least 1 PHP billion. The stress test is conducted annually and has reference periods of end-June and end-December.

27. The BSP should start running macro-scenario stress testing that focus on systemic risk analysis to strengthen financial stability analysis. The macroprudential stress test - one of the essential tools that cover a comprehensive set of macro scenarios - is still missing despite the available strong capacity of the staff. Such exercises could focus on systemic part of the financial system such as UKBs for example. They could examine the effects of a common macro scenario that are considered relevant at the particular point in time. These exercises could include some form of macro-financial feedback effects.¹⁷ In addition, it could consider linking corporate sector stress test results to bank's credit risks from NFC loans.¹⁸ Connecting the network analysis to bank stress test is another approach to make a stress test more macroprudential. Bank stress test results could be used to estimate potential contingent liabilities to the Government from various credit guarantee

¹⁷ Such as the second-round effect analysis as included in the draft TN on Risk Assessment of Banks, Non-Financial Corporates, and Macro-Financial Linkages prepared in the context of the Philippines FSAP.

¹⁸ For instance, one could use ICR-based NFC stress test results to calculate stressed PDs for banks' loan portfolio instead of PDs estimated using banks' NPL transition data. When long-term credit registry data become available, one could use the detailed registry data to further improve the accuracy of the credit risk model.

programs it offers, informing the Department of Finance. Once the methodology is established well, the BSP could consider publishing the high-level results in its semi-annual Financial Stability Report as many other central banks do. Macroprudential stress tests could be implemented within the macroprudential unit or in collaboration with the economic research department (for scenarios) and the supervision sector (for implementing the bank stress testing part).¹⁹ BSP should adopt the necessary internal arrangements for conducting macroprudential stress-tests (see Box 1).

Box 1. Institutional Arrangements for Macroprudential Stress Test

Microprudential objectives aim assure the safety and soundness of individual financial entities. Microprudential stress tests (MiPSTs) encompass an examination of banks' balance sheets with a focus on capital and regulatory ratios, and increasingly on assessments of risk management practices. Subsequently, where deficiencies are identified, remedial efforts by banks, including additional safety buffers in the form of bank capital may be warranted.

On the other hand, macroprudential stress tests (MaPSTs) assess the impact of an adverse scenario on the financial system's capital, profitability, and ability to support activity in the economy as a whole. Since the global financial crisis, authorities have been increasingly focused on maintaining a "macro" perspective on the risk assessment of financial systems. By simultaneously subjecting a number of institutions to the same scenario, stress tests allow for an assessment of the system as a whole after losses from systemic risk amplification have materialized. The risk amplification can endogenously magnify losses through macrofinancial feedback effects and contagion across financial entities and markets (beyond the banking sector). It is worth noting that in addition to the quantitative information extracted, MaPSTs provide qualitative information for assessing "reactions of the system" in periods of stress.

The MaPST for financial stability purpose have a systemic focus and could consist of both top-down (TD) and bottom-up (BU) exercises. These tests assess the ability of financial institutions to continue providing services under different adverse macroeconomic scenarios, including extreme but plausible ones. TD stress tests typically use a set of common elements: scenarios, rules to measure risks, models, and behavioral rules for banks. These are usually carried out by a single entity, such as a central bank or the IMF (in the context of country FSAPs). Results are used to take policy actions aimed at preserving financial stability, i.e., to mitigate risks of systemic financial disruptions or crisis events. BU stress tests for financial stability purposes (but BU stress tests may also be conducted for microprudential purposes) employ a common scenario and individual bank models that use more granular portfolio data; they also account for individual banks' reactions under stress. Although BU stress tests are carried out by individual banks, a methodological framework designed by the supervisory body is set up to ensure consistency and comparability of results across banks, and to facilitate comparability between TD and BU tests. In particular, as TD and BU tests employ common scenarios and (basic) assumptions, meaningful comparisons can be drawn from bank-specific results.

¹⁹ Similarly, FSS could consider developing a bottom-up macro prudential scenario stress test to more effectively conduct, for example, the assessment of banks' Internal Capital Adequacy Assessment Programs, where banks report results using their own models to run the macro scenario, resulting in outcomes that are specific for their portfolios.

28. While data sharing arrangements under the FSCC are in place, data gaps and a lack of granular data are constraining systemic risk analysis and monitoring. Under bilateral agreements with other financial authorities, the BSP arrange data and information sharing to support the financial supervision and financial stability analysis in the BSP. Additionally, the information and data exchange are also stated in the memorandum of agreement (MOA) of the FSCC to support financial stability assessment and research. The FSCC has reached out to other organizations on policy matters. For example, a MOA was signed with the HLURB (the government housing agency) for purposes of gathering data directly from real estate developers. However, albeit the data sharing agreement has been set among the agencies, the scope and granularity of data should be improved:

- The quality of risk analysis is constrained by data gaps such as the lack of information on granular credit risk, including a fully operational national credit registry, current collateral values and loan-to-value ratios, small and unlisted NFCs, household indebtedness and survey, and detailed depositor information.²⁰
- The new BSP power to collect information from broader economic sectors for stability analysis and SEC's initiatives to digitalize more comprehensive NFC data are welcome progress. The SEC's capacity and staffing needs to be improved to foster the corporate data collection and management.

SYSTEMIC RISKS AND MACROPRUDENTIAL TOOLS

29. This section assesses systemic vulnerabilities and provides recommendations for the macroprudential policy toolkit to address identified risks. Systemic vulnerabilities are assessed based on the developments of multiple indicators and on the FSAP's financial sector risk analysis, following the Staff Guidance Note on Macroprudential Policy (IMF, 2014a). Some recommendations are then proposed based on the assessment of each type of vulnerability to strengthen the current set of the Philippines' macroprudential policy toolkit (see Appendix I).

A. Vulnerabilities from Broad-Based Credit Booms

30. Credit indicators remain positive so far, though credit growth is decelerating, the contraction of GDP contributes to increase in the credit-to-GDP gap. The credit-to-GDP gap, which is the deviation of the credit-to-GDP ratio from its long-term trend, has been in positive territory during several episodes, and has remained positive despite the COVID-19 pandemic (Figure 2)^{21,22} as the decline of GDP growth pushes the gap to increase. Even under this condition, the Basel

²⁰ Individual depositor information is covered by the bank secrecy laws and therefore not available for microprudential supervision or macroprudential surveillance.

²¹ The credit-to-GDP gap in the Philippines uses bank credit instead of total credit. Although the credit gaps should be ideally based on total credit, the credit gap based on bank credit would reasonably reflect broad credit conditions in the Philippines, given borrowers' strong reliance on bank credit.

²² The bank credit only cover NFC loans, which accounted around 85 percent of total credit to private nonfinancial sector.

III leverage ratio of the banking system is still well above the regulatory minimum of five percent (the minimum standard set by the BSP), indicating that the balance sheets are not stretched and non-performing loans are also still at a relatively comfortable level of 2.53 percent as of 2020Q2.

31. Despite the strong pre-crisis credit-growth and the level of the credit-to-GDP gap, BSP kept the countercyclical capital buffer (CCyB) at zero percent. NFC credit-to-GDP rose significantly since 2013 from around 30 percent to 50 percent at the end of the second quarter of 2020. The household credit-to-GDP has also been increasing, even though at a lower rate than that of NFCs. In past discussions with the IMF country team the authorities acknowledged that there was some evidence of a near-credit boom during the period 2017–18, however, they highlighted that the assessment was model-dependent and only held in some but not all models. At that point in time authorities also anticipated that credit growth in the next few years would come down to low two-digit levels, and that the risk of high credit growth would be limited.

32. Additional capital buffers would however have been useful and broadened the policy options in dealing with the economic fall-out of the COVID-19 crisis. While the credit-to-GDP gap is still positive (as the decline in GDP is pushing the credit-to-GDP gap), the current COVID-19 crisis might have been a good time to release buffers that had been built up in the past. Such buffers might have helped to avoid the perceived need to resort to forbearance measures, and also might be instrumental to mitigate the second-round GDP growth impact of solvency shocks (see also the TN on Risk Assessment of Banks, Non-Financial Corporates, and Macro-Financial Linkages prepared in the context of the FSAP).

