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Monetary Policy Report

2020. 12

BANK OF KOREA

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The Bank of Korea sets and implements its monetary and credit policies in order to contribute to the sound development of the national economy by pursuing price stability, and in the process pays attention to financial stability as well.

The Bank of Korea Act stipulates that the Bank of Korea, to fulfill its accountability corresponding to these mandates, should compile at least twice each year a report on the implementation of its monetary and credit policies.

In line with this the Bank of Korea prepares the Monetary Policy Report, containing the details of and backgrounds to its monetary policy decisions, the future monetary policy directions, etc., four times per year, and submits it to the National Assembly.

This December 2020 Monetary Policy Report has been drawn up to cover the time period from after the Monetary Policy Board meeting for monetary policy decision-making in August 2020 through the date of the Monetary Policy Board meeting for monetary policy decision-making in November 2020.

We sincerely hope that this Monetary Policy Report will be of help in ensuring that the public well understands the Bank of Korea's monetary policy operations, and forms rational expectations concerning the future policy directions.

<Bank of Korea Act>

Article 96 (Reporting to National Assembly)

(1) The Bank of Korea shall prepare an assessment report on progress in implementing monetary and credit policies and macro-financial stability conditions at least twice every year and submit it to the National Assembly.

(2) The Governor shall attend a meeting and answer questions, when the National Assembly or any of its committees requests him/her to attend the meeting in connection with the report submitted pursuant to paragraph (1).

This Monetary Policy Report is published in accordance with the provision of Article 96 of the Bank of Korea Act, and upon the resolution of the Monetary Policy Board.

December 2020

Juyeol Lee

Lee, Juyeol

Governor

Bank of Korea

General Principles of Monetary Policy Operation

The Bank of Korea Act stipulates the goal of monetary policy as follows: “The Bank shall contribute to the sound development of the national economy through ensuring price stability, while giving due consideration to financial stability in carrying out its monetary policy.” In order to enhance transparency, predictability and effectiveness of monetary policy, the Bank will carry out its task by setting specific targets and objectives in accordance with this goal.

☐ **(Inflation targeting)** The Bank of Korea maintains a flexible inflation targeting system to effectively achieve price stability, which is the primary objective of monetary policy. The inflation target is currently set at 2.0% in terms of consumer price inflation (year-on-year).

- **(Medium-term horizon)** The inflation target is meant to be achieved over a medium-term horizon, since consumer price inflation is affected not only by monetary policy but also by various other factors at home and abroad, which entail transitory and irregular impacts and the lag in monetary policy transmission.
- **(Forward-looking operation)** The Bank conducts its monetary policy in a forward-looking manner, while considering symmetrically the risks of inflation remaining persistently above or below the target.
    - The path of convergence of inflation toward the target is assessed on overall inflation and growth outlooks as well as their uncertainties and risks, and on financial stability conditions.
- **(Flexible operation)** The Bank conducts its monetary policy to support real economic growth to the extent that this does not hinder attaining the inflation target over the medium-term.

☐ **(Consideration of financial stability)** In ensuring price stability over the medium-term, the Bank pays careful attention to the impact of monetary policy on financial stability.

- **(Relationship with inflation targeting)** As persistent financial imbalance could undermine macroeconomic stability, paying due attention to financial stability in conducting monetary policy is consistent with the rationale behind flexible inflation targeting.
- **(Examination of financial stability)** The Bank examines, assesses and announces financial stability conditions on a regular basis, to prevent excessive buildup of financial imbalances that may be brought about by monetary policy implementation.
- **(Harmonization with macroprudential policy)** Since there are limits to maintaining financial stability solely by monetary policy that indiscretely affects the whole economy, monetary policy needs to be complemented by macroprudential policies to prevent accumulation of financial imbalance.

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[Monetary Policy Operating Conditions]

1 A look at financial and economic conditions in Korea and abroad between August and November 2020 finds the following. The global economy showed improvement, boosted by the recovery of consumption in advanced economies and increased investment in China. However, the economic recovery then somewhat weakened due to the rapid resurgence of COVID-19. Growth in the US picked up, led by consumption and employment, but economic activity is partially limited by stronger restrictions on movement following the resurgence of COVID-19. The trend of improvement in the euro area economy, and the services industries in particular, weakened owing to strengthened containment measures in individual countries. China's economy continued to show a solid recovery. Investment increased centered around infrastructure and real estate, and consumption improved.

Economic growth in major economies[1)]

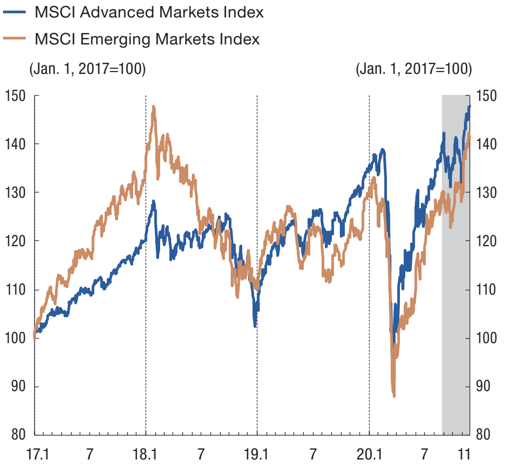
(%)

	2017	2018	2019			2020		
	Year	Year	Year	Q3	Q4	Q1	Q2	Q3
US	2.3	3.0	2.2	0.6	0.6	-1.3	-9.0	7.4
Euro area	2.6	1.9	1.3	0.3	0.0	-3.7	-11.8	12.6
Japan	2.2	0.3	0.7	0.0	-1.8	-0.6	-8.2	5.0
China	6.9	6.7	6.1	6.0	6.0	-6.8	3.2	4.9

Note: 1) The quarterly rates of growth are quarter-on-quarter (seasonally adjusted) for the US, Japan and the euro area, and year-on-year for China.
Sources: Individual countries' published statistics.

