

## II. Current Developments

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### Overview of current developments

**Headline inflation rose to 4.9 percent year-on-year in April 2022.** This is higher than 4.0 percent in March 2022. The resulting year-to-date average inflation of 3.7 percent remains within the national government's (NG) average inflation target range of 2.0-4.0 percent for the year. The higher inflation in April was attributed mainly to faster price increases of food, electricity, and domestic petroleum.

**Elevated oil prices in the international market continue to exert supply-side pressures on prices of key domestic items.** Dubai crude oil price remained elevated at over US\$100 per barrel in April 2022 due to continuing geopolitical conflict in Eastern Europe. Meanwhile, the US Energy Information Administration (EIA) expects global oil supply to outstrip demand for both 2022 and 2023, supported by an increase in production from the US and the Organization of the Petroleum Exporting Countries (OPEC). However, the current elevated oil prices led to higher domestic prices for key food items.

**Inflation expectations rise above target in 2022 but remain at a target consistent path in 2023-2024.** Based on the May 2022 survey, inflation expectations increased to 4.6 percent from 4.1 percent in the previous month. Similarly, inflation expectations for 2023 and 2024 also went up to 3.6 percent (from 3.4 percent) and 3.4 percent (from 3.3 percent) in May 2022.

**The Philippine economy expanded at a higher-than-expected rate of 8.3 percent in Q1 2022.** This was faster than the 7.8-percent (revised) growth in Q4 2021, and a reversal of the 3.8-percent contraction posted in Q1 2021. All the key sectors from the expenditure and production side of the economy posted positive outturns.

**Other demand indicators point to sustained economic activity.** The manufacturing sector's preliminary average capacity utilization rate rose anew to 69.0 percent in February 2022 from 68.3 percent (revised) in the previous month. Similarly, the preliminary Purchasing Managers' Index (PMI) in March 2022 stood at 55.7 points, higher than the previous month's PMI of 52.3 points.

**Labor market conditions improve with unemployment rate falling to 5.8 percent in March 2022.** This was lower than the month- and year-ago rates of 6.4 percent and 7.1 percent, respectively. On 14 May 2022, the wage board approved a 33-peso increase and a 55-110-peso increase in basic pay for workers in NCR and Region VI, respectively. It may be recalled that approvals of wage petitions were deferred since 2020 as the pandemic disrupted economic activities.

**Domestic financial conditions continue to be supportive of economic recovery.** Domestic liquidity grew by 7.6 percent in March 2022. Bank lending, likewise, accelerated faster by 8.9 percent during the same period. Meanwhile, primary Treasury bill rates increased across the 91-, 182- and 364-tenors as the 10-year Treasury bond rate also rose. Similarly, secondary market yields increased

amid market players' cautious sentiment on the prospect of a possible policy rate adjustment by the BSP at its 23-June monetary policy meeting.

**Global economy sustains recovery although significant headwinds remain.**

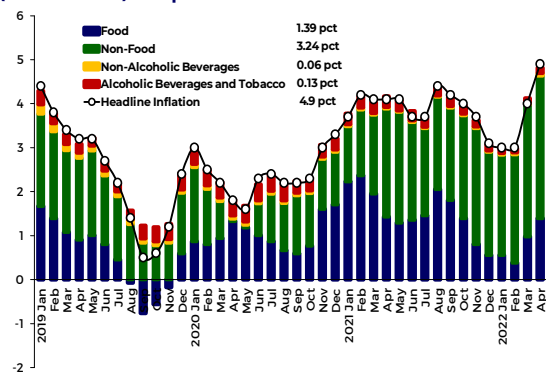
Global economic output expands at a slower rate, reflecting the impact of a COVID-19 resurgence in China and the Russia-Ukraine conflict. The JP Morgan All-Industry Output Index fell to 52.7 index points in March 2022 from 53.5 index points a month ago. Given persistent inflationary pressures in their respective jurisdictions and strong economic recovery, several central banks stepped in and raised their respective policy rates. The Bank of Canada, Reserve Bank of New Zealand and the US Federal Reserve raised their key rates by 50 bps; Reserve Bank of India hiked by 40 bps; and Bank of Korea, Reserve Bank of Australia and Bank Negara Malaysia increased by 25 bps.

## 1. Prices<sup>10</sup>

**Headline inflation.** Year-on-year headline inflation rose to 4.9 percent in April 2022 from 4.0 percent in March 2022 and 4.1 percent in April 2021. The resulting year-to-date average inflation of 3.7 percent remains within the NC’s average inflation target range of 2.0-4.0 percent for the year. On a month-on-month seasonally adjusted basis, inflation was unchanged at 1.0 percent in April. The higher inflation in April was attributed mainly to faster price increases of food, electricity, and domestic petroleum.

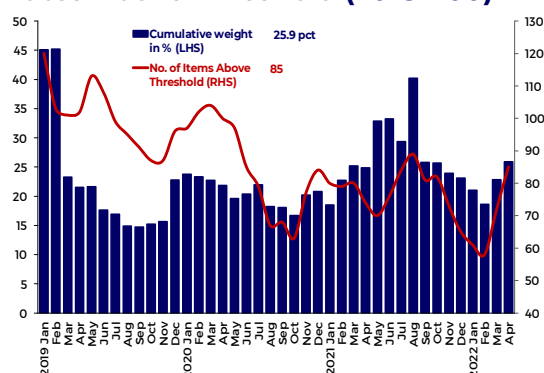
The sharp rise in headline inflation was also reflected in the increase in the number of CPI Items above threshold, which went up to 85 items (out of 315) in April 2022 using the 6-digit level CPI from 72 items in the previous month. These 85 items accounted for 25.9 percent of the total CPI weight, from 22.8 percent in March 2022. By contrast, the number of CPI items below target declined to 146 in April 2022 from 161 in the previous month. The weights of the CPI items below threshold at 52.2 percent continued to account for over half of the CPI basket. The remaining 84 items in April 2022 from 82 items in March 2022 were within threshold.

**Chart 2. Headline Inflation (2018=100); in percent**



Source: Philippine Statistical Authority (PSA) BSP

**Chart 3. CPI Items with Inflation Rates Above Threshold (2018=100)**



Source: PSA, BSP staff estimates

**Food Inflation.** Inflation for food and non-alcoholic beverages rose to 3.8 percent in April 2022 from 2.6 percent in the previous month. Heavily weighted CPI items namely, vegetables, meat, and fish were the main drivers of higher food inflation in April. The rise in meat inflation was driven by higher chicken prices as the Avian influenza affected poultry supply.

**Non-food Inflation.** Similarly, non-food inflation rose to 5.4 percent in April 2022. This can be attributed to rising energy-related CPI items. In particular, transport inflation remained at double-digit rates amid higher fuel prices due to the surge in international crude oil prices. Likewise, inflation for utilities particularly, electricity, gas, and other fuels also went up.

<sup>10</sup> The 2018-based series for core inflation is being reviewed by the Interagency Committee on Price Statistics (IACPS).

**Table 11. Inflation rates for Selected Food Items (2018=100)**  
year-on-year; in percent

Commodity	Apr 2021	Mar 2022	Apr 2022
<b>Food and Non-Alcoholic Beverages</b>	<b>3.8</b>	<b>2.6</b>	<b>3.8</b>
Food	4.1	2.8	4.0
Cereals	-0.4	3.2	3.0
Bread	2.1	3.4	4.0
Rice	-0.8	1.6	1.6
Corn	4.5	31.3	27.0
Meat	17.7	2.9	4.2
Fish	5.3	4.3	5.0
Milk	1.5	0.8	1.1
Cheese	1.1	1.0	1.6
Eggs	2.2	0.3	0.6
Oils and Fats	5.1	9.1	11.7
Fruit and Nuts	-0.6	-4.0	-4.6
Vegetables	-5.2	-0.1	9.2
Sugar, Confectionery and Desserts	0.8	6.2	7.3
Ready-Made Food and Other			
Food Products, N.E.C.	0.9	2.3	2.9
Non-Alcoholic Beverages	1.2	1.5	1.9
<b>Alcoholic Beverages and Tobacco</b>	<b>11.2</b>	<b>4.8</b>	<b>5.9</b>

Source of Basic Data: PSA, BSP

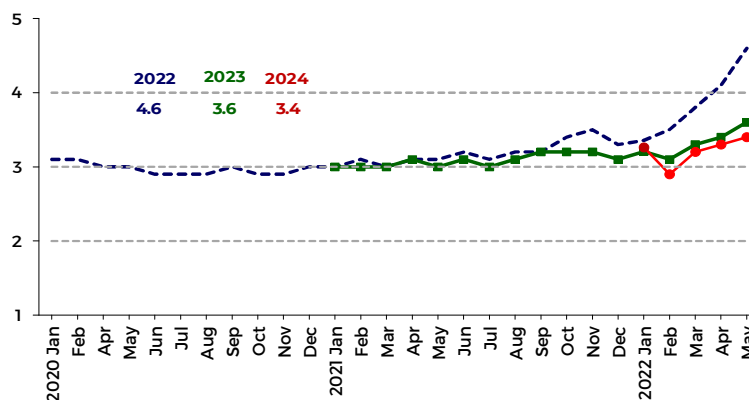
**Table 12. Inflation Rates for Selected Non-Food Items (2018=100)**  
year-on-year, in percent

Commodity	Apr 2021	Mar 2022	Apr 2022
<b>Non-Food</b>	<b>4.1</b>	<b>5.0</b>	<b>5.4</b>
Clothing and Footwear	1.7	1.9	2.0
Housing, Water, Electricity, Gas and Other Fuels	1.3	6.2	6.9
Electricity, Gas, and Other Fuels	1.2	17.4	19.9
Furnishings, Household Equipment & Routine Household Maintenance	1.9	2.6	2.6
Health	4.0	2.5	2.4
Transport	16.6	10.3	13.0
Passenger Transport Services	16.5	0.6	0.8
Information and Communication	0.6	0.7	0.7
Recreation, Sport and Culture	-0.6	1.5	1.6
Education Services	1.0	0.6	0.6
Restaurant and Accommodation Services	3.3	3.0	2.8
Financial Services	43.3	43.3	0.0
Personal Care and Miscellaneous Goods and Services	2.4	2.2	2.3

Source of Basic Data: PSA, BSP

**Private Sector Economists' Inflation Forecasts.** Results of the BSP's survey of private sector economists for May 2022 showed higher mean inflation forecast for 2022 at 4.6 percent from 4.1 percent in the April 2022 survey.<sup>11</sup> Likewise, the mean inflation forecasts for 2023 and 2024 increased to 3.6 percent (from 3.4 percent) and 3.4 percent (from 3.3 percent), respectively.

**Chart 4. BSP Private Sector Economists' Survey**  
mean forecast for full year; in percent



\*Based on forecasts provided by 16 respondents. The survey was conducted from 12-17 May 2022.  
Source: BSP

Analysts expect inflation to breach the upper end of the government's target range in 2022, with risks to the inflation outlook tilted to the upside largely driven by the adverse impact of the ongoing Russia-Ukraine conflict on global oil and food prices, which are already at elevated levels. Meanwhile, inflation is expected to settle close to the upper end of the target in 2023 before decelerating in 2024, with most of the analysts anticipating the BSP to begin its policy tightening in Q2 2022 and increase the RRP rate by a range of 25 to 150 bps in 2022-2024.

<sup>11</sup> There were 16 respondents in the BSP's survey of private sector economists in May 2022. The survey was conducted from 12 to 17 May 2022.

The upside risks to inflation include: (a) supply chain disruptions stemming largely from the geopolitical tensions between Russia and Ukraine, exacerbated further by the reimposition of lockdown measures in China and weather disturbances; (b) elevated pressures on the global prices of oil and food commodities brought about by the ongoing Russia-Ukraine conflict, which could result in the continued emergence of second-round effects such as higher energy prices, transport costs, and wage hikes; (c) an increase in domestic demand owing to the further re-opening of the economy given loose mobility restrictions; and (d) the weakening of the peso against the US dollar due to threats of downgrade of the Philippine economy and possible withdrawal of investments.

Meanwhile, a few analysts identified the emergence of the new COVID-19 variant and possible resurgence of COVID-19 cases as the main downside risk to the inflation outlook. The continued implementation of government subsidies (e.g., fuel subsidy program and livestock development and competitiveness bill) and other non-monetary government interventions, such as the lowering of import tariffs on pork and rice could help mitigate inflationary pressures.