33. BSP should consider a more comprehensive approach to determine when the CCyB should be relaxed or tightened. Albeit keeping the CCyB at zero percent could have been justified, maintaining the buffer at the same rate during the credit upswing warrant an explanation. The credit-to-GDP gap could serve as a headline indicator in guiding decisions with its 2 percent reference threshold ([BCBS, 2010](#)). While this indicator should not be solely relied upon, the calibration decision could also be informed by additional indicators—such as debt-to-GDP ratios, the current account balance, and bank balance sheet indicators, the credit growth, and the leverage level of corporates and households. Also, as suggested by Basel Committee guidance, the definition of credit should ideally include all credit extended to households and other non-financial private entities, so that the credit-to-GDP indicator could perform better to predict banking sector stress. The BSP should appropriately complement the credit gap analysis with various indicators that have proven to be useful early warning indicators in cross-country studies ([IMF, 2014b](#)). The tightening of countercyclical capital buffer during a credit boom can increase the resilience of the financial system and may also moderate the pro-cyclicality of credit. The use of countercyclical capital buffer affects all credit exposures of banking system (*broad-based tools*), including the credit to the NFC.

34. In order to make it operational, the procedures to tighten and relax the CCyB should be prepared. Setting thresholds and proper mechanism to receive views from all relevant departments, is needed to provide solid ground for decision making process in the BSP. The OSRM could also set a list of indicators that are used to monitor excessive lending and financial cycle, and the built-up of systemic risk in the financial system. Similar operational procedures could also be applied to other time-varying macroprudential tools that will be deployed by the BSP.

35. In view of the COVID-19 crisis experience, the BSP should reflect on the appropriate level of the “normal” CCyB buffer rate going forward. Consideration should be given to the desirable level of the CCyB before imbalances start to build up. There is increasing recognition that having a positive (rather than zero) level as the default setting, as in Czech, Ireland, and the UK, is useful since this creates valuable policy space that can be relaxed in response to adverse shocks. The COVID experience is likely to lead to a rethink of the optimal steady state of buffers in many countries where such policy space was not available because the buffer rate was zero.

Box 2. Cross Jurisdiction Implementation of Countercyclical Capital Buffer

The Basel Committee identified the period of excessive growth, which is defined as a positive gap between credit-to-GDP ratio and its long trend, as a key indicator for the decisions to activate the buffer. The Basel Committee also emphasized that activation should not be associated with the credit-to-GDP gap in a mechanical fashion, but rather, a broader range of information should be used to determine the level of systemic risk in the financial system, and ultimately judgement would be required as to the activation and deactivation of countercyclical capital buffer.

In practice, some authorities have relied upon a set of indicators that best reflect systemic risk in their jurisdictions, together with their expert judgement. These indicators tend to vary significantly among different jurisdictions, reflecting not only structural difference in their economies but also the continued evolution of experience and analysis. Therefore, in some countries that have chosen to activate the buffer, the credit-to-GDP gap has more often been negative than positive.

The following are some examples of jurisdiction that activate their buffer even though the credit-to-GDP gap has not been positive.

Jurisdiction	Current Rate (in percent)^{1/}	Credit-to-GDP Gap (percent of GDP)^{2/}
Denmark	1.0	-20.4
United Kingdom	1.0	-16.6
Sweden	2.5	-1.8
Czech Republic	2.0	-1.7
Ireland	1.0	-87.7
Norway	2.5	-9.8

Source: BIS, IMF database.

^{1/} Data as of Dec 2020

^{2/} Data as of 2019Q4

B. Vulnerabilities from Real Estate Sector

36. Property prices have been increasing quickly in recent years, reflecting strong demand (Figure 3).²³ The strong economic growth, rising disposable income, remittance inflows from the offshore workers, and portfolio adjustment of the households towards property investment in the recent low interest rate environment have been pushing the nominal property price up by 180

²³ The price is driven mostly by residential property price that share around 35 percent of property lending in the banking sector, while the data for commercial property is still being developed by the authorities.

percent during the period from 2008Q1 to 2020Q3.²⁴ Relative to GDP, property prices have been quite stable for the period and just started to increase significantly between 2018Q2 and 2019Q4 in which real property prices increased by 30 percent. With the impact of the COVID-19 pandemic the growth of property prices has plumped in 2020.

37. Some metrics indicate an overvaluation of property price, which may point to an overheating of the real estate market.²⁵ The recent spike in property price indices have resulted in prices going beyond their long-term trends. The conventional property indicators, such as property price index, property price index to GDP ratio, property price growth, and the growth of property price index to GDP, all have showed a significant deviation to their long-term trend, particularly during the period of 2018Q2 to 2019Q4. The property price-to-income and price-to-rent ratio of the Philippines are quite high relative to the other ASEAN countries.

38. Despite the indication of price misalignment, the spillover risk of real estate sector to the banking system appears to be limited. The exposure to real estate loans is relatively limited because of a regulatory threshold of 20 percent of total loans applicable to UKBs (raised temporarily to 25 percent upon COVID-19). The real estate loans are largely commercial, accounting for 65 percent of total real estate loan.²⁶ Condominium purchase contracts are often set up to limit risks to developers and banks.²⁷ The role of property collateral seems to be limited as well—if LTV is above 60 percent, the loan is treated as unsecured for the amount in excess of 60 percent which requires higher risk weights and provisioning. In addition to these rules, the authorities use a single factor tool to measure and limit the property risk of the banking sector. The real estate stress test threshold (REST), which banks should comply with after stress, is currently set at respectively 10 and 6.0 percent of CAR and CET1/Tier1 for UKBs/TBs.

39. The balance sheet of real estate corporates appears sound, confirming the view that the systemic risk from the real sector is limited (figure 4).²⁸ Real estate corporates account for a small share of NFC debt held by firms with ICR below one in 2019. The NFC stress tests further shows that real estate companies are relatively less vulnerable to the current crisis, despite weak earnings forecasts. Shocks to operating income and interest payment, and a regression-based approach to predict the ICRs at end-2020, appear to be relatively well absorbed by real estate corporates, as seen by the lower increase of debt-at-risk ($ICR = < 1$) and firm-at-risk ($ICR = < 1$) shares compared to for example energy, consumer discretionary, information technology and industrial sectors.

²⁴ The Philippines receives about eight percent of GDP remittance inflows per year.

²⁵ The analysis is based on property prices from before the COVID-19 pandemic.

²⁶ The limit does not apply for TBs which provide one-third of their loans to properties.

²⁷ The developers first collect installment money from buyers before starting construction. The title will be transferred to the buyers only when their equity reaches a certain level, at which time the buyers often seek bank loans. The developers can resale the property to a new buyer.

²⁸ Please see TN on Risk Assessment of Banks, Non-Financial Corporates, and Macro-Financial Linkages for further details.

40. On the household sector, mortgages only contribute a small share of total real estate loans, suggesting limited risk to the banks (figure 5). Financing options outside banking sector, such as self financing (due to cash inflows from offshore workers) and financing from the construction companies could explain the low share and slow growth of mortgages. Mortgage exposures seems to be prudent, with NPLs decreasing in line with GDP growth until end 2019. However, the NPLs spike during the pandemic warrant supervisory attention and close monitoring. The temporary relaxation of the real estate limit should also be implemented with consideration on the upside risk of mortgage NPLs.

