Bangko Sentral ng Pilipinas

BSP Working Paper Series

Series No. 2020-05

June 2020

Shifting macroeconomic landscape and the limits of the BSP's pandemic response

Eloisa T. Glindro, Hazel C. Parcon-Santos, Faith Christian Q. Cacnio, and Marites B. Oliva

Shifting macroeconomic landscape and the limits of the BSP's pandemic response

Eloisa T. Glindro, Hazel C. Parcon-Santos,
Faith Christian Q. Cacnio, and Marites B. Oliva

Abstract

Across the globe, containment and mitigation measures implemented in response to the COVID-19 health crisis led to immediate decline in economic activities and temporary disruptions in financial markets. This was evident in the experience of the Philippines. To support the immediate needs of the real economy and preserve market confidence during the pandemic-induced economic crisis, the Bangko Sentral ng Pilipinas (BSP) simultaneously deployed its conventional and unconventional monetary policy tools to complement the efforts of the National Government (NG). Being the regulator/supervisor of banks and quasi-banks, the BSP also implemented a comprehensive set of regulatory and forbearance measures.

In deploying crisis-response measures, prudence requires that certain principles be observed, and specific limits be recognized. First, price stability, complemented by financial stability, is a key consideration when undertaking market interventions during periods of crises. Second, it is crucial to maintain central bank independence. Third, central bank policies must be implemented with limiting moral hazard in mind. Finally, the central bank should not compromise its policies in the short run. Exercising flexibility is essential, but consideration of the central bank's credibility, scope for conventional policies, and the financial system's long run stability should put a limit on how extraordinary the responses can be. Consistent with these principles, the BSP has been circumspect not to undermine the stability of the financial system and the BSP's hard-earned credibility and independence. Moving forward, the BSP remains attentive to challenges and evolving developments. It stands ready to deploy additional policy measures, supported by evidence-based assessment of overall economic conditions.

JEL classification: I10, I18, H12, E58, E63, G21

Keywords: public health, monetary policy, central bank, fiscal policy, crisis management, bank regulations

Corresponding authors: Eloisa T. Glindro (Eglindro@bsp.gov.ph) and
Hazel Parcon-Santos (ParconHC@bsp.gov.ph)

Table of Contents

Shifting macroeconomic landscape and the limits of the BSP's pandemic response[1]

1. Introduction

The COVID-19 crisis is a global health crisis. Authorities responded swiftly with containment and mitigation measures so as not to overwhelm the health system. These measures, however, led to immediate decline in economic activities, at least, in the near-term. Given that the worst of any crisis is not its initial impact but its persistence, economic policymakers' main goal is to mitigate the socio-economic fallout by averting the amplification of pro-cyclical dynamics and preventing the public health shock from developing into long-term economic slump (Lane, 2020).

Across the globe, many central banks in advanced economies redeployed, on a larger scale, both conventional and innovative policy tools used during the 2008-2009 global financial crisis (GFC). A more expanded set of regulatory relief and forbearance measures was granted by central banks and financial/banking system regulators or supervisors.

An important lesson learned from past crises experience is that while monetary policy tools of the central bank are powerful, monetary policy is not a panacea to any crisis. The powers of a central bank have limitations. The GFC particularly laid emphasis on certain principles that must be observed or preserved to maintain the credibility and independence of the central bank, ensure that moral hazard is minimized, and that responses do not backfire.

The Bangko Sentral ng Pilipinas (BSP) recognized early on the severity of the economic implications of the health crisis. Similar to other central banks, the BSP responded aggressively to the pandemic by deploying measures to help keep the economy afloat and to ensure that no disruptive imbalances emerge in the financial markets. In exercising its powers, the BSP has been circumspect – well aware of the capability of its tools to stave off short- and medium-term economic concerns, but cognizant as well of the long-term economic consequences.

Objectives of the study. The paper aims to provide a broad description of the changing macroeconomic landscape since the start of the COVID-19 pandemic crisis. It specifically seeks to contextualize the measures implemented by the BSP during the COVID-19 crisis within the principles and limitations of central bank policy responses during a crisis. Moreover, it also expounds on the potential challenges that the BSP must pay close attention to with the unfolding macroeconomic developments.

Structure of the paper. This paper is organized as follows: Section 2 provides an overview of the Philippine macroeconomic conditions since the onset of the COVID-19 pandemic. Section 3 discusses the role of a central bank during a crisis and some guiding principles in disposing central bank powers. It also offers a preliminary evaluation of BSP

[1] Prepared by the Center for Monetary and Financial Policy (Eloisa T. Glindro, Hazel C. Parcon-Santos, Faith Christian Q. Cacnio, and Marites B. Oliva) under the supervision of Director Laura L. Ignacio, Assistant Governor Iluminada T. Sicat of the Monetary Policy Sub-Sector and Deputy Governor Francisco G. Dakila, Jr. of the Monetary and Economics Sector. The team is thankful to five anonymous reviewers for the insightful and constructive comments, CMFP colleague Jade Eric T. Redoblado for providing important information on key legislative measures. We are also grateful to Irene Rose Imson and Genna Paola Centeno for data assistance.

responses to COVID-19 relative to these principles. Section 4 discusses possible challenges that the BSP needs to carefully consider moving forward. Section 5 concludes and provides key lessons.

2. Philippine macroeconomic conditions going into the COVID-19 pandemic

The Philippines was in strong macroeconomic position at the onset of the pandemic. Nonetheless, several economic indicators warrant close monitoring.

2.1 Real sector and employment

Economic growth. The pandemic upended the economy's longest expansion since 1999, when growth cratered at – 0.2 percent in Q1 2020. It initially struck tourism and trade industry and eventually spread out to the whole economy, following the implementation of the enhanced community quarantine (ECQ) on 16 March 2020.[2] The ECQ forcibly halted economic activities, causing significant supply chain disruptions.

Among selected emerging market economies in Asia, the Philippines and Thailand experienced the largest contraction in the first quarter of 2020, partly reflecting the greater share of travel and tourism sector in the economies of these two countries.[3] Prior to pandemic, the Philippines was the second fastest growing economy among these Asian emerging market economies (EMEs) in 2019, next to Vietnam (Table 1).

Table 1. GDP Growth Rates of Selected ASEAN Economies, 2019 and Q1 2020

Country	Q1 2020	2019
Indonesia	3.0	5.0
Malaysia	0.7	4.3
Philippines	- 0.2	6.0
Thailand	- 1.8	2.4
Vietnam	3.8	7.0

Source: Central bank websites

The recession chipped away at growth of all major sectors. Both industry and agriculture shrunk. The services sector significantly slowed down, except for banking institutions, retail trade, government services, and communication, which managed to post respectable growth. The decline in the industry sector was attributed mainly to lower production in the manufacturing and decrease in construction activities.[4] The adverse effect on production is expected to continue in the second quarter of 2020, following the 59.8 percent drop in the volume of production index (VOPI) in April 2020 Monthly Integrated Survey

[2] The economy contracted in the first quarter of 2020 mainly due to large, unfavorable exogenous shocks. Apart from COVID-19, contributing factors include the Taal volcano eruption and geopolitical and trade tensions.

[3] Based on travel and tourism direct contribution to GDP data from the World Bank (2018), among the selected Asian economies, the highest share was recorded by Thailand (45.5 percent), followed by the Philippines (29.0 percent), Indonesia (20.4 percent), Malaysia (15.8 percent), and Vietnam (13.8 percent) in 2018 (latest actual data available).

[4] Manufacturing was weighed down by declines in petroleum products, computer, electronic and optical products, and basic metals and mining and quarrying sectors while construction was dented by decreases in construction activities of financial, non-financial corporations and households.

of Selected Industries (MISSI). Agricultural production, particularly fishing, aquaculture and palay, was pulled down by limited access to farm inputs and labor as well as by fishing ban in certain regions.[5] Meanwhile, the much reduced growth of the services sector was largely on account of lower land and air transport services as well as accommodation, food and beverage service activities.[6]

Domestic demand, which has been the bedrock of the country's growth story, contracted sharply at – 3.3 percent, a reversal of the 7.0 percent expansion in the same period a year ago and worse than the 0.5 percent decline during the global financial crisis in 2009. Among the components of demand, only government consumption posted higher growth. Weakened household income, employment, and consumer confidence dragged private consumption. Investment suffered from decline in construction and investment in durable equipment as well as inventory drawdowns. Net exports expanded mainly due to greater decline in imports, particularly of transport and industrial machinery equipment.

Business and consumer confidence. Expectations surveys used to gauge business and consumer confidence were both conducted in the period prior to the implementation of the enhanced community quarantine in Luzon. Even then, businesses and consumers already cited the COVID-19 disease as a source of concern. Results from the latest expectations survey of the BSP showed that the business outlook for Q1 2020 and for the next 12 months has become less optimistic.[7] Meanwhile, consumer confidence stayed positive for Q1 2020 but has become less optimistic for the next four quarters[8](BSP-DES, 2020a; 2020b).

Employment. Based on the employment index of the monthly purchasing managers' index report of the Philippine Institute for Supply Management, unfavorable employment condition started manifesting in February 2020. In April 2020, employment index of manufacturing sector deteriorated[9] as a substantial number of the workforce was laid off. The worsening employment condition (Figure 1) was affirmed in the April 2020 Labor Force Survey (LFS), which showed that unemployment rate surged to 17.7 percent.

The April 2020 LFS figure was the highest unemployment rate on record, upsetting the notable improvement in employment condition since October 2018. Employment losses were recorded in all sectors, particularly in services and industry (Figure 2).[10] The ECQ resulted in 7.3 million jobless Filipinos, a significant jump from the 2.3 million unemployed in April 2019. As

[5] Aside from limited access to farm inputs and labor due to ECQ, the sector was adversely affected by Taal volcano eruption and fishing ban.

[6] These offset the positive growth recorded by a few sectors, led by banking institutions, retail trade, government services, communication and utilities.

[7] The Business Expectations Survey (BES) for Q1 2020 surveyed 1,533 firms nationwide with a response rate of 72.5 percent. Q1 2020 BES was conducted during the period 24 January – 13 March 2020, just before the declaration of the Enhanced Community Quarantine in Luzon.

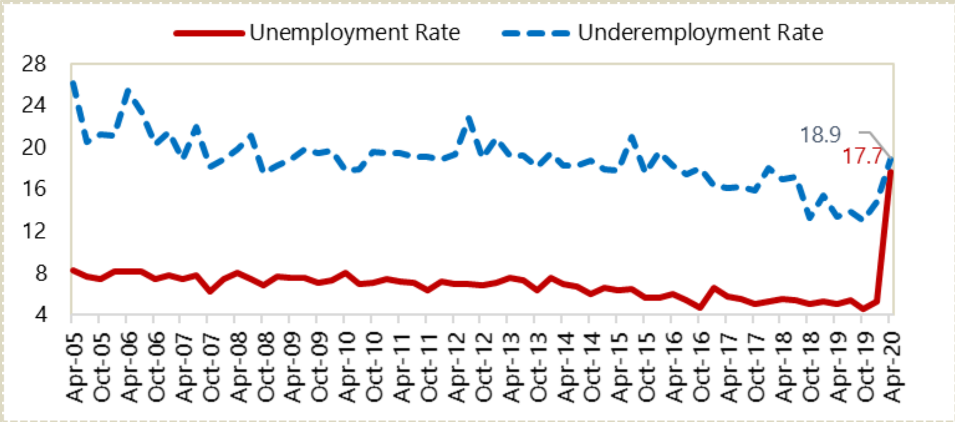
[8] The Consumer Expectations Survey (CES) for Q1 2020 is based on a survey of 5,555 households with a response rate of 97.3 percent. Q1 2020 CES was conducted during the period 29 January – 10 February 2020, before the declaration of the Enhanced Community Quarantine in Luzon.

[9] Based on IHS Markit Philippines Manufacturing PMI.

[10] Employment in the services sector declined by 21.7 percent particularly due to lower employment in wholesale and retail trade, transportation and storage, and accommodation and food service activities. The 28.9 percent decline in employment in industry sector was mainly due to construction and manufacturing subsectors. Employment in agriculture sector declined by 3.5 percent growth, arresting the recovery in agriculture employment that only started in Q3 2019.

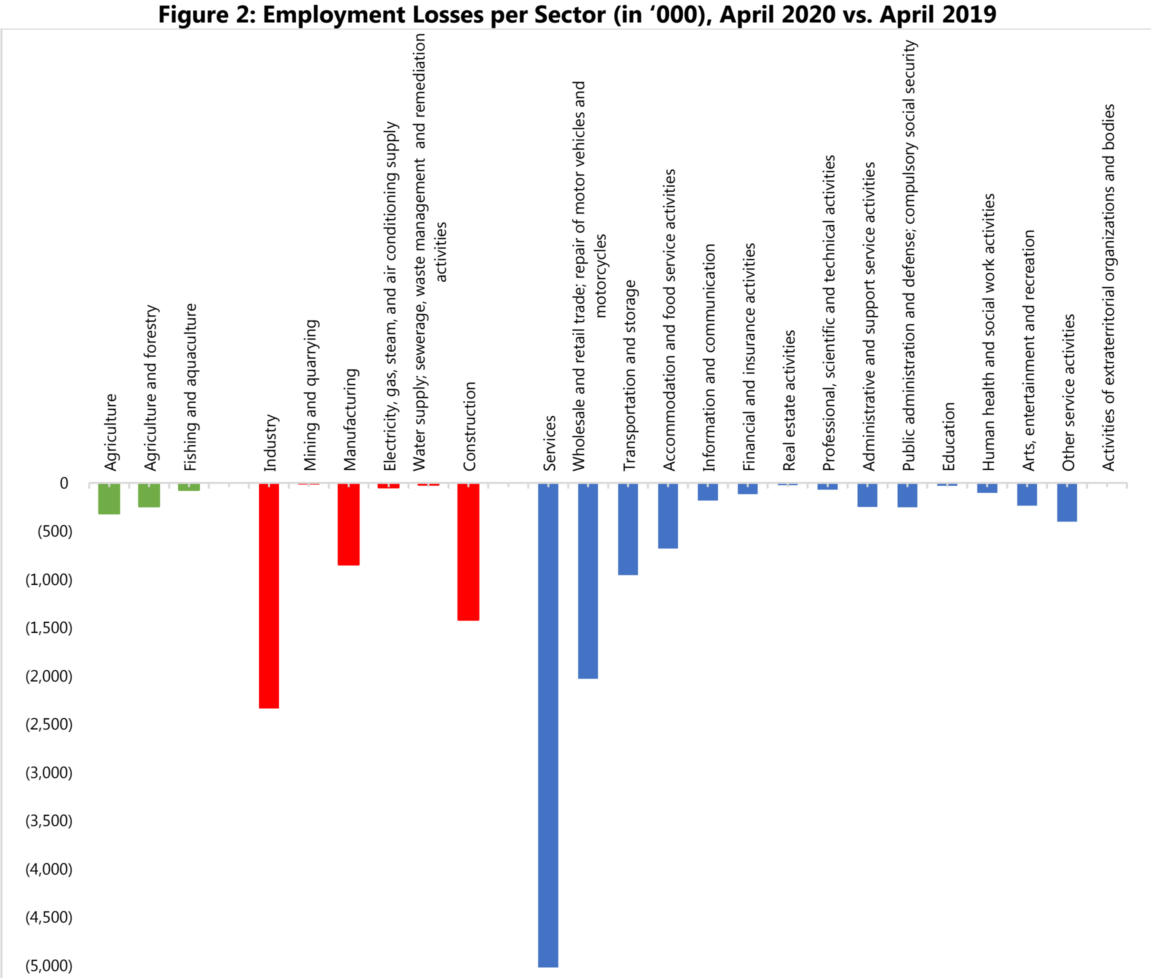
expected, the country also recorded its lowest labor force participation rate during the period at 55.6 percent. In the same vein, underemployment rate also worsened to 18.9 percent, from 13.4 percent in the same period in 2019 as some employers reduced the number of work hours due to lower domestic demand.

Figure 1. Unemployment and Underemployment Rates (in %)



Source: Philippine Statistics Authority

Figure 2: Employment Losses per Sector (in '000), April 2020 vs. April 2019



Source: Philippine Statistics Authority

The displacement of workers also affected Filipinos who work abroad. As of 31 May 2020, more than 320,000 onsite overseas Filipino workers (OFWs) were affected by the pandemic (DOLE, 2020a), 36,625 OFWs were repatriated (DOLE, 2020b) and 98,615 OFWs were stranded.[11] Travel restrictions also affected the deployment of OFWs. From January to April 2020, the deployment of Filipino workers abroad declined by 41.0 percent (POEA, 2020).[12] Mostly affected are sea-based OFWs and those that work in the Middle East, where economies are affected by falling world oil prices, and in the US, which has the greatest number of confirmed COVID-19 cases and deaths.[13] These are expected to significantly reduce overseas Filipino (OF) cash remittances that account for 8.4 percent of the country's GDP in 2019.

Potential Output. As the country's growth slid into negative territory in Q1 2020, BSP staff estimates of potential output likewise indicated deceleration to 5.6 percent from 6.1 percent a year ago.[14] Labor and capital remained largely intact but were rendered idle following the government-enforced ECQ. Total factor productivity (TFP), which was on a decline prior to the pandemic, was also estimated to be lower.[15]

Output gap was estimated to be –5.1 percent of the potential output in Q1 2020, a significant reversal from the estimated 0.3 percent in Q1 2019 and even lower compared to the –2.9 percent output gap in the first quarter of 2009 when the economy suffered the worst impact of the GFC. The huge economic slack reflects the massive amount of idle resources and low capacity utilization due to the ECQ. Based on MISSI, average capacity utilization rate fell to 77.9 percent in March 2020 from an average of 84.4 percent in the previous months.

As the ECQ was in effect during the entire second quarter, the economic fallout from COVID-19 is expected to worsen. Potential output growth is seen to decelerate faster during this period, given the reported double-digit unemployment rate, much lower average capacity utilization rate of 70.0 percent in April, and closures of a number of businesses. The crisis could further impair productivity growth due to higher transactions costs, lower mobility of goods and labor, and reduced scope for resource allocation (Di Mauro and Syverson, 2020).

For full year 2020, the government projects economic growth to range between –3.4 percent and –2.0 percent. Nevertheless, growth is projected to accelerate to 8.0 to 9.0 percent in 2021 once the government's policy support measures gain stronger traction (DBCC, 2020a). Consequently, potential output growth is also expected to improve, but not as fast as in the pre-COVID period and TFP may still decline.

Should the recession become a protracted one, it would likely leave permanent scars on TFP. Di Mauro and Syverson (2020) emphasized that the lack of effective treatment or vaccine for longer period could have deleterious effects on human capital. The disruption in schooling and persistent unemployment could reduce the skills, hence productivity, not only

[11] Most of the stranded OFWs were affected by lockdown in host countries, some have expired contracts while others are distressed needing repatriation (DOLE, 2020b).

[12] Includes both land-based (new hire and rehire) and sea-based (rehire) but excludes health care workers (POEA, 2020).

[13] As of 11 June 2020, the US recorded 2,000,464 confirmed cases, and 112,924 deaths (Johns Hopkins University, 2020).

[14] BSP-CMFP staff estimate as of 12 May 2020.

[15] The country's declining TFP since Q4 2018 is not unique as various estimates indicate that TFP growth rates of various economies and of the world have been declining even before the global financial crisis (Lagarde, 2017).