Between September and October, the international financial market saw stronger risk aversion due to the resurgence of COVID-19 in major countries, but investment sentiment improved afterwards, largely owing to a lessening of uncertainties related to the US presidential election and progress in the development of COVID-19 vaccines. Global prices rose sharply, boosted by factors such as eased concerns about increased taxation and stronger regulations after the US presidential election, and expectations for early vaccine rollouts. The US dollar weakened against currencies of major advanced countries, affected for instance by an increased preference for risky assets after the US presidential election in November.

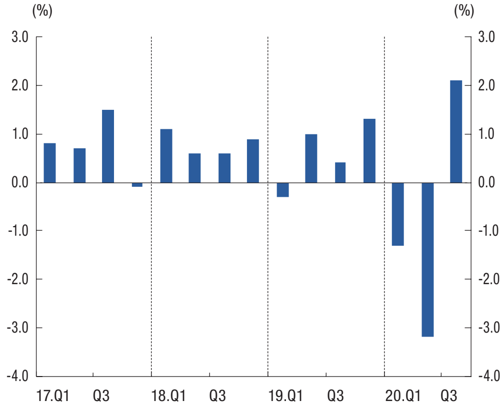
Share price indices of advanced and emerging markets



Source: Bloomberg.

2 In the Korean economy, growth showed moderate recovery, but the recovery varied from sector to sector. Consumption saw slower recovery, influenced for instance by the resurgence of COVID-19, and the adjustment in construction investment continued. However, exports rebounded significantly thanks to the economic reopening in major countries, and facilities investment improved. As a result, real GDP in the third quarter increased by 2.1% compared to the quarter before.

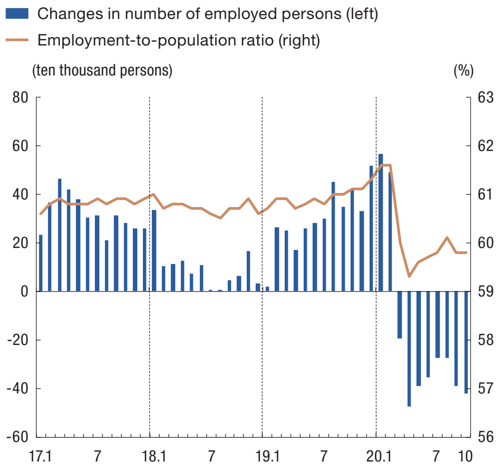
Real GDP growth[1)]



Note: 1) Quarter-on-quarter (seasonally adjusted).
Source: Bank of Korea.

Employment remained sluggish. After September, the number of persons employed declined by a larger amount (year-on-year) again due to a resurgence of COVID-19 and stronger social distancing measures, and the (seasonally adjusted) employment-to-population ratio also fell slightly.

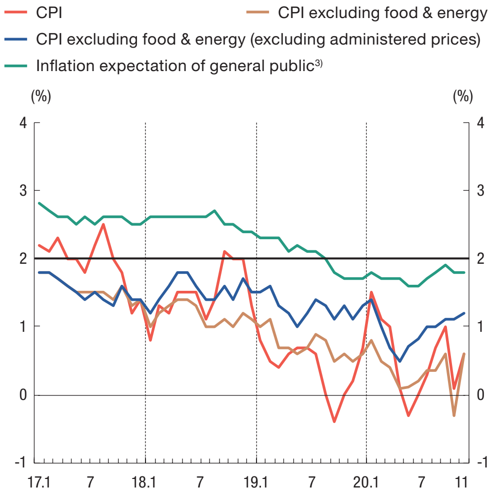
Changes[1)] in number of employed persons and employment-to-population ratio[2)]



Notes: 1) Year-on-year.
2) Seasonally adjusted.
Source: Statistics Korea.

③ Consumer price inflation showed increased volatility. It rose to the 1.0% level in September, affected by a hike in agricultural product prices owing to the worsening of weather conditions in the summer. It then fell sharply to 0.1% in October, as the government support for telecommunications fees acted as a temporary downward pressure on inflation. It rose again to the mid-0% range in November, owing to sharply declined effects of the support for telecommunications fees. Core inflation excluding food and energy has recently run in the mid-0% range and the inflation rate expected by the general public remained in the upper-1% range.

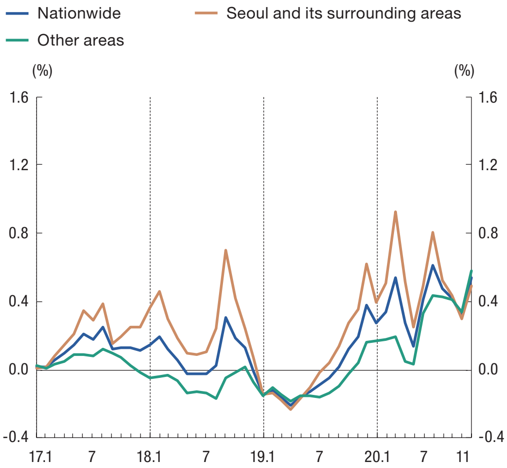
Inflation[1)2)]



Notes: 1) The bold line indicates the inflation target.
2) Year-on-year.
3) Expectations for the CPI inflation rate one year in the future.
Sources: Bank of Korea, Statistics Korea.