41. The monitoring and use of prudential tools for the housing sector could be enhanced.

- **The BSP should consider the modernization of its policy toolkit, making it more risk-sensitive and more time-varying:**
 - Going forward, the BSP should consider adopting more risk sensitive tools, for property lending as well as other risks. For example, the BSP should consider phasing out the property lending limit, and instead require banks to hold more capital for concentration risk (not only for sectoral, but also for other kinds of concentrations). The Pillar 2 review and micro- and macroprudential stress-testing exercises could for example be used as a tool to require any necessary capital add-ons.
 - The use of time-varying tools such LTV and DTI could also be considered. The current limit for “LTV” could be made time-varying to capture countercyclical characteristics. As property price is also a good indicator of economic and financial cycle, a tool that incorporates property price developments might better address the sectoral vulnerabilities and avoid the materialization of systemic risk.
- **A continuous mapping and monitoring of real estate sector, including the price and financing sources, are needed to better understand the risk in the sector and to know the most appropriate tools to address the risks.** For instance, when the property price is also affected by abundant financing options from non-bank sectors, other tools such as property tax could be considered. To better understand the real estate sector, the BSP should continue monitoring the sector (including the sources and trends of non-bank financing) and conducting analysis on the property price, construction companies performance, and their link to the conglomerates and banks.
- **Finally, to provide more time-varying and risk sensitive tools, and to conduct a more comprehensive monitoring on the real estate sectors, the BSP should increase the scope and granularity of its data.** This include realizing a fully operational Credit Information Registry (CIC, public centralized credit registry), and collecting data on loan collaterals, loan-to-value ratios, household indebtedness, property prices (including commercial one), price-to-income, and price-to-rent ratios.

C. Vulnerabilities from Banks’ FX Funding

42. The banking sector liquidity buffer is quite high and relatively stable. The liquidity coverage ratio (LCR) is maintained around 170 percent during the last five years, well above the regulatory minimum of 100 percent. The buffers are high quality, with government securities being the most dominant holding (around 46 percent of total HQLA at end 2019). While the banks funding

profile varies, the UKBs are mostly funded by deposits, with corporate and retail deposits contributing equally to total deposits.

43. However, FX liquidity could still be an issue. Banks have limited offshore borrowings, and the outstanding borrowings are usually offset by the foreign assets. Dollarization is moderate (15 percent of deposits and 11 percent of loans are in FX), and even though banks follow regulations to limit their FX exposures, banks may still experience FX liquidity stress from NFCs that may try to get FX loans or liquidate their deposits to fill their FX liquidity gap in case of capital outflow events.

44. The liquidity stress test show banking sector to be resilient.²⁹ Most banks exceed the 100 percent benchmark, while only a few banks (mainly branches of foreign banks) fall somewhat below the requirement. However, for FX liquidity stress test, the dispersion is more pronounced with much lower median FX LCR than all currency LCR because FX liquidity is concentrated in a few G-SIB branches. This may be partly due to the fact that a stand-alone FX LCR is currently not a regulatory requirement.

45. In relation to the FX exposure and liquidity, the authorities may consider the following recommendations:

- **Similar with prudential tools for property lending, the authorities should consider deploying a more risk sensitive tools to contain FX exposure risks.** The current NOP rule that limit the NOP to be the lower of 20 percent of their unimpaired capital or US\$50 million is not very risk sensitive, and does not capture the risk factor variations of each individual bank. It limits the banks with larger capacity and skill to contribute more on the FX trading in the system.
- **While the BSP has backstop requirements in place for foreign exchange liquidity risk, it could consider the introduction of LCR for foreign currencies.** The FX liquidity is largely concentrated in a few branches of foreign banks, and some banks have insufficient liquidity buffers in foreign currencies.

D. Vulnerabilities from Non-Financial Corporates

46. NFCs are deeply interconnected with the financial system through “mixed” conglomerate structures that include NFCs and financial institutions (Figure 7). Seven out of the ten largest banks are related to local-family-owned mixed conglomerates, and these banks hold about 60 percent of the banking sector’s assets. The figure and a network analysis by the BSP suggest that the primary source of contagion among banks is common exposures to large conglomerates.

47. The financial system is indirectly exposed to international spillovers (Figure 8). Most international spillovers are likely to stem indirectly from NFC’s international borrowing, trade, and declines in financial asset prices. International remittance inflows are significant (about eight percent

²⁹ Please see TN on Risk Assessment of Banks, Non-Financial Corporates, and Macro-Financial Linkages for further details,

of GDP annually), but may have little impact on banks' FX deposits because they can be credited to banks only in pesos in most cases.³⁰

48. The NFC external debt is at declining trend, similar with the decline in the NFC FX debt. The NFC debt mostly comprises of domestic debt, which at around 10 percent at end-2019. In terms of currency, the FX debt (mostly in Dollar denomination) is also showing a declining trend, with current share of 26 percent. Compared to other major ASEAN countries, this figure is relatively moderate, indicating a limited exposure to currency risk. However, the share of FX debt is historically quite volatile, with the highest figure reaching 60 to 70 percent of total debt.

49. The BSP needs to strengthen their analysis on the corporate sectors, including conglomerates by improving certain areas:

- **Continue closing data gap and strengthen monitoring risks from FX borrowing and conglomerates risks.** Closing the data gaps would need collaboration and coordination with other agencies (CIC, Government, FSF) and interdepartments within BSP (e.g. the use of banking data on corporate debtors for corporates analysis). The NFC data gap that needs to be closed soon includes the data of small and unlisted NFCs, a complete and accurate data of the NFC debt based on the lender and currency, the links among NFC inside and between conglomerates, and the link between NFCs and banks.
- **Strengthening BSP's existing interconnectedness analysis.** This includes connecting the network analysis to bank stress tests and improving the interconnectedness analysis using more sources of data, such as payment system and other big data.

E. Macprudential Aspect of Regulatory Forbearance

50. During the pandemic, the authorities applied regulatory relief and forbearance measures to support the banks and the debtors (Table Appendix 3). The forbearance includes the measure allowing banks to delay NPL recognition until end-2021 and credit loss recognition gradually over a maximum period of five years (upon BSP's approval)—an unusually strong form of forbearance compared to other EMs—could when used significantly undermine banks' economic capital for an extended period. From macro perspective, this could undermine the recovery process of banking sector due to long standing bad debt. In fact, the forbearance that firstly aimed at supporting the financial institutions could have a negative impact on financial stability in medium term.

51. In relation to the regulatory forbearance that applied during the COVID-19 pandemic, the BSP should consider several aspects as follows:

- *Regulatory changes, including forbearance, should be discussed comprehensively with all relevant departments to have a complete picture of the impact.* This includes the possible impact to the financial stability and macrofinancial feedback to the economy (e.g. impact of forbearance on banks' ability to continue to support the economy versus recapitalization and the feedback effect of these policies on the economy). The BSP should consider all policy options, systemic

³⁰ Major money transfer operators offer USD payments in cash.

effects, and unintended consequences in the process (see FSSA and TN on Risk Assessment of Banks, Non-Financial Corporates, and Macro-Financial Linkages) and the financial stability unit should be provided a chance to comment on proposed measures from its perspective.

- *The BSP should keep their policies consistent with their mandate, which is to maintain price and financial stability. Any policies aimed at economic recovery and growth should be carefully considered given their possible impacts to the central banks' independence and objectivity to achieve its mandate.*³¹

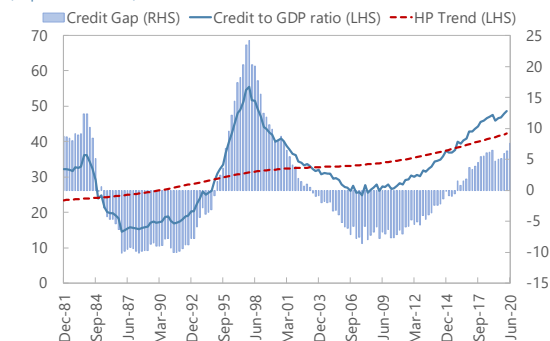
³¹ Please see Appendix III for the main policy measures issued by the BSP to mitigate the impact of COVID-19.