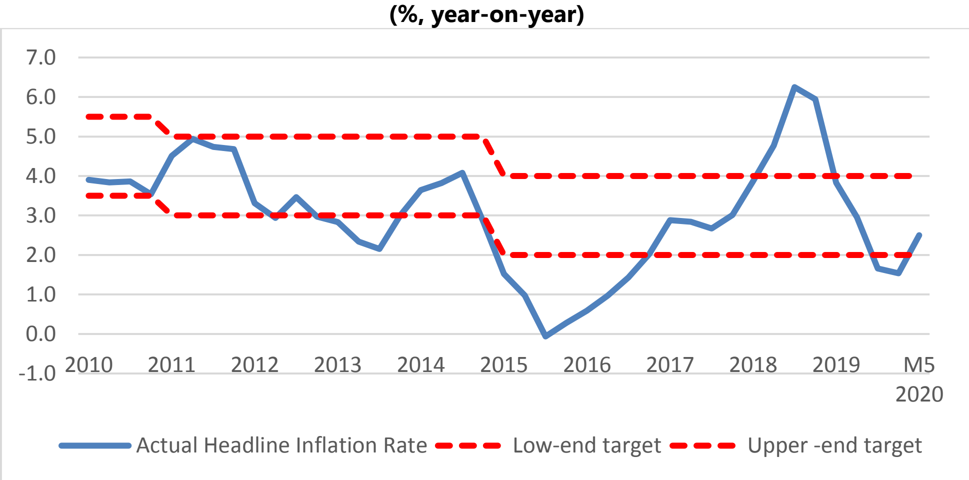
of the existing but also of the new members of the labor force.[16] The same can be said of capital stock that is not fully utilized and is hobbled by weak investment sentiment.

Fiscal expansion to support existing economic activities is not likely to reverse the downward trend in investment demand. Rather it is fiscal expansion aimed at stimulating new productive investments, innovation, and structural reforms that create growth-enhancing conditions, bolster potential growth, and strengthen economic resilience (Goy and van den End, 2020). As propounded by te Velde (2020), it is targeted and purposeful structural change that can propel new niche sectors and open new investment opportunities.

2.2 Inflation

Inflation is seen to hover near the low-end of the official NG's target range for 2020-2021, with downside risks – uncertainty about the severity of the pandemic and oil price volatility – dominating the inflation outlook.[17] The mean inflation forecasts of private sector economists for 2020 were also in accord with the BSP's inflation target range.[18] The relatively benign inflation outlook in the policy horizon provides space for monetary policy easing to complement the NG's efforts in easing the adverse impact of the COVID-19 public health crisis on the general economy.

Figure 3. Annual Headline Inflation Rate vis-à-vis Target Inflation Rate (%, year-on-year)



Sources: PSA for the 2012-based CPI data; BSP for the inflation target range

2.3 Fiscal condition

Revenue effort of the government reached 17.3 percent of GDP in the first quarter of 2020, an improvement from 15.5 percent in the same period in 2019 and the full year 2019 revenue effort of 16.1 percent (BTr, 2020a). However, this was due to an increase in income collected by the Bureau of the Treasury from dividends on shares of stocks,[19] which offset the

[16] Albeit remote working may upgrade the IT skills and increase the productivity of those who remain employed.

[17] BSP baseline inflation forecasts as of 11 May 2020. Adjustments in utility rates and higher global rice prices are the main upside risks to inflation.

[18] For 2021, mean inflation forecast is near the mid-point of the target range.

[19] This includes the Php 20 billion advance dividends remitted by the BSP to the NG to support the latter's programs during the pandemic. This constitutes 87 percent of the estimated total dividends based on the BSP's unaudited financial statements for year 2020. This also includes the Php 8.6 million dividend payment by PDIC in the form of securities (BTr, 202a).

lower tax collections of the Bureau of Internal Revenues (BIR) and Bureau of Customs (BOC) that started in March 2020 as a result of the ECQ.

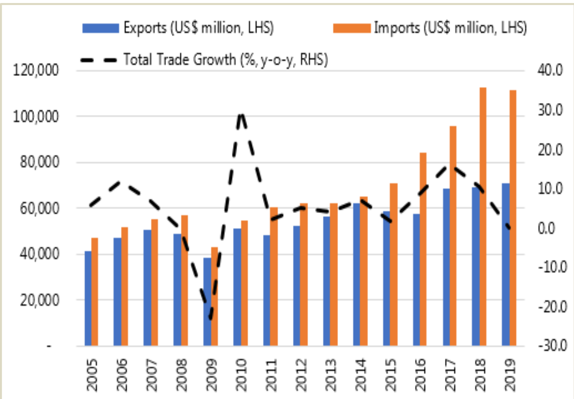
In April and May 2020, both bureaus continued to experience tax collection losses. The cumulative NG deficit for the first five months of 2020 expanded by almost 700 hundred-fold to Php 562.2 billion (BTr, 2020a). For the full year 2020, revenue effort is programmed at 13.6 percent of GDP and NG deficit-to-GDP ratio at 8.4 percent, which, if realized, will be the highest deficit-to-GDP ratio on record since 1986. The deficit-to-GDP ratio is programmed to gradually decline to 6.6 percent in 2021 and 5.0 percent in 2022 (DBCC, 2020a).

Consequently, the NG debt-to-GDP ratio increased to 44.0 percent in end-April 2020 from 39.6 percent in 2019. The increase was mainly accounted for by domestic securities issuance and external loan.[20] The domestic debt included the Php 300 billion short-term borrowing of the NG through the repurchase agreement with the BSP in March and net issuance of government securities amounting to Php 50.8 billion in April (BTr, 2020b). The external debt included the net availment of external loans amounting to Php 87.3 billion in April as part of the government's effort to raise concessional financing for its pandemic response measures (BTr, 2020b). The latest NG debt-to-GDP ratio is still below the highest debt-to-GDP ratio recorded by the country since 1986. This was in 2004 at 71.6 percent, when the country experienced a fiscal crisis.

2.4 External sector condition

International trade. After decelerating during the 2008-2009 GFC, Philippine total external trade grew from 2010 onwards (Figure 4). However, the confluence of supply chain disruptions and depressed demand caused by the pandemic led to significant decline in the country's foreign trade. As shown in Table 2, total external trade dropped markedly in March 2020 by 25.7 percent relative to March 2019 and by 8.2 percent relative to February 2020. Relative to the previous quarter, Q1 2020 external trade declined by 10.4 percent. Based on UNCTAD's (2020a) assessment, the pandemic led to a 3.0 percent drop in global trade values in the first quarter of 2020. It projected the downturn to accelerate further in the second quarter, with an estimated quarter-on-quarter decline of 27.0 percent.

Figure 4. Philippine External Trade, 2005-2019



Source: Philippine Statistics Authority

Table 2. Philippine External Trade, 2019-2020

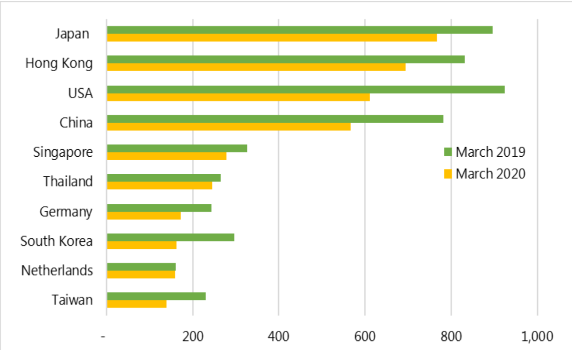
Month/Year	Total Trade	Imports	Exports
Levels (US$ million)			
January			
2019	14,858	9,565	5,293
2020	15,082	9,293	5,789
February			
2019	13,237	7,985	5,252
2020	12,458	7,057	5,401
March			
2019	15,397	9,366	6,031
2020	11,442	6,911	4,531
Q1			
2019	43,492	26,916	16,576
2020	38,981	23,261	15,720
Growth Rates (%)			
Mar 2019 - Mar 2020	-25.7	-26.2	-24.9
Feb-Mar 2020	-8.2	-2.1	-16.1
Q1 2019 - Q1 2020	-10.4	-13.6	-5.2

Source: Philippine Statistics Authority

[20] Of the total outstanding debt stock, 68.2 percent was sourced domestically and 31.8 percent was external debt.

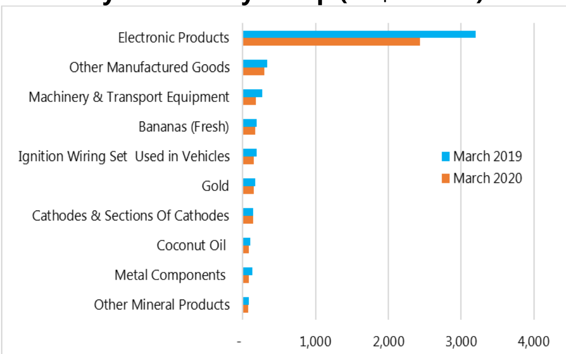
Philippine exports declined by 24.9 percent and 16.1 percent on an annual and monthly basis, respectively. The fall was evident in all export markets of the Philippines, with exports to South Korea, Taiwan, and the USA having had the largest annual reductions at 45.0 percent, 39.1 percent, and 33.9 percent, respectively (Figure 5).[21] Figure 6 shows that nine of the top 10 major export commodities fell in March 2020 led by metal components (-40.9 percent); machinery and transport equipment (-33.1 percent); and electronic products (-24.0 percent).

Figure 5. Top Ten Export Partners* (US$ million)



*Comprise 83.8% of the country's total export partners
Source: Philippine Statistics Authority

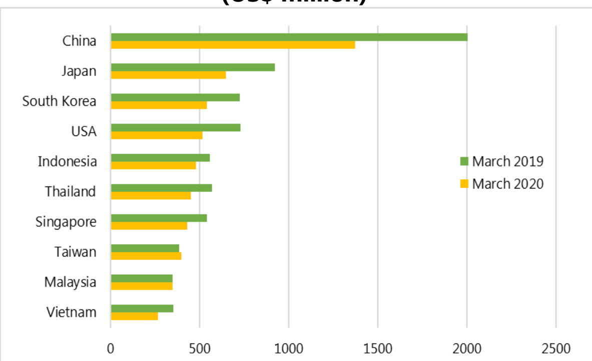
Figure 6. Top Ten Philippine Exports* By Commodity Group (US$ million)



* Comprise 82.7% of the country's total exports
Source: Philippine Statistics Authority

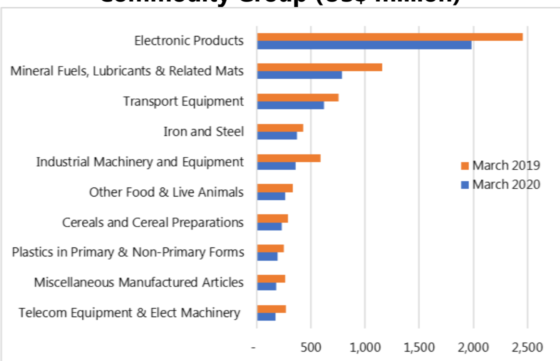
Meanwhile, imports declined by 25.7 percent and 8.2 percent on an annual and monthly basis, respectively. Imports from China, Japan, and the USA had the largest drop at 31.4 percent, 29.7 percent, and 29.5 percent, respectively (Figure 7). Among the commodities, industrial machinery and equipment, miscellaneous manufactured articles, and mineral fuels and related materials recorded the highest fall at 39.4 percent, 32.9 percent, and 32.2 percent, respectively (Figure 8).

Figure 7. Top Ten Import Partners* (US$ million)



* Comprise 79.0% of the country's total import partners
Source: Philippine Statistics Authority

Figure 8. Top Ten Philippine Imports*By Commodity Group (US$ million)



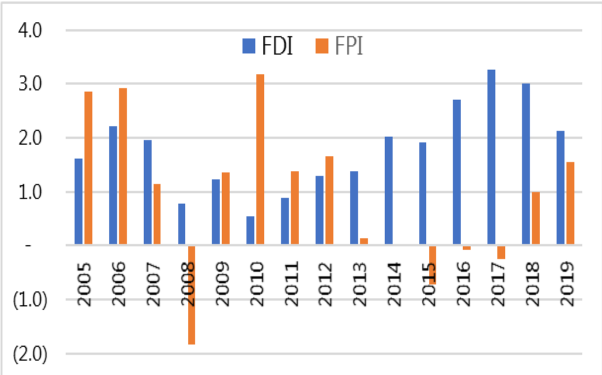
* Comprise 74.3% of the country's total imports
Source: Philippine Statistics Authority

Foreign investments. After falling to less than one percent of GDP in 2008, foreign direct investments (FDI) in the Philippines steadily increased, reaching a high of 3.3 percent of GDP in 2017. Moreover, the volatility in FDI declined throughout the years. In contrast, foreign portfolio investments (FPI) plunged during the GFC but recovered in succeeding years.

[21] Shown in Figure 5 is the decline in top ten export markets only, but the decline occurred in all export markets (PSA, 2020).

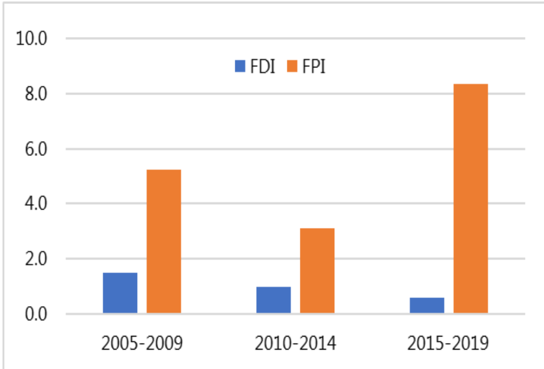
However, bouts of risk aversion arising from the Taper Tantrum episode in 2013 and the Renminbi (RMB) devaluation in 2015-2016, among others, contributed to significant drop in FPI in 2013-2017. In recent years, the volatility in FPI also increased. (Figures 9 and 10).

Figure 9. Foreign Direct and Portfolio Investments (% of GDP)



Note: Foreign direct and portfolio investments correspond to non-resident investments - net incurrence of liabilities in the Balance of Payments Statistics
Source: BSP Balance of Payments Statistics (BPM6)

Figure 10. Volatility* of Foreign Investments



*Volatility calculated using coefficient of variation.
Source: Authors' calculations

The full impact of COVID-19 on Philippine foreign investments is yet to be seen. For Q1 2020, FDI net inflows contracted by 14.2 percent to US$ 1.7 billion from the US$ 1.9 billion net inflows in Q1 2019. UNCTAD (2020b) estimated that global FDI for the 2020-2021 period could fall between 5 percent in a scenario where the pandemic is reined in within the first half of 2020 and 15 percent in a scenario where it persists throughout the year.

For FPI, BSP-registered portfolio investments[22] showed substantial net outflows of US$ 2.1 billion in January – April 2020, a reversal of the US$ 64.6 million net inflows registered for the same period in 2019 and larger than the US$ 1.8 billion net outflows recorded in 2008 GFC (Table 3). This is, however, not unique to the Philippines. Across EMEs, the IIF (2020a) estimated that the exodus of capital in the COVID-19 episode was larger than during the GFC and far bigger than recent *"risk-off"* episodes, such as RMB devaluation fears in 2015 – 2016 or the escalation of US-China trade tensions in late-2018.

Table 3. FDI and BSP-Registered Portfolio Investments*

	FDI		FPI	
	Jan 2019	**Jan 2020**	**Jan – Apr 2019**	**Jan - Apr 2020**
USD million	586.2	657.2	64.6	(2,067.5)
Growth (%)		12.1		3,302.4

*Refer to inward foreign investments in PSE-listed securities (PSE); peso-denominated government securities (GS); peso time deposits with banks with minimum tenor of 90 days; other peso debt instruments; unit investment trust funds; and other portfolio investments such as Exchange Traded Funds and Philippine Depositary Receipts
Source: BSP

Remittances. Overseas Filipino (OF) remittances have always been an important source of foreign exchange (FX) inflows for the country. It tends to be countercyclical and is considered one of the sources of resilience of the Philippine economy. Amid the 2008 – 2009

[22] This pertains to voluntary registration of investments with the BSP-International Operations Department and reports of custodian banks.

GFC, OF remittances grew strongly, reaching around 10 percent of GDP. This helped private consumption maintain positive growth despite the adverse impact of the GFC on domestic employment (in 2009 unemployment rate reached 7.5 percent). However, in the current COVID-19 crisis, this may not be the case based on the huge number of affected and repatriated OFWs as well as the substantial decline in deployment of workers overseas.

The growth of OF cash remittances decelerated to 1.4 percent in the first quarter of 2020, slower than 4.2 percent in the same period in 2019 and 4.1 percent for the full year.[23] The slowdown in growth was primarily due to the 4.7 percent decline in March 2020, when most of the countries started the COVID-19 pandemic lockdown.[24] OF remittances will likely to be much lower in the second quarter of 2020, weakening the support to private consumption.

BPO receipts. Operations of business process outsourcing (BPO) sector were also disrupted by problems of worker mobility during the ECQ period. The growth of professional and business service activities moderated to 0.7 percent in Q1 2020 from 1.1 percent in Q1 2019. Nevertheless, the BPO industry demonstrated some resilience as industrial and logistics sectors continued during the lockdown, supported by e-commerce expansion. Some market analysts[25] consider the BPOs as one of the sectors that could help alleviate the economic downturn. The industry is expected to continue to grow strongly in the second half of 2020 as multinationals around the world turn to outsourcing in a bid to aggressively cut costs and increase production amid falling revenues. Moreover, the country continues to be an attractive destination for the industry due to competitive costs and young talent. The expected increase in vacancy in office buildings partly caused by the pandemic will also provide more attractive lease terms for firms. The estimated earnings from BPO services in 2019 was US$ 22.4 billion, 4.7 percent higher than the previous year (BSP-DES, 2020c). This is equivalent to 6.2 percent of GDP.

Gross international reserves. Sound macroeconomic policies are not sufficient to ensure economic stability. A strong external position is equally important for economic resilience. Throughout the years, the BSP accumulated foreign reserves as a self-insurance against a currency crisis. The country built its international reserves from the strong capital inflows experienced in the post-GFC period and from robust growth in remittances from overseas Filipinos.

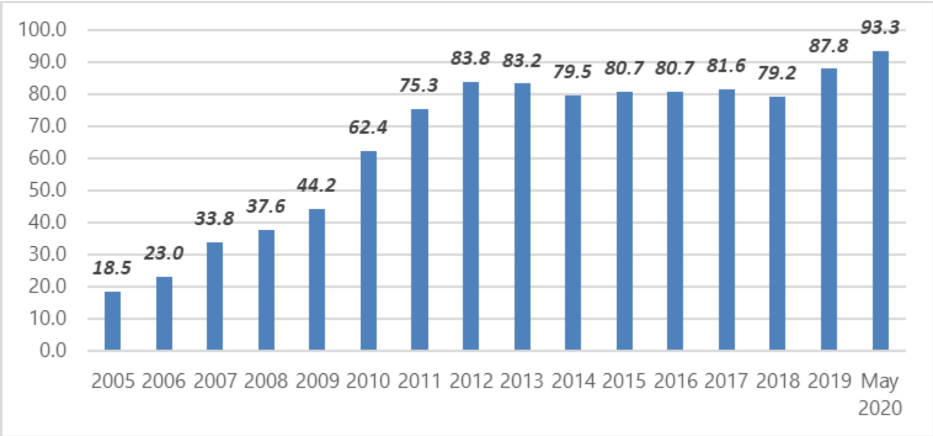
The Philippines' international reserves rose from US$ 18.5 billion in 2005 to US$ 87.8 billion in 2019. As of May 2020, the country's foreign reserves reached an all-time high of US$ 93.3 billion (Figure 11).

[23] The slower growth in OF remittances in the first quarter was also reflected in the country's net primary income data, which declined by 4.4 percent in the first quarter. This was mainly due to the 2.6 percent reduction in compensation inflows, which consisted mostly of remittances from Filipino workers abroad.

[24] The regions that registered significant declines in cash remittances in the first quarter were the Middle East (particularly, Saudi Arabia and United Arab Emirates) and Europe (particularly United Kingdom and Germany).