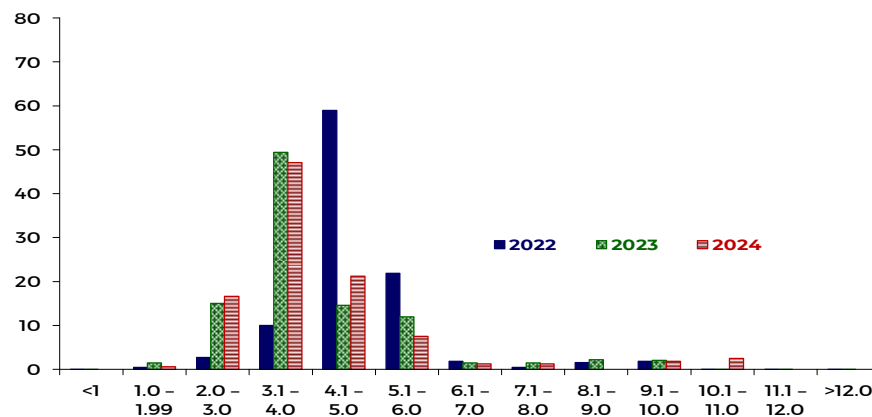
**Table 13. Private Sector Forecasts for Inflation**  
annual percentage change; May 2022

	2022			2023	2024
	Q2	Q3	FY	FY	FY
1) Banco De Oro	5.48	6.44	5.69	5.45	3.59
2) Bangkok Bank	4.70	4.40	4.20	3.00	3.00
3) Bank of Commerce	5.15	5.13	4.70	-	-
4) Barclays	4.90	4.80	4.50	3.30	-
5) Citibank	5.10	4.70	4.30	3.30	3.40
6) CTBC Bank	5.20	4.80	4.40	3.60	3.30
7) Deutsche Bank	-	-	4.40	3.80	-
8) Korea Exchange Bank	4.50	5.00	4.80	4.00	4.20
9) Land Bank of the Phils	5.10	5.00	4.60	3.60	3.30
10) Maybank	5.20	4.30	4.00	2.75	2.50
11) Metrobank	-	-	5.40	3.00 - 5.00	-
12) Mizuho	4.80	4.80	4.40	4.00	4.00
13) Nomura	5.10	5.10	4.60	3.50	-
14) RCBC	5.40	5.90	5.10	3.00 - 3.50	3.20 - 3.70
15) Robinsons Bank	5.20	5.10	4.70	3.50	3.50
16) Standard Chartered	5.00	4.70	4.50	2.90	3.10
Median Forecast	5.1	4.9	4.6	3.5	3.4
<b>Mean Forecast</b>	<b>5.1</b>	<b>5.0</b>	<b>4.6</b>	<b>3.6</b>	<b>3.4</b>
High	5.5	6.4	5.7	5.5	4.2
Low	4.5	4.3	4.0	2.8	2.5
Number of Observations	14	14	16	15	11
<b>Government Target</b>	<b>3.0±1.01</b>	<b>3.0±1.01</b>	<b>3.0±1.01</b>	<b>3.0±1.01</b>	<b>3.0±1.00</b>

Source: BSP

Based on the probability distribution of the forecasts provided by 11 out of 16 respondents, there is a 12.8-percent (from 29.0 percent) probability that average inflation for 2022 will settle within the 2-4 percent range, while there is an 86.7-percent (from 70.8 percent) chance that inflation will exceed 4.0 percent. Meanwhile, the probabilities that inflation will fall within the target band in 2023 and 2024 are seen at 64.4 percent (from 75.9 percent) and 63.8 percent (from 79.3 percent), respectively.

**Chart 5. Probability Distribution for Analysts' Inflation Forecasts\* (2022-2024)**

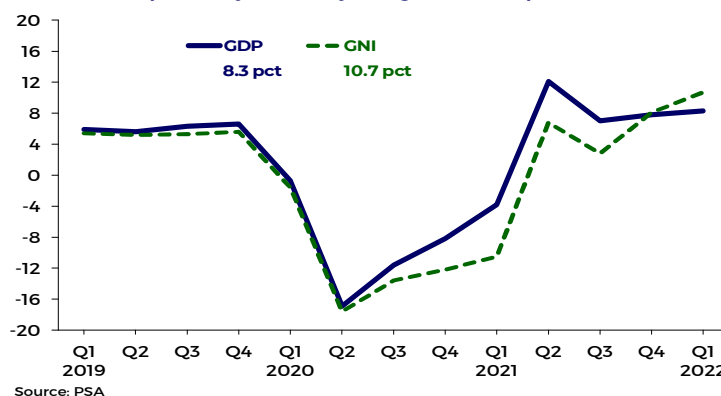


\*Probability distributions were averages of those provided by 11 out of 16 respondents.  
Source: May 2022 BSP Survey

## 2. Demand Conditions

The Philippine economy grew by 8.3 percent year-on-year in Q1 2022. This was faster than the 7.8-percent (revised) growth in Q4 2021, and a reversal of the 3.8-percent contraction posted in Q1 2021. On a seasonally-adjusted basis, quarter-on-quarter GDP rose by 1.9 percent in Q1 2022, slower than the 3.5-percent growth in Q4 2021.

**Chart 6. Gross Domestic Product and Gross National Income at constant 2018 prices; year-on-year growth in percent**



Source: PSA

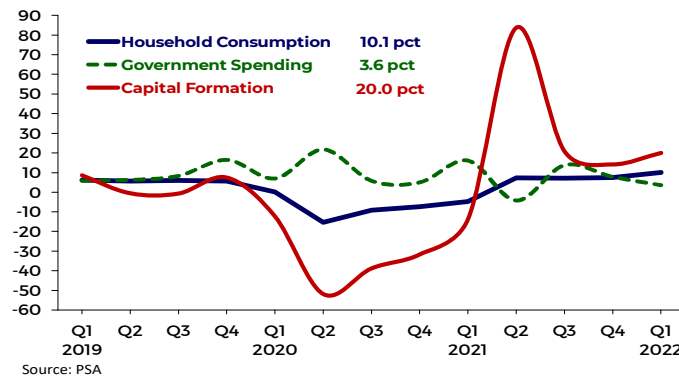
Gross national income (GNI) increased by 10.7 percent year-on-year in Q1 2022, higher than the 8.1-percent growth in Q4 2021 and 10.5-percent contraction in Q1 2021. Net primary income rose sharply by 103.2 percent from 16.0-percent growth in Q4 2021 and double-digit decline of -75.9 percent in Q1 2021.

**Aggregate Demand.** Under the expenditure approach, household spending, government spending, investments (or capital formation), and net exports contributed 7.5 percentage points (ppts), 0.5 ppt, 4.0 ppts, and -3.0 ppt, respectively, to total GDP growth in Q1 2022.

Household expenditures, which accounted for 75.3 percent of GDP in Q1 2022, expanded by 10.1 percent in Q1 2022. This is an improvement from the 7.5-percent growth in the previous quarter and a turnaround from the 4.8 percent drop recorded in Q1 2021. All the other items contributed positively to the growth of household spending, particularly: food and non-alcoholic beverages, restaurants and hotels, transport, miscellaneous goods and services, and housing, water, electricity, gas and other fuels.

Government expenditures slowed down in Q1 2022 at 3.6 percent from 7.8 percent growth in Q4 2021 and 16.1-percent expansion in Q1 2021.

**Chart 7. Gross Domestic Product by Expenditure Shares**  
at constant 2018 prices; growth rate in percent



Capital formation grew by 20.0 percent year-on-year in Q1 2022, faster than the 14.2 percent growth in Q4 2021 and a turnaround from the 13.9-percent contraction in Q1 2021. The expansion was attributed to the registered increase in fixed capital investments from construction activities, durable equipment, breeding stocks and orchard development, and intellectual property products.

Overall exports grew by 10.3 percent in Q1 2022, higher than the 7.7-percent expansion in Q4 2021 and an improvement compared to the 8.4-percent drop in Q1 2021. The growth was attributed to the reported gains in merchandise exports, particularly, components/ devices (semiconductors), telecommunication, other exports of goods, coconut oil, and cathodes and sections of cathodes, of refined copper. Similarly, exports of services expanded, driven by growth in business services, transport, travel, telecommunications, computer and information services, and manufacturing services on physical inputs owned by others.

**Table 14. Gross Domestic Product by Expenditure Shares**  
at constant 2018 prices; growth rate in percent

BY EXPENDITURE ITEM	2021		2022
	Q1	Q4	Q1
Household Final Consumption Expenditure	-4.8	7.5	10.1
Government Final Consumption Expenditure	16.1	7.8	3.6
Gross Capital Formation	-13.9	14.2	20.0
Gross Fixed Capital Formation	-18.2	10.8	11.0
Exports of Goods and Services	-8.4	7.7	10.3
Imports of Goods and Services	-7.5	14.3	15.6

Source: PSA

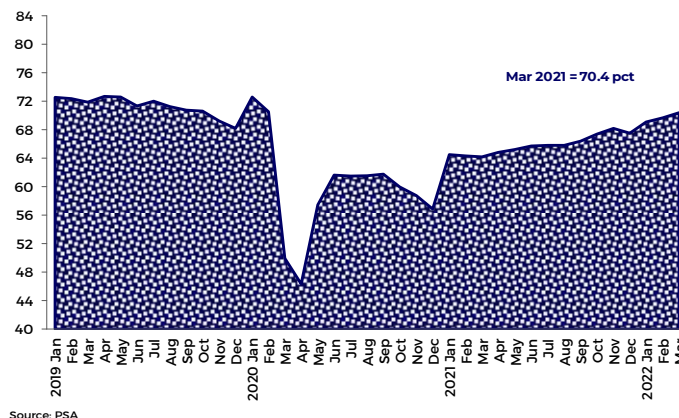
Overall imports slightly increased by 15.6 percent in Q1 2022 from 14.3 percent in the previous quarter. The year-on-year growth was due to the increase in merchandise imports of transport equipment, mineral fuels, lubricants and related materials, other imports of goods, medical and pharmaceutical products, and components/devices (semiconductors). Imports of services also increased supported by travel, business services, transport, insurance and pension services, and charges for the use of intellectual property.

### Other demand indicators

**Capacity Utilization.** The manufacturing sector's preliminary average capacity utilization rate increased to 70.4 percent in March 2022 from the revised month-ago level of 69.7 percent based on the Philippine Statistics Authority's Monthly Integrated Survey of Selected Industries (MISSI).

Of the 617 respondent-establishments surveyed by the PSA, about 41.3 percent operated at or above the 80.0 percent capacity level in March 2022, higher than the 39.6 percent recorded in February 2022. The response rate of 65.0 percent (preliminary) in March is notably lower than the previous months' preliminary rate of 70.0 percent.

**Chart 8. Monthly Average of Capacity Utilization for Manufacturing (2018=100); in percent**

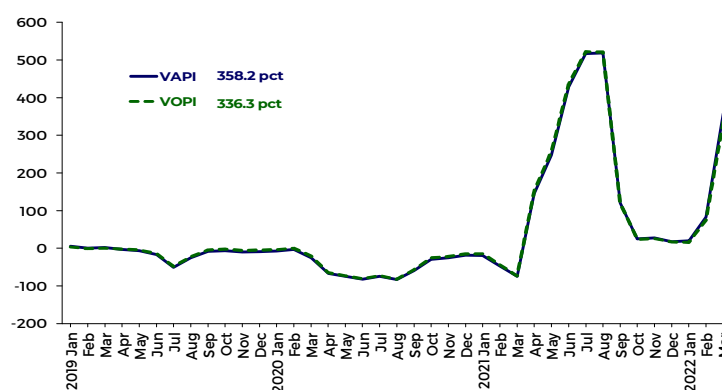


Average capacity utilization rose in March 2022 as operating conditions improved due mainly to relaxed pandemic-related restrictions and the gradual recovery of domestic demand. Of the 22 major industries, only furniture operated above the 80.0 percent capacity level. Meanwhile, 18 industries operated at the 60 to 79 percent capacity range, while two industries operated at the 50 to 59 percent capacity range. Leather and related products, including footwear operated below the 50 percent capacity level.

**Volume and Value of Production.** Preliminary results of the MISSI showed that factory output - as measured by the volume of production index (VoPI) - increased by 336.3 percent year-on-year in March 2022, higher than the 75.5-percent (revised) growth recorded in February 2022. Of the 22 subsectors, 15 posted year-on-year expansions, while the remaining seven subsectors recorded contractions.



**Chart 9. Volume and Value Indices of Manufacturing Production**  
2018=100; year-on-year in percent



Source: PSA

Similarly, the growth of the value of production index (VaPI) surged to 358.2 percent in March 2022 from 82.9 percent growth (revised) a month ago owing mostly to the gradual resurgence of demand and positive base effects.

**Table 15. Growth in Volume of Production Index by Industry Division (2018=100)**

year-on-year; in percent

GAINERS		Mar-22
1.)	Coke and Refined Petroleum Products	2,175.6
2.)	Machinery and Equipment Except Electrical	43.2
3.)	Textiles	24.2
4.)	Other Manufacturing and Repair and Installation of Machinery and Equipment	24.0
5.)	Tobacco Products	17.1
6.)	Computer, Electronic and Optical Products	16.1
7.)	Chemical and Chemical Products	15.8
8.)	Wood, Bamboo, Cane, Rattan Articles and Related Products	12.2
9.)	Rubber and Plastic Products	10.5
10.)	Wearing Apparel	9.2
11.)	Paper and Paper Products	4.8
12.)	Beverages	4.5
13.)	Furniture	3.1
14.)	Fabricated Metal Products, except Machinery and Equipment	3.0
15.)	Basic Metals	0.8
LOSERS		Mar-22
1.)	Electrical Equipment	-36.5
2.)	Printing and Reproduction of Recorded Media	-10.9
3.)	Leather and Related Products, Including Footwear	-5.9
4.)	Other Non-Metallic Mineral Products	-5.4
5.)	Transport Equipment	-4.6
6.)	Basic Pharmaceutical Products and Pharmaceutical Preparations	-0.6
7.)	Food Products	-0.1

Source: PSA

**Table 16. Growth in Value of Production Index by Industry Division (2018=100)**

year-on-year; in percent

GAINERS		Mar-22
1.)	Coke and Refined Petroleum Products	2,583.3
2.)	Machinery and Equipment Except Electrical	42.4
3.)	Textiles	29.6
4.)	Chemical and Chemical Products	26.9
5.)	Other Manufacturing and Repair and Installation of Machinery and Equipment	24.2
6.)	Tobacco Products	18.9
7.)	Rubber and Plastic Products	16.7
8.)	Wearing Apparel	14.0
9.)	Computer, Electronic and Optical Products	13.4
10.)	Basic Metals	12.3
11.)	Beverages	7.8
12.)	Paper and Paper Products	7.2
13.)	Food Products	7.0
14.)	Furniture	5.8
15.)	Fabricated Metal Products, except Machinery and Equipment	5.7
16.)	Wood, Bamboo, Cane, Rattan Articles and Related Products	4.7
17.)	Basic Pharmaceutical Products and Pharmaceutical Preparations	1.8
LOSERS		Mar-22
1.)	Electrical Equipment	-34.4
2.)	Printing and Reproduction of Recorded Media	-12.0
3.)	Leather and Related Products, Including Footwear	-4.6
4.)	Transport Equipment	-2.1
5.)	Other Non-Metallic Mineral Products	-1.5

Source: PSA

**Purchasing Managers' Index.**<sup>12</sup> The preliminary composite PMI in March 2022 stood at 55.7 index points, higher by 3.4 index points from the previous month's PMI of 52.3 index points.<sup>13</sup> The economy's recovery momentum was supported

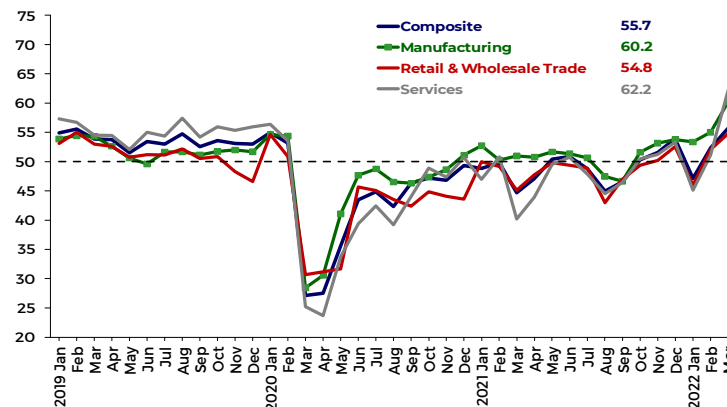
<sup>12</sup> Data based on the monthly PMI report of the Philippine Institute for Supply Management (PISM).