Figure 2. Broad Credit Conditions

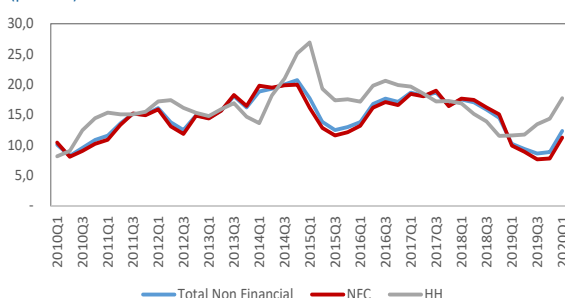
The credit-to-GDP gap, based on bank credit, has been positive since Global Financial Crisis. The current COVID-19 pandemic caused the GDP growth decline and push the ratio to increase.

Credit gap

(In percent of GDP)

**Credit growth**

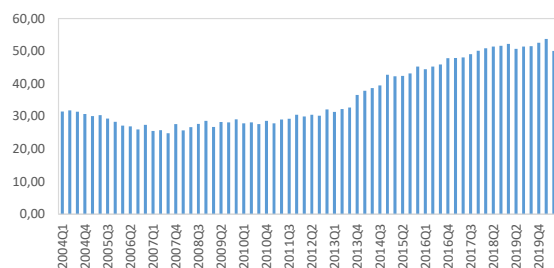
(percent)



Corporate debt-to-GDP ratio, which includes bank credit only continues to increase, upto pre-pandemic COVID-19.

NFC debt to GDP ratio

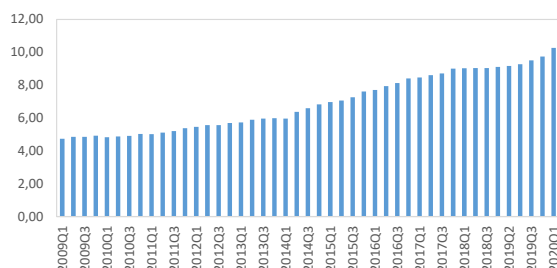
(percent)



Household debt-to-GDP has also increased.

HH debt to GDP ratio

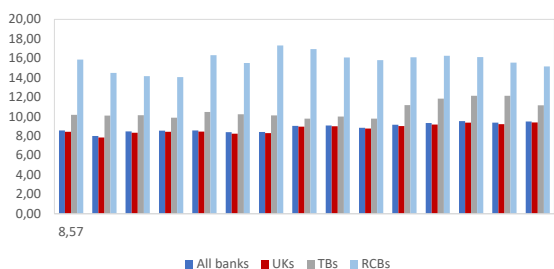
(percent)



Bank leverage ratios are well maintained above the Basel III minimum requirement...

Leverage ratio

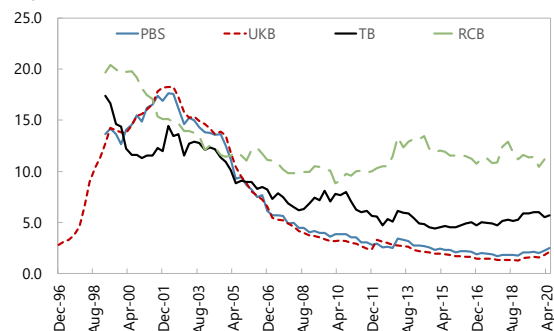
(percent)



...and asset quality has been well maintained since Global Financial Crisis.

Non-performing Loans (NPLs)

(In percent)



Sources: BSP, IMF staff calculation.

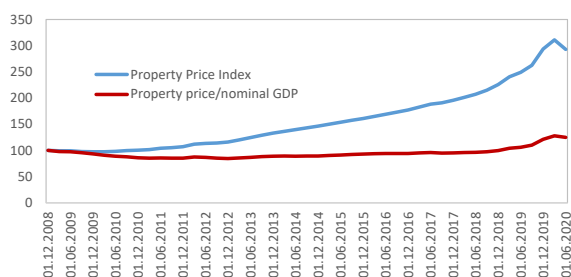
Sources: the Philippines authorities; IMF staff calculations.

Figure 3. House Price

House prices have been steadily increasing...

Property Price

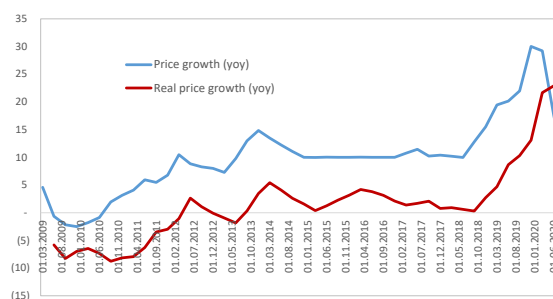
(Index, 2008Q4 = 100)



...and has been accelerating since 2018.

Price growth (yoy)

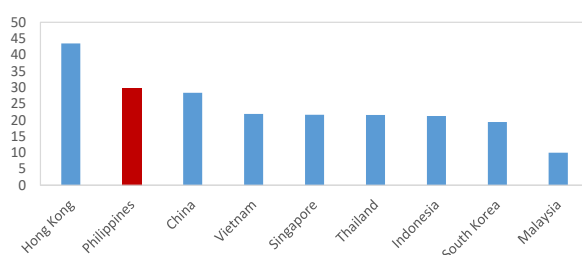
(percent)



Price to income ratio quite high compared to the other ASEAN countries.

Price to Income Ratio

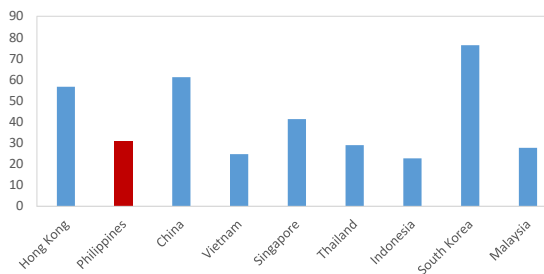
(percent)



...and the price to rent ratio too.

Price to Rent Ratio - City Center

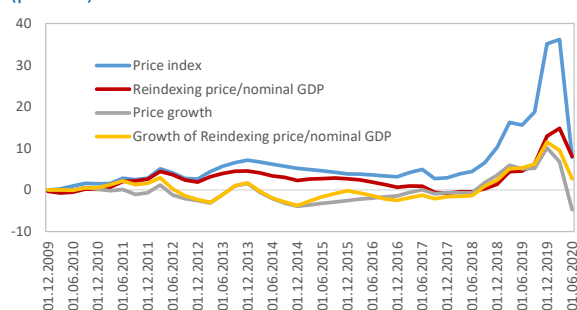
(percent)



House-price indices are above their long-term trends.^{1/}

House Price Deviation from the Long-Term Trend^{1/}

(percent)

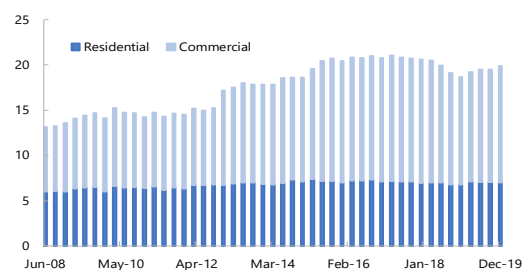


Sources: the Philippines authorities; Bank for International Settlement (BIS), Numbeo (2020), IMF staff calculations.

1/ Using one-sided HP filter, lambda parameter = 1,600

Figure 4. Real Estate Loan

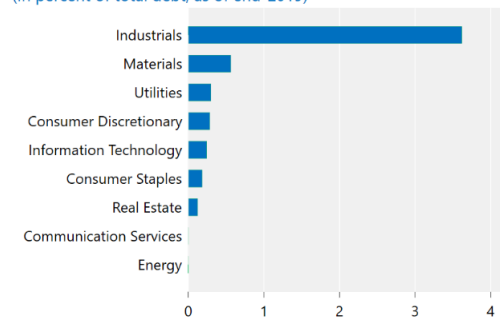
Real estate loans are largely commercial and their share in total assets are capped at relatively low 20 percent by the BSP.

Share of Real State Loans in Total Loans
(In percent)

The majority of NFC debt with ICR less than one in 2019 is held by firms in industrial sector.