[25] Leechiu Property Consultants and Santos Knight Frank (Valdez, 2020; Dumlao-Abadilla, 2020)

Figure 11. Gross International Reserves (in US$ billion)



Source: BSP

Based on commonly used reserve adequacy measures (i.e., imports and short-term debt metrics), total reserves in the Philippines can be considered as sufficient (Table 4). The May 2020 GIR level was enough to cover 8.4 months' worth of imports of goods and payments for services and primary income. It was also equivalent to 7 times the country's short-term external debt based on original maturity and 4.6 times based on residual maturity.

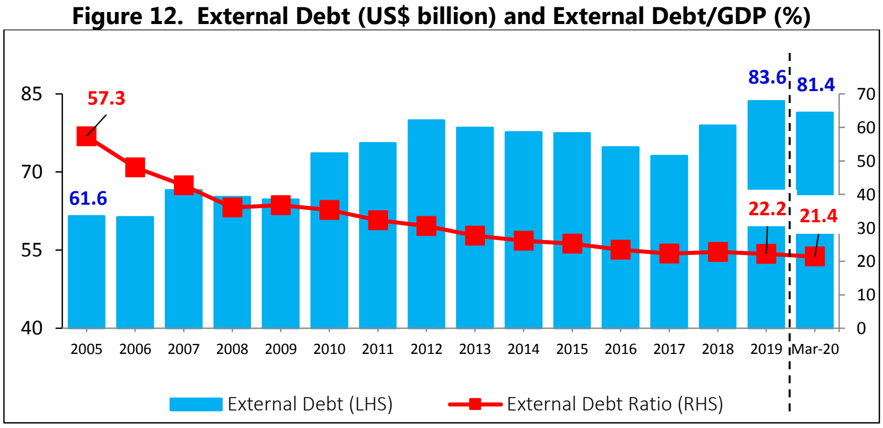
Table 4. Reserve Adequacy Measures

	2005 – 2009	**2010 – 2014**	**2015 – 2019**
Import-based measure (3.0)	6.4	11.0	8.2
Debt-based measure (1.0)	2.5	4.2	4.0

Source: IMF Assessing Reserve Adequacy (ARA) estimates and CMFP staff calculations
Figures in the parenthesis are the thresholds.

External debt. From being a highly indebted country in the 1980s, the Philippines ably controlled its external debt at manageable levels. The country's external debt metrics steadily improved, with the significant decline in the external debt-to-GDP ratio from 57.3 percent in 2005 to 21.4 percent as of end-March 2020 (Figure 12).

Figure 12. External Debt (US$ billion) and External Debt/GDP (%)



Source: BSP

The improvement in the country's external debt position was achieved through a debt management strategy that involved shifting towards domestic borrowing and lengthening the maturity of external debt. The approach successfully transformed the maturity profile of the country's external debt into predominantly medium-and long-term (MLT).[26] This helped prevent the clustering of maturities of borrowings and ensured that foreign exchange requirements for external debt payments are spread out and hence, more manageable. As of end-December 2019, MLT borrowings accounted for 83.6 percent of the country's total external debt while short-term (ST) borrowings (i.e., those with original maturities of up to one year) comprised the remaining 16.4 percent. The weighted average maturity for all MLT accounts is at 16.9 years. Public sector borrowings have a longer average term at 20.9 years while private sector borrowings have an average term of 7.4 years.

2.5 Banking System

Since the GFC, the BSP has embarked on significant reforms that aimed to further strengthen the country's banking system and control financial risks. Examples include the adoption of the new capital requirements of Basel III[27] and strengthening of credit risk management.[28]

Total resources. The total resources of the Philippine Banking System (PBS) continued to expand, supporting the country's financing needs amidst the domestic and global uncertainties.[29] As of end-April 2020, total assets of the banking system stood at Php18.7 trillion, reflecting a year-on-year growth of 9.3 percent (Figure 13). Even during the community quarantine phase, the total resources of the PBS posted a month-on-month increase of 1.4 percent from March 2020 to April 2020, higher than the average 0.7 month-on-month growth recorded in 2019.

Meanwhile, total deposits of the PBS and universal and commercial banks (U/KBs) recorded an annual growth of 11.3 percent and 13.4 percent, respectively as of end-April 2020 (Figure 14), higher than the increase posted for the same period in 2019.[30] For thrift banks (TBs), total deposits registered a year-on-year decline of 13.1 percent. The deceleration in deposit growth of TBs started in September 2019, thus, cannot be fully attributed to the COVID-19 crisis. Latest data (end-December 2019) for rural and cooperative banks (R/CBs) showed that deposits grew at an annual rate of 6.7 percent, above the 5.2 percent annual average growth for the last five years.

[26] Debts with original maturities longer than one (1) year.

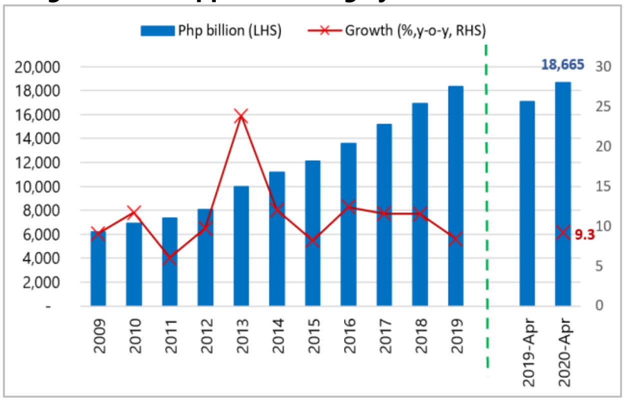
[27] Under Resolution No. 33 dated 5 January 2012, the Monetary Board of the BSP approved the Basel III implementation plans. BSP Memorandum No. M-2012-002 provides the Implementation Plans for Basel III Standards on Minimum Capital Requirements.

[28] Circular No. 855 dated 29 October 2014

[29] The total assets of the banking system grew at an annual average of 11.3 percent from 2008 to 2019, i.e., from Php5.7 trillion in end-2008 to almost Php18.3 trillion in end-2019. This asset growth was funded by deposit generation, bond issuances and capital infusion (BSP, 2020a).

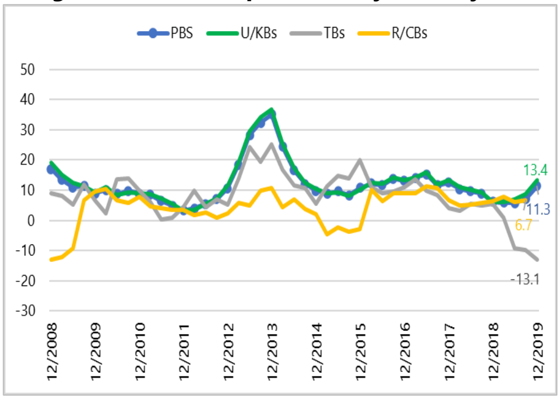
[30] 6.6 percent and 6.8 percent for PBS and U/KBs, respectively.

Figure 13. Philippine Banking System: Total Assets



Source: BSP

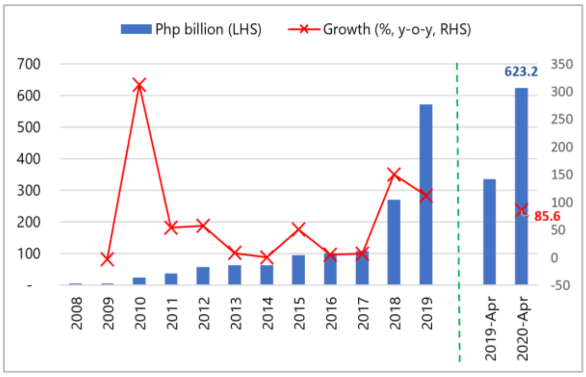
Figure 14. Total Deposits* (%, year-on-year)



*Last data point is for April 2019-April 2020, except for R/CBs.
Source: BSP

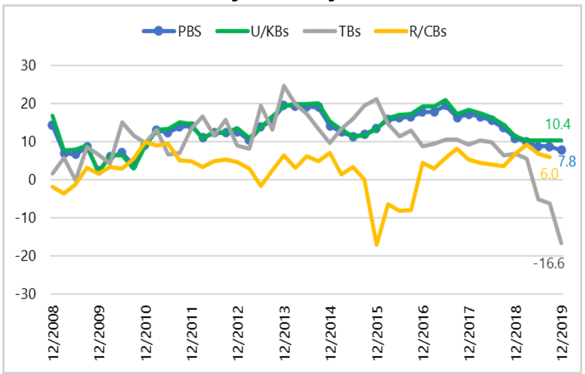
Banks also tapped the bond market as an alternative source of funding following the relaxation of requirements for bond issuance in August 2018[31] and the implementation of the net stable funding ratio (NSFR) requirement in June 2018.[32] As of end-December 2019, 11 banks were among the top 30 issuers of local currency (LCY) corporate bonds in the Philippines, accounting for 37.0 percent of the total LCY corporate bond market (ADB, 2020a). While bonds generally provide longer-term financing, the tenors of the new issuances ranged from only two to three years as market players expected interest rate to drop. This give banks flexibility should interest rates stabilize over the medium term (BSP, 2020). As of end-April 2020, bonds payable expanded by 85.6 percent year-on-year to Php 623.2 billion (Figure 15).

Figure 15. PBS: Bonds Payable



Source: BSP

Figure 16. Total Loan Portfolio* (%, year-on-year)



*Last data point is for April 2019-April 2020, except for R/CBs.
Source: BSP

Lending activities. Throughout the years, stable funding sources supported banks' lending activities. However, constrained economic activity following the Luzon-wide lockdown in March and April 2020 have led to decline bank lending growth. As of end-April 2020, total loan portfolio of the PBS and U/KBs recorded annual growth rates of 7.8 percent and 10.4

[31] BSP Circular No. 1010 dated 9 August 2018 simplifies the process of issuance of bond/commercial papers for U/KBs. BSP Circular No. 1062 dated 26 November 2019 amended the requirements on the issuance of long-term negotiable certificates of time deposit, bonds and commercial papers.

[32] The NSFR seeks to limit the overreliance of banks/quasi-banks on short-term wholesale funding (BSP Circular No. 1007 dated 6 June 2018).

percent, respectively (Figure 16), lower than the growth rates recorded in the same period in 2019.[33] Meanwhile, loan growth of TBs has displayed a downward trend since September 2019, but fell markedly in end-April 2020, recording an annual deceleration of 16.6 percent. This may not bode well for micro, small and medium enterprises (MSMEs) – the main borrower segments of TBs. Nonetheless, R/CBs maybe able to partially support lending to some MSMEs as latest data for R/CBs (end-December 2019) showed that loans grew at annual rate of 6.0 percent, higher than the annual average growth of 2.1 percent in the last five years.

Under the Magna Carta for MSMEs, banks were mandated to allocate 2 percent of their total loan portfolio to medium enterprises[34] and 8 percent to micro and small enterprises.[35] During the implementation of the mandatory credit allocation,[36,37] lending by the PBS and all the bank groups exceeded the mandated credit allocation to medium enterprises. However, lending to micro and small enterprises by the PBS consistently fell below the mandated allocation since 2011, largely driven by the under allocation by U/KBs and TBs. As expected, lending by R/CBs exceeded the mandated allocation as R/CBs catered mostly to micro and small enterprises (Table 5).

Table 5. Mandated Lending to MSMEs* (% of total lending)

	Medium Enterprises (Mandated lending=2%)				**Micro and Small Enterprises** (Mandated lending=8%)			
	PBS	**U/KBs**	**TBs**	**R/CBs**	**PBS**	**U/KBs**	**TBs**	**R/CBs**
2009	8.2	7.9	8.9	12.8	9.7	7.1	16.1	41.1
2010	7.9	7.7	8.6	12.0	8.5	6.8	14.0	34.1
2011	7.6	7.4	8.0	10.5	7.6	5.8	16.2	29.6
2012	6.9	6.7	7.8	9.5	6.4	5.3	11.3	22.3
2013	6.1	5.9	7.0	11.2	5.6	4.6	9.8	26.0
2014	6.1	5.4	7.6	9.1	4.9	3.7	7.4	24.8
2015	6.2	5.7	8.4	10.3	4.4	3.4	7.1	23.2
2016	5.4	5.2	6.3	10.0	3.8	3.0	6.6	22.0
2017	5.0	4.9	5.5	10.4	3.3	2.7	5.4	22.3
2018	4.6	4.4	5.0	10.6	3.1	2.5	4.9	24.0
2019	4.3	4.1	4.9	12.0	2.8	2.3	4.5	24.3

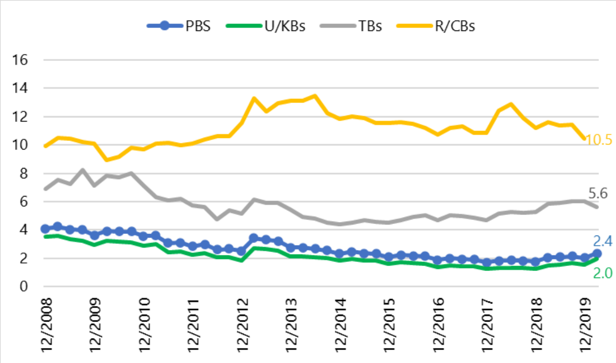
* Republic Act No. 6977, as amended by RA Nos. 8289 and 9501.
Source: BSP

Performance indicators. Exposure to bad debts was on a declining trend since 2008, as shown by the downtrend in gross non-performing loans (NPL) ratio and non-performing assets-to-gross assets (NPA) ratio, for all bank groups, except NPL ratio for R/CBs (Figures 17 and 18). By end-April 2020, the two ratios slightly increased for U/KBs relative to end-

[33] 12.2 percent and 12.8 percent for PBS and U/KBs, respectively.
[34] Enterprises with asset size equal to Php 15 million but less than Php 100 million, and with 100-199 employees are under this category.
[35] Enterprises with asset size less than Php 15 million and with less than 100 employees are under this category.
[36] The mandatory credit allocation prescribed under the Magna Carta lapsed in 2018.
[37] House Bill No. 6004 (filed on 22 January 2020), introduced by CIBAC Party-List Representatives, Eduardo C. Villanueva and Domingo C. Rivera, seeks to extend the period for the mandatory allocation to MSMEs to another 10 years.

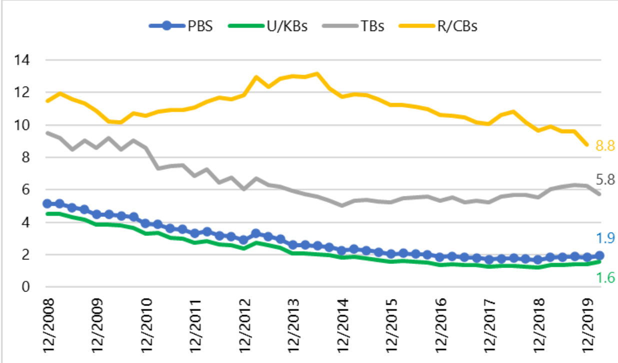
December 2019, but remained manageable.[38] The NPL and NPA ratios are some of the closely monitored indicators by the BSP-Financial Supervision Sector (FSS), especially in light of the expected increase in bad debts arising from financially constrained borrowers following the COVID-19 crisis.

Figure 17. Non-Performing Loans-to-Total Loans* (%)



*Net of interbank loans. Last data point is for April 2020, except for R/CBs.
Source: BSP

Figure 18. Non-Performing Assets-to-Gross Assets* (%)

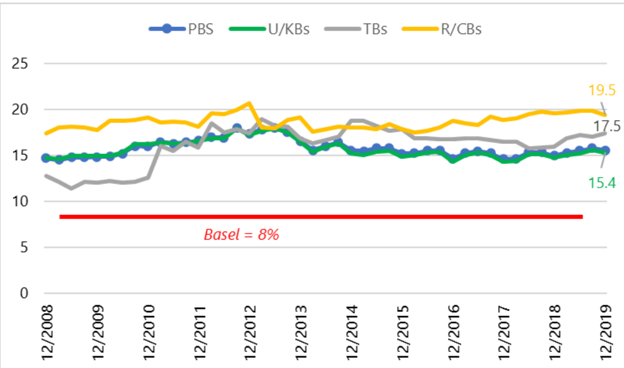


*Last data point is for April 2020, except for R/CBs.
Source: BSP

Available data on capital adequacy ratios (CAR) as of end-December 2019 indicated that local banks had sufficient capital buffers to absorb potential losses at the onset of the pandemic. All bank groups maintained CARs above the BSP regulatory requirement of 10 percent and Bank for International Settlements (BIS) standard of 8 percent (Figure 19). In terms of liquidity, the loan-to-deposit ratio (LDR) of U/KBs was on an uptrend since 2013, but remained below 80 percent. Meanwhile, after reaching over 100 percent in 2012, LDR of R/CBs declined to around 80 percent in recent quarters. For TBs, the ratio was on an increasing trend, but slightly declined to 92.3 percent as of end-April 2020 (Figure 20).

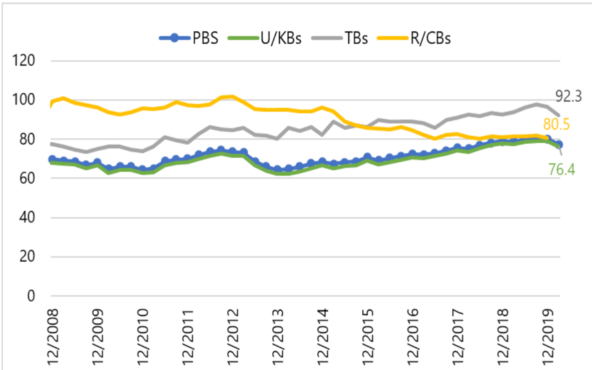
The banking system also sustained profitability despite domestic and global uncertainties. As of end-March 2020, the PBS posted return on asset (ROA) and return on equity (ROE) of 1.3 percent and 10.4 percent, respectively (Figures 21 and 22).

Figure 19. Capital Adequacy Ratio – Solo* (%)



*Last data point is for December 2019.
Source: BSP

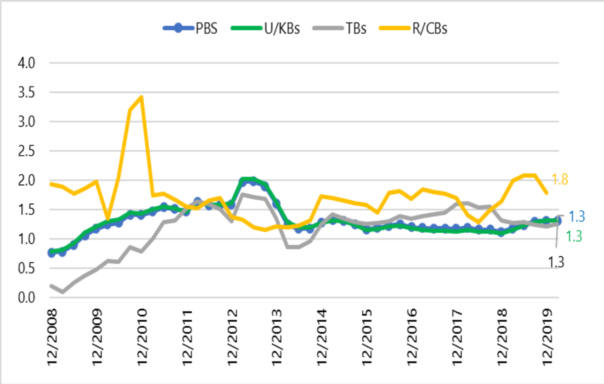
Figure 20. Loan-to-Deposit Ratio* (%)



*Last data point is for April 2020, except for R/CBs.
Source: BSP

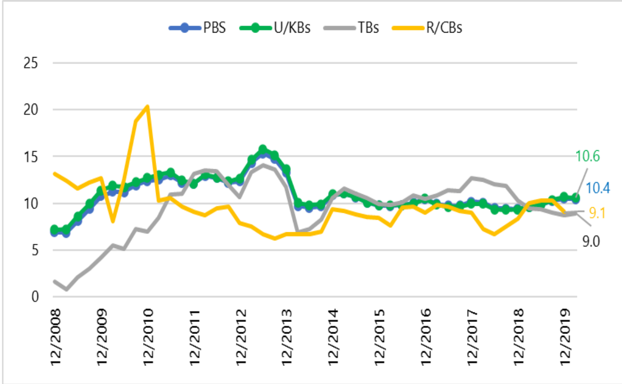
[38] Data for R/CBs as of end-December 2019.