<sup>13</sup> The actual formula used to calculate the PMI assigns weights to each common element and then multiplies them by 1.0 for improvement, 0.5 for no change, and 0 for deterioration. As a result, an

mainly by the relaxation of mobility restrictions and renewed demand, as evident in the improvement of business activity in all major economic sectors. Firms are optimistic that operating conditions will remain favorable in the month ahead.

The services PMI expanded by 11.1 index points to an index of 62.2 in March from 51.1 in February. The sector benefited significantly from relaxed pandemic-related protocols which allowed firms to further increase operating capacity, particularly in key business areas such as in Metro Manila. Save for employment, all sub-indices in the services sector expanded on a month-on-month basis in March as demand indicators such as New Orders (68.1), Business Activity (67.8), and Outstanding Business (68.9) increased by 18.3 index points, 17.7 index points, and 16.7 index points, respectively. Meanwhile, Employment contracted anew after losing 0.8 index points to a PMI of 49.6. Service managers are expecting business activities to further improve in April 2022 as easing pandemic restrictions boost domestic demand in service-oriented businesses.

**Chart 10. Purchasing Managers' Index**  
Diffusion index



Source: Philippine Institute of Supply Management (PISM)

Likewise, the manufacturing PMI increased by 5.2 index points to 60.2 from the previous month's 55.0. New Orders (64.3), Inventory (62.2), Production (62.5), and Employment (53.7) expanded faster, gaining 7.8 index points, 7.4 index points, 5.9 index points, and 3.7 index points, respectively. Meanwhile, Lead Time, with a PMI of 55.6, lengthened at a slower rate after losing 0.4 index point. The number of businesses reporting delivery delays slightly declined as firms increased inventory levels to mitigate production disruptions and hedge against rising prices of production inputs. For the month ahead, manufacturing firms anticipate business conditions to strengthen as aggregate consumption continues to recover.

Finally, the retail and wholesale PMI also expanded in March, with the index up by 2.7 points to a PMI of 54.8 from 52.0 in February. Inventory (58.2), Sales Revenues (57.7), and Purchases (56.3) rose by 7.6 index points, 6.3 index points, and 1.1 index points, respectively. Similar to that of the manufacturing sector, Lead Time fell by 2.6 index points to a PMI of 49.8 as supply constraints eased due mainly to high inventory levels. By contrast, Employment contracted faster after falling by 0.4 index point as firms implemented cost-cutting measures to streamline

index above 50 indicates economic expansion, and an index below 50 implies a contraction. PMI surveys are conducted on the last week of the month.

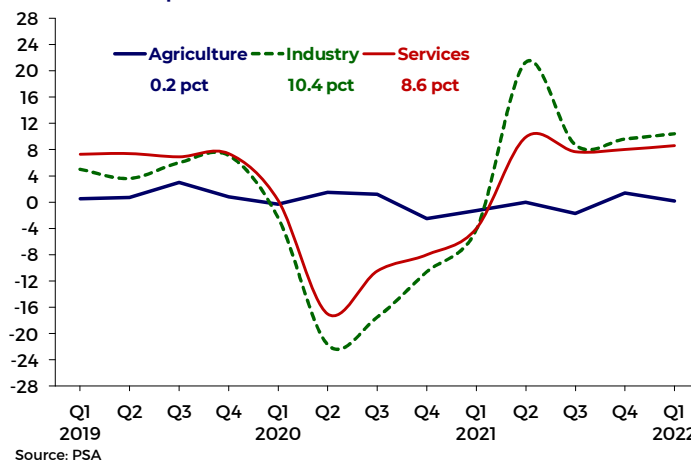
operations. Prospects are assessed as favorable for the wholesale and retail sector in the month ahead.

### 3. Supply Conditions

**Aggregate Supply.** On the production side of the economy, the agriculture, industry, and services sectors contributed 0.0 ppt, 3.1 ppts and 5.1 ppts, respectively, to total GDP growth in Q1 2022.

The industry sector continued to improve in Q1 2022 at 10.4 percent, faster than the 9.6-percent growth in Q4 2021 and the 4.2-percent contraction in Q1 2021. This was mainly driven by the expansion in the manufacturing of food products, chemical and chemical products, computer, electronic and optical products, basic metals, and basic pharmaceutical products and pharmaceutical preparations. At the same time, construction, electricity, steam, water, and waste management, and mining and quarrying improved in Q1 2022.

**Chart 11. Gross Domestic Product by Industrial Origin**  
at constant 2018 prices



The services sector likewise grew in Q1 2022 by 8.6 percent, slightly higher than the 8.0-percent growth posted in Q4 2021 and a turnaround from the 4.0-percent contraction in Q1 2021. The growth in the services sector was largely driven by the strong performance in wholesale and retail trade, repair of motor vehicles and motorcycles, transportation and storage, professional and business services, real estate and ownership of dwellings, and accommodation and food service activities. In addition, financial and insurance activities, education, information and communication, public administration and defense; compulsory social activities, and human health and social work activities contributed to the growth of the services sector in Q1 2022.

**Table 17. Gross Domestic Product by Industrial Origin**  
at constant 2018 prices; growth rate in percent

BY INDUSTRIAL ORIGIN	2021		2022
	Q1	Q4	Q1
Agriculture, Forestry, and Fishing	-1.3	1.4	0.2
Industry Sector	-4.2	9.6	10.4
Mining and Quarrying	2.0	10.7	17.0
Manufacturing	0.8	7.3	10.1
Electricity, Steam, Water and Waste Management	1.1	4.3	5.8
Construction	-22.6	18.6	13.5
Service Sector	-4.0	8.0	8.6
Wholesale and Retail Trade and Repair of Motor Vehicles and Motorcycles	-3.4	7.1	7.3
Transportation and Storage	-19.9	18.7	26.5
Accommodation and Food Service Activities	-22.5	20.2	21.0
Information and Communication	6.6	8.7	7.7
Financial and Insurance Activities	4.3	5.4	7.2
Real Estate and Ownership of Dwellings	-11.7	3.4	7.9
Professional and Business Services	-3.6	7.2	8.8
Public Administration and Defense; Compulsory Social Security	7.5	5.0	0.8
Education	0.3	7.3	7.8
Human Health and Social Work Activities	13.0	13.6	1.2
Other Services	-38.7	29.6	22.3

Source: PSA

Meanwhile, the agriculture sector grew by 0.2 percent year-on-year in Q1 2022, decelerating from the 1.4-percent growth posted in Q4 2021 albeit an improvement from the 1.3 percent contraction in Q1 2021. The growth in the agriculture sector was due mainly to the higher output for poultry and egg production as well as support activities to agriculture, forestry, and fishing, other animal production, coconut and other agricultural crops.

**Oil market developments.** Dubai crude oil prices eased in April compared to the previous month albeit still over US\$100 per barrel given continuing geopolitical conflict in Eastern Europe, declaration of force majeure on oilfields in Libya, and weather-related disruptions in Kazakhstan. The uptrend was counterbalanced by concerns over weaker demand prospects amid China's stringent lockdown measures to stem the surge of COVID-19 cases. Moreover, the significant oil stock release announced by the International Energy Agency (IEA) and the US has also exerted downward pressure on oil prices.

Given demand-side risks, different agencies namely, the IEA,<sup>14</sup> US Energy Information Administration, and the Organization of the Petroleum Exporting Countries (OPEC)<sup>15</sup> revised their respective global oil demand projections downward for 2022 due to the adverse effects of the ongoing geopolitical conflict in Ukraine and COVID-19 restrictions in China. On the other hand, the US EIA expects global oil supply to outstrip demand for both 2022 and 2023.<sup>16</sup> This reflects the agency's expectation of a drop in production from Russia. Despite lower petroleum output from Russia, US EIA expects supply to be supported by an increase in production from the US and OPEC. Data from Baker Hughes show

<sup>14</sup> IEA Oil Market Report (April 2022). <https://www.iea.org/reports/oil-market-report-april-2022>

<sup>15</sup> OPEC Monthly Oil Market Report (12 April 2022). <https://www.opec.org/>

<sup>16</sup> Source: April 2022 US EIA Short-Term Energy Outlook. <https://www.eia.gov/outlooks/steo/>

that total US rig count was at 698 as of 29 April 2022, which is 258 rigs higher than the same period in 2021 and 112 rigs higher than end-December 2021.<sup>17</sup>

Still elevated global oil prices was reflected in the steep upward adjustment in domestic fuel prices. On a year-to-date basis (for the week ending 26 April 2022), domestic petroleum products showed a net price increase compared to end-2021 levels.<sup>18</sup> In particular, prices of gasoline, kerosene, and diesel prices in Metro Manila increased by ₱11.30 per liter, ₱24.18 per liter, and ₱29.25 per liter, respectively.

**Developments in the agriculture sector.** The Agriculture, Forestry, and Fishing (AFF) sector posted a 0.2-percent growth in Q1 2022, a slight improvement from the 1.3-percent decline recorded in Q1 2021.<sup>19</sup> The year-on-year growth in AFF output, which was more subdued than the Q4 2021 expansion of 1.4 percent, was due mainly to decreased production registered in the crops, livestock, and fisheries subsectors, offset by the increase in poultry output, forestry/logging, and other support activities for AFF.

In particular, crop production, which accounted for 58.0 percent of the total value of agricultural and fisheries production, decreased by 1.6 percent in Q1 2022.<sup>20</sup> Likewise, livestock production fell by 1.0 percent in Q1 2022 due mainly to lower output for hog, which was still weighed down by the impact of the African Swine Fever (ASF), cattle, and goat. Similarly, the fisheries subsector contracted by 5.8 percent in Q1 2022 from year-ago level due to production declines. By contrast, poultry production grew by 12.3 percent attributed largely to higher production of chicken (13.0 percent) and chicken eggs (12.4 percent).

The NG has rolled-out targeted measures to help stabilize domestic supply of agricultural commodities amid disruptions brought about by the pandemic, natural calamities, and animal diseases. These measures also aim to mitigate the potential impact of the recent crisis between commodity exporters Ukraine and Russia, which will likely cause disruption in the global commodity supply chain and therefore may affect prices of agricultural commodities.

**Global food prices.** The United Nations' Food and Agriculture Organization (FAO) Food Price Index (FPI) eased to 158.5 points in April 2022 from an all-time high of 159.7 points in March 2022 and year-ago levels of 122.1 points. The month-on-month decline was driven by deceleration in the prices of vegetable oils and cereals.

- The cereal price index was weighed down by lower prices of maize as seasonal supplies from ongoing harvests in Argentina and Brazil helped ease pressure on markets. Meanwhile, international wheat prices remain elevated due to supply disruptions in Ukraine and concerns over crop conditions in the US. International rice prices also increased driven by strong demand from China and the Near East.

<sup>17</sup> Source: Baker Hughes Rig Count, North America Rotary Rig Count. <https://bakerhughesrigcount.gcs-web.com/na-rig-count>

<sup>18</sup> Based on common prices in Metro Manila as compiled by the Department of Energy (DOE).

<sup>19</sup> Based on the Q1 2022 National Accounts report published by the Philippine Statistics Authority on 12 May 2022.

<sup>20</sup> The growth rates of the subsectors and commodities are based on the January to March 2022 Performance of Philippine Agriculture report published by the Philippine Statistics Authority on 11 May 2022.

- Similarly, the vegetable oil price index dropped due to subdued import demand for palm oil and demand rationing for sunflower and soy oils. However, the uncertainties on export availabilities from Indonesia, the world's leading palm oil exporter, contained further declines in international vegetable oil prices.
- By contrast, the dairy price index rose reflecting the persistent global supply tightness for milk output in Western Europe and Oceania. World butter prices rose the most, underpinned by strong demand associated with the current shortage of sunflower oil and margarine.
- The meat price index likewise increased reflecting robust demand amid supply shortfall following the avian flu outbreaks in key producing regions and disruption of exports from Ukraine. Pig and bovine meat prices also went up on the back of tightening supply and increased global demand.
- The sugar price index also rebounded driven by strong ethanol demand amid higher ethanol prices in Brazil, as well as the continued strength of the Brazilian real against the US dollar.