Debt-at-Risk By Industry (ICR) 2/

(In percent of total debt, as of end-2019)

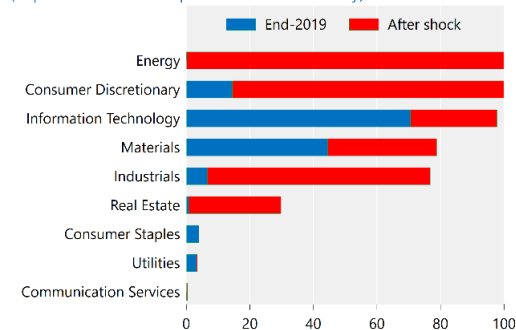


Sources: S&P Global Market Intelligence; and IMF staff estimates.

The real sector corporates are less vulnerable to pandemic shocks, both in terms of the debt-at-risk...

Debt-at-Risk (ICR<1)

(In percent of total sample debt in each industry)



Sources: S&P Global Market Intelligence; and IMF staff estimates.

Sources: the Philippines authorities; IMF staff calculations.

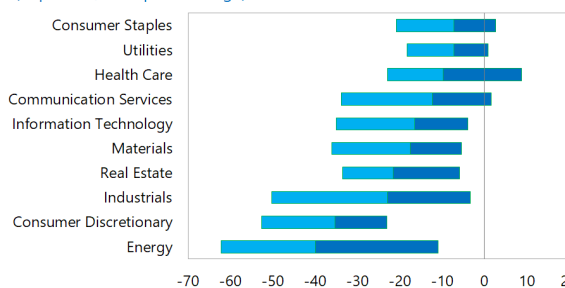
1/ Interquartile range of changes in analysts' 12-month-ahead company earning forecasts for each industry between January 2 and June 30.

2/ ICR<1

Market analysts forecast considerable earning shock in 2020, especially for the industrials, consumer discretionary, and energy sectors.¹

Expected Corporate Earning Shock by Industry 1/

(In percent, interquartile range)

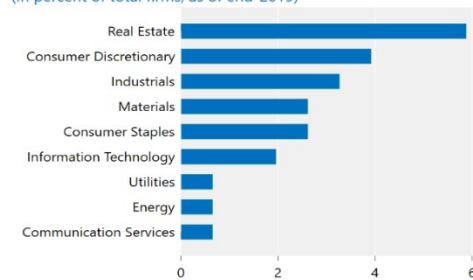


Sources: S&P Capital IQ; and IMF staff estimates.

However, in terms of the share of the firms, real estate accounted for the highest share of firms at risk in the sample.

Firms-at-Risk by Industry 2/

(In percent of total firms, as of end-2019)

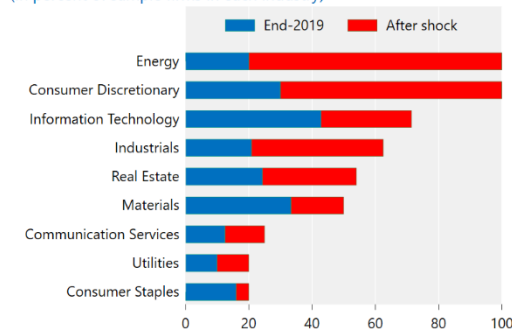


Sources: S&P Global Market Intelligence; and IMF staff estimates.

...and the shares of firms at risk.

Firm-at-Risk (ICR<1)

(In percent of sample firms in each industry)

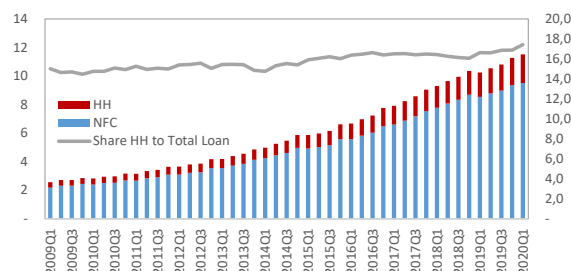


Sources: S&P Global Market Intelligence; and IMF staff estimates.

Figure 5. Residential Mortgage Lending

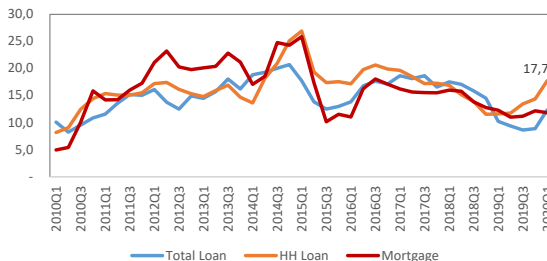
Share of HH loan is much smaller than NFC loan, but has been continually increasing

Share of HH to Total Non-financial Loan (in trillion Peso and percent)



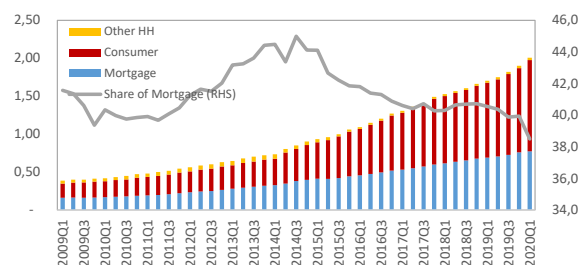
...and the growth has been accelerating since 2019.

HH Credit Growth (percent)



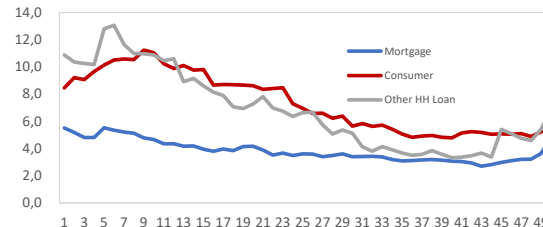
The consumer loan has been the majority of HH loan and it is increasing..

HH Loan Composition (in trillion Peso and percent)



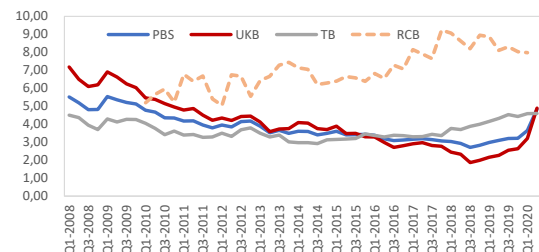
The NPLs of HH loan has been decreasing. The lowest NPLs for HH loan is mortgage.

NPLs for HH Loan (In percent)



Nevertheless, the NPLs of mortgage, including the one for UKBs, has started to hike during the pandemic, albeit still lower than 5 percent.

Mortgage NPLs (percent)



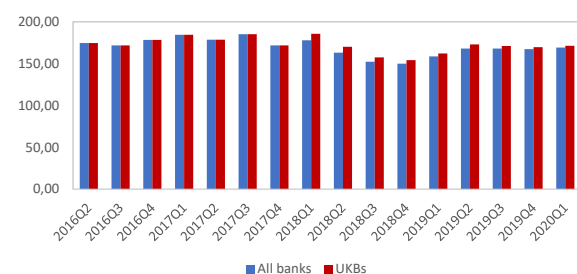
Sources: the Philippines authorities; IMF staff calculations.