Figure 21. Return on Assets* (%)



*Last data point is for March 2020, except for R/CBs.
Source: BSP

Figure 22. Return on Equity* (%)



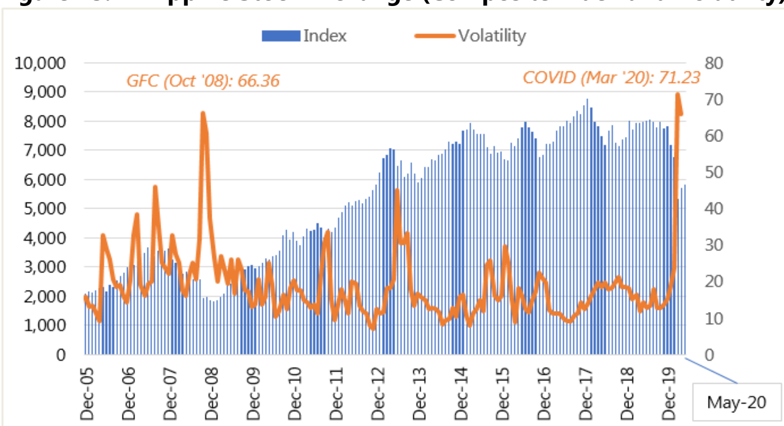
*Last data point is for March 2020, except for R/CBs.
Source: BSP

2.6 Financial Markets

Even as macroeconomic indicators were essentially sound prior to the COVID-19 crisis, the adverse economic effects of the COVID-19 pandemic were quickly reflected in financial markets, but appeared to be short-lived.

Equity market. Since the GFC, the Philippine Stock Exchange (PSE) Composite Index has been on an increasing trend, peaking at 9,058.6 on 29 July 2018 (Figure 23). When the pandemic hit, equity markets declined across Asia, including the Philippines (Figure 24). From end-December 2019 to end-May 2020, the PSE index dropped by 25 percent, with volatility substantially increasing in March 2020 and surpassing the volatility during the GFC.[39] By sector, Mining and Oil shares declined the most followed by Financials (Figure 25).

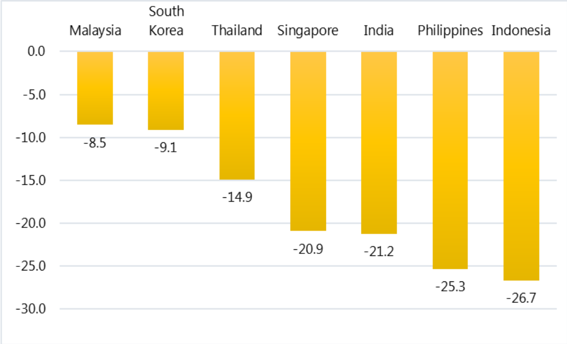
Figure 23. Philippine Stock Exchange (Composite Index and Volatility)



Source: Bloomberg

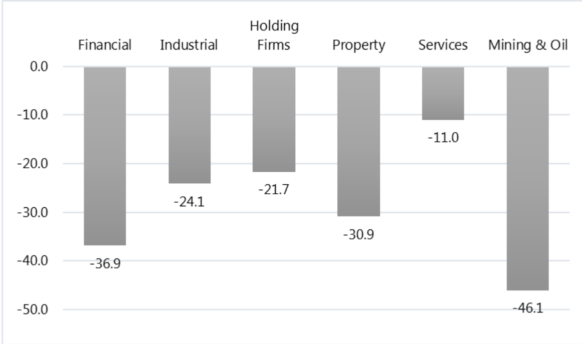
[39] The PSE was temporarily shut down on 17-18 March 2020, in conjunction with President Duterte's announcement placing Luzon under enhanced community quarantine. The temporary market closure was intended mainly as a circuit breaker to allow investors to rationally absorb market developments.

Figure 24. Asian Equity Market Composite Indexes (% change, 31 Dec 2019 – 31 May 2020)



Source: Bloomberg; Authors' calculations

Figure 25. Philippine Equity Market Sectoral Indexes (% change, 31 Dec 2019 – 31 May 2020)



Source: CEIC, Authors' calculations

Sovereign bond market. The Philippine local currency (LCY) 10-year government bond yield more than halved since 2018, which indicated increasing demand for safe haven asset (Figure 26). At the start of the community quarantine in March 2020, the yield volatility spiked,[40] signifying less predictability in bond yields.[41] Nonetheless, the volatility was way below the volatility experienced during the GFC and Taper Tantrum episodes. By April 2020, the volatility dropped (Figure 27). The suppressed yield and decline in volatility were supported by the demand from local banks as funds were freed up by the lower reserve requirement ratio as well as by the bond purchases of the BSP in the secondary market (Wong, 2020). In May 2020, the interest rate spread,[42] meanwhile, turned positive, implying improved economic prospects.

In December 2019, the Philippines' credit default swap (CDS) spread reached a minimum of 33.54. However, heightened investor sentiment in March 2020 widened the spread to 104.41 (Figure 28). While the recent spike in the CDS spread was way below the peak reached during the GFC, the recent volatility exceeded that experienced during the GFC. Nonetheless, as of end-May 2020, the CDS spread declined to 74.9. Relative to other Asian economies, the CDS spread for the Philippines increased moderately (Figure 29) and remained competitive (Indonesia-175.9, India-136.4, Malaysia-89.6, Thailand-48.9, South Korea-28.7, Vietnam-219.9).

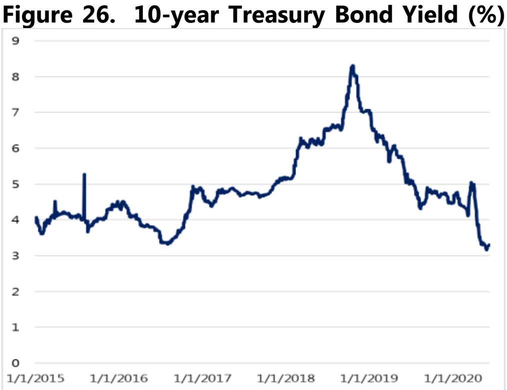
---

[40] Yield volatility is calculated as the standard deviation of the daily yield changes over the last 21 trading days (calendar month proxy). Daily yield changes are computed from the previous closing bid yields of LCY benchmark 10-year government bonds provided by Bloomberg. Yield volatility is an indicator of risk arising from movements in interest rates (ADB, 2020b).

[41] High volatility suggests less predictability of daily movements in bond yields. A number near zero indicates that daily bond yields are clustered around the average yield. This implies that yields are relatively stable during the period covered (ADB, 2020b).

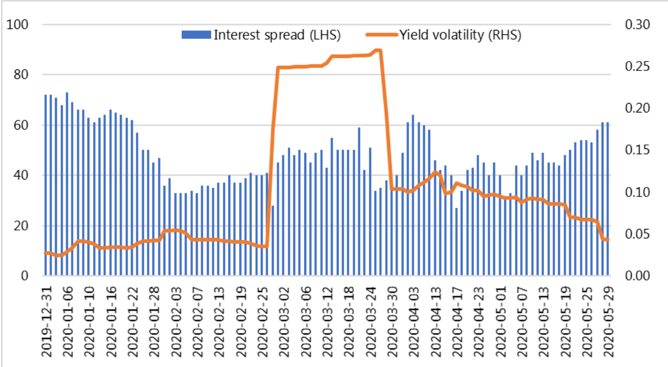
[42] The size of the interest rate spread indicates the slope of the LCY benchmark bond yield curve. The higher the absolute number of the spread, the steeper the yield curve. If the spread is positive, the yield curve is normal. If the spread is negative, the yield curve is inverted. The spread is based on the previous trading day's last bid for government benchmark bond yields. (ADB, 2020b).

Figure 26. 10-year Treasury Bond Yield (%)



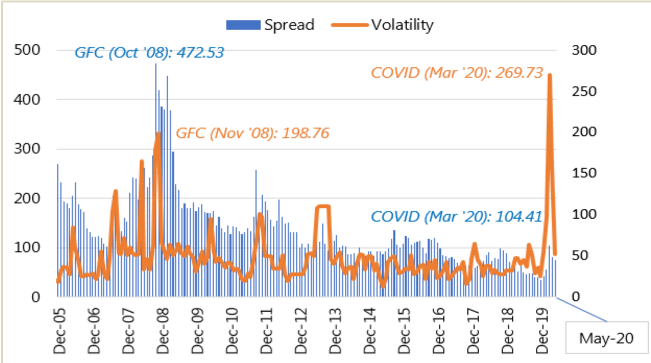
Source: Bloomberg

Figure 27. Sovereign Interest Rate Spread* and Yield Volatility



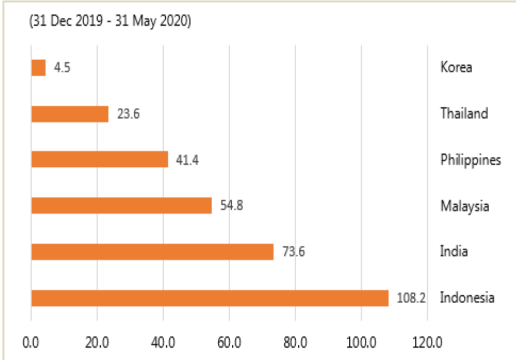
*Interest spread=10-year T-bond yield– 2-year T-bond yield
Source: Asia Bonds Online

Figure 28. Philippine Credit Default Swap Spread



Source: Bloomberg

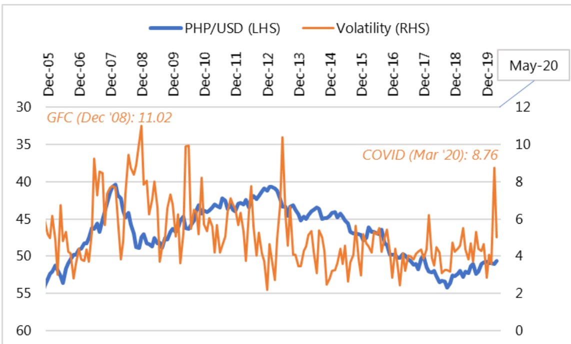
Figure 29. Change in CDS Spread



Source: Bloomberg, Authors' calculations

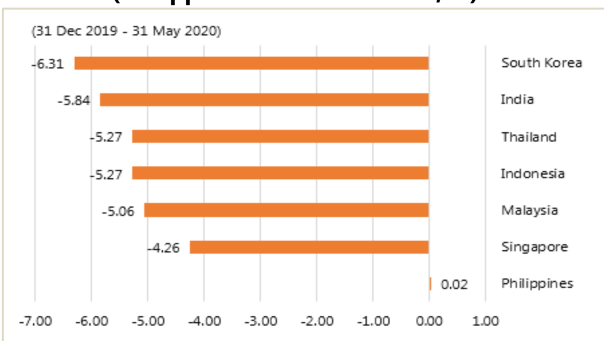
Foreign exchange market. The volatility of the Php/USD exchange rate rose in March 2020, following the imposition of the community quarantine. Nonetheless, the spike in volatility was lower relative to the GFC and Taper Tantrum episode. Whereas the Philippine peso substantially depreciated relative to the dollar by 15.1 percent during the GFC, it appreciated during the COVID-19 episode, defying the trend in majority of Asian currencies.

Figure 30. Nominal Exchange Rate (Philippine Peso vs US Dollar)



Source: BSP

Figure 31. Local Currency Appreciation(+)/Depreciation(-) (Philippine Peso vs US Dollar, %)



Source: CEIC, Authors' calculations

2.7 Credit ratings

On 27 March 2013, the Philippines received its first investment grade rating when Fitch Ratings upgraded the country's sovereign credit rating to BBB- from BB+. Since then, the country steadily received credit rating upgrades from the different credit rating agencies (Table 6). The country's robust macroeconomic fundamentals and strong external position underpinned the credit rating upgrades.

Amid the COVID-19 pandemic, the Philippines retained its investment grade score with Fitch and S&P Global affirming their "BBB" and "BBB+" ratings for the country, respectively. Moreover, both investment ratings maintained a "stable" outlook.[43] On 11 June 2020, the Japan Credit Rating Agency (JCR) upgraded the Philippines' credit rating by a notch from BBB+ to A- with a stable outlook (JCR, 2020). The JCR cited the country's resilience amid the severe impact of the pandemic on growth and fiscal positions for the credit rating upgrade.[44]

Table 6. Credit Profile of the Philippines

Metric	2013	2014	2015	2016	2017	2018	2019	2020
JCR	BBB/stable	BBB/stable	BBB+/stable	BBB+/stable	BBB+/stable	BBB+/stable	BBB+/positive	A-/stable
R&I	BBB-/positive	BBB/stable	BBB/stable	BBB/stable	BBB/stable	BBB/stable	BBB/stable	BBB+/stable
Moody's	Baa3/positive	Baa2/stable	Baa2/stable	Baa2/stable	Baa2/stable	Baa2/stable	Baa2/stable	Baa2/stable
S&P	BBB-/stable	BBB/stable	BBB/stable	BBB/stable	BBB/stable	BBB/positive	BBB+/stable	BBB+/stable
Fitch	BBB-/stable	BBB-/stable	BBB-/positive	BBB-/positive	BBB/stable	BBB/stable	BBB/stable	BBB/stable

Source: BSP Investors Relations Office (IRO)

The improvement in the Philippines' investment grade rating enabled the National Government to access funding at favorable cost and enhanced overall investor perception of the Philippines (IRO, 2020). This was evident in the keen investor interest shown for the recent international capital market offerings of the Philippines. On 27 April 2020, the country sold US$ 2.35 billion worth of 10-year and 25-year global bonds at relatively low interest rates. This deal followed the EUR 1.2 billion double tranche global bond offering of the Philippines in January 2020 and the US$1.5 billion and EUR750 million global bond offerings in 2019 (BTr, 2020c).

3. Central banks and crises

For central banks in East Asia, the 1997 Asian Financial Crisis stood out as an exceptional period of financial and economic stress. The collapse of the Thai baht in July 1997 triggered a series of currency depreciations and stock market declines that quickly spread to

[43] In the first five months of 2020, Fitch, S&P Global, and Moody's Investors Service implemented a total of 37 sovereign credit rating downgrades and 84 negative outlook revisions.

[44] The rating peers of the Philippines with JCR include Malaysia, Italy, Poland, and Portugal (all of which are rated A); Thailand, Mexico, Hungary, and Peru (all of which are rated A-); and India and Indonesia (which is rated BBB+). Out of the 14 credit rating actions that JCR did since the start of the 2020, only three involved credit rating upgrades while the rest of the actions were either rating downgrades, negative outlook revisions, or rating affirmation.

East Asian countries and resulted in a severe financial crisis for the region.[45] When the crisis broke out in July 1997, the BSP immediately tried to stabilize the peso to mitigate any adverse effects on the banking and corporate sectors (Tuaño-Amador, 2009). The BSP drew on its foreign exchange reserves to sustain the orderly functioning of the foreign exchange market. Subsequently, the peso was allowed to trade at a wider band to curtail the unabated attack on the domestic currency. Tuaño-Amador (2009) observed that during the Asian financial crisis, the BSP faced a delicate balancing act between avoiding sharp depreciation and rising inflation in limiting the adverse effects of monetary tightening on the real sector.

Almost 12 years after the 1997 AFC, another financial crisis erupted. The 2008-2009 GFC severely affected both advanced and developing economies.[46] Central banks, particularly those in major advanced economies, adopted various measures to avert the collapse of their financial systems and prop up aggregate demand. These measures can be classified in three categories: (i) measures affecting policy rates that central banks directly set; ii) forward guidance about future policy rate movements; and (iii) use of central bank balance sheet such as quantitative easing (Group of Thirty, 2015). Central banks were even referred to as "the only game in town" given the substantial interventions and enormous policy responsibilities that they took on during the GFC (El-Erian, 2016).

3.1 Monetary policy responses: principles and limits

The past crises, specifically the GFC, provided some lessons on central bank interventions during crisis periods:

First, price stability should remain as the primary objective of monetary policy (IMF, 2010). Price stability, complemented by financial stability, is a key consideration when undertaking market interventions during periods of crises.

Second, it is crucial to maintain central bank independence (Group of Thirty, 2015). The policy focus of central banks has to be oriented toward longer-term objectives. Thus, central banks should remain free from political pressures and popular sentiments to take any policy action that is inconsistent with their mandates, particularly in times of economic and financial stress.

Third, central banks cannot be the "only game in town" (El-Erian, 2016). Central bank interventions can provide support during times of crisis. However, these must be accompanied by fiscal and structural reforms to enhance their effectiveness in helping the economy back on track (Lagarde, 2020).

[45] Over the following year, the value of the most affected East Asian currencies (i.e. Indonesian rupiah, Malaysian ringgit, Korean won) fell 35 to 83 percent against the US dollar (i.e. dollars per unit of the Asian currency) and some stocks declined by as much as 40 to 60 percent (Moreno, 1998).

[46] Compared to the other regions, Asian economies suffered less from the GFC. Ironically, the region's economic and financial resilience to the GFC was founded on another crisis - the AFC. Nonetheless, the lessons from the AFC translated into vital policy and structural reforms, which included the use of macroprudential policies and accumulation of international reserves. These, in turn, allowed the economy to better withstand shocks and contagion and put the domestic financial system in a better shape relative to those in other countries in the region.

Fourth, central bank support can potentially lead to moral hazard. Market agents may be encouraged to behave imprudently believing that central banks will bail them out. The excessive reliance on central bank policies could likewise exacerbate underlying systemic problems and hinder needed structural adjustments (Group of Thirty, 2015). These are risks that need to be taken into account and mitigated.

Fifth, central bank policies, whether conventional or unconventional, could have unintended consequences to the economy. In the period prior to the GFC, central banks maintained relatively low interest rates. While lower cost of borrowing encourages investments and consumption spending, it could also lead to the mispricing of risk and complacency among market agents. Moreover, it stokes the risk-taking behavior of investors (Gambacorta, 2009). The mispricing of risk, complacency, and aggressive risk-taking of investors were contributing factors to the occurrence of the GFC. Thus, central banks have to be constantly mindful of the potential consequences of their policy actions.

These are important lessons that central banks need to carefully consider as they help economies deal with the adverse consequences of the COVID-19 pandemic.

3.1.1 BSP conventional monetary policy measures

The extraordinary nature of the COVID-19 crisis highlighted the importance of immediate policy action. The BSP undertook unprecedented measures to ensure adequate domestic liquidity, shore up market confidence, and sustain the flow of credit to support growth amid stronger headwinds. The manageable inflation environment and stable inflation expectations enabled the BSP to conduct assertive monetary policy easing to mitigate the risk of financial sector volatility.

From 4.0 percent at the beginning of the year, the BSP consecutively reduced the policy rate to its current level of 2.25 percent. The policy rate cut began as early as February 2020 with 25 basis points (bps) when the BSP recognized the potential adverse impact of COVID-19 pandemic on economic activity and market sentiments in the country. This was followed by 50 bps in March 2020 to address spillovers associated with the pandemic.[47] Knowing that monetary policy works with a lag, an off-cycle rate cut of 50 bps was again implemented in April 2020. The latest round of adjustment was made on 25 June 2020 when policy rate was reduced by another 50 bps. This brought the cumulative rate reduction to a total of 175 bps, which could potentially free up to Php 46.2 billion in the next 12 months, all things held constant. This is equivalent to 0.2 percent of GDP (See Annex 1 for the estimated monetary impact of BSP policy responses).