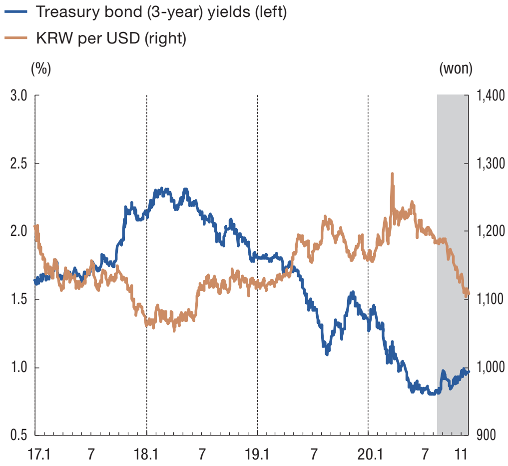
Entering November, the upward trend of housing sales prices accelerated in Seoul and its surrounding areas (mainly in Gyeonggi province and Incheon), and in the rest of the country (mainly in metropolitan cities), while leasehold (*jeonse*) deposit prices also rose at a higher pace in both Seoul and its surrounding areas and the rest of the country.

Housing sales price growth rate[1)]



Note: 1) Month-on-month.
Source: Korea Appraisal Board.

Korean Treasury bond yield and exchange rate (KRW per USD)

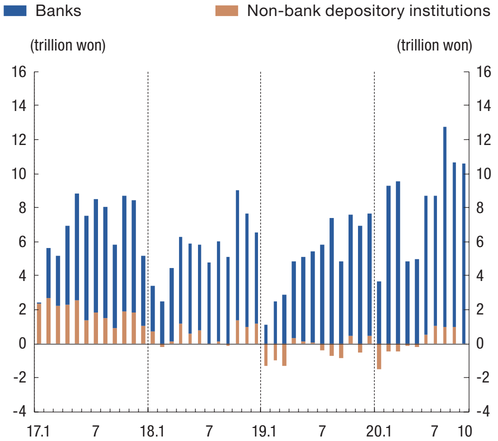


Sources: Bank of Korea, KOFIA.

④ In the domestic financial markets, long-term market interest rates fluctuated in September, influenced for instance by concerns over the excess supply of bonds related to the government's additional supplementary budget, and the Bank of Korea's announcement of a plan to expand outright purchases of Treasury bonds. The rates then rose after October on improved major domestic and international economic indices, a lessening of uncertainties related to the US presidential election, and expectations for development of COVID-19 vaccines. Stock prices soared after November on a shift to a net inflow of foreign stock investment funds and improvements in investment sentiment at home and abroad. The Korean won/US dollar exchange rate declined on the strengthening of the yuan and global weakening of the dollar, as well as on the perception that the degree of strengthening of the Korean won had been relatively limited.

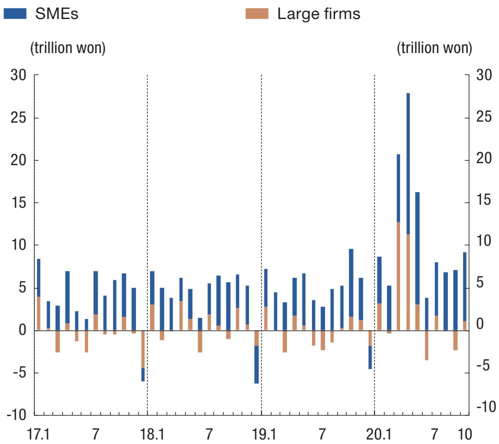
⑤ Household lending increased at a much faster pace, driven by demand for funds for stock investment and for living expenses in addition to increased housing-related demand for funds. Corporate lending continued to grow, led by lending to small and medium-sized enterprises, due to COVID-19-related fund demand and to support from the government, the Bank of Korea, and financial institutions.

Changes in household loans[1)2)3)]



Notes: 1) Month-on-month.
2) Including mortgage transfers.
3) Figures for October 2020 are based on the Bank of Korea advance estimate for banks and have not been released for non-bank depository institutions.
Source: Bank of Korea.

Changes in corporate loans[1)2)]

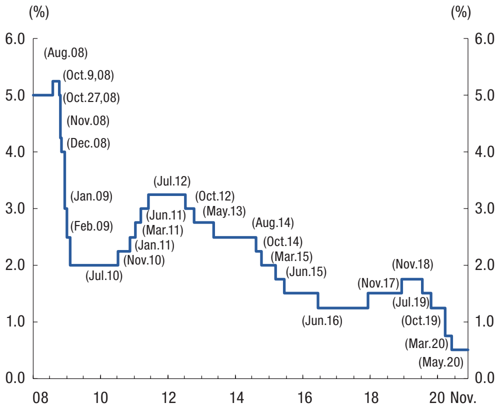


Notes: 1) Month-on-month.
2) Based on banks.
Source: Bank of Korea.

[Conduct of Monetary Policy]

6 The Bank of Korea maintained its accommodative policy stance to support the recovery of growth and to help inflation stabilize at the 2% target over a medium-term horizon. In this process, it closely examined risk factors such as the global and domestic development of the COVID-19 pandemic, its financial and economic impacts at home and abroad, and changes in financial stability conditions. Under this policy stance, the Bank maintained the Base Rate at 0.50% per annum.

Bank of Korea Base Rate[1)]



Note: 1) Figures in parentheses refer to the months of Base Rate adjustments.
Source: Bank of Korea.

7 A detailed look at the Base Rate decisions during this period, and the backgrounds behind them, are as follows.

At the October meeting, the Board decided to leave the Base Rate unchanged at 0.50%, considering that it was necessary to monitor the effects of the monetary and fiscal measures taken so far, the development of COVID-19 at home and abroad, and subsequent changes in financial and economic conditions, as the slump in exports was easing and the expansionary fiscal policy stance was being strengthened under the accommodative financial conditions amid high uncertainties surrounding the growth path. It was expected that the economy would recover gradually, led by exports as the slump in exports eased, although consumption was tepid, affected by the resurgence of COVID-19, and the recovery in facilities investment was subdued. However, it was judged that uncertainties surrounding the growth path were still high due to the spread of COVID-19 worldwide. Consumer price inflation had risen to around 1% in September, driven mainly by a large increase in the prices of agricultural, livestock and fishery products due to severe weather conditions. It was forecast that consumer price inflation would run at the low- to mid-0% level for some time, reflecting weak demand-side inflationary pressures and prolonged effects from the drop in global oil prices. From the financial stability perspective, household loan growth had picked up and housing prices continued on an increasing trend in all parts of the country.