## Box Article No. 1: Evaluating the Forecasting Performance of Oil Futures Curves

Predicting the path of global crude oil prices with reasonable accuracy is important among central banks given its strong link to inflation and inflation expectations. Like many central banks and multilateral institutions, the BSP uses the path from futures curve in its baseline assumptions for crude oil prices. The Bank of England (BOE) uses the first six months of the futures curve in its baseline macroeconomic forecasts and assumes that prices would remain constant across the forecast horizon.<sup>1</sup> The European Central Bank (ECB) uses average futures prices observed over a two-week horizon as the baseline assumption, which was subsequently reduced to three days to account for the conflict between Russia and Ukraine.<sup>2</sup> Similarly, the IMF's oil assumptions published in the World Economic Outlook (WEO) are based on futures prices.

The academic literature has documented the weak performance of futures prices of crude oil in predicting spot prices. Nonetheless, Nixon (2012) argued that futures curve remains useful for policymakers given its transparency for communications purposes and that no other simple benchmark models can outperform futures prices. At the same time, central banks, like the BSP, utilize a wide range of crude oil price scenarios to account for the uncertainty surrounding the path of crude oil prices.

This short note evaluates the performance of futures prices as a measure of the expected spot price relative to univariate time series models in terms of forecast performance and adequacy. We also test for the unbiasedness and efficiency of the futures curve to determine whether it systematically over- or under-predicts spot prices. The sample period used is from 2016 to 2021 to focus on the recovery of oil prices following the shale oil boom and COVID-19 pandemic.

To assess the viability of using futures prices vis-à-vis model generated forecasts, we compare the mean absolute errors (MAE) and root mean squared errors (RMSE) of both Brent and Dubai futures prices to forecasts of spot prices from ARIMA and random walk models for the period 2016-2021 (Table 1).

**Table 1. Brent: Forecast Accuracy of Futures, ARIMA and Random Walk**

Sample: 2016-2021	Brent Futures				
	3-Mo.	6-Mo.	9-Mo.	12-Mo.	24-Mo.
MAE (US\$/bbl)	5.7	9.6	12.3	14.3	16.2
RMSE (US\$/bbl)	7.7	12.1	14.7	17.7	19.3
	ARIMA				
	3-Mo.	6-Mo.	9-Mo.	12-Mo.	24-Mo.
MAE (US\$/bbl)	8.5	12.1	15.0	18.3	19.0
RMSE (US\$/bbl)	11.3	14.5	17.9	22.1	23.4
	Random Walk				
	3-Mo.	6-Mo.	9-Mo.	12-Mo.	24-Mo.
MAE (US\$/bbl)	8.1	11.8	14.9	17.8	18.8
RMSE (US\$/bbl)	10.9	14.1	17.9	21.4	23.0

Note: Standard deviation of Brent spot price = 13.6 US\$/bbl

Brent futures curve has lower forecast errors compared to forecasts from ARIMA and random walk models across all forecast horizons. In addition, the forecast adequacy<sup>3</sup> of Brent futures curve is up to 7 months ahead, longer than the univariate models' of up to 3 months ahead.

The same can be observed for Dubai futures curve. It has lower forecast errors in terms of MAE and RMSE compared to ARIMA and random walk for all forecast horizons. Also, the forecast adequacy for Dubai futures curve is up to 8 months, while for the ARIMA model, adequacy of its forecast is only up to 3 months, and only up to 6 months for the random walk.

The Diebold-Mariano test confirms the superiority of the oil futures curve. The lower forecast errors generated from both Brent and Dubai futures curve relative to ARIMA and random walk forecasts across all horizons are significant at 5.0 percent significance level, except for Brent at 24-months ahead where we can only reject at 10.0 percent level of significance (Table 2).

**Table 2. Brent: Diebold-Mariano Test**

Brent					
Diebold-Mariano Test	3-Mo.	6-Mo.	9-Mo.	12-Mo.	24-Mo.
Futures vs. ARIMA	0.00	0.00	0.03	0.01	0.03
Futures vs. Random Walk	0.01	0.01	0.02	0.00	0.08

\*reject if p-value < 0.05

\*\*alternative hypothesis: Futures have lower errors than benchmark

\*\*\*ARIMA(1,1,0)

### Unbiasedness and efficiency of futures curve

The test for unbiasedness and forecast efficiency is based on Alquist and Arbatli (2010), which regresses the ex-post percentage change in the spot price of oil against a constant term and the predicted change based on futures prices at time  $t$ .

$$\log(Spot_{t+h}) - \log(Spot_t) = \alpha + \beta(\log(Futures_{h|t}) - \log(Spot_t)) + \varepsilon_{t+h} \quad (1)$$

for  $h = 3, 6, 9, 12, 24$  months

A joint and individual test of hypothesis is implemented for the constant term  $\alpha = 0$ , and the time-varying risk premium  $\beta = 1$ . The failure to reject the null hypothesis at a specified level of significance would give unbiasedness and efficiency.

Table 3 indicates that Brent futures curve is jointly biased and inefficient across all horizons. However, individual tests showed unbiasedness for 3-, 12- and 24-months at 5.0 percent level of significance. The random walk is likewise jointly biased and inefficient across all horizons, except for 24-months. Furthermore, random walk forecasts are individually unbiased across all forecast horizons. Similar results hold for the Dubai futures curve. These results are consistent with the observation that the crude oil futures prices tended to underpredict actual spot prices when spot prices were increasing following the shale oil boom.



**Table 3. Brent: Unbiasedness and Efficiency**

Brent Futures	Unbiased	Efficient	Unbiased and Efficient	Random Walk	Unbiased	Efficient	Unbiased and Efficient
3	Yes	No	No	3	Yes	No	No
6	No	No	No	6	Yes	No	No
9	No	No	No	9	Yes	No	No
12	Yes	No	No	12	Yes	No	No
24	Yes	No	No	24	Yes	Yes	Yes

### Conclusion

Results from the above exercises indicate that the use of oil futures curve to predict the future path of global oil prices remains a viable practice for central banks. While the futures curve represents a mere snapshot of what the market is willing to pay today for delivery in the future, it can be noted that no simple measure has outperformed the futures curve in terms of accuracy.

We find that forecasts from futures curves have lower forecast errors compared to random walk and ARIMA model with forecast adequacy of 2 to 3 quarters. However, results show that the futures curve is jointly biased and inefficient across all forecast horizons, which may be attributed to the post shale oil boom in the sample period of 2016 to 2021. This implies that forecasts from Brent and Dubai futures could have been scaled upwards to be closer to actual spot prices given observed increase in crude oil prices in 2016-2019 and in 2020-2021, while futures prices were systematically lower.

The exercise highlights the importance of scenarios using a range of crude oil prices when assessing the impact of movements in oil prices on the inflation forecasts. As an extension of the exercise, the use of options-based probability distribution for oil prices in scenario analysis can be explored along with the use of structural models of global oil supply and demand as benchmark.

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<sup>1</sup> Bank of England, Monetary Policy Report, May 2022.

<sup>2</sup> European Central Bank, ECB Staff Macroeconomic Projections for the Euro Area, March 2022.

<sup>3</sup> Refers to the longest period that the RMSE of the forecast is less than the standard deviation of the actual time series (i.e., standard deviation of spot price)

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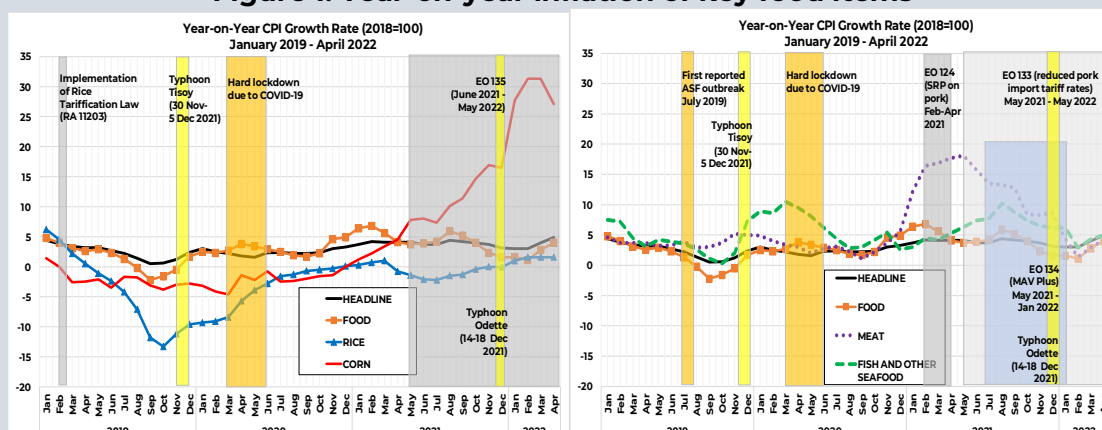
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## Box Article No. 2: Supply-Side Drivers of Inflation

Over the past year and in recent months, inflation pressures have mostly been coming from a limited set of CPI components, driven primarily by supply-side factors. The recent inflation uptrend is influenced mainly by supply shocks related to weather disturbances, supply disruptions brought about by the COVID-19 containment measures, surge in global oil prices which translate to higher local petroleum prices, and the continued impact of the African Swine Fever (ASF) outbreak (as shown in Figure 1). Adverse weather conditions including typhoons produce logistical bottlenecks and reduce agricultural output. Meanwhile, rising international oil prices due to firmer global demand have led to higher transport and power costs. At the same time, the prolonged recovery from the ASF has kept pork prices elevated, even as pork importation has helped to raise domestic meat supply. The impact of these supply shocks on inflation is particularly strong as food and energy account for about 41.5 percent of the consumer basket.

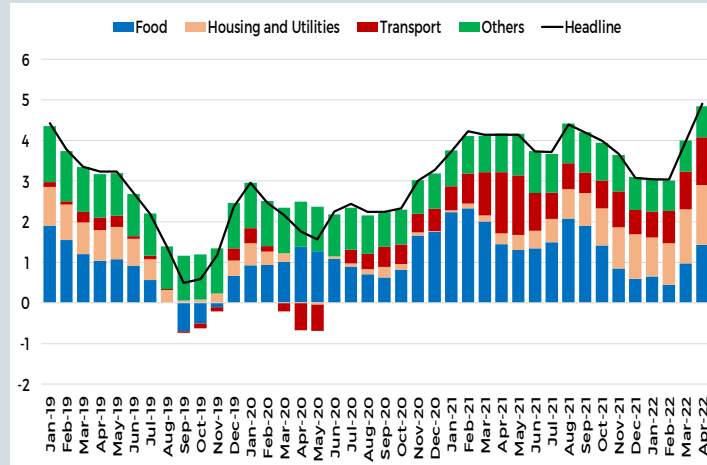
**Figure 1. Year-on-year inflation of key food items**



Source: Philippine Statistics Authority (PSA)

Furthermore, the Russian invasion of Ukraine in February 2022 exacerbated conditions in the global commodity markets, which have already been struggling with soaring prices, supply-chain disruptions, and the continuing fallout from the COVID-19 pandemic. The increase in inflationary pressures emanating from rising global commodity prices have affected domestic inflation dynamics mainly through higher fuel prices which, in turn, has also been affecting prices of certain food commodities namely, meat and fish. This was reflected in the higher inflation outturns for March and April 2022 wherein headline inflation increased markedly to 4.9 percent year-on-year in April from 4.0 percent in the previous month driven by faster price increases of food, electricity, and domestic petroleum.

**Figure 2. Contribution to Headline Inflation**



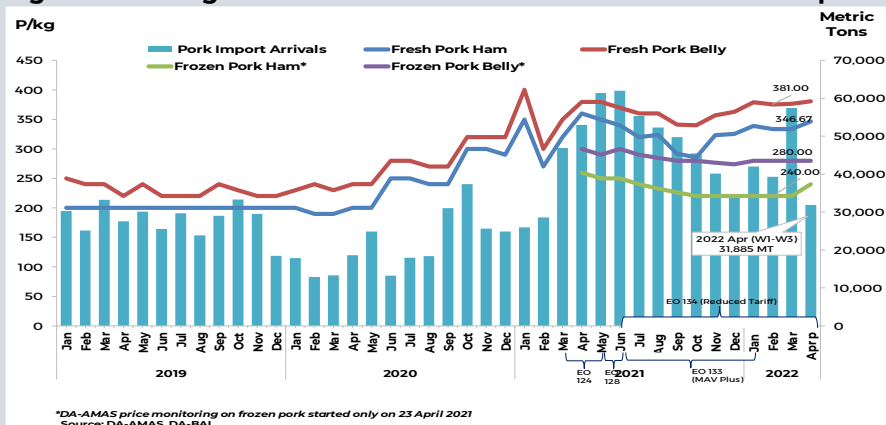
Sources: PSA and BSP staff calculations.

Meanwhile, responding to higher inflation requires a clear understanding of the reasons behind inflationary pressures. Demand-driven inflation, which occurs when supply cannot keep up with the substantial increase in aggregate demand, often requires a firmer monetary policy response. On the other hand, higher inflation caused by rising producer costs or supply-side constraints, which was observed in recent inflation trends, requires direct non-monetary interventions that help ease those supply constraints.

Previous episodes in the country have shown that non-monetary interventions by the government are more appropriate in directly and immediately curbing higher prices of specific commodities caused by supply-side disruptions. Some of the non-monetary measures to address inflation pressures include easing domestic supply constraints by increasing production or addressing distribution bottlenecks. The Philippine government has implemented targeted interventions to address supply-side issues particularly for food commodities, which are crucial in tempering near-term price pressures.