Figure 6. Banking Sector Liquidity

The banking LCR is quite high and stable, at around 170 percent

Liquidity Coverage Ratio (LCR)

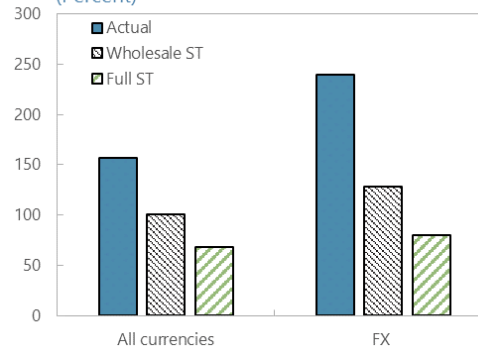
(In percent)



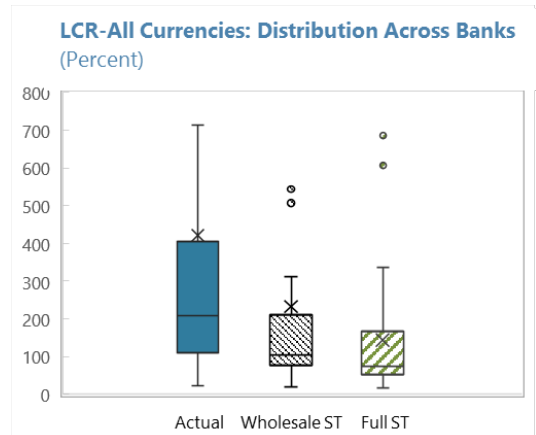
The banking system appears to maintain adequate liquidity buffers as measured by the LCR metric

Liquidity Coverage Ratio (LCR)

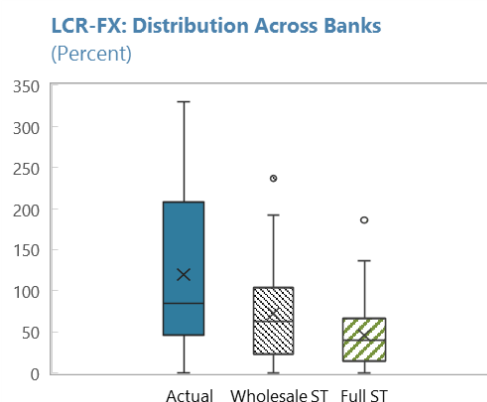
(Percent)



Liquidity buffer accross banks appear to be better in terms of LCR calculated using all currencies...



...however, there is a large dispersion across banks especially in terms of FX liquidity buffers.

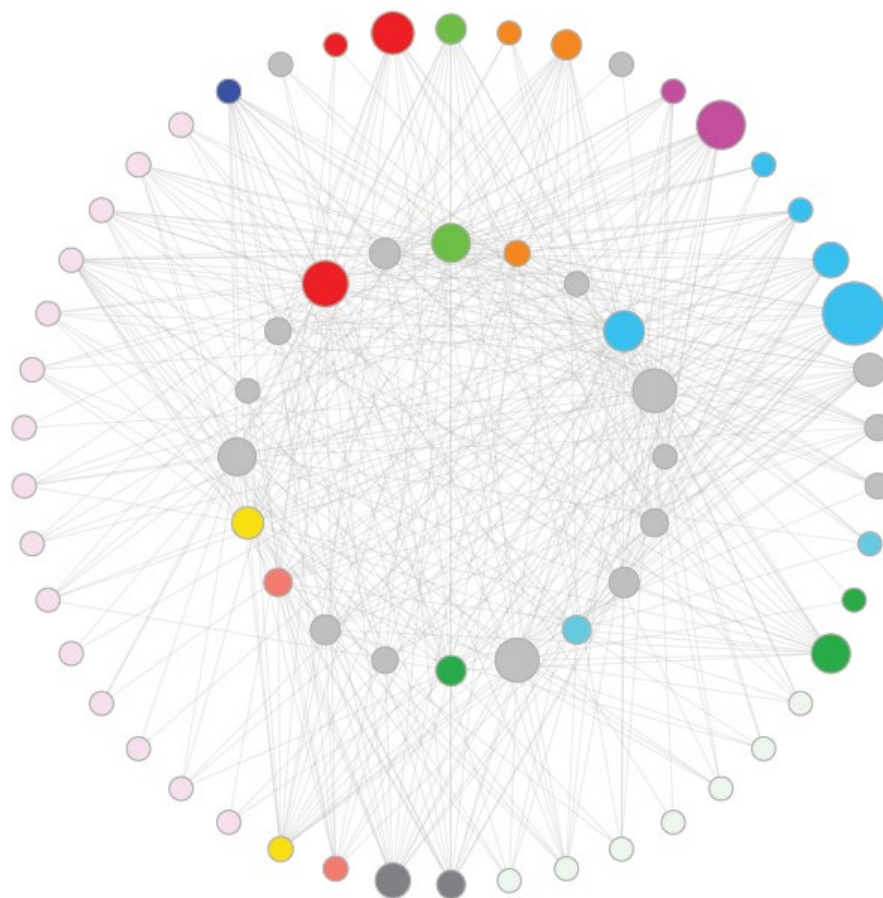


Sources: the Philippines authorities; IMF staff calculations.

Figure 7. Financial Linkage Among Banks and Conglomerates

(Inner circle = conglomerate groups, outer circle = banks)

The main source of interconnectedness is through bank lending to conglomerates (lines between outer and inner circles), rather than interbank exposures (among nodes on outer circle). Large banks have significant exposures to a number of conglomerates, including their own. Each conglomerate also takes loans from various banks from within and outside of their own group. Contagion from common borrowers could be strong if any of the major conglomerates become distressed. The BSP study on network analysis shows that the failure of major conglomerates would have larger contagion effects to banks compared to failures of banks.



Sources: BSP and IMF staff visualization.

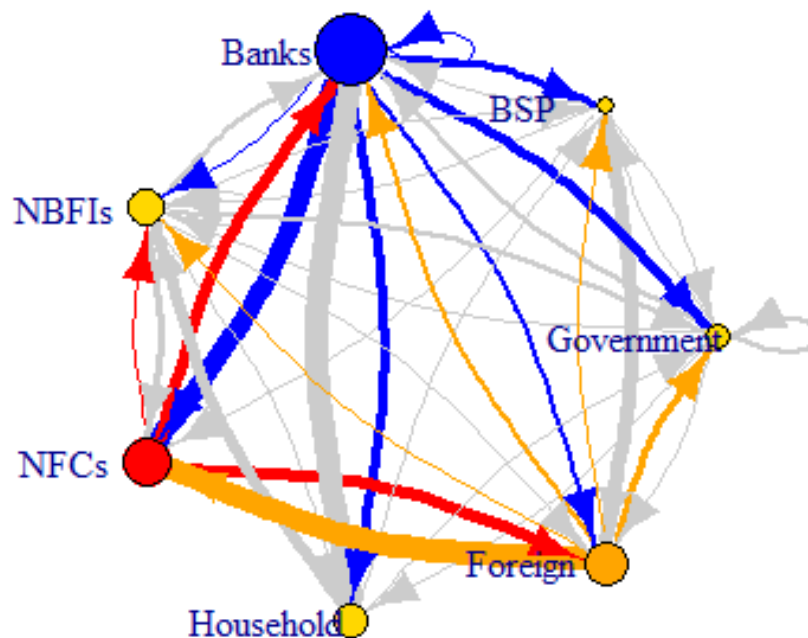
The sample includes 20 large conglomerates. Out of all UKBs and thrift banks, those with more than one connection (lending counterparts among the 20 conglomerates) are included in the figure Based on banks' large exposure data. Bank deposit data are not available due to the secrecy law.

Node size represents degree of the network. Nodes color codes: light pink = thrift banks that are not part of any conglomerate; light green = foreign banks; dark grey = government-owned banks; light grey = conglomerates and banks in a conglomerate with relatively smaller group total exposures; and other colors = other conglomerates—for instance, the three red nodes indicate a conglomerate groups and two banks that belong to the conglomerate.

Figure 8. Financial Linkage Map

(Network of Financial Claims, all instruments and currencies, March 2019)

Banks are at the center of financial linkage, followed by NFCs and foreigners. Banks fund themselves with mostly household deposits, followed by corporate deposits, while lend primarily to NFCs. They hold large liquidity buffer consisting of BSP reserve deposits and government securities. Foreign investment mostly goes to NFCs (including FDI, portfolio equity, and borrowing), followed by sovereign and banks. Banks' international liability is much smaller than their domestic liabilities and largely balanced with international assets amounting to over 80 percent of liabilities. However, the coverage is much lower for NFCs (about 20 percent) in part because NFC receives FDIs. NBFIs are mostly of institutions other than insurance and mutual funds.