The reserve requirement ratio (RRR) of universal and commercial banks as well as non-bank financial institutions with quasi-banking functions was reduced by 200 basis points from 14 percent to 12 percent in April 2020. The RR cut was intended to calm the markets and to encourage banks to continue lending to retail and corporate sectors, especially to MSMEs. The

[47] The BSP assessed that the enforcement of quarantine measures would result in disruptions to industries and private spending, resulting in reduced economic growth in the near term. Moreover, COVID-19 has dampened prospects for the global economy that could negatively impact tourism and trade, OF remittances and foreign investments (BSP, 2020b).

reduction in RRR was estimated to release around Php 200 billion worth of liquidity[48] or 1.0 percent of GDP. Banks were likewise allowed to include MSMEs loans as part of their compliance with the required reserve ratio.

Moreover, the BSP temporarily suspended the term deposit facility (TDF) auctions for certain tenors to ensure the availability of short-term peso liquidity in the financial system and to support funding to businesses and households during the ECQ. Around Php 300 billion in liquidity was released following this measure,[49] equivalent to 1.6 percent of GDP.

The BSP also implemented other liquidity provision measures such as scaling down of reverse repurchase (RRP) operations to re-channel funds to the interbank loan and GS markets; ensuring the availability of the overnight lending facility (OLF) to counterparties to cover temporary day-to-day liquidity needs; and facilitating access to rediscounting facilities through a temporary reduction in the term spread on rediscounting loans relative to the overnight lending rate to zero.

The reduction in the overnight RRP volume offering beginning 8 April 2020 to Php 100 billion freed up about Php 205 billion in the system or 1.1 percent of GDP. However, the BSP started the gradual normalization in TDF and RRP operations on 10 June 2020, given continued stabilization of liquidity conditions and sustained oversubscriptions in the TDF and RRP auctions (BSP, 2020c). The normalization was seen to provide better guidance to short-term interest rates with the gradual reopening of the economy.

Almost similar measures were implemented by some of our neighbors in the region. Policy rate cuts were implemented by Indonesia (50 bps), Thailand (75 bps), and Malaysia (75 bps), and Vietnam (100-150 bps). Some countries also lowered their RRR to generate additional liquidity like Indonesia and Malaysia.

3.1.2 BSP unconventional monetary policy measures

While conventional monetary policy employs a short-term interest rate to affect financial conditions and the economy, unconventional monetary policy (UMP) uses other tools to do so, including quantitative easing and forward guidance (Kuttner, 2018).

As the severity of the GFC unfolded, major central banks in advanced economies lowered their interest rates to near zero to prevent financial meltdown and support aggregate demand. However, effective lower bound interest rate impairs the traditional channel of monetary policy and hence, limits the ability of the central bank to stimulate economic growth. Thus, major central banks turned towards the use of UMP, like quantitative easing,[50] to provide

---

[48] BSP Department of Economic Research staff estimate.

[49] BSP Department of Economic Research staff estimate.

[50] Quantitative easing is a monetary policy that central banks adopt to stimulate the economy when standard monetary policy becomes ineffective (i.e., when short-term interest rates are near effective lower bound). It entails the purchase of specified amounts of financial assets (commonly of longer-term maturities) from the commercial banks and private institutions, which, in turn, raises their prices, lower long-term yields and increase the money supply in the economy. Japan was the first country to use quantitative easing in the early 2000s to fight deflationary pressures in its economy.

further monetary policy accommodation and to sustain the functioning of financial markets and credit intermediation (IMF, 2013).[51]

Unconventional monetary policies provided policymakers with the needed additional policy space and flexibility to deal with the adverse consequences of a crisis. Moreover, UMPs helped central banks pursue price stability and financial stability when conventional policy was constrained. These UMPs were assessed to have stabilized economies and tempered the build-up of deflationary pressures. Central banks' positive assessment of UMPs was based on the effects of these tools on financial conditions e.g., yields, term structure, credit volumes (BIS, 2019).

Empirical studies on the macroeconomic effects of UMPs (e.g. IMF, 2013; Perasan and Smith, 2012; Giannone et al., 2012) showed that the bond purchases undertaken by advanced economies had significant positive effect on their GDP growth and inflation. These studies typically estimated the effects of a 100 basis points decline in long-term bond yields due to accommodative monetary policy. Most of the papers found that GDP growth increased by around two percentage points in the US and the UK with duration of around two years while inflation increased by an average of one to two percent over a duration that ranges between three quarters to five years. Nonetheless, IMF (2013) underscored the uncertainty surrounding these results given the time-varying relationship among growth, inflation and bond yields.

While they can be effective policy tools, particularly during crisis periods, UMPs have drawbacks that central banks should take heed of. One important consideration is that UMPs can amplify moral hazard problems. UMPs can provide disincentives for the private sector to maintain ample buffers against financial stress. Moreover, central banks could find themselves taking on the heavier burden of policy interventions. Other policymakers (e.g. fiscal, regulatory) may become complacent in their expectations that central banks can resort to UMPs to prevent all possible adverse outcomes (BIS, 2019). The overreliance on central bank policy actions in addressing and mitigating risks during crises could hinder the implementation of the necessary fiscal, structural and regulatory reforms which are needed by economies as they recover.

Unconventional monetary policies have commonly been associated with central banks in advanced economies. However, with the dire economic implications of the COVID-19 pandemic, some of the central banks in Asia also implemented their own quantitative easing measures (Table 7). These measures were intended to ensure financial market stability and to support government efforts to counter the impact of the COVID-19 disease.

The BSP, in March, purchased Php 300 billion peso of government bonds from the Bureau of the Treasury under a three month repurchase agreement, which can be extended for another three months. While the measure may be deemed as an unconventional central bank measure, it was actually a form of bridge financing to NG for its immediate COVID-19 crisis response programs and was not used for deficit financing by the NG.

[51] The US Federal Reserve, in particular, carried out three rounds of QE starting in 2008. The unprecedented policy action led to a substantial expansion of the US Fed's balance sheet. By the time the US Fed ended its bond-buying program in October 2014, it has accumulated US$4.24 trillion worth of Treasury bonds and mortgage-backed securities.

Asian experience. In Indonesia, a government regulation signed in late March 2020 allowed Bank Indonesia (BI) to purchase government bonds in the primary market until 2022 (BI, 2020). The Bank of Korea (BOK) launched its own version of quantitative easing in March 2020 with the adoption of a weekly repurchase agreement (repo) auction where unlimited amount of liquidity is supplied at set interest rates based on market demand. The repo facility will run for three months from April to June 2020 (BOK, 2020). The BOK likewise broadened the eligible collaterals for the repo auctions.

Table 7. Unconventional monetary policies in selected Asian central banks

Central Bank	UMP Measures
Reserve Bank of India	Allowed to buy government bonds from the primary market if deviation from fiscal deficit target exceeds 0.05 percent of the GDP for the year.
Bank Indonesia	Allowed to purchase government bonds from the primary market until 2022.
Bank of Korea	Adopted weekly repo auctions to provide unlimited amount of liquidity to financial institutions at set interest rates.
Bank Negara Malaysia	Able to purchase government bonds from primary and secondary markets based on market prices only up to 10 percent of the issue size.
Bank of Thailand	Established a 400 billion Thai baht Corporate Bond Stabilization Fund to provide bridge financing to high-quality firms with bonds maturing during 2020 - 2021.

Source: Central bank websites

To stabilize the corporate bond market, the Bank of Thailand (BOT) and the Ministry of Finance established a 400 billion Thai baht Corporate Bond Stabilization Fund (CBSF). The CBSF will provide bridge financing to high-quality corporate firms with bonds maturing between 2020 and 2021 (BOT, 2020) at higher-than-market 'penalty' rates. Other central banks in the region like the Reserve Bank of India and Bank Negara Malaysia were likewise allowed to engage in UMPs. Under the Fiscal Responsibility and Budget Management Act of 2003, the Reserve Bank of India (RBI) can purchase government bonds from the primary markets if fiscal deficit deviates from target at greater than 0.05 percent of the GDP for the year. Bank Negara Malaysia (BNM) can purchase government securities from primary and secondary markets based on market prices. However, to ascertain that BNM purchases do not influence or distort market prices, the amount of central bank purchase was limited to 10 percent of the issue size.

3.2 Regulatory relief and forbearance measures: principles and limits

The dramatic effects of the pandemic dictate that all policies be deployed, including assistance to banks or financial institutions, in general. Financial system regulators and supervisors took bold approaches to support economic activity in terms of regulatory relief[52]

[52] In the context of the banking system, regulatory relief refers to macroprudential policy easing or the temporary relaxation of financial requirements with clear guidance (Metrick, 2020). Measures include releasing banks from complying with buffering requirements and changes to rules to favor debtors.

and forbearance measures.[53] Given the important role of financial institutions in providing needed financial system liquidity to keep the economy afloat, it is essential that banks and other financial institutions are able to maintain their financial health to ease the impact of the pandemic.

In supporting the immediate needs of the real economy during a crisis, prudence requires that certain principles be observed, and specific limits be recognized. Borio and Restoy (2020) broadly described the general principles of regulatory responses. First, measures should be effective in supporting economic activity. Second, responses should preserve the health of the financial (banking) system to allow banks to aid in the recovery efforts (Metrick, 2020). Responses that weaken the banking sector would weaken the economy. Third, measures should not undermine the long-run credibility of financial policies.

As such, regulators should uphold minimum regulatory standards and preserve consistency with international standards. Excessively compromising the policies in the short run can create serious long-term damage. Regulators and supervisors must keep in mind that credibility is difficult to gain, but easy to lose. Consideration of the long run stability of the financial system should therefore put a limit on how extraordinary the responses can be.

Following the guidelines provided by Standard Setting Bodies (SSBs),[54] the IMF-WB (2020) provided specific recommendations on how national regulatory and supervisory authorities can provide sound policy responses to the COVID-19 pandemic.

First, use embedded flexibility in the regulatory and supervisory framework. Relaxation of macroprudential measures is recommended, subject to country-specific circumstances. For instance, the prudential buffers under Basel III framework were designed to be used in times of stress. Jurisdictions with countercyclical capital buffer (CCyB) above zero should consider its release. Liquidity buffers in domestic and foreign currency should also be used, if needed, in accordance with the Basel Liquidity Coverage Ratio (LCR) standard or other domestic liquidity requirements.

Second, facilitate well-designed public and private support interventions that target affected borrowers and sectors. To help maintain the flow of credit in the economy, timely, prudent and targeted measures to support businesses and individuals affected by the pandemic should be implemented. Examples of these include providing government-funded loans, public guarantee schemes, temporary payment moratoria, and restructuring of loans of heavily affected borrowers.

---

[53] Forbearance is a concession provided by a bank to a counterparty experiencing financial difficulty. Examples of concessions granted by lenders include extending the loan term, granting new or additional periods of non-payment (grace period), reducing the interest rate of the loan, and releasing collateral or accepting lower levels of collateralization. There is no concession when the borrower is not in financial difficulty. A counterparty may be considered in financial difficulty if it is currently past due on any of its material exposures; if there is a high probability that it will be past due on any of its material exposures in the foreseeable future without the concession; and if it is estimated to have insufficient cash flows to service all of its loans or debt securities in accordance with the contractual terms of the existing agreement for the foreseeable future (BCBS, 2016).

[54] Basel Committee on Banking Supervision (BCBS), Financial Stability Board (FSB), International Financial Reporting Standards (IFRS) Foundation, International Committee for Credit Reporting (ICCR), Financial Action Task Force (FATF), International Organization of Securities Commissions (IOSCO), and International Association of Insurance Supervisors (IAIS)

Third, ensure that measures minimize opportunities for moral hazard. To reduce potential moral hazard, measures must: (i) be time-bound; (ii) have a sunset clause and a clear exit strategy; (iii) be targeted to ensure that only viable firms benefit as much as possible; and (iv) account for possible moral hazard in their design and implementation.

Fourth, provide guidance on asset classification and provisioning. The unprecedented level of uncertainty surrounding the economic effects of COVID-19 poses significant challenges to reliably estimate credit losses. Banks will need to assess the impact on borrowers in the short and medium term. Authorities should ensure that expected losses are recognized on a timely basis. Authorities should also convey their expectations about how different scenarios should be considered when assessing borrowers' creditworthiness and estimating loan allowances. Banks must be encouraged to regularly reassess the status of credit exposures and the level of provisioning as the situation evolves. The easing of regulatory definition of nonperforming loans, even on a temporary basis, should be avoided.

Fifth, maintain transparency and provide guidance on risk disclosure. Past crises experiences have shown that transparency is a precondition for maintaining trust in the system and for market discipline to work effectively, and thus limiting moral hazard. Strategic communication is essential. Supervisors should consider disclosing: (i) the materiality of loan restructuring; (ii) the performance of the loan portfolio; (iii) policy adjustments to assess borrowers' creditworthiness; and (iv) the impact of these adjustments.

Sixth, suspend automatic corrective supervisory action triggers. In some countries, a breach in a number of bank measures and ratios beyond specified thresholds or requirements automatically triggers the activation of corrective supervisory action. Authorities should consider temporarily suspending corrective actions or extending corrective periods (to the extent legally permissible) when banks are fundamentally sound and the breach is expected to be temporary. An example would be a fall in the capital adequacy ratio below the requirement. However, capital restoration plans must be clearly laid out and executed to prevent additional stress on the bank and on the financial system. If restoration is not proceeding as planned and would have longer-term impact and major systemic implications, the supervisor can consider working with other relevant authorities for actions that may need to be considered to support the financial system.

Seventh, review supervisory priorities and maintain close dialogue with the banking industry. Supervisors should re-prioritize their tasks, taking into account risks and areas most heavily impacted by the crisis. Depending on the situation, supervisors can consider postponing activities that may divert attention from more pressing tasks - in the context of the pandemic, onsite inspections can be postponed. Regulators should also consider adjusting phase-in periods of new prudential requirements. Supervisors should likewise request banks to review and enhance the effectiveness of their business continuity plans (e.g., identification of critical functions, special work arrangements, maintaining the function of the Board).

Eighth, coordinate actively with other relevant authorities, domestically and internationally. It is essential that domestic financial sector policy responses be coordinated and communicated using existing institutional arrangements for financial stability. To better inform policy responses, regulators can learn from the responses used in other jurisdictions.

International coordination may also be helpful in the presence of internationally active banks and financial groups to minimize the risks of contagion across countries.

Ninth, ensure the smooth functioning of critical market infrastructures. Central banks and supervisory authorities should closely monitor the resilience of key nodes (e.g., securities clearing, settlement and payment systems) that are critical for financial stability. Weaknesses in these nodes and their interactions could exacerbate financial conditions and impair the provision of financial services, the execution and transmission of monetary policy, and potentially the stability of the financial system.

3.2.1 BSP regulatory relief and forbearance measures

The BSP enacted a broad set of regulatory relief and forbearance measures to help mitigate the impact of the pandemic on the economy. These include: (a) measures to incentivize lending; (b) extension of financial relief to borrowers and BSP-Supervised Financial Institutions (BSFIs); (c) temporary relaxation of accounting regulations; (d) operational relief measures; and (e) facilitation of public access to financial services (Annex 2). The pandemic response measures were larger in magnitude and scope compared to the measures deployed during the GFC.[55]

Measures to incentivize lending. The BSP implemented measures to ensure that businesses deeply affected by the community quarantine arrangements will continue to have access to formal financing channels. Particular attention was given by national authorities to MSMEs, as they account for about 99 percent of total number of establishments in the country and employ over 60 percent of the total labor force.[56] To free up capital in the balance sheets of banks and enable them to lend more to the MSMEs, a number of measures were implemented by the BSP.

- Credit risk weight of loans granted to MSMEs that are in current status was reduced to 50 percent from 75 percent (qualified MSME portfolio[57]) and 100 percent (non-qualified MSME portfolio), subject to review by end-December 2021.

- Zero-percent risk weight was assigned to loans guaranteed by the Agricultural Guarantee Fund Pool (AGFP) and the Agricultural Credit Policy Council (ACPC), in addition to loans guaranteed by the Philippine Guarantee Corporation, to encourage banks to lend to small farmers and fisherfolks.

- Loans granted to MSMEs were recognized as a form of alternative compliance with banks' reserve requirements from 24 April 2020 up until 30 December 2021, subject to control measures.

[55] The GFC measures included (i) allowing reclassification by FIs of their non-derivative financial assets from Held for Trading (HFT) or Available for Sale (AFS) to Held to Maturity (HTM) or Unquoted Debt Securities Classified as Loans (UDSCL), subject to certain conditions; and (ii) providing extension to R/CBs on submission of Financial Reporting Package (BSP Memorandum No. 2008-036); requiring banks and trust entities to submit weekly report on Non-Deliverable Forward (NDF) transactions with non-residents (BSP Memorandum No. 2008-019).To boost the confidence of the public in the banking system, the maximum deposit insurance coverage was increased from Php 250,000 to Php 500,000 effective April 2009, by virtue of Republic Act No. 9576.
[56] https://www.dti.gov.ph/resources/msme-statistics/
[57] A qualified MSME portfolio is diversified with at least 500 borrowers over a number of industries.

These measures complemented programs of the National Government that support financing to MSMEs as well as small farmers and fisherfolk, particularly during the pandemic.[58] Considering that not only MSMEs were unfavorably affected by the pandemic, loans granted to large enterprises[59] were likewise recognized as a form of alternative compliance with banks' reserve requirements from 29 May 2020 to 30 December 2021, subject to a number of control measures.[60]

In addition to aforementioned measures, the BSP increased the single borrower's limit (SBL) from 25 percent to 30 percent for a period of 6 months beginning March 2020; reduced the minimum liquidity ratio of stand-alone thrift banks and R/CBs from 20 percent to 16 percent until end-December 2020; allowed the use of capital conservation and Liquidity Coverage Ratio (LCR) buffers of banks/quasi-banks during the crisis; and allowed BSFIs to provide financial assistance to their affected officers, subject to reporting to the BSP.

Extension of financial relief to borrowers and BSFIs. To ease burden on borrowers with outstanding obligations but are financially constrained due to temporary work stoppage, the BSP imposed a grace period for all loans with principal and/or interest payments falling due within the enhanced community quarantine period, and issued guidelines on past due and non-performing classification. While the latter is discouraged by the IMF-WB (2020), the change in classification is time-bound and is subject to reporting to the BSP.

In addition, the BSP temporarily allowed banks and quasi banks (QBs) to use their legal reserves to support their liquidity requirements and provided relief to banks with outstanding rediscounting obligations with the BSP. These measures are expected to help bridge short-term liquidity needs.

Temporary relaxation of prudential accounting measures. To ease financial strains of banks, the BSP imposed flexibility in a number of accounting measures. These included the option to stagger booking of allowance for credit losses for loans to affected borrowers for a maximum period of five years, subject to BSP approval; reclassification of debt securities from categories measured at fair value to the amortized cost category to minimize mark-to-market losses; easing of the Expanded Foreign Currency Deposit Unit/Foreign Currency Deposit Unit (E/FCDU) asset cover requirement; and relief from exposure limit of Unit Investment Trust Funds (UITFs), including treatment of breaches.

---

[58] Examples include the following: (i) Php 2.8 billion additional funding for Department of Agriculture's (DA) Survival and Recovery Assistance Program (SURE Aid) for affected farmers and fishers; (ii) Php 1.203 billion for Department of Trade and Industry loan program for MSMEs for enterprise development training and livelihood kits; and (iii) up to Php 15 million loan assistance from the DA for micro and small enterprises engaged in agriculture and fisheries production (IATF-TWGAFP, 2020).

[59] A large enterprise refers to a sole proprietorship, partnership, corporation or cooperative that has an asset size (less land) of more than Php 100 million and an employment size of 200 employees or more.

[60] The large enterprise must not belong to a conglomerate structure, is critically impacted by the COVID-19 outbreak, and is not a bank or other financial institutions supervised by the BSP. A critically-impacted business enterprise includes those in the transport industry, tourism industry, and export industry. It is critically-impacted if its liabilities exceed its assets and has experienced at least 50 percent decline in gross receipts for at least one calendar quarter (BSP Circular No. 1087).