At the November meeting, the Board left the Base Rate unchanged at 0.50%. The Board judged there was a need to maintain the current policy stance as uncertainties surrounding the growth path remained elevated, regarding for example early vaccine rollouts and the development of the global spread of COVID-19, although expectations for an economic recovery were heightened as the development of COVID-19 vaccines reported better-than-expected results. The Korean economy continued to recover at a modest pace overall, but showed varying movements by sector. The improvement in exports continued and facilities investment had started to recover, led by the IT sector, while the recovery in private consumption was slow with the resurgence of COVID-19, and the adjustment in construction investment continued. Going forward, the domestic economy was likely to recover gradually, led mainly by exports and investment. GDP was projected to grow at slightly below -1% in 2020 and around 3% in 2021. It was forecast that consumer price inflation would remain at the low- to mid-0% level for some time and then moderately increase to around 1% in 2021, owing to improvement in the domestic economy and the base effect of international oil price declines this year. In the meantime, the Board saw a need to closely monitor the effects of the government's housing and macroprudential policies and consequent changes in financial stability conditions, as housing prices in all parts of the country continued their upward trends, and the growth in household loans accelerated.

8 The Bank of Korea is using various policy instruments to promote stability and smooth credit flows in the financial and FX markets.

The Bank increased the total ceiling on the Bank Intermediated Lending Support Facility by 8 trillion won from 35 trillion won to 43 trillion won on October 5 to support SMEs and small businesses whose financial difficulties had been aggravated by the resurgence of COVID-19. Specifically, the Bank provided 3 trillion won of new funding to support small businesses affected by COVID-19, and increased the ceiling of the existing program that supports SMEs affected by COVID-19 by 3 trillion won. In addition, another 2 trillion won was used to increase the ceiling of the program that supports facilities investment of startups, of businesses that create jobs, and of material, parts and equipment businesses, all of which can act as growth engines of the Korean economy and contribute to employment.

Programs under the Bank Intermediated Lending Support Facility

(trillion won, %)

Program	Ceiling		Interest rate
	Before adjustment	After adjustment	
Support Program for Trade Financing	2.5	2.5	0.25
Support Program for New Growth Engine Development and Job Creation[1]	11.0	13.0	0.25
Program for Stabilization of SME Lending[2]	5.5	5.5	0.25
Support Program for Regional SMEs	5.9	5.9	0.25
Support for SMEs Affected by COVID-19	10.0	13.0	0.25
Support for Small Businesses	-	3.0	0.25
Total	35.0[3]	43.0[3]	-

Notes: 1) The Support Program for High-tech and Other Start-up SMEs was expanded and reorganized as the Support Program for New Growth Engine Development and Job Creation (September 2017).
2) Includes the support that had been formerly provided under the Support Program for Facilities Investment.
3) Includes reserves of 0.1 trillion won.
Source: Bank of Korea.

In addition, the Bank of Korea announced a plan to expand outright purchases of Treasury bonds to a total of around five trillion won from September to the year-end, as a preemptive response to any possible mismatch in the supply and demand of Treasury bonds and consequent expanded volatility in market interest rates. The Bank purchased Treasury bonds on three occasions, in September (2.0 trillion won), October (1.5 trillion won), and November (1.5 trillion won), with total purchases amounting to 5.0 trillion won.

Outright purchases of Treasury bonds[1]

(trillion won)

Date	Amount	Date	Amount
March 20	1.5	September 24[2]	2.0
April 10	1.5	October 28[2]	1.5
July 2	1.5	November 27[2]	1.5
August 31	1.5	Total	11.0

Notes: 1) As of the end of November 2020.
2) Conducted at the month-end according to the plan on the expansion of outright purchases of Treasury bonds.
Source: Bank of Korea.

The Bank extended its Corporate Bond-Backed Lending Facility again by three months to February 3, 2021, in consideration of the continuing COVID-19 pandemic and the still high financial and economic uncertainties at home and abroad. It also continued to support the credit market through an SPV that manages purchases of corporate bonds and commercial paper, including lower-rated ones, established to stabilize the credit securities market. The SPV purchased 2.2 trillion won worth of corporate bonds and CP as of the end of November 2020.

As part of its efforts to secure new policy instruments for FX market stability, the Bank of Korea launched a new facility under which it supplies foreign currency liquidity through transactions of foreign currency bond repurchase agreements in competitive auctions. This facility will be activated when necessary in reflection of foreign currency market conditions.

9 The Bank of Korea activated an emergency monitoring mechanism in cases of heightened market volatility and closely monitored developments of COVID-19 and their possible impacts on the domestic and foreign financial sectors and economies, as well as changes in financial and FX market conditions after the Bank's market stabilization measures. The Bank held a Fi-

nancial and Economic Conditions Review Meeting during the Chuseok holidays in October to monitor financial and FX market developments induced by domestic and overseas risk factors. In another meeting in November, it reviewed the reactions to and the impacts of the US presidential election in the domestic and global financial markets.

The Bank continued to preemptively identify potential risk factors within the financial system and to carry out related early warning activities. In the September Financial Stability Meeting, the Bank examined how the changes in real and financial sector conditions brought on by the prolonged pandemic could affect Korea's financial system. In mid-October, it also resumed the joint examination of financial institutions, which had been suspended after the coronavirus outbreak, and monitored current issues and potential risks including COVID-19-related financial support and loan soundness management.

The Bank of Korea also continued to strengthen the multi-layered financial safety net, by expanding its bilateral currency swap arrangements with major central banks. In October, it renewed its currency swap arrangement with the People's Bank of China, enabling a more stable supply of sufficient foreign currency liquidity by increasing the amount and lengthening the period of the agreement.