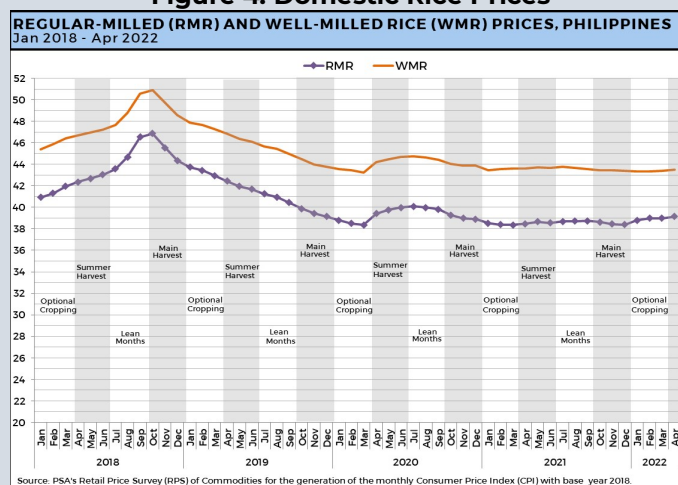
For instance, the temporary relaxation of pork import restrictions<sup>1</sup> such as reduction in tariff rates and increased volume of pork imports has contributed to the relative stability of pork prices, albeit remaining elevated (Figure 3) due to adverse impact of ASF in the local hog production. The interim implementation of suggested retail price for pork products<sup>2</sup> also helped mitigate price pressures particularly during the peak of increase in pork prices in early 2021.

**Figure 3. Average Retail Prices of Pork and Volume of Pork Imports**



On the other hand, allowing the importation of certain types of fish during closed fishing season aimed to augment local fish production, maintain sufficient supply, and provide affordable fish products to consumers.<sup>3</sup> Prior to these measures, the government has passed the Rice Tariffication Law (RTL)<sup>4</sup> in 2019, ending the many years of quantitative restriction on rice imports, which has eventually helped domestic rice prices to remain steady (see Figure 4).

**Figure 4. Domestic Rice Prices**



Over the medium term, the livestock development and competitiveness (LDC) bill being proposed aims to improve the competitiveness of the livestock, poultry, dairy, and corn production sectors. At the same time, the government is promoting urban agriculture and backyard gardening to further boost the supply of other key food items such as vegetables and crops. On the other hand, to help mitigate rising fertilizer prices, additional budget was allotted for the provision of fertilizer subsidies to farmers. The government has also conducted bilateral discussions with fertilizer manufacturing firms in several countries for the supply of major fertilizer grades.

Moreover, to help the country weather the impact of the Russia-Ukraine conflict, the government has also rolled out timely non-monetary government interventions to temper price pressures on basic commodities:

- Thus far, the government has increased fuel subsidy program for PUV from ₱2.5 billion to ₱5.0 billion with the 1st tranche distributed in March 2022. At the same time, additional fuel vouchers for agricultural producers were provided by increasing the budget from ₱500.0 million to ₱1.1 billion, with the 1st tranche released in March 2022 and 2nd tranche in April 2022.

- The Economic Development Cluster (EDC) has also recommended the following measures to the President:

- (a) increasing the buffer stock of gas and diesel from 30 to 45 days and liquefied petroleum gas or LPG from 7 to 15 days;

- (b) expanding the supply of coal and temporarily removing the commodity's most favored nation (MFN) tariff rate of 7.0 percent until December 2022 to ensure sufficient inventory and lower power charges for consumers; and

- (c) lowering tariff rates, expanding the sources of imports, and removing all non-tariff barriers for importation to increase supply and ensure lower prices of rice, corn, pork, fish, chicken, sugar, and wheat.<sup>5</sup>

Notwithstanding ongoing recovery efforts for domestic agricultural production, supply conditions continue to face headwinds emanating from animal diseases, global economic challenges amid the pandemic, and additional uncertainties brought about by the Ukraine-Russia crisis. In addition, the current global supply disruptions may hamper the flow of imported food items and other agricultural inputs to the country. Thus, the immediate, effective, and sustained implementation of non-monetary measures to fill supply gap and boost local production remain crucial.

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<sup>1</sup> Executive Order (E.O.) 133, with validity from 10 May 2021 to 31 January 2022, was issued to increase pork import volume from 54,210 to 254,210 metric tons. Meanwhile, EO 134 which was approved on 17 May 2021 and valid for one year, reduced pork import tariff rates to 10.0-15.0 percent in-quota and 20.0-25.0 percent out-quota.

<sup>2</sup> E.O. 124 was effective from 1 February 2021 to 6 April 2021, which imposed a price ceiling on pork of ₱270 - ₱300 per kilo.

<sup>3</sup> The Department of Agriculture approved the issuance of Certificate of Necessity to Import (CNI) 60,000 metric tons of small pelagic fish for the period 2 September to 31 December 2021, and 18 January to 31 March 2022.

<sup>4</sup> On 14 February 2019, President Duterte signed Republic Act (R.A.) No. 11203, or the "Act Liberalizing the Importation, Exportation, and Trading of Rice, Lifting for the Purpose the Quantitative Import Restriction on Rice, and for Other Purposes." The law, which became effective on 5 March 2019, replaces quantitative restrictions with tariffs, enhances competition in the rice market, and provides for the Rice Competitiveness Enhancement Fund. On 5 April 2019, the Implementing Rules and Regulations (IRR) of the law has been signed by the DA, NEDA, and DBM, as mandated by Section 17 of R.A. No. 11203.

<sup>5</sup> Economic Development Council (EDC), "Subsidies, Stable Food Supply to Help Country Alleviate Economic Impact of Global Tensions", Meeting with the President, 8 March 2022.

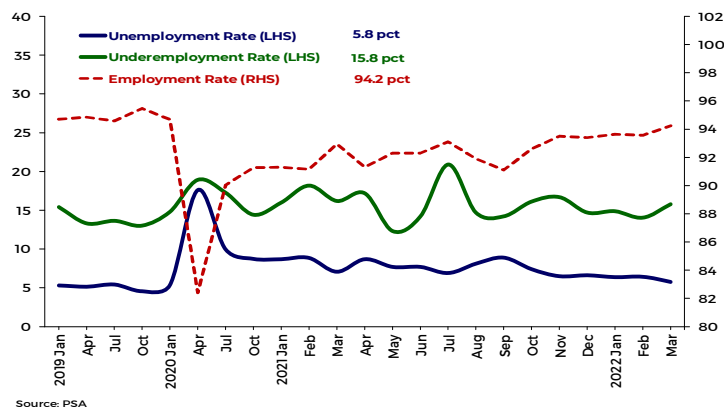
## 4. Labor Market Conditions

Labor market indicators in March 2022 suggest sustained improvement in employment conditions which may be attributed to easing mobility restrictions and improved economic activity during the month.

The unemployment rate improved to 5.8 percent in March 2022, representing about 2.88 million unemployed Filipinos. This was an improvement from the month- and year-ago rates of 6.4 percent and 7.1 percent, respectively. However, the number of unemployed individuals in March 2022 was greater than the level posted during the pre-pandemic period by about 484,000.

On the other hand, employment rate was at 94.2 percent, representing 46.98 million employed individuals. This is higher by about 1.50 million and 1.64 million from month-ago and year-ago levels, respectively. The employment outcome in March 2022 is also higher than the level posted during the pre-pandemic period by 10.4 percent or about 4.43 million employment gains.

**Chart 12. Unemployment Rate, Underemployment Rate and Employment Rate in percent**



The underemployment rate, which is one of the measures of employment quality, stood at 15.8 percent in March 2022 representing about 7.42 million individuals.

Youth labor force participation rate (YLFPR) was at 36.9 percent in March 2022, higher compared to 35.9 percent in the previous month but lower than the 40.1-percent YLFPR the same month a year ago.

**Wage Developments.** On 14 May 2022, the Regional Tripartite Wage and Productivity Board (RTWPB) for the National Capital Region has approved a ₱33 increase in basic pay for the region's non-agricultural and agriculture sectors. This will bring the new minimum wage for the region to ₱570.00 from ₱537.00 for non-agricultural workers and ₱533.00 from ₱500.00 for agricultural workers. According to the Department of Labor and Employment (DOLE), this is expected to benefit around one million minimum wage earners in private establishments for the region.

Likewise, the RTWPB for Region VI (Western Visayas) has approved a ₱55 and ₱110 increase in basic pay for the region's non-agriculture, industrial, and commercial establishments employing more than 10 workers and those employing 10 or less workers, respectively. This will bring the new minimum wages in the region to ₱450 for establishments with more than 10 workers and ₱420 for establishments with 10 or less workers. Meanwhile, agriculture workers have been granted a ₱95 increase in basic pay which brings the new minimum wage to ₱410 for the sector. The two wage orders are expected to take effect on 3 June 2022.

Meanwhile, as of 18 May 2022, the RTWPBs for Regions I (Ilocos Region), II (Cagayan Valley), and XIII (CARAGA) also approved increase in the basic pay for each region's minimum wage earners. The RTWPB for Ilocos Region has approved a ₱60 and ₱90 increase in basic pay for the region's non-agriculture establishments employing more than 10 workers and those employing 10 or less workers, respectively. This will bring the new minimum wages in the region to ₱400 for establishments with more than 10 workers and ₱372 for establishments with 10 or less workers. Similarly, the RTWPB for Cagayan Valley has approved a wage order granting wage increases ranging from ₱50 to ₱75 in two to three tranches. After the full implementation, this will bring the minimum wage rate in the region in the range of ₱400 to ₱420. The RTWPB for CARAGA also approved the integration of the ₱15 cost of living allowance (COLA) to the basic salary and an additional ₱30 increase in basic pay for the region which brings the minimum wage for non-agriculture workers to ₱350. These wage orders are expected to take effect 15 days upon publication in a newspaper of regional circulation.

## 5. Monetary Operations

As of 26 April 2022, total outstanding amount absorbed in the BSP liquidity facilities stood at about ₱1.603 trillion, higher than the total placements recorded in pre-IRC period as of 25 May 2016<sup>21</sup> at around ₱1.3 trillion and the pre-pandemic end-December 2019 level at ₱854 billion. The bulk of the BSP's monetary operations to absorb excess liquidity had been conducted through the term deposit facility (TDF), comprising about 36.0 percent of total (or about ₱576.8 billion). Placements in the BSP Securities facility (BSP-SF), overnight reverse repurchase (RRP) facility, and overnight deposit facility (ODF) made up about 31.8 percent (₱509.6 billion), 19.0 percent (₱305.0 billion), and 13.2 percent (₱211.9 billion), respectively, of the total amount of liquidity absorbed by the BSP.

As of 4 May 2022, the weighted average interest rate (WAIR) for the 7-day fell slightly to 1.9597 percent, settling lower by 0.018 basis point (bp) from the rate fetched during the 27-April 2022 auction. Meanwhile, the WAIR for the 14-day term deposits increased by 6.716 bps to 2.0352 percent from the previous auction.

As of the latest data in May 2022,<sup>22</sup> average weekly bid-to-cover ratios for the 7-day and 14-day TDFs stood at 1.39x (from 0.95x in April 2022) and 0.92x (from 1.01x in April 2022), respectively. The TDF auction results during the review period reflect market participants' preference to hold on to cash due to scheduled funding

<sup>21</sup> Last Wednesday of May before the start of IRC implementation in 2016.

<sup>22</sup> As of 4 May 2022



requirements such as loan releases and time deposit maturities. Nonetheless, financial system liquidity remains ample.<sup>23</sup>

For the issuance of BSP Bills (BSPB), the resulting WAIR for the 28-day BSPB declined to 1.9523 percent on 29 April 2022 from 1.9978 percent fetched during the BSPB auction on 25 March 2022. In April 2022, average weekly bid-to-cover ratios for 28-day BSPB stood at 1.40x relative to March 2022.

For the daily RRP auctions, the average bid-to-cover ratio in April 2022 was recorded at 2.83x, slightly lower than the bid-to-cover ratio in March 2022 at 2.70x.

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<sup>23</sup> The 28-day TDF has not been offered starting with the 14 October 2020 TDF auction, reflecting the full migration of auction volumes to the 28-day BSP Bills.

### Box Article No. 3: The BSP's Exit Strategy after the Pandemic

The COVID-19 pandemic forced the hand of central banks across the world, with the degree of intervention not seen since the Global Financial Crisis and the Asian Financial Crisis.

In the case of the Philippines, the Bangko Sentral ng Pilipinas (BSP) laid down unprecedented monetary easing measures at the onset of the pandemic to provide liquidity and sustain market confidence. Not only was this done to ensure the financial system continued to function well, but it was also geared towards preventing serious scarring of the economy over the medium term. The BSP's policy actions (see table below) also complemented the health and fiscal programs of the national government (NG) in mitigating the impact of COVID-19.

**Table. Extraordinary Measures Implemented During the Pandemic**

<b>Monetary Policy Actions</b>	<ul style="list-style-type: none"> <li>• 200 basis points (bps) cumulative reduction in policy rate from 4.0 percent to 2.0 percent for the period February 2020 - November 2020</li> <li>• Interest rates on the overnight deposit and lending facilities (i.e., ODF and OLF) were reduced accordingly</li> </ul>
<b>Liquidity-easing Measures</b>	<ul style="list-style-type: none"> <li>• 200 bps reduction in RRR of universal and commercial banks effective on 3 April 2020</li> <li>• 100 bps reduction in RRR of thrift and rural/cooperative banks effective on 31 July 2020</li> <li>• Reduction in the scale of monetary operations for liquidity absorption</li> <li>• Temporary reduction of the term spreads to zero on peso rediscounting loans and rediscounting loans under the Exporters' Dollar and Yen Rediscount Facility (EDYRF) relative to their respective reference interest rates</li> <li>• New or re-financed loans to micro, small and medium enterprises (MSMEs) and eligible large enterprises<sup>1</sup> during the pandemic allowed as alternative mode of RR compliance</li> </ul>
<b>Asset Purchases</b>	<ul style="list-style-type: none"> <li>• Purchase of GS in the secondary market beginning 24 March 2020</li> </ul>
<b>Direct Assistance to National Government (NG)</b>	<ul style="list-style-type: none"> <li>• P300-billion repurchase agreement with the NG on 27 March 2020 (which matured on 29 June 2020 but extended for another 3 months and settled on 29 September 2020)</li> <li>• Approved P540-billion provisional advances to NG on 24 September 2020 (repaid on 18 December 2020)</li> <li>• Approved P540-billion provisional advances to NG on 28 December 2020 (repaid on 7 July 2021);</li> <li>• Approved P540-billion provisional advances to NG on 16 July 2021 (repaid on 10 December 2021);</li> <li>• Approved P300-billion provisional advances to NG on 16 December 2021 (to be repaid by June 2022)</li> </ul>

Through the BSP's liquidity-easing measures, the amount of liquidity injected into the financial system was estimated at around ₱2.2 trillion as of 12 May 2022, equivalent to about 11.3 percent of the country's nominal gross domestic product (GDP) in 2021. Consequently, market interest rates and market participation in the BSP's open market operations have stabilized, reflecting ample liquidity in the financial system.