Meanwhile, to enable stand-alone thrift banks, rural banks and cooperative banks to continue to support their MSME and rural community-based clients, the BSP deferred the phase-in period of the revised risk-based capital framework applicable to these banks. This will provide banks with enough time to meet the new minimum capital ratios through reasonable measures without disrupting their banking activities.

Operational relief measures. To allow BSFIs to focus their resources to more pressing tasks during the pandemic, the BSP issued a number of operational relief measures. These included the suspension of submission of reports required from BSFIs falling due within the months of March to May 2020, except for four reports necessary for surveillance and policy-making;[61] relaxation of notification requirements related to changes in banking hours and temporary closure of bank/branch/branch-lite units and BSFI offices/service units; and relief for FX transactions (e.g., electronic submission of documents; use of e-signatures; non-imposition of monetary penalties for delayed submission of reports, and waiver of certain fees). The BSP also simplified the application and availment procedures in obtaining a Rediscounting Line (RL) from the BSP, including easier exchange of communication between banks and the BSP Department of Loans and Credit.

Public access to financial services. The BSP temporarily suspended PESONet and InstaPay fees and waived fees related to the grant of Electronic Payments and Financial Services (EPFS) licenses for the duration of the ECQ. Banks were directed to augment their existing capabilities and implement strategies to address the growing digital requirements of customers. The BSP also relaxed the Know Your Client (KYC) requirements to facilitate public access to basic government and financial services (e.g., social benefit transfers, payments to merchants or billers including the government, payments to suppliers, and remittances).

Based on the report of the BSP-Payments System Oversight Department (2020), there was an increased use of electronic payment and financial services during the implementation of the ECQ (17 March-2 April 2020).[62] ATM withdrawals declined, while InstaPay service, which is a more convenient and safer means to make low-value payments, increased. Meanwhile, the use of cheques, which are predominantly used by business entities, declined in volume and value, while the use of PESONet, which is designed to be the electronic alternative for checks, increased in value, but not in volume.[63]

In general, the BSP exercised flexibility to the extent allowed by regulatory frameworks, but at the same time remained circumspect to ensure that the long-term stability of financial institutions under its supervision will not be compromised. Certain macroprudential measures were temporarily relaxed or deferred to allow continuous flow of credit to the economy. The BSP encouraged the use of capital and liquidity buffers, which are meant to be used to absorb shocks during times of stress.

---

[61] This pertain to the Financial Reporting Package (FRP), Consolidated Foreign Exchange (FX) Position Report, event-driven report requirements, and reserve requirement-related reports. The latter include the following: Consolidated Daily Report of Condition, Weekly Report on Required and Available Reserves Against Deposit Liabilities, Consolidated Report on Required and Available Reserves Against Deposit Substitutes and Special Financing and Weekly Reserve Report on Trust and Other Fiduciary Accounts (TOFA).

[62] Before ECQ period correspond to 1-16 March 2020.

[63] PSOD (2020) stated that the PESONet volume did not grow along with the PESONet value due to the adverse economic impact of the ECQ on salaried individuals who are also users of PESONet.

To help minimize the opportunities for moral hazard, the BSP exercised prudence and promoted transparency. Majority, if not all, of the regulatory relief measures implemented by the BSP in response to the pandemic are time-bound, with period of effectivity explicitly stated in the issuances. Moreover, guidelines on all relief measures were appropriately, clearly, and timely provided by the BSP, and made publicly available through publication on its website and media releases.

Complementary legislative measures. To further cushion the adverse impact of the pandemic on financial institutions, the House of Representatives Defeat COVID-19 Ad-Hoc Committee (DCC) approved the "Financial Institutions Strategic Transfer (FIST) Act" on 26 May 2020.[64] The bill recognizes that with the disruption of economic activities due to COVID-19, most financial institutions may face a period of delayed loan collections, and are at risk of recording higher NPAs across all borrower segments.[65] It proposes the creation of FIST Corporations, which may perform the following: (i) invest in, or acquire NPAs of financial institutions; (ii) engage third parties to manage, collect, operate and dispose of NPAs acquired from financial institutions; (iii) in case of non-performing loans, to restructure debt, condone debt, and undertake other restructuring related activities; and (iv) renovate, improve, complete or alter their NPAs acquired from financial institutions, among others (HOR, 2020a).

While the banking system remains fundamentally strong, the proposed law is expected to promote investor and depositor confidence. In the event that a financial crisis ensues, the proposed bill is seen to moderate the spillover effects of a financial system crisis on the real economy (HOR, 2020b).

Asian experience. Across Asia, authorities likewise implemented a variety of forbearance and regulatory relief measures from deferment of loan payments and waiver of certain fees to moving scheduled implementation of various macroprudential measures and temporarily relaxing some existing ones (ADB, 2020c; IIF, 2020b). Similar to the BSP, a number of Asian central banks encouraged lending to MSMEs. For instance, the BOT allowed a loan payment holiday of 6 months for all SMEs with a credit line not exceeding 100 million baht. RBI introduced regulatory measures to promote credit flows to the retail sector and MSMEs and provided subsidies to banks to reduce interest rates for short-term loans to farmers. To augment available funding for SMEs, the BOK increased the ceiling of the Bank Intermediated Lending Support Facility by a total of KRW5 trillion (about 0.26% of GDP).

Annex 3 provides detailed information on the COVID-19 forbearance and regulatory relief measures implemented in selected Asian jurisdictions.

[64] The bill is authored by Rep. Junie Cua (1st District, Quirino).

[65] NPAs consist of the non-performing loans and real and other properties acquired (ROPAs) by financial institutions.

4. Challenges Ahead

With the immediate impact of the pandemic on the real economy, direct and quick response from authorities was crucial. Notwithstanding the necessity of massive crisis intervention measures, maintaining the delineation of responsibilities between the central bank and governments is essential. On one hand, the government is responsible for containing the public health risk and providing social safety nets to affected households and firms. Central bank, on the other hand, is primarily responsible for maintaining liquidity and preventing the tightening of financial conditions and financial disintermediation while keeping a close watch at inflation developments. Preserving the balance makes for better policy coordination and accountability. In addition, it may be worth noting that the appeal of large-scale bailouts would need to be tempered to dispel the belief that massive stimulus measures would swiftly translate into business as usual (Mendoza, 2009).

This section discusses some of the challenges that the BSP must keep an eye on as it helps steer the economy towards safer harbor.

4.1 Policy space and the risk of new waves of infection

There has been huge dispersion in the estimates of potential economic damage of COVID-19 pandemic, indicating considerable degree of uncertainty (Boissay and Rungcharoenkitkul, 2020; Pohlman and Reynolds, 2020).[66] The integrity of COVID-19 data and the duration of the pandemic despite advances in modern medicine and technology remain open questions. Thus, even as the economy gradually re-opens, the risk of re-escalation of COVID-19 infection will not readily peter out (Baldwin and Di Mauro, 2020). New clusters of infection emerged even after having receded as in the case of South Korea or after having eased confinement measures such as in France.

Despite favorable pre-COVID-19 conditions, the capacity of both the national government and BSP is not limitless. It is providential that as the country enters the general quarantine phase, the BSP still retains the flexibility to use conventional monetary policy such as reduction in policy rate and reserve requirement ratio as well as operational adjustments in the TDF, if need be. However, should the pandemic drag longer than anticipated, conditions could deteriorate and policy space could shrink. Economic policymakers would not want to be in a position where monetary policy loses much of its powers to stimulate the economy and fiscal agencies become the principal borrowers in the economy. Thus, it is both pragmatic and necessary to carefully calibrate the deployment of policy buffers over the long haul.

Aside from domestic policy buffers, there would also be a need for financial safety nets (FSNs) such as healthy level of international reserves and access to international funding facilities such as the Chiang Mai Initiative Multilateralization (CMIM) facility in Asia and IMF emergency funding facility. Foreign exchange reserves are costly to accumulate and can be easily depleted by volatile capital flows. Thus, standby FSNs provide confidence.

[66] There are four likely growth trajectories, V-U-W-L. The V-shape indicates a sharp decline followed by quick recovery; or follows a more subdued U-shaped growth before going back to its pre-pandemic level); or a double-dip W-shape; or an L-shaped growth path in which the GDP level is permanently lower and protracted period of economic inertia (Erken, et al, 2020).

One regional FSN is the CMIM, which is a network of bilateral and repurchase agreements with a funding size of US$240 billion. It has the IMF De-Linked Portion equivalent to 30% of each member's maximum arrangement amount and a CMIM Precautionary Line (Khor, 2017). Another FSN is the IMF's Rapid Funding Instrument (RFI), which provides rapid and low-access financial assistance to member countries for situations where a full-fledged economic program is either not necessary nor feasible.[67] Due to massive financing requirement arising from COVID-19 pandemic, access limits of the RFI regular window was raised from "50 to 100 percent of quota per year, and from 100 to 150 percent of quota on a cumulative basis, net of scheduled repurchases." These are available from April 6, 2020 to October 5, 2020, with extensions subject to the decision of the IMF's Executive Board (IMF, 2020).

4.2 Buyer of last resort and CB independence

The breadth of measures undertaken by central banks during the GFC, more so in advanced economies, raised expectations for central banks to take on bigger responsibilities beyond its traditional remit of maintaining price and financial stability. While appealing at first glance, it comes with challenges.

The massive purchase of different types of bonds[68] by several central banks will undoubtedly alleviate market stress. However, as El Erian (2020, as cited in Jeffrey 2020) cautioned, these policy actions create greater expectations of future central bank support in these markets. Such expectations, once entrenched, would make it difficult for central banks to step back and pursue a path independent of markets. In this situation, central banks go beyond mending financial market dysfunctions and find themselves inadvertently supporting asset prices. More importantly, the "democratic legitimacy of an independent central bank can be undermined by the distributional implications of its discretionary powers" (Orphanides, 2013; 2018).

In the case of the BSP, the scope for conventional monetary policy remains broad, ably supported by regulatory flexibility. Thus far, the complementarity between price stability and financial stability toolkits provides adequate leg room for BSP to undertake independent policy actions that guard against long-term economic distortions.

4.3 Run on the financial system

During a crisis situation, the immediate financial stability risk is illiquidity, rather than insolvency. A prolonged battle against COVID-19 pandemic could potentially trigger bouts of credit tightening, which, in turn, could induce investors to run off from risky assets. Under this phase, there would be expected withdrawal of liquid reserves by household and firms, which may not initially present an urgent problem. If not resolutely addressed, it could transform into serious illiquidity problem (Perotti, 2020).

[67] Among the broad range of urgent needs are commodity price shocks, natural disasters, conflict and post-conflict situations, and emergencies resulting from fragility. The RFI superseded the IMF's previous policy that covered Emergency Natural Disaster Assistance (ENDA) and Emergency Post-Conflict Assistance (EPCA). https://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/19/55/Rapid-Financing-Instrument.

[68] In the case of the US Federal Reserve, it embarked on purchase of corporate bonds, junk bond, and exchange-traded funds

Illiquidity could possibly trigger a run on both banks and non-bank financial intermediaries and which may be particularly acute for shadow banks. Unlike regulated banks, which have access to safeguards such as deposit insurance, liquidity facilities of central banks, and government guarantees, shadow banks do not have such safeguards (Sengupta, 2002; Perotti, 2020). The tightening of financial conditions leads to repricing of both financial and real assets. The longer the period of inactivity is, the higher is the likelihood of mounting corporate restructuring workouts and insolvency cases.

The BSP's forceful actions to relieve incipient liquidity risks provided elbow room for the national government to mobilize resources and map out action plans to stem the impact of pandemic. The PH-PROGRESO program of the national government alongside pending legislative bills on FIST, ARISE,[69] GUIDE,[70] and CREATE[71] are essential underpinnings to a robust crisis-response policy framework that is anchored on risk-sharing and targeted support.

4.4 Recession and debt deflation

Adverse supply shocks – shutdowns, layoffs, and firm exits – can potentially trigger large changes in aggregate demand. With low substitutability across sectors, incomplete markets, and liquidity constrained consumers, such scenario may lead to a demand-deficient recession (Guerrieri et al, 2020). The persistence of uncertainty about pandemic developments could dent consumer and investor confidence and thus, stifle demand over longer period.

Diminished demand would prompt businesses to lower prices and consumers to hold onto cash. This phase is deflationary because consumption weakens, investment stalls, and money velocity diminishes. Under conditions of uninsurable income risk and natural limits on how low prices could go down, firms would eventually reduce demand for labor. Progressive deterioration in labor market conditions would reinforce the precautionary savings motive, exacerbating the decline in aggregate demand. Eventually, the demand depression would cut back the revenue stream of government amidst increased funding requirements for social safety nets. Thus, government would have to borrow more.

[69] House Bill (HB) No. 6815 or the Accelerated Recovery and Investments Stimulus for the Economy of the Philippines (ARISE Philippines), formerly called the Philippine Economic Stimulus Act (PESA), is a P1.3-trillion stimulus package designed to help the economy recover from the coronavirus pandemic in the next 4 years. It seeks to offer various forms of assistance to MSMEs and other key sectors affected by the COVID-19 crisis, generate about 1.5 million jobs through infrastructure projects, and provide financial assistance for small businesses between 2020 to 2023. It was approved during its final reading last 4 June in the House of Representatives. The proposed funding for the programs under ARISE bill, however, must be matched with those of the 4-pillar strategy of PH-PROGRESO of the national government to ensure that the government support programs are not redundant and do not compete for funding and resources. A clear delineation of the proposed sources and uses of funds is crucial for monitoring and better-informed policy making.

[70] Government Financial Institutions (GFI) Unified Initiatives to Distressed Enterprises for Economic Recovery Act seeks to create a corporate vehicle (joint venture owned by GFIs) which will raise funds via bond offering to support onlending by other financial institutions to distressed enterprises. It will be provided with equity infusion and credit guarantee by the national government. The joint venture corporate vehicle can also infuse equity into affected businesses in strategic sectors (e.g. agriculture, manufacturing, services, infrastructure, among others.)

[71] Corporate Recovery and Tax Incentives for Enterprises Act (CREATE) is a repackaged Corporate Income Tax and Incentives Rationalization Act (CITIRA) proposes an immediate across-the-board reduction in corporate income tax (CIT) rate for all firms from 30% to 25% followed by a 1-percentage point annual reduction from 2023 – 2027 to bring down CIT to 20% by 2027.

Deflation is equally pernicious, especially with rising debt and weak growth. While nominal asset values go down, the nominal value of debt is fixed according to the terms of the contract. If assets are debt financed, the real cost of debt servicing goes up while assets, which are a source of income, fall in value. As households and firms deleverage, consumption and investment get reduced further, possibly propelling deflation creep. Under conditions of strong deflationary pressures, monetary policy faces the risk of reaching the limit of its capacity to reflate the economy through lower interest rate. The vicious cycle could then lead to debt traps and economic stagnation, as seen in the 1930s Great Depression and the decades-long Japanese deflation.

Central banks would need to be flexible in averting a collapse of the credit system and deflationary pressures. Irving Fisher (1933) underlined two *principal elements that lead to the breakdown of the credit system, namely, "over indebtedness to start with and deflation following soon after."* According to Mendoza (2009), if deflation of asset and goods prices is not reined in, the collapse of the credit system will not be prevented. Similarly, huge stimulus programs will also not guarantee escape from the deflationary rout if financial stabilization fails. Thus, the sooner a credible financial stabilization measure is put in place, the lesser would be the need for huge debt-financed fiscal support

4.5 Debt sustainability and stagflation

Just as the central bank needs to watch out for debt-deflation spiral, it must also pay careful attention to the possibility of stagflation (OMFIF, 2020). Inflation does only happen during booms. It can break out even with resource slack and stability of expectations (Cochrane, 2011). History is equally replete with episodes of stagflation in the 1970s and 1980s.

The health crisis forcibly shut down economic activities, inducing immediate strains on supply chains and credit problems in highly indebted sectors. These represent huge supply shocks that affect the returns on labor and capital. With constrained sources of revenues, funding for social protection would have to be increasingly supported by accumulating higher debt. Even with massive debt-financed fiscal stimulus, there would always be a risk of achieving small impact if the economy still operates below capacity and supply chains remain largely impaired, thus, muting the multiplier feedback (Guerrieri, et al, 2020).

Debts could ratchet up and could eventually become toxic. Deleveraging by both debtors and creditors would curb consumption and investment even more. Idle labor would not exert demand-pull inflation. Instead, cost-push inflation scenario may develop. When supply chains become inflexible over long period of time, the economy stagnates and prices go up (Cadamuro and Papadia, 2020; Reading, 2020).

4.6 Unwinding of temporary relief measures

The decision to unwind COVID-19 policy responses must be done in a gradual, prudent and informed manner. Glindro et al. (2020) emphasized that a well-thought out exit strategy is necessary to ensure that policy objectives are achieved and maintained. Complete risk assessment based on all available data must support the decision and timing of unwinding. Likewise, appropriate communication must accompany the decision to unwind.

5. Conclusion

The world is combatting a once in a lifetime crisis. The severity of the economic effects of COVID-19 led some to liken the crisis to a war, where all weapons must be deployed to win against it. Throughout different crises episodes, central banks exhibited massive fire power in supporting aggregate demand and staving off inflationary pressures, and in ensuring the proper functioning of financial markets and the process of financial intermediation.

In supporting the immediate needs of the real economy during a crisis, prudence requires that certain principles be observed, and specific limits be recognized. First, price stability, complemented by financial stability, is a key consideration when undertaking market interventions during periods of crises. Second, it is crucial to maintain central bank independence. Third, central bank policies must be implemented with limiting moral hazard in mind because if not reined in, it can cause further harm to the financial system and economy. Finally, the central bank should not compromise its policies in the short run. Exercising flexibility is essential, but consideration of the central bank's credibility, scope for conventional policies, and the financial system's long run stability should put a limit on how extraordinary the responses can be.

The BSP simultaneously deployed its conventional and unconventional monetary policy tools to complement the efforts of the NG. Being the regulator/supervisor of banks and quasi-banks, the BSP also implemented a comprehensive set of regulatory and forbearance measures. In employing these measures, the BSP has been circumspect not to undermine the stability of the financial system and the BSP's hard-earned credibility and independence. Moving forward, the BSP remains attentive to challenges and evolving developments. It stands ready to deploy additional policy measures, supported by evidence-based assessment of overall economic conditions.

References

Asian Development Bank (2020a). Asia Bond Monitor, March 2020. Retrieved 3 June 2020, from https://www.adb.org/publications/asia-bond-monitor-march-2020.

Asian Development Bank (2020b). Asia Bonds Online Data Portal. Retrieved 3 June 2020, from https://asianbondsonline.adb.org/.

Asian Development Bank (2020c). ADB COVID-19 Policy Database. Retrieved 3 June 2020 from https://covid19policy.adb.org/policy-measures.

Bangko Sentral ng Pilipinas – Department of Economic Statistics (2020a). "Business Confidence Weaker for Q1 2020 but More Upbeat for Q2 2020," Business Expectations Survey, First Quarter 2020, 07 April 2020.

Bangko Sentral ng Pilipinas – Department of Economic Statistics (2020b). "Consumer Confidence Remains Optimistic for Q1 2020, Less Upbeat for the Next Quarter and Next 12 Months," Consumer Expectations Survey, First Quarter 2020, 16 April 2020.

Bangko Sentral ng Pilipinas – Department of Economic Statistics (2020c). Balance of Payments Report, Fourth Quarter 2019 Developments. Retrieved 10 June 2020, from http://www.bsp.gov.ph/publications/regular_balance.asp.