[Future Monetary Policy Directions]

⑩ A look at the outlooks for growth and inflation is as follows. It is forecast that GDP will record a growth rate of -1.1% in 2020, 3.0% in 2021, and 2.5% in 2022. With the slump in goods exports gradually easing and fiscal policy remaining on an expansionary course, the domestic economy is expected to recover moderately. Although the recovery of private consumption is predicted to be slow due to the continuing domestic resurgence of COVID-19, facilities investment is expected to continue to increase and construction investment to turn to positive growth. There is a high level of uncertainty surrounding the growth path. The upside risks to growth include an early supply of vaccines and treatments for COVID-19, additional fiscal stimulus at home and abroad, and an improvement in the global trade environment. Among the downside risks are an accelerated spread of COVID-19 at home and abroad, a delay in the semiconductor industry's recovery, and rising tensions between the US and China.

Economic growth outlook[1)2)]

(%)

	2019	2020			2021e			2022e
	Year	H1	H2e	Yeare	H1	H2	Year	Year
GDP	2.0	-0.7	-1.4	-1.1	2.6	3.3	3.0	2.5
Private consumption	1.7	-4.4	-4.1	-4.3	2.9	3.2	3.1	2.5
Facilities investment	-7.5	5.6	5.7	5.7	4.9	3.6	4.3	3.2
Intellectual property products investment	3.0	3.3	4.2	3.8	3.8	4.0	3.9	3.7
Construction investment	-2.5	1.7	-2.9	-0.7	-1.8	2.6	0.5	2.1
Goods exports	0.5	-2.9	-0.4	-1.6	9.3	1.9	5.3	2.3
Goods imports	-0.8	-0.9	-0.3	-0.6	7.5	4.5	5.9	3.2

Notes: 1) Year-on-year.
2) Figures are the forecast as of November 2020.
Source: Bank of Korea.

Consumer price inflation is forecast to record 0.5% this year, driven by weaker demand-side inflationary pressures, greater downward pressures on inflation from government policies and lower-than-last-year international oil prices. However, it is expected to pick up next year to around 1.0% as the effects of lower international oil prices dissipate and the economy improves.

Core inflation excluding food and energy prices is forecast to increase from 0.3% this year to 1.0% next year. Upside risks to prices include stronger economic improvement due to COVID-19 vaccine development, and a faster rise in international commodity prices. Among the downside risks are a weak economic recovery resulting from a coronavirus resurgence and a larger appreciation of the Korean won.

Inflation outlook[1)2)]

(%)

		2019	2020			2021e			2022e
		Year	H1	H2e	Yeare	H1	H2	Year	Year
CPI inflation		0.4	0.6	0.5	0.5	0.7	1.2	1.0	1.5
Core inflation	CPI excluding food & energy	0.7	0.4	0.3	0.3	0.7	1.3	1.0	1.3
	CPI excluding agricultural products & oils	0.9	0.6	0.7	0.7	0.8	1.2	1.0	1.3

Notes: 1) Year-on-year.
2) Figures are the forecast as of November 2020.
Source: Bank of Korea.

11 The Bank of Korea will continue to conduct its monetary policy in order to support the economy and stabilize consumer price inflation at the target level (2%) over a medium-term horizon, while paying attention to financial stability.

As the recovery in the Korean economy is expected to be modest and inflationary pressures on the demand side are forecast to remain weak, the Bank will maintain its accommodative monetary policy stance. In this process, it will thoroughly assess COVID-19 developments, their impacts on the financial markets and economy, and changes in financial stability conditions such as household debt growth.

I

Monetary Policy Operating Conditions

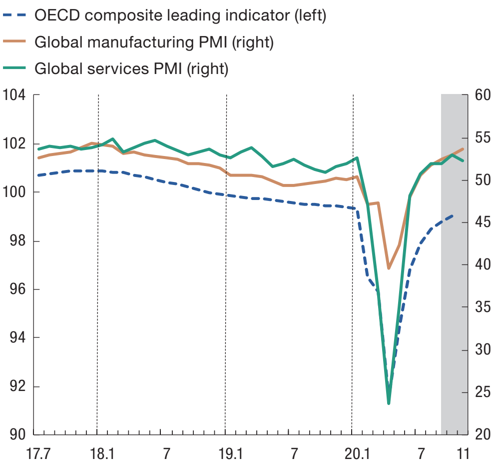
1. Global Economy

Global economic recovery weakens somewhat

The global economy showed improvement, boosted by the recovery of consumption in advanced economies and increased investment in China. However, the economic recovery then somewhat weakened due to the rapid resurgence of COVID-19. Global all-industry PMIs improved, surpassing the benchmark in July and the four months that followed.[1] The OECD composite leading indicators continued to increase, but at a slower pace. Uncertainties surrounding the growth path of the global economy are very high, as the possibility of vaccine rollouts is increasing but COVID-19 continues to spread.

Growth in the US picked up, led by consumption[2] and employment,[3] but economic activity has been partially constrained by stronger restrictions on movement following the resurgence of COVID-19 in November. The trend of improvement in the euro area economy, and the services industries[4] in particular, weakened owing to strengthened containment measures in individual countries following the rapid resurgence of COVID-19. Exports in Japan improved, but consumption was sluggish, especially for services.[5] China's economy continued to show a solid recovery[6] as investment increased, centered around infrastructure and real estate, and as consumption improved. The ASEAN-5 countries saw their exports to China improve, but their domestic consumption was sluggish. India's GDP declined substantially in the second quarter, but improved somewhat in September as production shifted to an increase and as all-industry PMI rose greatly.