Moreover, to maintain stability of the financial system and ensure public access to financial services, regulatory relief measures were implemented by the BSP to ease the impact of the crisis on the balance sheet of banks as well as to help their crisis-hit customers. Such measures include, among others, allowing loans to micro, small, and medium enterprises as an alternative means to comply with reserve requirements, increasing the single borrower's limit, and raising the ceiling for real-estate loans.

Two years after COVID-19 disrupted the global economy, recovery across jurisdictions has begun to take shape. Increased mobility and the return of some pre-pandemic activities have been some of the telltale signs, with these developments not lost on the financial system. As the economy continues to recover, there is a need to dial back and reverse some of the pandemic-induced measures, considering the circumstances that called for these interventions have receded.

For this reason, central banks often refer to an "exit strategy" after undertaking extraordinary measures and major adjustments in their policy settings. An exit strategy helps ensure that the adjustment to normal times occurs smoothly. The unwinding will need to be done carefully, since an abrupt or poorly timed withdrawal could derail the economic recovery from the pandemic, disrupt financial markets, or impair the safety and soundness of the financial system. The figure below shows the components of the exit strategy of the BSP.

**Figure. Components to the BSP's Exit**



The first component involves the recalibration of the BSP's monetary operations through the gradual absorption of excess liquidity to ensure that the desired monetary policy stance is transmitted to the economy through the short-term interest rates. The second component involves the pursuance of the BSP interest rate corridor (IRC) roadmap to ensure effective implementation. Meanwhile, the third component involves the unwinding of the extraordinary liquidity measures. The fourth component comprises the raising of the policy interest rate when prospects for the economy are firm. Finally, the fifth component pertains to the preparation for future crises.

Consistent with the BSP's data-dependent approach to policymaking, the implementation of the BSP's exit strategy will be outcome-based rather than anchored on a particular date. Decisions on the timing and circumstances under which policy should change could be guided by several indicators, which include the following:

- *Inflation and growth outlook.* Adjustments in the key policy rate will remain contingent on the outlook for inflation and economic growth, as embodied in the inflation forecasts over the policy horizon. The BSP looks at a wide array of

demand- and supply-side factors that can potentially have an impact on the inflation outlook.

- *Financial stability risks.* Emerging risks to financial stability include the buildup of imbalances in asset markets. Before the pandemic, the BSP had already put in place various macroprudential measures and introduced new monitoring tools to help safeguard against asset price bubbles. The BSP also introduced active liquidity management facilities such as the TDF and BSP Securities for absorbing excess liquidity from the financial system if needed. These instruments will help temper the risk of asset price inflation or excessive risk-taking behavior.
- *State of public health.* A sustained decline in community transmission and sufficient deployment of vaccines can help boost consumer and business sentiment, which may lead to a faster economic recovery.
- *Global developments and spillovers.* External risk factors can impact domestic financial and growth conditions, including global economic growth and shifts in monetary policy in major economies.

The BSP has already taken steps to prepare the economy as it begins the post-pandemic phase. The exit strategy provides the groundwork and flexibility for the BSP to address further developments and pursue its monetary and financial stability objectives.

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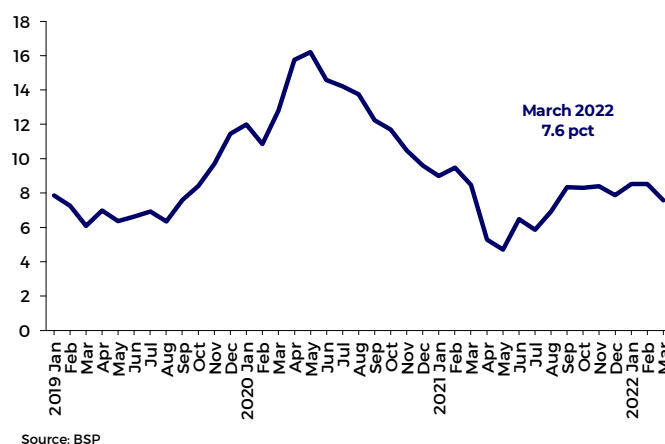
<sup>1</sup> A large enterprise refers to a sole proprietorship, partnership, corporation, or cooperative that: (a) does not belong to a conglomerate structure, (b) has an asset size (less land) of more than ₱100 million and an employment size of 200 employees or more, and (c) is a critically-impacted business enterprise that has been directly and adversely impacted by the COVID-19 outbreak.

## 6. Financial Conditions

**Domestic Liquidity.** Preliminary data show that domestic liquidity (M3) grew by 7.6 percent year-on-year to about 15.2 trillion in March 2022 following an 8.5-percent (revised) expansion in February. On a month-on-month seasonally-adjusted basis, M3 growth was broadly unchanged.

Domestic claims rose by 7.3 percent year-on-year in March from 8.8 percent in the previous month due to the improvement in bank lending to the private sector and expansion in net claims on the central government. Claims on the private sector grew by 5.6 percent in March from 4.9 percent in February as bank lending to non-financial private corporations and households rose. Meanwhile, net claims on the central government increased by 13.3 percent in March from 21.0 percent in February owing to the sustained borrowings by the National Government.

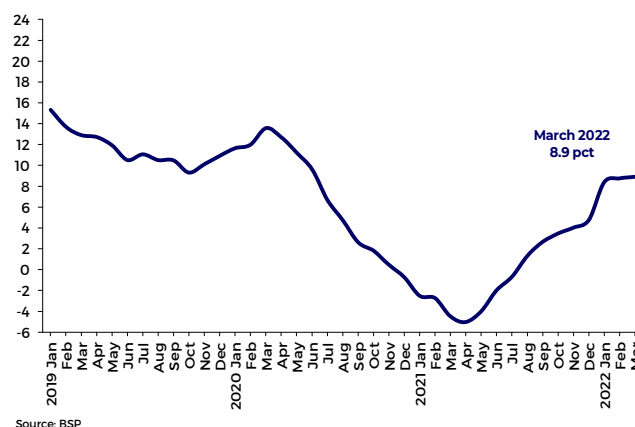
**Chart 13. Domestic Liquidity**  
year-on-year growth rate; in percent



Net foreign assets (NFA) in peso terms increased by 8.4 percent in March from 6.5 percent in February. The expansion in the BSP's NFA position reflected the higher level of gross international reserves relative to the same period a year ago. Likewise, the NFA of banks increased as banks' foreign assets grew at a faster pace on account of higher investments in marketable debt securities and deposits maintained with nonresident banks.

**Bank Lending.** Preliminary data show that outstanding loans of universal and commercial banks (U/KBs), net of reverse repurchase (RRP) placements with the BSP, expanded anew at a slightly quicker rate of 8.9 percent year-on-year in March from 8.8 percent in February, marking the eighth consecutive month of expansion. On a month-on-month seasonally-adjusted basis, outstanding universal and commercial bank loans, net of RRP, went up by 0.2 percent. Lending activity has gained further traction as the country's improved COVID-19 caseload continues to support market confidence.

**Chart 14. Loans Outstanding of Commercial Banks**  
year-on-year growth rate; in percent



Outstanding loans to residents, net of RRP, also increased by 8.9 percent in March from 8.8 percent in February as loans for production activities continue to expand. Outstanding loans for production activities rose by 9.5 percent in March from 9.7 percent in February due to the increase in lending for real estate activities (19.7 percent); information and communication (28.4 percent); manufacturing (10.0 percent); wholesale and retail trade, repair of motor vehicles and motorcycles (8.7 percent); and financial and insurance activities (6.2 percent).

Similarly, consumer loans to residents went up by 3.6 percent in March after a 0.9-percent increase in February with the year-on-year rise in credit card loans. Outstanding loans to non-residents<sup>24</sup> also went up by 9.5 percent in March from 7.3 percent in the previous month.

### Credit Standards<sup>25, 26</sup>

Results of the Q1 2022 Senior Bank Loan Officers' Survey (SLOS) continued to indicate that a large proportion of bank respondents maintained their overall lending standards for loans to businesses and households based on the modal approach.<sup>27</sup> Meanwhile, the diffusion index (DI) approach<sup>28, 29</sup> pointed to mixed

<sup>24</sup> Outstanding loans to non-residents include loans by UKB's foreign currency deposit units (FCDUs) to non-residents.

<sup>25</sup> The survey consists of questions on loan officers' perceptions relating to the overall credit standards of universal/commercial banks (U/KBs) and selected large thrift banks (TBs) in the Philippines, as well as to factors affecting the supply of and demand for loans by both enterprises and households. Survey questionnaires were sent to 64 U/KBs and TBs, of which, 52 banks responded to the current survey representing a response rate of 81.3 percent.

<sup>26</sup> Survey responses for the Q1 2022 SLOS were gathered between 1 March to 7 April 2022. The duration of data gathering was in conjunction with the government's placement of NCR and 38 other areas in CAR and Regions 1 to 11 under COVID-19 Alert Level 1.

<sup>27</sup> In the modal approach, the results of the survey are analyzed by looking at the option with the highest share of responses.

<sup>28</sup> In the DI approach, a positive DI for credit standards indicates that the proportion of respondent banks that have tightened their credit standards exceeds those that eased ("net tightening"), whereas a negative DI for credit standards indicates that more respondent banks have eased their credit standards compared to those that tightened ("net easing").

<sup>29</sup> During the Q1 2010 to Q4 2012 survey rounds, the BSP used the DI approach in the analysis of survey results. Beginning in Q1 2013, the BSP used both the modal DI approaches in assessing the results of the survey.

results given that credit standards for enterprises generally showed a net tightening while a net easing of overall lending standards was reflected for consumer loans.

**Lending to enterprises.** The modal-based results for Q1 2022 showed that most respondent banks (72.0 percent) indicated generally unchanged overall lending standards for loans to businesses. The DI-based method pointed to net tightening of overall credit standards across all borrower firm sizes (specifically top corporations, large middle-market enterprises, small and medium enterprises, and micro enterprises). Bank respondents indicated that the reported tightening of overall lending standards was mainly due to the deterioration of borrower's profile and profitability of bank's portfolio as well as reduced tolerance for risk and less favorable economic outlook.

**Table 18. General Credit Standards for Loans to Enterprises (Overall)**

	2019				2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Tightened Considerably	2.1	4.8	4.1	0.0	2.8	20.4	20.5	14.6	10.6	8.0	4.2	4.2	10.0
Tightened Somewhat	22.9	11.9	12.2	15.2	30.6	49.0	27.3	17.1	14.9	20.0	20.8	14.6	16.0
<b>Remained Basically Unchanged</b>	<b>72.9</b>	<b>81.0</b>	<b>81.6</b>	<b>84.8</b>	<b>66.7</b>	<b>24.5</b>	<b>45.5</b>	<b>63.4</b>	<b>66.0</b>	<b>70.0</b>	<b>70.8</b>	<b>75.0</b>	<b>72.0</b>
Eased Somewhat	0.0	0.0	0.0	0.0	0.0	6.1	6.8	4.9	8.5	2.0	4.2	6.3	2.0
Eased Considerably	2.1	2.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Diffusion Index for Credit Standards</b>	<b>22.9</b>	<b>14.3</b>	<b>14.3</b>	<b>15.2</b>	<b>33.3</b>	<b>63.3</b>	<b>40.9</b>	<b>26.8</b>	<b>17.0</b>	<b>26.0</b>	<b>20.8</b>	<b>12.5</b>	<b>24.0</b>
<b>Number of Banks Responding</b>	<b>48</b>	<b>42</b>	<b>49</b>	<b>46</b>	<b>36</b>	<b>49</b>	<b>44</b>	<b>41</b>	<b>47</b>	<b>50</b>	<b>48</b>	<b>48</b>	<b>50</b>

Note: A positive diffusion index for credit standards indicates that more banks have tightened their credit standards compared to those that eased ("net tightening"), whereas a negative diffusion index for credit standards indicates that more banks have eased their credit standards compared to those that tightened ("net easing").

Source: BSP

Over the next quarter, while a larger number of respondent banks anticipate maintained overall credit standards for business loans, the DI-based approach continue to show expectations of net tightening loan standards given increased uncertainty in economic growth outlook, reduced risk tolerance, and a deterioration in borrower's profile and bank's portfolio.

**Lending to households.** In Q1 2022, most respondent banks (62.5 percent) kept their overall credit standards unchanged for loans extended to households. By contrast, DI-based results continued to indicate a net easing of overall lending standards for all types of consumer loans namely, housing, credit card, auto and personal/salary loans.<sup>30</sup> Respondents associated the net easing of overall credit standards for consumer loans with more favorable economic outlook, increased tolerance for risk, as well as improvement in borrower's profile and profitability in bank's portfolio.

<sup>30</sup> Lending standards on credit card loans reportedly eased amid the issuance of BSP Memorandum Circular No. 1098 which sets a ceiling rate of 24 percent per annum on the interest or finance charge that can be imposed on all credit card transactions (except credit card installment loans). In April 2021, the BSP announced that the cap on credit card charges will be retained in line with the low interest rate environment and the BSP's accommodative monetary policy stance.