Sources: BSP and IMF staff visualization.

NBFI = non-bank financial institutions, NFC = non-financial corporation.

Yellow lines=liabilities to foreign investors, blue lines = bank assets, and red lines = NFC assets.

Bubble size represents relative financial footprint of the sector (sum of financial assets and liabilities).

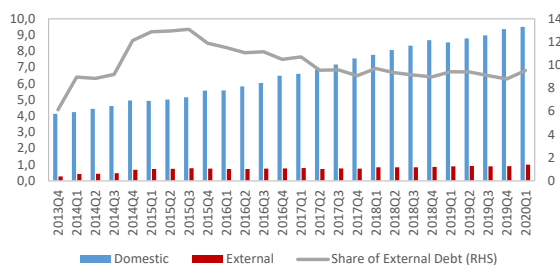
Financial exposure data among NFCs and between households and NFCs are missing.

Figure 9. Non-Financial Corporation

The share of NFC external debt is at declining trend, contributing to around 10 percent of total debt.

NFC Debt by Lender

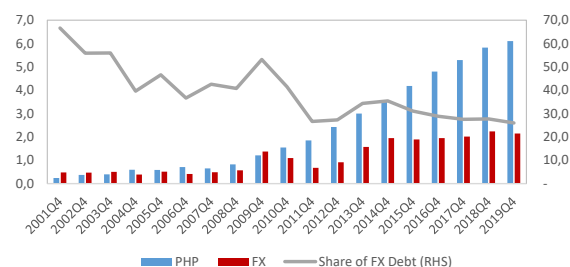
(In trillion PHP and percent)



In terms of currency, the FX currency debt (mostly Dollar denominated) has a declining share, with the last share of 26 percent at end 2019.

NFC Debt by Currency^{1/}

(In trillion PHP and percent)

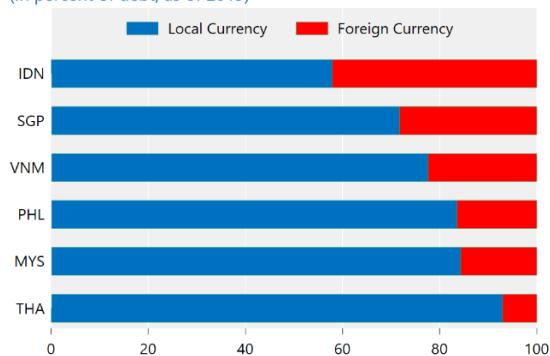


^{1/} Note: The data consists of PSE listed corporations that cover around 80 percent of total NFC debt

The share of FX debt was also moderate compared to other major ASEAN economies

Share of NFC Debt By Currency

(In percent of debt, as of 2019)



Sources: S&P Global Market Intelligence; and IMF staff estimates.

Sources: the Philippines authorities; BIS, IMF staff calculations.

Appendix I. Macroprudential Policy Toolkit in the Philippines¹

Instrument	Description
Countercyclical capital buffer	The Countercyclical Capital Buffer framework is applied on top of the capital conservation buffer with size from 0 percent to 2.5 percent. The buffer rate is at 0 percent since it was introduced in 2018. Any increase in the CCyB rate shall be effective 12 months after its announcement. Decreases shall be effective immediately.
Capital conservation buffer	Capital conservation buffer was introduced in 2013 by the issuance of Circular No. 781 dated 15 January 2013. Under this Circular, UBs/KBs, as well as their subsidiary banks and QBs, are mandated to raise the quality of their capital and to set up a CCB of 2.5 percent composed of CET1 capital. Banks that do not meet the 2.5 percent CCB will be restricted from distributing earnings. In response to the Covid-19 crisis, the BSP issued Memorandum No. M-2020-039 last 4 May 2020, which states that a covered bank/quasi-bank (QB) that draws down its 2.5 percent minimum capital conservation buffer will not be considered in breach of the Basel III risk-based capital adequacy framework. Covered banks/QBs will be given a reasonable time period to restore their Basel III capital conservation and liquidity buffers after the COVID-19 crisis.
Leverage ratio	The minimum Basel III Leverage Ratio is set at 5.0 percent (vis-à-vis the 3.0 percent of the BCBS) and has been implemented effectively since 1 July 2018. Such a requirement is applicable to all UBs/KBs and their subsidiary banks and QBs.
Uniform Stress Testing	The tool was introduced in 2014 that require banks to have sufficient capital level to absorb risks. The stress test has a reference period of end-June and end-December annually and covers credit risk (i.e., bank's exposure to economic activities, conglomerates and consumer loans) and market risk (movement in interest rates and foreign exchange). The stress test covers credit and market risks. The credit stress test imposes a 20 percent and 50 percent write-off on the net carrying value of balance sheet exposures while the uniform stress test for market risk covers the two main sources of market risk movements in interest rates and foreign exchange rates, based on simplified assumptions.
Real estate loan (REL) limit	The REL limit was introduced in 2008 and is set at 20 percent of a bank's total loan portfolio. The tool aims to identify potential vulnerabilities arising from banks' exposure in real estate and to serve as a preemptive measure to strengthen the banking system's ability to withstand a systemic shock emanating from the property sector. The REL limit applies to all UBs/KBs and covers commercial real estate loans extended to finance the acquisition and development of land and/or construction of buildings and structures, including housing units for sale/lease, for income-generating purposes. On 20 August 2020, the BSP issued Circular No. 1093, which increases the Real Estate Loan (REL) limits from 20 percent to 25 percent of total

¹ As mentioned in paragraph 17, most of prudential tools listed in the table are currently set by the Financial Supervision Sector.

Instrument	Description
	loan portfolio, net of interbank loans. The amendment aims to support growth in productive sectors of the economy amid the pandemic and to encourage bank lending to households for the acquisition or construction of a residential real estate property.
Real Estate Stress Test (REST) Limit for Real Estate Exposure (REE)	The BSP introduced in 2014 for UBs/KBs and TBs that limit loss from real estate stress test at 10 percent of the CAR and 6.0 percent of CET1 (for UBs/KBs and their subsidiary TBs)/Tier 1 ratio (for TBs that are not subsidiaries of UBs/KBs), on both solo and consolidated basis, after adjusting for a stress scenario resulting in a 25 percent write-off rate on REE and Real and Other Properties Acquired (ROPA)/Non-Current Assets Held for Sale (NCAHS). Relative to the REL limit, the REST limit has broader coverage as it includes all residential and commercial real estate loans as well as real estate investments, ROPA and NCAHS. The REST limits are not absolute limits, rather, a bank which does not meet either or both the REST limits is directed to explain why its exposures do not warrant remedial action. A bank which, persistently, breaches any of the REST limits is subject to heightened supervisory response. Per BSP Circular No. 1093, issued last 20 August 2020, the computation for REST limits was revised to exclude residential real estate loans to individuals for own occupancy and foreclosed real estate property.
Property loan to collateral value limit	The property loan to collateral value limit is set as 60 percent. This tool is similar to loan to value (LTV) ratio with static limit. If the collateral ratio is above 60 percent, the loan is treated as unsecured for risk weights and provisions.
Liquidity Coverage Ratio	The LCR requirement was initially rolled out to UBs/KBs with phased-in implementation of minimum LCR (i.e., 90 percent LCR starting 01 January 2018 and 100.0 percent LCR starting 01 January 2019) under Circular No. 905 dated 10 March 2016. The coverage of the LCR framework was then expanded under Circular No. 996 dated 8 February 2018 to include banks and QBs that are subsidiaries of UBs/KBs thus, enable subsidiaries to have a consistent approach and employ the same tool in managing their liquidity risk with their parent banks. In response to the Covid-19 crisis, the BSP issued Memorandum No. M-2020-039 last 4 May 2020, which states that a covered bank/QB may draw on its stock of liquid assets to meet liquidity demands to respond to the current circumstances, even if this may cause the covered bank/QB to maintain an LCR that is below the 100 percent minimum requirement. Covered banks/QBs will be given a reasonable time period to restore their Basel III capital conservation and liquidity buffers after the COVID-19 crisis.
Net Stable Funding Ratio	Introduced in June 2018, the requirement is applied for UBs/KBs and their subsidiary banks and QBs, with the minimum level have been set as 100.0 percent on both solo and consolidated basis since January 2019.