Figure I-1. Composite leading indicator[1] and global PMIs



Note: 1) The composite leading indicator includes OECD member countries and six emerging countries (China, Brazil, India, Russia, Indonesia, and South Africa).
Sources: OECD, Bloomberg.

1) In November, global manufacturing and services PMIs stood at 53.7 and 52.2, respectively, exceeding the benchmark (50).
2) Retail sales grew 1.6% in September and 0.3% in October month-on-month, and services consumption increased 0.8% in September and 0.6% in October.
3) The unemployment rate declined by 1.0%p month-on-month to 6.9% in October.
4) The services PMI declined below the benchmark (50) to stand at 46.9 in October and 41.7 in November.
5) The services consumption activity index recorded 95.4 in October (100 in 2011), 10.8% lower than in early this year (107.0 in Jan. 2020).
6) In October, retail sales growth accelerated year-on-year (3.3% in September → 4.3% in October), and manufacturing and services PMI stood at 51.4 and 55.5, exceeding the benchmark (50).

Table I-1. Economic growth in major economies[1)2)]

(%)

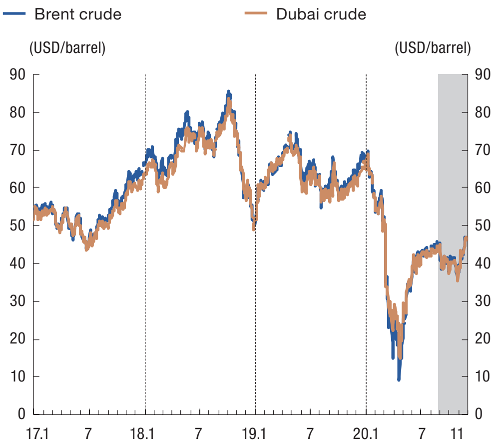
	2017	2018	2019			2020		
	Year	Year	Year	Q3	Q4	Q1	Q2	Q3
World	3.8	3.5	2.8	-	-	-	-	-
Advanced economies	2.5	2.2	1.7	-	-	-	-	-
US	2.3	3.0	2.2	0.6	0.6	-1.3	-9.0	7.4
Euro area	2.6	1.9	1.3	0.3	0.0	-3.7	-11.8	12.6
Japan	2.2	0.3	0.7	0.0	-1.8	-0.6	-8.2	5.0
Emerging market and developing economies	4.8	4.5	3.7	-	-	-	-	-
China		6.7	6.1	6.0	6.0	-6.8	3.2	4.9
India[3)]	7.0	6.1	4.2	4.4	4.1	3.1	-23.9	-7.5
ASEAN-5[4)]	5.5	5.3	4.9	5.0	4.7	1.4	-8.7	-4.1
Brazil	1.3	1.8	1.4	1.3	1.6	-0.3	-10.9	-3.9
Russia	1.8	2.5	1.3	1.5	2.1	1.6	-8.0	-3.6

Notes: 1) Based on IMF statistics, except in the cases of individual countries, the euro area and ASEAN-5 which are based on their own published statistics.
2) The quarterly rates of growth are quarter-on-quarter (seasonally adjusted) for advanced economies, and year-on-year for the others.
3) The annual growth rates are based on the fiscal year (April of the current year to March of the next year).
4) Indonesia, Thailand, Malaysia, the Philippines, and Vietnam.
Sources: IMF, individual countries' published statistics.

International oil prices rebound to mid-40 dollar range

Volatility in international oil prices (Dubai crude) expanded after August. International oil prices declined to the mid-30 dollar per barrel range in early November as concerns over a supply glut grew on the resurgence of COVID-19 and the resumption of oil production in Libya.[7)] However, they then rebounded to the mid-40 dollar range due to the possible extension of OPEC+ oil production cuts, the expectations of COVID-19 vaccine development, and the reduction of oil reserves in the US.[8)]

Figure I-2. International oil prices



Sources: Bloomberg, Reuters.

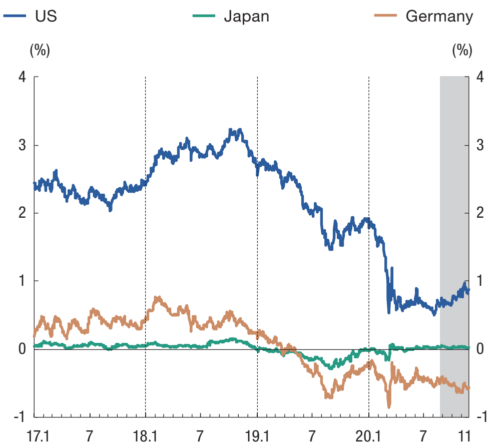
International financial market generally stable

In September and October, the international financial markets saw stronger risk aversion due to the resurgence of COVID-19[9)] in major countries, but investment sentiment improved afterwards, largely owing to a lessening of uncertainties related to the US presidential election and progress in the development of COVID-19 vaccines.[10)]

7) Libya expanded its oil production from 0.15 million barrels per day in September to 1 million barrels in early November as oil production resumed in its major oil fields after the truce agreement (Oct. 23).
8) This is largely due to a slow recovery in oil production stemming from shrinking drilling activities and production setbacks in the Gulf of Mexico due to hurricanes.
9) The number of newly confirmed cases of COVID-19 (daily average, 10 thousand): in the US, 4.9 in August → 3.9 in September → 5.7 in October; in Germany, 0.1 → 0.2 → 0.7; in France, 0.3 → 0.9 → 2.5; in Italy, 0.1 → 0.1 → 1.1; in Spain, 0.6 → 1.0 → 1.4; in the UK, 0.1 → 0.4 → 1.8 (source: WHO).
10) Pfizer and Moderna announced the preliminary results of their third trials that suggested that their vaccines were more than 90% and 95% effective, respectively (Nov. 9, Nov. 16). AstraZeneca reported that its vaccine was 70% effective on average (Nov. 23).