Bangko Sentral ng Pilipinas-Payments System Oversight Department (2020). "Retail Payments Before and After ECQ," PSOD Issue No. 1.

Bangko Sentral ng Pilipinas (2020a). Report on the Philippine Financial System, 2nd Semester 2019. Retrieved 1 June 2020, from http://www.bsp.gov.ph/publications/regular_status.asp.

Bangko Sentral ng Pilipinas (2020b). "Monetary Board Cuts Policy Rate by 50 Basis Points," BSP Media Releases, 19 March 2020. Retrieved 1 June 2020, from http://www.bsp.gov.ph/publications/media.asp?id=5322.

Bangko Sentral ng Pilipinas (2020c). "Advisory on the Gradual Normalization in the TDF and RRP Operations" 08 June 2020. Retrieved 14 June 2020, from http://www.bsp.gov.ph/publications/media.asp?id=5400&yr=2020.

Bank for International Settlements (2019). "Unconventional monetary policy tools: a cross-country analysis," CGFS Papers No. 63, October 2019.

Bank Indonesia (2020). Latest Developments and BI Measures against COVID-19 (2nd April 2020), Bank Indonesia Media Room, 2 April 2020. Retrieved 8 June 2020, from https://www.bi.go.id/en/ruang-media/info-terbaru/Pages/Perkembangan-Terkini-Perekonomian-dan-Langkah-BI-dalam-Hadapi-COVID-19-020420.aspx.

Bank of Korea (2020). "Bank of Korea implements financial stability measures including adoption of unlimited liquidity support facility," Bank of Korea Press Release, 26 March 2020. Retrieved 8 June 2020, from https://www.bok.or.kr/eng/bbs/E0000634/view.do?nttId=10057338&menuNo=400069&pageIndex=1.

Bank of Thailand (2020). "Additional measures to assist SMEs affected by COVID-19 and to stabilize corporate bond market," Bank of Thailand Press Release No. 20/2020. Retrieved 8 June 2020, from https://www.bot.or.th/English/PressandSpeeches/Press/2020/Pages/n2063.aspx.

Basel Committee on Banking Supervision (2016). Guidelines: Prudential treatment of problem assets – definitions of non-performing exposures and forbearance. Retrieved 25 May 2020, from https://www.bis.org/bcbs/publ/d403.htm.

Boissay, F. and Rungcharoenkitkul, P. (2002). "Macroeconomic effects of Covid-19: an early review," BIS Bulletin No. 7, 17 April 2020.

Borio, C. and Restoy, F. (2020). "Reflections on regulatory responses to the Covid-19 pandemic," FSI Briefs No. 1, April.

Bureau of the Treasury (2020a). National Government Cash Operations. Retrieved from https://www.treasury.gov.ph/?page_id=4221.

Bureau of the Treasury (2020b). National Government Debt Recorded at P8,600 Billion as of end-April 2020," Press Release, 2 June 2020. Retrieved 5 June 2020, from https://www.treasury.gov.ph/?p=35866.

Bureau of the Treasury (2020c). Republic of the Philippines prices 10-Year, 25-Year dollar global bonds," Press Release, April 2020. Retrieved 5 June 2020, from https://www.treasury.gov.ph/wp-content/uploads/2020/04/BTR_PR_ROPv1.pdf.

Cadamuro, L. and Papadia, F. (2020). Three macroeconomic issues and COVID-19. European Macroeconomics and Governance. Breugel, 10 March 2020. Retrieved from https://www.bruegel.org/2020/03/three-macroeconomic-issues-and-covid-19/.

Cochrane, J. (2011). Inflation and Debt. Reproduced in National Affairs No. 43 (Spring 2020). Retrieved on 30 May 2020 from https://www.nationalaffairs.com/publications/detail/inflation-and-debt

Department of Labor and Employment (2020a). "Cash, Food and Medical Relief to over 80k OFWs," DOLE News Release, 31 May. Retrieved 5 June 2020, from https://www.dole.gov.ph/news/ cash-food-and-medical-relief-to-over-80k-ofws/.

Department of Labor and Employment (2020b). "Stranded OFWs nearing 100k," DOLE News Release, 31 May. Retrieved 5 June 2020, from https://www.dole.gov.ph/news/stranded-ofws-nearing-100k/.

Development Budget Coordination Committee (2020a). DBCC Revised Figures (May 27, 2020). https://www.dbm.gov.ph/index.php/dbcc-matters/macroeconomic-assumptions-and-fiscal-targets/dbcc-revised-figures-may-27-2020.

Development Budget Coordination Committee (2020b), Medium-Term Fiscal Program FYs 2020-2022, DBCC Ad Referendum dated May 27, 2020, Retrieved from https://www.dbm.gov.ph/index.php/dbcc-matters/macroeconomic-assumptions-and-fiscal-targets/dbcc-revised-figures-may-27-2020.

Dumlao-Abadilla, D. (2020). "BPO Sector Seen to Help Temper Downturn," Philippine Daily Inquirer, 3 April.

El-Erian, M. (2016). "The only game in town: central banks, instability, and avoiding the next collapse." London, United Kingdom: Yale University Press.

Erken, H., de Groot, E., Hayat, R., and Marey, P. (2020). Looking beyond the COVID-19 crisis. Rabo Research Global Economics and Markets. Retrieved 7 June 2020 from https://economics.rabobank.com/publications/2020/april/looking-beyond-the-covid-19-crisis/#c49448c7-6013-42fc-9bf9-c8dedac61a64

Fisher, I. (1933). "The Debt-Deflation Theory of Great Depressions," *Econometrica*.

Gambacorta, L. (2009). "Monetary policy and the risk-taking channel," BIS Quarterly Review, December 2009.

Giannone, D., Lenza, M., Pill, H., and Reichlin, L. (2012). "Non-standard monetary policy measures and monetary developments," in *Interest Rates, Prices, and Liquidity: Lessons for Monetary Policy from the Financial Crisis*, ed. J. Chadha and S. Holly. New York: Cambridge University Press.

Glindro, E., Parcon-Santos, H. C., Cacnio, F. C. Q., Oliva, M. B., and Ignacio, L. L. (2020). "COVID-19 Exit Strategies: How Do We Proceed?" BSP Working Paper Series No. 2020-01, May.

Goy, G. and van den End, J. W. (2020). "The impact of the COVID-19 crisis on the equilibrium interest rate, VOX CEPR Policy Portal, 20 April 2020. Retrieved 15 June 2020, from https://voxeu.org/article/impact-covid-19-crisis-equilibrium-interest-rate.

Group of Thirty (2016). "The Evolving Role of Central Banks," Chapter 1 in Fundamentals of Central Banking: Lessons from the Crisis. Washington, D.C.

Guerrieri, V. Lorenzoni, G., Straub, L., and Werning, I. (2020). "Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?" 02 April 2020. Retrieved from https://scholar.harvard.edu/files/straub/files/covid19_supply_demand.pdf

Guinigundo, D. (2017). "Implementing a flexible inflation targeting in the Philippines," in V. B. Valdepeñas Jr. (Ed.), Philippine Central Banking: A Strategic Journey to Stability. Manila: Bangko Sentral ng Pilipinas.

House of Representatives (HOR, 2020a). "DCC approves PESA, FIST and 'Anti-COVID-19 Related Anti-Discrimination' Bills," Press Release, 27 May 2020.

House of Representatives (2020b). "Proposed 'Philippine Banking Industry Resiliency Act Against Covid-19 Pandemic approved," Press Release, 11 May 2020.

Institute of International Finance (2020a). "How Abnormal were Q1 Outflows from EM?" Global Macro Views, 28 May 2020.

Institute of International Finance (2020b). Prudential Regulatory Measures in Response to COVID-19 (as of May 29, 2020). Retrieved 1 June 2020 from https://www.iif.com/COVID-19.

International Monetary Fund (2010). "Central banking lessons from the crisis," Report from the IMF Monetary and Capital Markets Department, 27 May 2010.

International Monetary Fund (2013). "Unconventional monetary policies – recent experience and prospects," Staff Report.

International Monetary Fund (2020). Factsheet: The IMF's Rapid Financing Instrument (RFI), 09 April 2020.

International Monetary Fund-World Bank (2020). "COVID-19: The Regulatory and Supervisory Implications for the Banking Sector," Joint IMF-World Bank Staff Position Note, 21 May 2020.

IMF Factsheet (2020). The IMF's Rapid Financing Instrument (RFI), 19 April 2020. Retrieved 31 May 2020, from imf.org/en/About/Factsheets/Sheets/2016/08/02/19/55/Rapid-Financing-Instrument.

Inter-Agency Task Force Technical Working Group for Anticipatory and Forward Planning (2020). We Recover As One.

Investor Relations Office (2020). "Japan Credit Rating Agency upgrades Philippines' rating to A- : Debt watcher cites country's resilience amid pandemic," IRO Press Release, 11 June 2020. https://iro.ph/articledetails.php?articleid=3305&catid=4.

Japan Credit Rating Agency, Ltd. (2020). JCR Upgraded Ratings to A-/A- (FC/LC) with Stable Outlook. News release, 11 June 2020. Retrieved 23 June 2020 from https://www.jcr.co.jp/en/ratinglist/sovereign/12006

Jeffrey, C. (2020). "Central banking enters a new era." Central Banking, 04 June 2020.

Johns Hopkins University (2020). COVID-19 Dashboard by the Center for Systems Science and Engineering. Retrieved 11 June 2020, from https://gisanddata.maps.arcgis.com/ apps/ops dashboard/ index.html#/bda7594740fd40299423467b48e9ecf6.

Khor, H. E. (2017). Chiang Mai Initiative Multilateralization (CMIM): Progress and Challenges. ASEAN+3 Macroeconomic Research Office.

Kuttner, K. (2018). "Outside the Box: Unconventional Monetary Policy in the Great Recession and Beyond," *Journal of Economic Perspectives* 32(4), pp. 121-46.

Lagarde, C. (2020). Introductory statement on the occasion of the presentation of the ECB Annual Report 2018, European Parliament, February.

Lagarde, C. (2017). "Reinvigorating Productivity Growth," Speech, American Enterprise Institute, 3 April.

Lane, P. (2020). "The monetary policy package: An analytical framework," in R Baldwin and B Weder di Mauro (eds), Economics in the time of COVID-19, a VoxEU.org eBook, CEPR Press. Also appeared in European Central Bank (ECB) blog on 13 March 2020 https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200313~9e783ea567.en.html.

di Mauro, F. and C. Syverson (2020), "The COVID crisis and productivity growth," VOX CEPR Policy Portal, 16 April. Retrieved 31 May 2020, from https://voxeu.org/article/covid-crisis-and-productivity-growth.

Mendoza, E. (2009). "Hire Irving Fisher!" VOX CEPR Policy Portal, 12 February 2009. Retrieved 30 May 2020, from https://voxeu.org/article/crisis-lessons-irving-fisher-fix-debt-deflation-disease-not-its-symptoms.

Metrick, A. (2020). "Yale Program on Financial Stability: Response to Effects of COVID-19 Crisis," presentation in the Bank for International Settlements webinar, 30 April 2020. Retrieved 30 May 2020, from https://som.yale.edu/news/2020/05/ypfs-describes-four-phase-model-of-the-economic-consequences-of-pandemic.

Moreno, R. (1998). "What Caused East Asia's Financial Crisis?" FRBSF Economic Letter, 1998-24. August.

Official Monetary and Financial Institutions Forum (2020). Heading for 1970s-style cost-push inflation. Retrieved 30 May 2020, from https://www.omfif.org/2020/05/welcome-to-world-of-stagflation/.

Orphanides, Athanasios (2013). Is Monetary Policy Overburdened? BIS Working Paper No. 435, December. Retrieved from https://www.bis.org/publ/work435.htm.

Orphanides, Athanasios (2018). Expanding the boundaries of central banking: The risks for central bank independence. Keynote speech at the Bangko Sentral ng Pilipinas' International Research Conference, Manila, Philippines, 23 September 2018.

Perasan, M. and R. Smith (2012). "Counterfactual analysis in macroeconometrics: an empirical investigation into the effects of quantitative easing," IZA Discussion Paper Series No. 6618.

Perotti, E. (2020). "The coronavirus shock to financial stability." Voxeu, 27 March 2020. Retrieved 4 June 2020, from https://voxeu.org/article/coronavirus-shock-financial-stability.

Philippine Overseas Employment Agency (2020). "POEA: Deployment of Pinoy workers abroad down 99.9 percent amid COVID-19 pandemic," 22 May, In the News, POEA website. http://www.poea.gov.ph/ default.html.

Philippine Statistics Authority (2020). Foreign Trade Statistics, March 2020 Tables, Table 7. Retrieved 5 June 2020, from http://www.psa.gov.ph/statistics/foreign-trade/fts-release-id/161873.

Reading, B. (2020). "Heading for 1970s-style cost-push inflation." Retrieved 30 May 2020 from https://www.omfif.org/2020/05/welcome-to-world-of-stagflation/.

Sengupta, R. (2020). The global pandemic and run on shadow banks. Kansas City Federal Reserve, 11 May 2020. Retrieved 2 June 2020, from https://www.kansascityfed.org/en/publications/ research/eb/articles/2020/global-pandemic-run-shadow-banks.

Shiller, Robert (2020). "Why We Can't Foresee the Pandemic's Long-Term Effects." New York Times, 29 May 2020. Retrieved 7 June 2020 from https://www.nytimes.com/2020/05/29/business/ coronavirus-economic-forecast-shiller.html.

Tuaño-Amador, M.C. (2009). "Asian Financial Crisis of 1997 – 1998 and the Philippine Economy: Causes, Consequences and Challenges," in V. B. Valdepeñas Jr. (Ed.), Central Banking in Challenging Times: The Philippine Experience. Manila: Bangko Sentral ng Pilipinas.

United Nations Conference on Trade and Development (2020a). "COVID-19 triggers marked decline in global trade, new data shows," UNCTAD Public Information News, 13 May 2020.

United Nations Conference on Trade and Development (2020b). "Impact of Coronavirus Outbreak on Global FDI," Investment Trends Monitor, March 2020.

Valdez, D. (2020). "PHL Office Sector to Benefit when BPOs Bounce Back After Virus," Business World, 6 April.

te Velde, D.W. (2020). The economic impact of coronavirus: five lessons and challenges. Commentary for Overseas Development Institute (ODI), 13 March 2020. Retrieved 22 May 2020, from https://www.odi.org/blogs/16764-economic-impact-coronavirus-five-lessons-and-challenges.

Wong, M. (2020). "Mega Rally in Philippine Bonds Has Room to Run Along with Peso," Bloomberg, 4 June 2020. Retrieved 5 June 2020, from https://www.bloomberg.com/news/ articles/2020-06-04/mega-rally-in-philippine-bonds-has-room-to-run-seasia-rates.

World Bank (2018). "Travel and Tourism Direct Contribution to GDP," TCData360, from https://tcdata360.worldbank.org/indicators/tot.direct.gdp?country=PHL&indicator=24650&countries=THA,IDN,MYS,VNM&viz=line_chart&years=1995,2020.

Annex 1: Estimated Monetary Impact of BSP Policy Responses (as percent of GDP) *

BSP Policy Response	% of GDP	Estimated Monetary Impact
175-bps cumulative RRP cut • 25-bp in February 2020 • 50-bp each in March, April, and June 2020	**0.2**	• The BSP assesses that a 25-bp RRP rate cut could increase domestic liquidity by ₱6.6 billion in the first year, and by ₱16.7 billion in the second year. • This means that the cumulative reduction of 175 bps in the policy rate thus far could lead to an expansion in liquidity by up to ₱46.2 billion in the next 12 months, all things held constant.
Asset purchases		
• Repurchase Agreement with the National Government (NG)	**1.6**	• ₱300 billion purchases of government securities (GS) from the National Government under the repurchase agreement.
• Purchase GS from banks in the secondary market	**0.4**	• BSP purchases of GS from the secondary market of around ₱ 67.7 billion starting from 24 March up to 23 April 2020.
Other liquidity-enhancing measures		
• The 200-basis-point decrease in the reserve requirement ratios of universal and commercial banks as well as non-bank financial institutions with quasi-banking functions (NBQBs)	**1.0**	• Around ₱200 billion in liquidity was released following the 200-bp reduction in the RRRs that took effect this April.
• Timely suspension of the term deposit facility auctions for certain tenors (zero offering for 14- and 28-day tenors)	**1.6**	• Around ₱300 billion in liquidity was released following the suspension of TDF auctions, which is considered a conservative estimate.
• Reduction in the O/N RRP Volume Offering beginning 8 April 2020	**1.1**	• Volume offering for O/N RRP was reduced to ₱100 billion, freeing up about ₱205 billion in the system.
• Remittance of dividends to NG	**0.1**	• While our newly amended Charter no longer mandates the BSP to remit its dividends to the NG, BSP has decided to remit ₱20 billion in advance dividends to support the NG's COVID-19 response programs. (It may be recalled that under the amended Charter, all of the BSP's declared dividends should be applied to the increase in the BSP's capitalization.)

* Based on nominal GDP approved by the DBCC as of 12 May 2020.

Source: BSP - Department of Economic Research

Annex 2. BSP Regulatory Relief Measures to Mitigate COVID-19 Crisis

Classification of response	**BSP measure**	**BSP's adherence to IMF-WB (2020) recommendations ***
(a) Incentivizing lending	• Reduction of credit risk weights of loans granted to MSMEs that are current in status to 50 percent from 75 percent (for qualified MSME portfolio[72]) and 100 percent (for non-qualified MSME portfolio). The reduced credit risk weight will be subject to review by end-December 2021 (BSP Memorandum No. M-2020-011).	(2), (3)
	• Recognition of loans granted to MSMEs as a form of alternative compliance with banks' reserve requirements against deposit liabilities and deposit substitutes effective 24 April 2020 up until 30 December 2021 (BSP Circular No. 1087 dated 27 May 2020, BSP Circular No. 1083 dated 22 April 2020), subject to certain control measures, as follows: a. The MSME loans are granted after 15 March 2020; and b. The MSME loans are not encumbered, or rediscounted with the BSP, or earmarked for any other purpose.	(2), (3)
	• Recognition of loans granted to large enterprises as a form of alternative compliance with banks' reserve requirements effective 24 April 2020 to 30 December 2021 (BSP Circular No. 1087 dated 27 May 2020), subject to certain control measures, as follows: a. The loan to the large enterprise is granted after 15 March 2020; b. The loan to the large is not encumbered, or rediscounted with the BSP, or earmarked for any other purpose; and c. The large enterprise must not belong to a conglomerate structure, and is critically impacted by the COVID-19 outbreak.	(2), (3)
	• Assignment of a zero-percent risk weight to loans that are guaranteed by the Agricultural Guarantee Fund Pool (AGFP) and the Agricultural Credit Policy Council (ACPC), in addition to loans guaranteed by the Philippine Guarantee Corporation, to encourage banks to lend to small farmers and fisherfolks (BSP Memorandum No. M-2020-011).	(2), (3)
	• Temporary increase of SBL from 25 percent to 30 percent for a period of six (6) months beginning March 2020. The relaxation also covers increase in the 25 percent SBL for project finance loans to finance initiatives that are in line with the priority programs of the Government (BSP Memorandum No. M-2020-011).	(1), (2), (3), (6)
	• Reduction in the minimum liquidity ratio of stand-alone thrift, rural and cooperative banks from 20 percent to 16 percent until end-December 2020 (BSP Memorandum No. M-2020-020).	(1), (2), (3)

[72] A qualified MSME portfolio is diversified with at least 500 borrowers over a number of industries.