**Table 19. General Credit Standards for Loans to Households (Overall)**

	2019				2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Tightened Considerably	3.3	4.0	3.1	0.0	0.0	39.4	16.7	3.7	9.4	5.7	5.6	2.9	2.8
Tightened Somewhat	16.7	8.0	6.3	6.9	21.7	21.2	30.0	11.1	9.4	20.0	11.1	8.6	5.6
<b>Remained Basically Unchanged</b>	<b>73.3</b>	<b>88.0</b>	<b>81.3</b>	<b>89.7</b>	<b>69.6</b>	<b>33.3</b>	<b>50.0</b>	<b>77.8</b>	<b>75.0</b>	<b>68.6</b>	<b>69.4</b>	<b>65.7</b>	<b>63.9</b>
Eased Somewhat	3.3	0.0	9.4	3.4	8.7	6.1	3.3	7.4	6.3	5.7	13.9	17.1	27.8
Eased Considerably	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Diffusion Index for Credit Standards</b>	<b>13.3</b>	<b>12.0</b>	<b>0.0</b>	<b>3.4</b>	<b>13.0</b>	<b>54.5</b>	<b>43.3</b>	<b>7.4</b>	<b>12.5</b>	<b>20.0</b>	<b>2.8</b>	<b>-11.4</b>	<b>-19.4</b>
<b>Number of Banks Responding</b>	<b>30</b>	<b>25</b>	<b>32</b>	<b>29</b>	<b>23</b>	<b>33</b>	<b>30</b>	<b>27</b>	<b>32</b>	<b>35</b>	<b>36</b>	<b>35</b>	<b>36</b>

Note: A positive diffusion index for credit standards indicates that more banks have tightened their credit standards compared to those that eased ("net tightening"), whereas a negative diffusion index for credit standards indicates that more banks have eased their credit standards compared to those that tightened ("net easing").

Source: BSP

Over the next quarter, the modal-based method revealed that a higher number of respondent banks expect to maintain their overall lending standards. Similar with the previous survey results, the DI-based approach pointed to bank respondents' anticipation of net easing of overall lending standards for households given the improvement in borrower's profile, less uncertain economic outlook, and increased tolerance for risk.

**Loan demand.** Survey results for Q1 2022 indicated that majority of the respondent banks pointed to a generally unchanged credit demand from both enterprises and households based on the modal approach. Meanwhile, DI-based results showed a net rise in overall demand for credit from across all firm types (particularly for top corporations, large middle-market firms, small and medium enterprises, and micro-enterprises) and all categories of household loans (specifically housing loans, credit card loans, auto loans, and personal/salary loans).

In the following quarter, the modal approach revealed that half of the respondent banks pointed to an expected rise in overall demand for credit from businesses while 46.0 percent of respondent banks anticipate generally unchanged loan demand from firms. Similarly, the DI-method indicated expectations of a net increase in overall demand for credit from firms.

**Real estate loans.** Q1 2022 results showed that a high percentage of respondent banks (72.2 percent) reported generally maintained overall lending standards for commercial real estate loans (CRELs). Meanwhile, the DI-based approach indicated a net tightening of loan standards for CREL's for the 25<sup>th</sup> consecutive quarter. Respondents identified the following key factors in the tightening of overall credit standards for CRELs: banks' reduced tolerance for risk, a deterioration of borrowers' profile, a less favorable economic outlook, and stricter financial regulations.

Over the following quarter, modal-based results presented banks' anticipation of maintained credit demand for CRELs, while the DI-based method reflected a net rise in demand. Bank respondents noted the following reasons for the anticipated net increase in loan demand: customers' positive economic prospects, increased



inventory financing requirements, and lower customers' internally-generated funds.

On housing loans extended to households, a larger proportion of banks (61.8 percent) conveyed generally unchanged credit standards based on the modal approach while the DI approach determined a net easing in Q1 2022. For the next quarter, DI values also pointed to expectations of net easing in lending standards for housing loans, mainly due to improvement in borrowers' profile, more optimistic economic growth outlook, and increased risk tolerance.

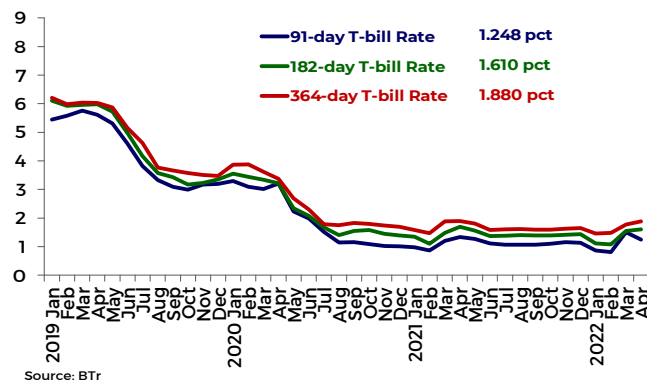
Respondent banks continue to indicate expectations of a net increase in housing loan demand for Q2 2022, which was mainly associated with higher housing investment and household consumption as well as financial firms' more attractive conditions for borrowers.

**Primary GS market and rates.** During the 2 May 2022 T-bill auction, the average interest rates for the 91-, 182- and 364-day T-bills increased by 13.2 basis points (bps), 7.7 bps and 3.2 bps to 1.272 percent, 1.635 percent and 1.933 percent, respectively, from the rates fetched during the 25 April 2022 auction. The results of the auction reflected market participants' expectation of a higher inflation print for April 2022.

The Auction Committee awarded in full the offered amounts of ₱5.0 billion each for the 91-day and 182-day T-bills but made partial awards of around ₱2.6 billion out of the ₱4.6-billion total tenders for the 364-day T-bills, lower than the offered amount of ₱5.0 billion.

Total tenders for all maturities reached about ₱23.7 billion, or about 1.6 times the ₱15.0-billion total amount offered by the Bureau of the Treasury (BTr).

**Chart 15. Treasury Bill Rates**  
in percent

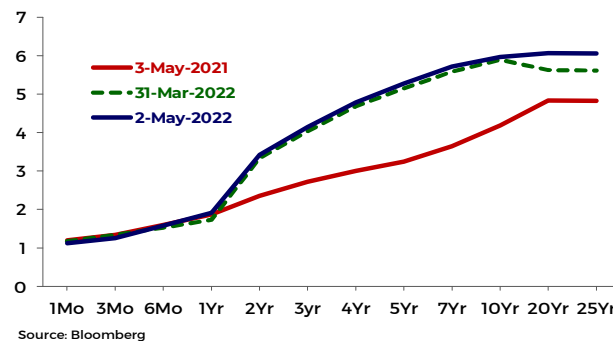


On 26 April 2022, the BTr awarded a partial amount of about ₱17.6 billion out of the total offered amount of ₱35.0 billion for the reissued 10-year T-bonds with remaining life of 9 years and 8 months. The average interest rate fetched for the said T-bond was 6.313 percent, 22.1 bps higher than the average rate of 6.092 percent during the 29 March 2022 auction for the same tenor.

The auction was oversubscribed with tenders reaching around ₱56.4 billion or 1.6 times the offered amount of ₱35.0 billion.

**Secondary market GS yield curve.** On 2 May 2022, secondary market GS yields increased relative to end-March 2022 amid market players' cautious sentiment on the prospect of a possible policy rate adjustment by the BSP following the statement of the Governor that the BSP may consider hiking its policy rate at its 23-June monetary policy meeting. The positive spreads of secondary market rates over the BSP overnight RRP rate on 2 May 2022 were wider relative to end-March 2022 levels.

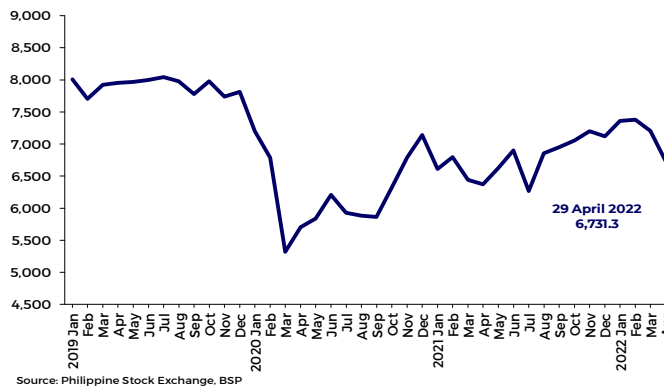
**Chart 16. Yields of Government Securities in the Secondary Market**  
in percent



As of 2 May 2022, the spreads between the 10-year and 1-year GS rates and the 10-year and 5-year GS rate were narrower at 405.3 bps (from 416.2 bps as of end-March 2022) and 69.2 bps (from 74.3 bps as of end-March 2022), respectively, as a result of the larger increases in the 1-year and 5-year GS rates relative to the rise in 10-year GS rate.

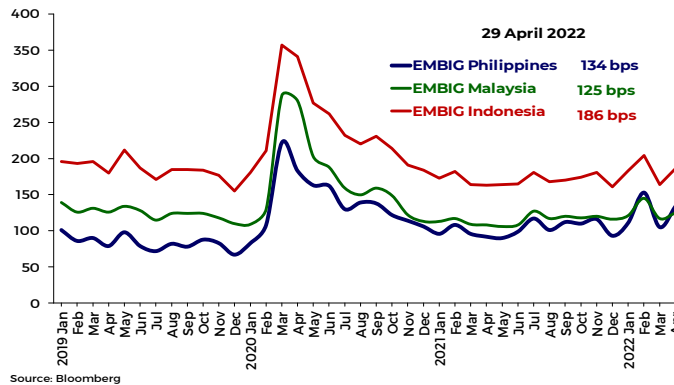
**Stock Market.** The Philippine Stock Exchange index (PSEi) further lost momentum in April 2022 amid the US Fed's aggressive monetary tightening, reimposition of lockdowns in China due to the renewed COVID-19 surge and the continued Russia-Ukraine conflict. Nevertheless, positive developments in the domestic setting provided support to the PSEi such as the faster-than-initially reported GDP growth in 2021 and the continued decline in COVID-19 cases that resulted in the easing of mobility restrictions starting March 1. The PSEi closed at 6,731.3 index points on 29 April 2022, lower month-on-month and year-to-date by 6.6 percent and 5.5 percent, respectively.

**Chart 17. Philippine Stock Exchange Index**  
end-period; index points

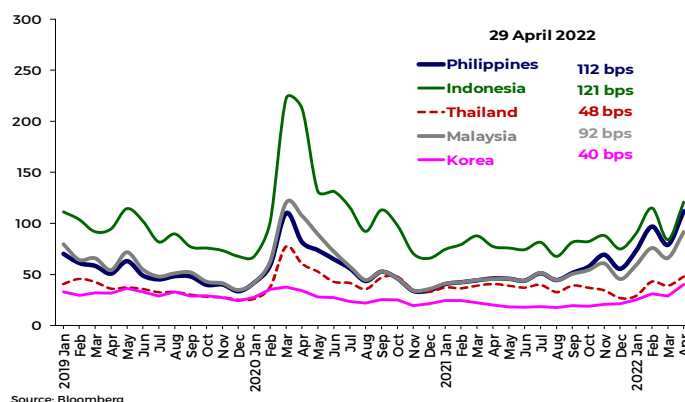


**Sovereign Bond and Credit Default Swap (CDS) Spreads.** Debt spreads widened as markets continued to demand a higher risk premium from the ongoing war between Russia and Ukraine. Policy pronouncements on the continuation of monetary policy normalization in the US likewise contributed to the expansion of sovereign debt spreads. As of 29 April 2022, the Emerging Market Bond Index Global (EMBIG) Philippines spread, the extra yield investors demand to hold Philippine sovereign debt relative to US Treasuries, stood at 134 basis points (bps). This was higher than the end-March 2022 level of 105 bps. Similarly, the country's 5-year sovereign credit default swap (CDS) widened to 112 bps from 79 bps during the same period.

**Chart 18. EMBIG Spreads of Selected ASEAN Countries**  
in basis points



**Chart 19. Five-Year CDS Spreads of Selected ASEAN Countries in basis points**



**Exchange rate.** In April 2022, the peso averaged ₱52.00/US\$1 appreciating by 0.19 percent from the ₱52.10/US\$1 average during the previous month. The peso appreciated amid positive domestic developments which include statement from the BSP that it is prepared to take pre-emptive action as needed if inflation expectations become at risk or de-anchored.<sup>31</sup> On a year-to-date basis, the peso depreciated against the US dollar along with other Asian currencies by 2.28 percent to close at ₱52.19/US\$1 on 29 April 2022 from the end-December 2021 closing rate of ₱51.00/US\$1.

On a real trade-weighted basis, the peso gained external price competitiveness in March 2022 (y-o-y) against the basket of currencies of all trading partners (TPI), trading partners in advanced (TPI-A) and developing (TPI-D) countries. This was indicated by the decrease in the real effective exchange rate (REER) index of the peso by 3.41 percent, 1.94 percent and 1.85 percent against the TPI, TPI-A and TPI-D, respectively.<sup>32,33</sup>

<sup>31</sup> BSP Governor Benjamin E. Diokno said during the Philippine Economic Briefing held in Pasay City on 5 April 2022 that BSP will remain vigilant against possible second-round effects from supply-side pressures or shifts in inflation expectations following the release of March 2022 inflation data, which showed an uptick to 4.0 percent from 3.0 percent a month ago. (Source: Bworldonline)

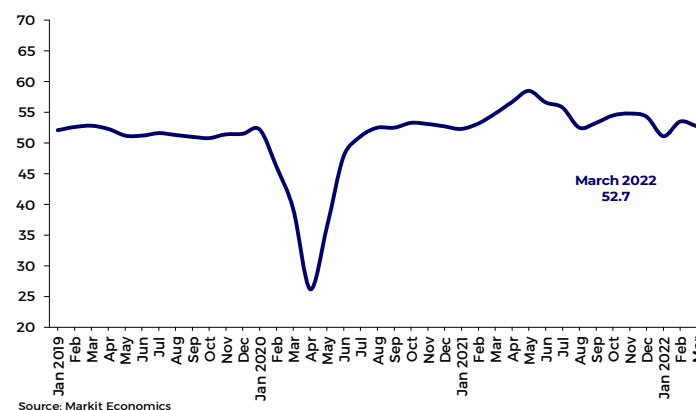
<sup>32</sup> The Trading Partners Index (TPI) measures the nominal and real effective exchange rates of the peso across the currencies of 14 major trading partners of the Philippines which include US, Euro Area, Japan, Australia, China, Singapore, South Korea, Hong Kong, Malaysia, Taiwan, Indonesia, Saudi Arabia, United Arab Emirates, and Thailand. The TPI-Advanced (TPI-A) measures the effective exchange rates of the peso across currencies of trading partners in advanced countries comprising of the US, Japan, Euro Area and Australia. The TPI-Developing (TPI-D) measures the effective exchange rates of the peso across 10 currencies of partner developing countries which include China, Singapore, South Korea, Hong Kong, Malaysia, Taiwan, Indonesia, Saudi Arabia, United Arab Emirates, and Thailand.