The US Treasury bond yield declined in September, affected by the US-China conflict and expectations of continued accommodative monetary policy by the US Federal Reserve, but it rebounded afterward on expectations of an economic stimulus agreement, favorable economic indicators and easing of uncertainties related to the US presidential election. The government bond yield in Germany declined substantially due to stronger restrictions on movements following the resurgence of COVID-19 in Europe, but rebounded after November, recovering some of the earlier drop, thanks to the rise of the US Treasury bond yield and expectations of COVID-19 vaccine development.

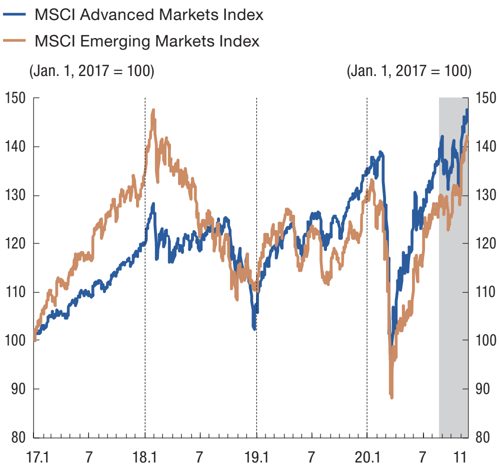
Figure I-3. Long-term market interest rates[1] in major economies



Note: 1) Treasury bond (10-year) yields.
Source: Bloomberg.

Stock prices in advanced economies fluctuated in September and October, with the coexistence of upside factors such as favorable economic indicators and expectations for a US economic stimulus package, and downside factors such as declining US tech stock prices[11] and the resurgence of COVID-19. However, they rebounded significantly on eased concerns about increased taxation and stronger regulations after the US presidential election,[12] and on expectations of early vaccine rollouts. Stock prices in emerging market economies fluctuated in sync with those of advanced economies, but rose sharply on expectations of improvement in global trade after the US presidential election.

Figure I-4. Share price indices of advanced and emerging markets



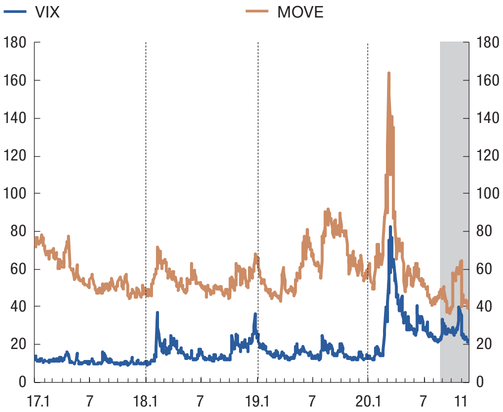
Source: Bloomberg.

Stock price volatility expanded temporarily in late October due to the resurgence of COVID-19, but narrowed as uncertainties related to the US presidential election eased. Interest rate volatility increased in October owing to uncertainties related to the US stimulus package and the resurgence of COVID-19, but narrowed after the US presidential election.

11) Changes in major US tech stocks in September: Microsoft -6.7%, Amazon -8.8%, Google -10.1%, Apple -10.3%, Facebook -10.7%.

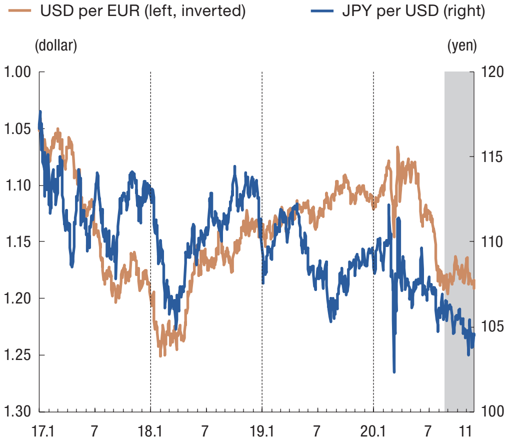
12) Markets assessed that the next US government would find it hard to raise corporate taxes and to strengthen regulations on large IT companies as Republicans were expected to retain their Senate majority.

Figure I-5. Volatility Index (VIX) and Merrill Lynch Option Volatility Estimate (MOVE) Index[1)]



Note: 1) Volatility indices for US equity and Treasury bond prices.
Source: Bloomberg.

Figure I-6. Major exchange rates[1)]



Note: 1) Based on the New York market rate at 16:30.
Source: Reuters.

The US dollar strengthened against the euro in September and October, driven by stronger restrictions on movements in the euro area following the COVID-19 resurgence and expectations for accommodative monetary policy by the ECB.[13)] However, it then shifted to a weakening in November due to a growing preference for risky assets after the US election. The US dollar weakened against the Japanese yen, affected by the BOJ's upward revision of its economic assessment.[14)]

13) The ECB indicated at its October monetary policy meeting that it would adjust all of its available policy instruments in response to downside risks such as the recent resurgence of COVID-19 (Oct. 29).

14) The Bank of Japan made an upward revision of its economic assessment for 8 out of its 9 metropolitan regions from the last quarter (July 9), judging that its economy had entered a recovery phase with the resumption of economic activity (Oct. 8).

2. Real Economy

Domestic economic growth shows modest recovery, varying from sector to sector

Regarding the domestic economy, consumption saw a weaker recovery, affected for instance by the resurgence of COVID-19, and the adjustment in construction investment continued. However, exports rebounded significantly thanks to the economic reopening in major countries, and facilities investment improved. As a result, real GDP in the third quarter increased by 2.1% compared to the quarter before (declined by 1.1% year-on-year).