Instrument	Description
Capital surcharges for Systemically Important Institutions	The identified D-SIBs will be categorized into different high loss absorbency (HLA) buckets and will be required to increase their minimum CET1 capital by 1.5 percent to 2.5 percent of total risk-weighted assets. Bank designated as a D-SIB is also required to develop and maintain a concrete and reasonable recovery plan that sets out the actions that it will take to restore its viability in cases of significant deterioration of its financial condition. The D-SIBs framework is applied on a consolidated basis to all UBs/KBs as well as their subsidiary banks and QBs, and branches of foreign banks.
Net Foreign Exchange (FX) Positions.	Under Circular No. 561 dated 8 March 2007, banks' allowable Net Open FX Position (either overbought or oversold) shall be the lower of 20 percent of their unimpaired capital or US\$50 million. Any excess of the allowable limit will be settled on a daily basis. Banks will submit a report on the daily consolidated foreign exchange position of banks to include a foreign currency position against pesos of any of the banks' branches/offices, subsidiaries, and affiliates, here and abroad whether or not they are financial institutions, as long as the banks and their shareholders/officers exercise reasonable influence or control over them, as well as any entity that is engaged in FX trading or FX corporation that is affiliated with the banks either by ownership, management control, or influenced by banks, their retirement fund, officer, directors, or shareholders.
FX Swaps or Derivative Positions	The tool was introduced in 2011 and 2013 to curb speculative attacks on the Philippine Peso (Php) by imposing limits and higher risk weights on Non-Deliverable Forward (NDF) transactions. Circular No. 740 (issued in 2011) imposes higher risk weights for purposes of compliance with the risk-based capital requirement (15 percent capital charge from 10 percent capital charge) on NDF transactions. Circular No. 790 (issued in 2013) imposes limits on a bank's gross exposures to peso NDF transactions (20 percent and 100 percent of unimpaired capital) for domestic banks and foreign bank branches, respectively.
Prohibition against non-residents from Investing in the Term Deposit Facility and Overnight Deposit Facility	Since July 2012, the BSP limited the participation and placements to the facilities by banks/trust departments/entities whose funds are obtained directly or indirectly from non-residents. The BSP maintained the prohibition against funds from non-residents being accepted in the TDF and ODF. These facilities are monetary instruments deployed by the BSP for the purpose of managing domestic liquidity in the financial system and should not be made available for opportunistic investment activities funded from non-resident sources.

Appendix II. Key Macprudential Policy Measures: Selected Asian Economies

	Philippines	Korea	Indonesia	Thailand	Malaysia
Broad-based tools 1/					
Countercyclical capital buffer (above 0%)	No	No	No	No	No
Capital conservation buffer	Yes	Yes	Yes	Yes	Yes
Limit on leverage ratio	Yes	Yes	Yes	No	Yes
Household sector tools					
Household sector capital requirement	No	No	No	Yes	Yes
Cap on loan-to-value ratio	Yes	Yes	Yes	Yes	Yes
Cap on debt-service to income ratio	No	Yes	No	No	No
Cap on household credit growth	No	No	No	No	No
Fiscal measures to contain systemic risks	No	No	No	No	Yes
Corporate sector tools					
Corporate sector capital requirement	No	No	No	No	N.A.
Loan/eligibility restrictions	Yes	No	Yes	N.A.	N.A.
Exposure caps on corporate credit	Yes	No	No	No	N.A.
Liquidity tools (banking sector)					
Liquidity buffer requirements	Yes	Yes	Yes	Yes	Yes
Stable funding requirements	Yes	Yes	Yes	Yes	Yes
Limits on foreign exchange positions	Yes	Yes	Yes	Yes	No
Tools for systemic liquidity risk and nonbank sector					
Asset management industry	No	Yes	No	Yes	No
Pension funds	No	Yes	No	N.A.	No
Insurance companies	No	Yes	No	N.A.	No
Tools for SIs and interconnectedness					
Capital surcharges for SIs	Yes	Yes	Yes	Yes	No
Exposure limits/additional risk weights between financial institutions	No	Yes	Yes	No	No

Source: IMF Macprudential Policy Database.

1/ These broad-based tools are only applicable to the banking sector and in some cases to investment firms.

Note: In addition to these MPMs, the Philippines has extensive capital flow management (CFM) measures on FX transactions and borrowings—mostly to banks. For instance, banks have to obtain a separate license to handle FX transactions, and their access to non-deliverable forwards (NDFs) are constrained. However, many of the CFM measures do not apply for NBFIs and non-financial corporations as well as transactions in cash or in foreign soil (that are not repatriated), which led to developing substantial and efficient informal FX and derivatives markets that are even larger than formal markets.

Appendix III. Main Policy Measures to Mitigate the Impact of COVID-19

Monetary	
1	Reduction of the policy rate four times in 2020 by a cumulative 175 bps to 2.25 percent
2	Lowering of the reserve requirement ratio for banks by 200 bps to 12 percent
3	Relaxation of requirements for accessing the rediscount window
4	Purchase of PHP 300 billion worth government securities (about 1.5 percent of 2019 GDP) through a repurchase agreement with the government and secondary market transactions
5	Distribution of PHP 20 billion as dividend to the government—even though such distributions are no longer required under the recently amended new BSP charter
6	Inclusion of SMEs loans in the calculation of the compliance with reserve requirements (unusual measure to encourage banks to maintain SME loans). At end August 2020, SME loans accounted about 7½ percent of required reserves.
Regulatory	
7	A 90-day moratorium (ending June 2020) on all bank loan repayments during the Enhanced Community Quarantine period (part of the Bayanihan Act, March 2020). The BSP estimates that the uptake of the moratorium covered about 70 percent of total loans. Congress approved in August 2020, taking effect September 15, another 60-day moratorium (part of the Bayanihan Act II).
8	Relaxation of asset classification and provisioning requirements: (i) exclusion from the past due loan ratio of loans to affected borrowers until December 2021, and (ii) staggered booking of provision for credit losses over a maximum period of five (5) years, subject to prior approval of the BSP (strong form of regulatory forbearance).
9	Temporary relaxation of reporting requirements and penalties on required reserves and single borrower limits (subject to review March 2021, possible regulatory forbearance measure).
10	Temporary relaxation of prudential regulations that allow banks to reclassify available-for-sales securities subject to mark-to-market valuation to held-to-maturity securities that are valued at their book value, which expires September 30, 2020 (regulatory forbearance)).
11	Temporary reduction of MSME credit risk weights to 50 percent (below the Basel III minimum of 75 percent) subject to review end 2021 (regulatory forbearance).
12	Increase in the limit on banks' real estate loan share from 20 percent of their total loan portfolio (net of interbank loans) to 25 percent.
Exchange Rate and Balance of Payments	
13	The BSP has relaxed documentary and reporting rules for FX operations
Fiscal	
14	The public response (part of the Bayanihan Act, March 2020) has four pillars: (1) PHP 205 billion cash aid program (1.1 percent of 2019 GDP) for 18 million low-income households for a period of two months (2) PHP 56 billion social protection measures for vulnerable workers, including for displaced and overseas Filipino workers (0.3 percent of 2019 GDP); (3) PHP 54 billion on COVID-19-related medical response (0.3 percent of 2019 GDP); (4) PHP 120 billion (0.6 percent of 2019 GDP) credit guarantee for small businesses and support to the agriculture sector.
15	Further support fiscal support (part of the Bayanihan II Act, September 2020) will be provided to vulnerable households and to workers and businesses in hard-hit industries, such as agriculture, transportation, and tourism (0.8 percent of 2019 GDP).