	• Utilization of Basel III Capital and Liquidity Buffers (BSP Memorandum No. M-2020-039) a. On Capital Conservation Buffer - A covered bank/quasi-bank (QB) which 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. b. On Liquidity Coverage Ratio - 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. c. 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. d. Non-compliance by a covered bank/QB with the minimum risk-based capital adequacy ratios and the minimum 100 percent Net Stable Funding Ratio (NSFR) will be handled on a case-by-case basis. e. A covered bank/QB will be provided by the BSP with enough time to address regulatory breaches taking into account a forward-looking assessment of macroeconomic and financial conditions of the system as a whole and their potential impact on the supervised institution.	(1), (6)
	• Allowing BSFIs to provide financial assistance to affected officers, subject to reporting to the BSP (BSP Memorandum No. M-2020-008)	(2), (3), (5)
(b) Extension of financial relief to borrowers and BSFIs	• Implementation of a 30-day grace period for all loans with principal and/or interest falling due within the ECQ period without incurring interest on interest, penalties, fees and other charges. The initial 30-day grace period shall automatically be extended if the ECQ Period is extended by the President (BSP Memorandum No. M-2020-017 and M-2020-018).	(2), (3)
	• Non-application of interest on interest, fees and charges during the 30-day grace period to future payments/amortizations of the individuals, households, micro, small and medium enterprises (MSMEs), and corporate borrowers (BSP Memorandum No. M-2020-017 and M-2020-018).	(2), (3)
	• Exclusion of loans of affected borrowers from the past due and non-performing classification from 08 March 2020 until 31 December 2021, subject to reporting to the BSP as well as waiver of documentary requirements for restructuring of loans (BSP Memorandum No. M-2020-008).	(2), (3), (4), (5), (7)
	• Relief for banks with outstanding rediscounting obligations with the BSP (BSP Memorandum No. M-2020-008) a. A 60-day grace period on the settlement of outstanding obligations from 8 March 2020, without penalty charges, or b. Restructuring of rediscounted loans of end-user borrowers affected by the COVID-19, subject to BSP approval on a case-to-case basis.	(1), (2), (3), (6)

	c. Banks which renew rediscounting lines or avail of rediscounting loans with the BSP will be assessed against relaxed eligibility criteria.	
	• Allowing Banks/QBs to use their legal reserves to support liquidity requirements, subject to request for BSP approval on the non-imposition of penalties on legal reserve deficiencies for a period of six (6) months from 8 March 2020 ((BSP Memorandum No. M-2020-008, BSP Memorandum No. M-2020-011).	(1), (3), (6)
	• Availability of option to stagger booking of allowance for credit losses for loans to affected borrowers for a maximum period of five (5) years, subject to approval of the BSP (BSP Memorandum No. M-2020-008).	(2), (3), (4), (5)
(c) Temporary relaxation of prudential accounting measures	• Provision of temporary accounting relief measures to reduce the impact of mark-to-market (MTM) losses. Banks' debt securities lodged at fair value category may be reclassified to the amortized cost category, subject to reporting to the BSP (BSP Memorandum No. M-2020-022, BSP Memorandum No. M-2020-011).	(3), (4), (5)
	• Easing of the Expanded Foreign Currency Deposit Unit/Foreign Currency Deposit Unit (E/FCDU) asset cover requirement, until 30 September 2020 (Memorandum No. M-2020-023, BSP Memorandum No. M-2020-011).	(1), (3), (4), (6)
	• Regulatory relief from exposure limit (15 percent of the market value of the UITF) applicable to Unit Investment Trust Funds, subject to reporting to the BSP (BSP Memorandum No. M-2020-011).	(1), (3), (5), (6)
	• Deferral of the implementation of the revised risk-based capital framework applicable to stand-alone thrift banks, rural banks and cooperative banks[73] to continue to support their rural community-based clients. The revised capital adequacy framework will now take effect on 1 January 2023 instead of 1 January 2022.	(1), (2), (7)
(d) Operational relief measures for BSFIs	• Suspension of the submission of reports to the BSP Financial Supervision Sector that fall due within the months of March to May 2020, except for the submission of four (4) reports necessary for surveillance and policy-making. Monetary penalties shall not be imposed by the BSP for delay in the submission of these reports (BSP Memorandum No. M-2020-008, BSP Memorandum No. M-2020-011).	(3), (7)
	• Relaxation of the notification requirements to the BSP related to changes in banking hours and temporary closure of bank/branch/branch-lite units and BSFI offices/service units (BSP Memorandum No. M-2020-011)	(3), (7)

[73] Stand-alone thrift, rural and cooperative banks are banks that are not subsidiaries of universal or commercial banks.

	• Operational relief for FX transactions, effective for the duration of the community quarantine or as may be extended by the BSP (BSP Circular No. 1080): a. Electronic submission of documents for: (i) applications for approval and/or registration of foreign/foreign currency loans/borrowings/ investments; and (ii) sale of FX by authorized agent banks (AABs)/AAB forex corps b. Use of e-signatures/digital signatures for documents originally required to be submitted in hardcopy and/or requiring signature c. Submission of documents without the e-signatures/digital signatures/required notarizations d. Non-imposition of monetary penalties for delayed submission of reports e. Relaxation of deadline/prescriptive period for the submission of certain documents/information/applications covering foreign/foreign currency loans/borrowings/investments f. Waiver of applicable processing fees for applications covering private sector foreign/foreign currency loans/borrowings with FX obligations due within the period covered by the Circular g. Issuance of BSP documents [e.g., Bangko Sentral Registration Document (BSRD), implementing letter] by the International Operations Department in electronic form	(3), (7)
	• Simplified application and availment procedures in obtaining a Rediscounting Line (RL) from the BSP, including easier exchange of communication between banks and the BSP Department of Loans and Credit (BSP Memorandum No. M-2020-016).	(3), (7)
(e) Facilitate continued access of the public to financial services	• Temporary waiver of fees related to the grant of license or authority to provide Types A[74] and B[75] Advanced Electronic Payments and Financial Services (EPFS). The waiver of fees related to grant of EPFS licenses aims to encourage BSFIs to provide safe, efficient and reliable digital channels that support critical payment use cases such as social benefit transfers, payments to merchants or billers including to the Government, payments to suppliers, and remittances particularly during the COVID-19 situation (BSP Memorandum No. M-2020-033).	(2), (3)
	• Suspension of PESONet and InstaPay fees for the duration of the ECQ period. BSFIs are also encouraged to extend the same for other fund transfer services and interbank ATM transactions (BSP Memorandum No. M-2020-031).	(2), (3)

[74] This applies to BSFIs that can be assessed against the prudential criteria provided under the Policy and Regulations on Licensing. These applicants must have been examined by the BSP.

[75] This applies to proponents that cannot be assessed against the prudential criteria provided under the Policy and Regulations on Licensing. These include newly-established BSFIs and new applicants for an authority to operate as "Electronic Money Issuer-Others".

	• BSFIs shall augment existing capabilities and implement appropriate strategies in order to address customers' growing requirements for digital channels as a means to fulfill basic financial and payment transactions (BSP Memorandum No. M-2020-030).	(2), (7)
	• Temporary relaxation of Know Your Customer (KYC) requirements to facilitate access to basic government and financial services until 30 June 2020, subject to control measures against money laundering and terrorism financing risks. (BSP Memorandum No. M-2020-015 and BSP Memorandum No. M-2020-011)	(2), (3)
	• Temporary waiver of transaction fees charged for fund transfer instructions made with PhilPaSS which include the following transactions (BSP Memorandum No. M-2020-048, Memorandum No. M-2020-044, BSP Memorandum No. M-2020-027): a. Interbank transactions b. Peso-leg of US dollar trades c. Peso-leg of government securities trades d. Philippine Clearing House Corporation transactions e. Automated tellering machine transactions f. Manual processing of interbank transactions	(3), (9)

Source of basic data: Various circulars, BSP Financial Supervision Sector
* CMFP staff assessment

Annex 3. Regulatory Relief and Forbearance Measures in Selected Asian Economies

Central Bank	Regulatory Relief and Forbearance Measures
Brunei	• Deferment on principal payments of financing or loan to all sectors • Restructuring or deferment on principal repayment of personal loans and hire purchase such as car financing, for a period not exceeding 10 years • Deferment on principal repayments of property financing • Conversion of any outstanding credit card balances into term loans not exceeding 3 years for affected individuals in the private sector • Waiver of all bank fees/charges (except third party charges
Bank Indonesia	• Relaxation of the mandatory reporting for commercial banks and all other parties effective from 31 March 2020 until a date yet to be determined
Otoritas Jasa Keuangan or the Financial Services Authority of Indonesia	• Relaxation of loan classification and loan restructuring procedures for banks • Extension of the deadline for publicly listed companies to release their annual financial reports and hold annual shareholders meetings
Central Bank of Myanmar	• Extension of the deadline for compliance to certain prudential regulations, enacted in July 2017, by three years from end-August 2020 to end-August 2023
Bank of the Lao P.D.R.	• Issuance of a new credit policy by the Bank of the Lao P.D.R., directing banks and financial institutions to restructure existing loans and provide new loans to businesses affected by the outbreak. Under this policy, banks and financial institutions that implement debt restructuring and new loan provisions will benefit from regulatory forbearance on loan classification and provisioning
Bank of Thailand	• Reduction in the contribution of financial institutions to the Financial Institutions Development Fund from 0.46 percent to 0.23 percent of the deposit base to provide space for a decrease in lending rates. • Temporary relaxation of financial sector liquidity-related regulations in order to support the temporary relaxation of repayment conditions for businesses
Monetary Authority of Singapore	• Deferment of the implementation of Basel III by one year, • Encouraging banks to use their capital buffers with caveat that these should not be used to fund share buybacks • Provision of additional time for certain regulatory reporting requirements. • Recognition of banks' regulatory loss allowance reserves as capital • Reduction in the Net Stable Funding Ratio requirement from 50 to 25 percent until 30 September 2021
Ministry of Finance (MOF), Inland Revenue Authority of Singapore (IRAS), and MAS	• Providing real estate investment trusts with greater flexibility including extension of the deadline for distribution of taxable income, as well as raising leverage limit and deferment of new regulatory requirements to provide greater flexibility to manage their capital structure and enhance funding access

Central Bank	Regulatory Relief and Forbearance Measures
Reserve Bank of India	• Forbearance on asset classification of loans to MSMEs and real estate developers • Deferment of the implementation of the Net Stable Funding Ratio to October 1 • Reduction in the Statutory Liquidity Ratio (SLR) by 18 percent • Increase in the Marginal Standing Facility to 3 percent • Recognition of SLR-eligible assets as high-quality liquid assets (HQLA) • Time-bound permission for banks to operate under 100 percent Liquidity Coverage Ratio • Increase in the limit for foreign portfolio investment in corporate bonds to 15 percent of outstanding stock for 2020-2021 • and the restriction on nonresident investment in specified securities issued by the Central Government was removed
State Bank of Vietnam	• Debt rescheduling • Exemption or reduction in interests/fees for affected firms and households • Requirement for credit institutions to actively reduce bonus, salary and other operating costs and timely adjust business plan (including non-payment of dividend in cash), and use the saved resources to reduce interests.
South Korea Financial Services Commission	• Easing of capital requirements for banks, temporarily lifted the credit extension cap for subsidiaries of the same holding company • Application of existing asset quality standards without the need to raise additional capital reserves • Consideration of accrued interest as interest revenue for accounting purposes • Postponement of the implementation of the large exposures framework until after 2021. • Extension of reporting deadlines for financial companies' overseas branches that face compliance burdens due to COVID-19 • Waiver of penalties or administrative sanctions for failing to meet disclosure or business report deadlines.

Sources: ADB, 2020c; IIF, 2020b

BANGKO SENTRAL NG PILIPINAS
BSP Working Paper Series

Scope: The Bangko Sentral ng Pilipinas (BSP) Working Paper Series constitutes studies relevant to central banking, which are conducted by BSP researchers and occasionally, in collaboration with external contributors. The topics may include monetary policy framework and operations, bank supervision, financial markets, macro-financial risks, payments and settlements system, digitalization, big data management and analytics for central banks, central bank communication, central bank governance and legal frameworks, among others.

Peer-reviewed: The BSP working papers are reviewed by the Editorial Committee, led by the Deputy Governor of the Monetary and Economics Sector. Completed working papers are published for the purpose of soliciting comments and discussion for further refinements. The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the BSP.

Submissions: Authors may submit their manuscripts to the following addresses below:

- BSP.Working.Paper@bsp.gov.ph with the subject line that reads BSP Working Paper Series
- The Managing Editor, BSP Working Paper Series, Center for Monetary and Financial Policy, Room 402, 4/F, 5-Storey Building, BSP Main Complex, Malate, Manila

Editorial Guidelines:

- The title page of the manuscript must include the following: title, author's name, abstract describing the main arguments and conclusions of the article, affiliation, corresponding author, 3 - 5 keywords, JEL classification
- Manuscripts must be written in English and in MS Word format, text-aligned with 1.5 line spacing, 1" margins, font Segoe UI, font size 11.
- All graphs, tables, and footnotes must be in font Segoe UI, font size 9.
- Tables must contain only essential data and hence, must be kept to a minimum. Each figure and table must be given an Arabic numeral, followed by a heading.
- All diagrams, charts, and graphs must be referred to as figures and consecutively numbered.
- All figures and tables must be cited in the text.
- Headings and sub-headings must be clearly marked.
- References must be consistent with in-text citations.
- Manuscripts must adopt the Harvard referencing system or APA referencing system.

Authors must include in their submission all graphs and tables in Excel format. They must also ensure that their manuscripts are consistently referenced and free from typographical and presentation errors. The Editorial Committee and the Editorial Staff will not undertake any retyping of manuscripts before publication.

Website: http://www.bsp.gov.ph/publications/regular_wps.asp

List of BSP Working Paper Series

- Available at http://www.bsp.gov.ph/publications/regular_wps.asp

No	Author	Title	Date
2020-05	Eloisa T. Glindro, Hazel C. Parcon-Santos, Faith Christian Q. Cacnio, and Marites B. Oliva	Shifting macroeconomic landscape and the limits of the BSP's pandemic response	June 2020
2020-04	Zernan C. Talabong	Do Prudential Regulations Affect Bank Lending Rates? Insights from Philippine Banks Using an Accounting-Based Approach	June 2020
2020-03	Veronica B. Bayangos, Rafael Augusto D. Cachuela and Fatima Lourdes E. Del Prado	Impact of Extreme Weather Episodes on the Philippine Banking Sector: Evidence Using Branch-Level Supervisory Data	June 2020
2020-02	Joselito R. Basilio and Faith Christian Q. Cacnio	Relative price changes, asymmetric adjustments and aggregate inflation: Evidence from the Philippines	June 2020
2020-01	Eloisa T. Glindro, Hazel C. Parcon-Santos, Faith Christian Q. Cacnio, Marites B. Oliva, and Laura L. Ignacio.	COVID-19 Exit Strategies: How Do We Proceed?	May 2020
2019-04	Charday V. Batac, Eduard Joseph D. Robleza I, Jan Christopher G. Ocampo, and Cherrie F. Ramos	BSPeak: A Text Analysis of BSP's Communications	November 2019
2019-03	Ramon Moreno, Hazel Parcon-Santos, and John Michael Rennie Hallig	A Preliminary Assessment of Drivers of Philippine FX Market Liquidity	October 2019
2019-02	Veronica B. Bayangos and Jeremy L. De Jesus	Have Domestic Prudential Policies Been Effective: Insights from Bank-Level Property Loan Data	March 2019
2019-01	Cherry Wyle G. Layaoen and Vernalin Grace F. Domantay	Do Capital Regulations Influence Banks' Holding of "Excess Capital"	March 2019
2018-01	Hazel C. Parcon-Santos	Foreign Exchange Interventions, Capital Outflows, and Financial Vulnerabilities in Selected Asian Emerging Economies	November 2018
2018-01	Roberto S. Mariano, Suleyman Ozmucur, Veronica B. Bayangos, Faith Christian Q. Cacnio, and Marites B. Oliva	Review of the Potential Output and Output Gap Estimation Models of the Bangko Sentral ng Pilipinas	October 2018
2017-01	Veronica B. Bayangos	Capital Flow Measures and Domestic Macro Prudential Policy in Asian Emerging Economies: Have These Been Effective?	June 2017

No	Author	Title	Date
2016-02	Eufrocinio M. Bernabe, Jr., Hazel C. Parcon-Santos and John Michael Rennie G. Hallig	Spillovers in ASEAN-5 Equity Markets	July 2016
2016-01	Veronica B. Bayangos, Lilia V. Elloso, John Michael Rennie G. Hallig, Jodeth Niña R. Yeung and April Michelle D. Salamatin	The Impact of Foreign Exchange Liberalization Reforms on the Philippine Economy: An Initial Assessment	March 2016
2015-01	Laura L. Ignacio, Hazel C. Parcon-Santos, Teresita B. Deveza, Maria Fatima C. Paule-de Leon, and Jean Christine A. Armas	Reformulating Effective Exchange Rates: Does the Exchange Rate Matter For Trade?	June 2015
2013-01	Francisco G. Dakila, Jr., Veronica B. Bayangos and Laura L. Ignacio	Identifying Sectoral Vulnerabilities and Strengths for the Philippines: A Financial Social Accounting Matrix Approach	July 2013
2012-02	Hazel C. Parcon-Santos and Eufrocinio M. Bernabe, Jr.	The Macroeconomic Effects of Basel III Implementation in the Philippines: A Preliminary Assessment	October 2012
2012-01	Veronica B. Bayangos	Going With Remittances: the Case of the Philippines	July 2012
2010-02	Eloisa T. Glindro and Vic K. Delloro	Identifying and measuring Asset Price Bubbles in the Philippines	June 2010
2010-01	Veronica B. Bayangos and Irene T. Estigoy	A Geometric Price Index for the Philippines: A Preliminary Assessment	March 2010
2009-01	Paul D. McNelis, Eloisa T. Glindro, Ferdinand S. Co, and Francisco G. Dakila, Jr.	Macroeconomic Model for Policy Analysis and Insight (a Dynamic Stochastic General Equilibrium Model for the BSP)	December 2009
2008-02	Agnes M. Yap and Cristeta B. Bagsic	Adjustments in the Face of Peso Volatility: Perspective from the Past and Policy Directions	September 2008
2008-01	Haydee L. Ramon	Forecasting the Volatility of Philippine Inflation Using GARCH Models	September 2008
2007-02	Francisco G. Dakila, Jr. and Racquel A. Claveria	Identifying the Determinants of Overseas Filipinos' Remittances: Which Exchange Rate Measure is Most Relevant?	January 2008
2007-01	Paul D. McNelis and Cristeta B. Bagsic	Output Gap Estimation for Inflation Forecasting: The Case of the Philippines	August 2007

No	Author	Title	Date
2006-02	Cristela Goce-Dakila and Francisco G. Dakila, Jr.	Modeling the Impact of Overseas Filipino Workers Remittances on the Philippine Economy: An Inter-Regional and Economy-Wide Approach	September 2006
2006-01	Cristeta B. Bagsic and Eloisa T. Glindro	Bangko Sentral ng Pilipinas Modernization: A Policy Perpective PDF	August 2006

BSP International Research Conference Volume
Available at http://www.bsp.gov.ph/publications/regular_irc.asp

- BSP International Research Conference on "Revisiting Macro-Financial Linkages: Looking Back and Looking Ahead", 20-21 September 2016
- BSP International Research Conference on "The Evolving Role and Limits of Monetary Policy: New Perspectives for Emerging Market Economies", 28-29 October 2014
- BSP International Research Conference on "Contemporary Challenges to Monetary Policy", 28-29 February 2012
- 2010 Central Bank Macroeconomic Modeling Workshop, 19-20 October 2010
- BSP International Research Conference on Remittances, 30-31 March 2009
- Joint BSP-BIS High-Level Conference on Transparency and Communication in Monetary Policy, 01 February 2008