<sup>33</sup> The REER index represents the Nominal Effective Exchange Rate (NEER) index of the peso, adjusted for inflation rate differentials with the countries whose currencies comprise the NEER index basket. A decrease in the REER index indicates some gain in the external price competitiveness of the peso, while a significant increase indicates the opposite. The NEER index, meanwhile, represents the weighted average exchange rate of the peso vis-à-vis a basket of foreign currencies.

## 7. External Developments

Global economic output expands at a slower rate reflecting the impact of a COVID-19 resurgence in China and the Russia-Ukraine conflict. The JP Morgan All-Industry Output Index fell to 52.7 in March from 53.5 in February as output growth slowed in both the manufacturing and service sectors amid a slower increase in new order intakes and a decrease in new export business. Global factors such as the COVID-19 resurgence in China as well as the Russia-Ukraine crisis tempered the positive effect of looser pandemic-related restrictions on overall economic activity. The steepest improvement in economic activity was seen in Ireland, the UK, and the US, while contractions were recorded by China, Russia, and Kazakhstan.<sup>34</sup>

**Chart 20. JP Morgan Global All-Industry Output Index**  
index points



In the April 2022 World Economic Outlook (WEO) report, the IMF downgraded its full-year economic growth projections to 3.6 percent for both 2022 and 2023 from 4.4 percent and 3.8 percent, respectively, in the January WEO forecasts. The ongoing war in Ukraine and the sanctions imposed on Russia are expected to dampen global economic activity in 2022 through direct impacts on both Russia and Ukraine and via global spillovers. The war and related sanctions have contributed to tighter global financial conditions, lower risk appetite, and flight-to-quality flows.

For advanced economies, particularly, the US, the IMF lowered its growth forecasts due to expectations of faster withdrawal of monetary support to rein in inflation as well as the trade impact of war-related disruptions. For the euro area, higher global prices are seen to translate to lower output and higher inflation, while supply chain disruptions could affect industries such as automobile production. For EMDEs, the IMF also reduced its growth forecasts given the recent surge in COVID-19 infections in China and the resulting mobility restrictions, as well as the expected spillovers from the ongoing Russia-Ukraine conflict. Significant

<sup>34</sup> JP Morgan Global Composite PMI, <http://www.markiteconomics.com/>. A diffusion index is calculated for each survey variable. The index is the sum of the percentage of 'higher' responses and half the percentage of 'unchanged' responses. The indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease.

downgrades to the 2022 growth outlook include Japan and India, partly reflecting the weaker domestic demand due to higher oil prices, as well as lower net exports.

**Policy Actions by Other Central Banks.** On 13 April 2022, the Bank of Canada increased the overnight rate by 50 basis points (bps) to 1.0 percent as excess demand, prolonged supply disruptions, and rising global food and oil prices further intensified domestic inflationary pressures. Amid the Canadian economy's strong economic recovery and with inflation persisting above target, the Governing Council also decided to begin quantitative tightening, effective 25 April 2022, and ended reinvestment of maturing government bonds. Looking ahead, the Bank of Canada emphasized that interest rates will need to rise further to achieve the Bank's commitment to price stability.

Similarly, on 13 April 2022, the Reserve Bank of New Zealand (RBNZ) raised the Official Cash Rate (OCR) by 50 bps to 1.5 percent as price pressures persisted amid labor shortages as well as deteriorating supply and demand imbalances. The Monetary Policy Committee moved the OCR to a more neutral stance sooner to mitigate risks of rising inflation expectations.

On 14 April 2022, the Bank of Korea (BOK) likewise increased the Base Rate by 25 bps to 1.5 percent amid the continued acceleration of domestic inflation due to higher prices of petroleum products, personal services, and other industrial commodities. The BOK intends to recalibrate its monetary policy settings as needed to sustain recovery momentum and ensure that its price and financial stability objectives are achieved. As economic uncertainties persist, BOK will continue to monitor potential risks from the COVID-19 pandemic, financial imbalances, monetary policy movements, and geopolitical tensions.

On 3 May 2022, the Reserve Bank of Australia increased the cash target rate by 25 bps to 35 bps as the Board of the RBA views that it is now appropriate to begin the process of normalizing monetary conditions. In its decision, the Board considered primarily the resilience of the Australian economy, low unemployment, and expectations of a strong economic growth. At the same time, the Board took into account the recent pickup in inflation and rising labor costs.

On 4 May 2022, the Federal Reserve (Fed) decided to raise the target range for the federal funds rate by 50 bps to 0.75 percent to 1.0 percent from the previous 0.25 to 0.50 percent, in line with expectations that with the appropriate tightening in the stance of monetary policy, inflation will return to the Fed's 2-percent objective and labor market conditions will improve. The Russia-Ukraine conflict and supply chain disruptions from China's COVID-related lockdowns are viewed by the Fed as additional upward pressure on inflation and could weigh on US economic activity.

Likewise, on 4 May 2022, the Reserve Bank of India increased the policy repo rate under the liquidity adjustment facility by 40 bps to 4.40 percent, in line with its objective of achieving the medium-term inflation target of 4 percent within a band of +/- 2 per cent, while supporting growth. The RBI noted that while the domestic economy stabilized in March to April amid the easing of pandemic-related restrictions, inflation surged by end-Q3 2022 due to the impact of geopolitical spillovers.

On 5 May 2022, the Bank of England (BOE) increased the Bank Rate by 25 bps to 1.0 percent as successive supply shocks and a tight labor market broadened inflationary pressures. The BOE's Monetary Policy Committee (MPC) expects CPI inflation in the UK to rise further to over 9 percent in the second quarter of 2022 and slightly over 10 percent in the fourth quarter of 2022. GDP growth is forecasted to slow sharply over the first half of 2022 as the rising cost of living weighs on UK households' real incomes. Consistent with the previous forward guidance of the BOE's MPC, some degree of further tightening in monetary policy may still be appropriate in the coming months to achieve its objective of promoting monetary and financial stability.

Similarly, on 11 May 2022, Bank Negara Malaysia (BNM) increased the overnight policy rate (OPR) by 25 bps to 2.0 percent as inflationary pressures broadened due to protracted global supply chain disruptions as well as the ongoing geopolitical tensions in Eastern Europe. BNM's Monetary Policy Committee (MPC) observed that the reduction in the degree of monetary accommodation is appropriate as domestic economic activity continued to improve amid the sustained reopening of the global economy and continued improvement in labor market conditions. Moving forward, the MPC will continue to normalize monetary settings in a measured and gradual manner to ensure that monetary policy remains accommodative to promote economic growth and price stability.

Aside from the BSP, six central banks are scheduled to meet for their respective monetary policy meetings in May, namely, the People's Bank of China, Bank Indonesia, Bank Negara Malaysia, RBNZ, BOK, and Bank of England.

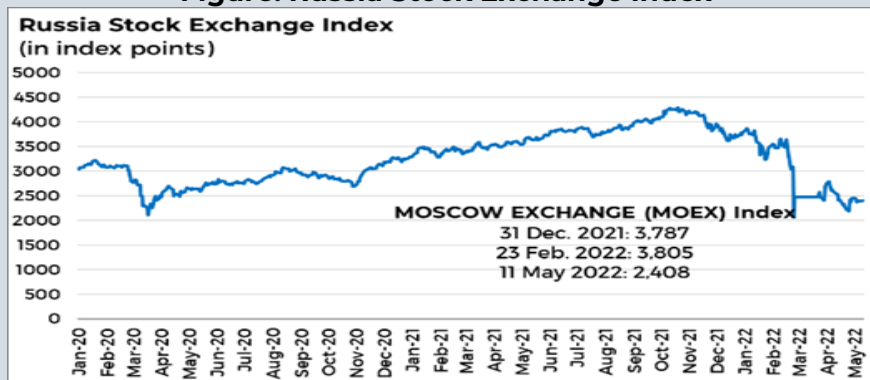
#### Box Article No. 4: Impact of the Ukraine-Russia Conflict on the Philippine Economy

On 24 February 2022, the Russian Federation began a large-scale military offensive on Ukraine. The invasion was responded to by calls from countries and international organizations condemning Russia and demanding withdrawal of its military advances in Ukraine, and by sanctions on Russian trade, banks, and businesses. Several Russian banks were excluded from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) payments system, making it difficult to facilitate cross-border payments. The Russian banking sector is now facing an acute structural liquidity deficit as foreign and domestic entities pull out capital from the financial system.

As an initial response to mitigate the heightened risk of foreign exchange depreciation and runaway inflation, the Central Bank of the Russian Federation (CBR) raised its key policy rate from 9.5 percent to 20.0 percent; halted stock and derivatives trading to prevent foreigners from selling Russian securities; and together with the Russian finance ministry ordered domestic exporters to sell 80 percent of all their foreign exchange revenues received under export contracts.

While the situation remains highly fluid and the outlook is subject to large uncertainty, the economic consequences of the geopolitical conflict in Eastern Europe have started to reverberate in different parts of the globe, and for some, the effects have already been substantial. Energy and commodity prices – including wheat and other grains – have surged, adding to inflationary pressures from supply chain disruptions and recovery in demand. These developments have increasingly become a significant headwind to global economic recovery, an upside risk to inflation, and a threat to global food security. Price shocks have an adverse impact especially on poor households, still reeling from the effects of the pandemic, and for whom food and fuel are a higher proportion of living expenses. The sanctions on Russia will also have a substantial impact on the global economy and financial markets, with significant spillovers to other countries. As of 11 May, the reported sanctions resulted in a continued decline in the Moscow Exchange (MOEX) Index, which remained lower than its pre-invasion and year-to-date (YTD) levels.

Figure. Russia Stock Exchange Index



Source: Bloomberg



For the Philippines, despite the limited economic linkages with the two warring countries, slower growth in the global economy and higher commodity prices pose as headwinds to the country's nascent economic recovery. More specifically, the Philippine economy is being affected by the Ukraine-Russia conflict through the following channels: trade, financial markets, investor confidence, and commodity prices.

On the trade channel, direct trade links of the Philippines with Russia and Ukraine are limited. The country's trade-in-goods with these two countries have been minimal in terms of value and share. In 2021, about US\$0.12 billion or 0.2 percent of total Philippine exports of goods were shipped to Russia, while US\$5 million went to Ukraine. Meanwhile, imports from Russia and Ukraine in 2021 accounted for 0.6 percent and 0.1 percent of the country's total imports, respectively. Other economic linkages through investments, remittances and tourism are likewise very limited. However, possible ramifications of the escalating tensions in the European region, and even in the US, could be more significant for the Philippines with these countries being important trade and investment partners.

On the financial markets, the ongoing Ukraine-Russia conflict has shown differentiated impact across asset classes and has triggered short-term volatility, albeit within manageable levels. The country's geographical distance and limited financial linkage with the Ukraine and Russia have proven to be important factors on the benign impact of the geopolitical conflict on the domestic financial markets. Moreover, recent drivers of market movements suggest that concerns on the ongoing geopolitical tension may be receding to the background in light of emerging developments, in particular, the pace of US Fed policy normalization as well as market expectations of domestic monetary policy tightening.

On investor confidence, the Ukraine-Russia conflict increases the perception of risk in investments which could, in turn, make investors more conservative, or decide to postpone their planned investments owing to global uncertainties triggered by the crisis. Nonetheless, fundamentals remain an important pull factor in determining the impact of capital flows to emerging markets. In particular, the country's strong macroeconomic fundamentals, which include a manageable inflation environment, a strong and resilient banking system, a prudent fiscal position, and an ample level of international reserve buffer would help sustain favorable investor sentiment on the country.

Among these, the main channel through which the Ukraine-Russia conflict affects the Philippines is through higher commodity prices (as discussed in Box Article No. 2), which pose upside risks to domestic inflation. International crude oil and non-oil commodities such as food and agricultural products remained above pre-invasion levels.

Sustained increase in domestic oil prices may result in a disanchoring of inflation expectations which could lead to second-round effects on transport fares, food prices, and higher-than-expected wage adjustments.

At the same time, higher global commodity prices would also push up the import bill, resulting in the widening of the current account and balance of payments (BOP) deficit particularly in 2022.

Under these circumstances, the BSP is keeping a watchful eye on emerging developments to ensure that the monetary policy stance remains in line with the primary mandate to promote price and financial stability. The BSP stands ready to respond to the buildup in inflation pressures that can disanchor inflation expectations in view of the potential broadening of price pressures over the near term.

The BSP continues to have a wide arsenal of policy instruments to respond to possible adverse impact of this external shock. The BSP likewise supports the timely implementation of selected direct non-monetary interventions by the government to temper price pressures on basic commodities, as well as social protection measures to alleviate the impact of rising energy prices on the most vulnerable sectors, e.g., public transport and agricultural production.