Private consumption in the third quarter remained the same as the previous quarter. Consumption of semi-durable goods (such as clothing and footwear) and of services declined, as people refrained from going out with the strengthening of social-distancing measures, while consumption of non-durable goods like food increased. Government consumption grew at a slower pace in the third quarter, up by 0.2% quarter-on-quarter. Health insurance payouts increased,[15] but government expenditures related to personnel and material expenses declined[16] due to the expenditure restructuring to finance the third supplementary budget (passed in the National Assembly on July 3). Facilities investment rose greatly, picking up by 8.1% quarter-on-quarter in the third quarter. Investment in transportation equipment shifted from a decline to a large increase, and machinery investment continued to rise, led by semiconductor manufacturing equipment. Construction investment declined by 7.3% quarter-on-quarter in the third quarter. Residential building construction increased, and non-residential building construction and civil engineering declined as construction was delayed due to heavy flooding and seasonal rains and as the government's SOC budget implementation was scaled back.

Table I-2. Major economic growth indicators[1]

(%)

	2018	2019			2020		
	Year	Year	Q3	Q4	Q1	Q2	Q3
Real GDP	2.9	2.0	0.4 (2.0)	1.3 (2.3)	-1.3 (1.4)	-3.2 (-2.7)	2.1 (-1.1)
(Private consumption)	3.2	1.7	0.4 (1.6)	0.7 (1.9)	-6.5 (-4.8)	1.5 (-4.0)	0.0 (-4.4)
(Government consumption)	5.3	6.6	1.7 (6.9)	1.8 (6.5)	1.4 (6.8)	1.1 (6.1)	0.2 (4.6)
(Facilities investment)	-2.3	-7.5	1.7 (-2.3)	2.6 (-2.0)	0.2 (7.3)	-0.5 (4.1)	8.1 (10.6)
(Construction investment)	-4.6	-2.5	-6.4 (-2.7)	8.0 (2.6)	0.5 (4.2)	-1.5 (-0.1)	-7.3 (-1.0)
(Goods exports)	3.3	0.5	5.2 (-0.1)	1.0 (3.4)	-1.0 (6.3)	-15.9 (-11.5)	18.4 (-0.3)
(Goods imports)	2.0	-0.8	1.6 (2.2)	0.7 (1.3)	-2.3 (3.1)	-4.8 (-4.8)	6.7 (-0.1)

Note: 1) Quarter-on-quarter (seasonally adjusted); figures in parentheses are non-seasonally adjusted year-on-year rates.
Source: Bank of Korea.

Employment remains sluggish

Employment remained sluggish, as the number of persons employed declined at a faster rate again. The decrease in the number of persons employed (year-on-year) decelerated modestly from May to August as the spread of COVID-19 slowed, but accelerated again from

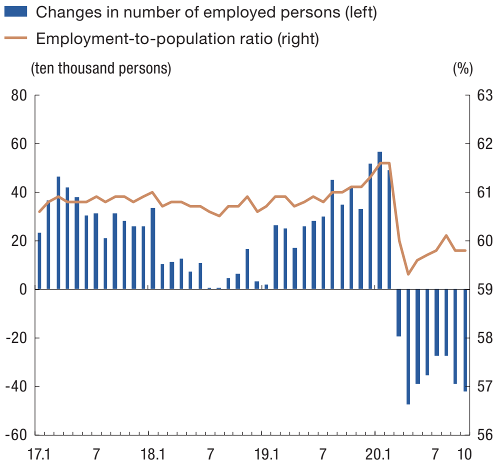
15) Health insurance payouts increased 3.2% year-on-year in the third quarter.
16) The central government's personnel and material expenses decreased 2.7% year-on-year in the third quarter.

September (decline of 421,000 jobs in October) as social distancing measures were strengthened with the resurgence of the pandemic.

By industry, the number of persons employed declined sharply in the service industry, mainly in industries requiring face-to-face interactions (e.g. food services & accommodation, wholesale & retail, and educational services). The number of persons employed in the manufacturing industry also declined at a faster pace, after shifting to a decrease in March. By status of workers, the number of temporary & daily workers and that of self-employed business owners continued their steep decline after March, and the increase in the number of regular workers has recently slowed significantly.

The seasonally adjusted employment-to-population ratio decreased sharply in March and April in line with the number of persons employed, picked up somewhat from May to August, and fell again to 59.8% after September due to the spread of the pandemic. The seasonally adjusted unemployment rate stood at 3.8% in the third quarter, down from 4.2% in the second quarter, but increased again to 4.2% in October.[17]

Figure I-7. Changes[1)] in number of employed persons and employment-to-population ratio[2)]



Notes: 1) Year-on-year.
2) Seasonally adjusted.
Source: Statistics Korea.

17) Labor underutilization indicators, which consider time-related underemployed people and the potential labor force, increased greatly in March and April and declined steadily after May (refer to the detailed explanation on composition of labor underutilization indicators below).

Economically active population			Economically inactive population		
Employed persons		Unemployed persons	Potential labor force		Others
Others	Time-related underemployed persons[1)]		Unavailable job seekers[2)]	Available potential job seekers[3)]	

Notes: 1) Work less than 36 hours per week, but want to and can work additional hours.
2) Seeking work for the last four weeks, but unavailable to work in the week of the survey.
3) Not seeking work for the last four weeks, but want to work and available to work in the week of the survey.

Table I-3. Major employment-related indicators

(ten thousand persons, %)

		2018	2019			2020			
		Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.
Change in number of employed persons (total)[1]		9.7	30.1	36.6	42.2	28.8	-40.7	-31.4	-42.1
By industry	Manufacturing	-5.6	-8.1	-7.6	-4.1	0.6	-5.5	-5.7	-9.8
	Construction	4.7	-1.5	-0.1	-5.0	-0.8	-6.1	0.9	3.7
	Services	5.2	34.8	39.1	46.6	18.6	-35.3	-27.8	-38.3
By status of workers	Regular workers	34.5	44.4	49.1	60.3	58.0	38.1	24.1	1.4
	Temporary & daily workers	-19.5	-8.7	-6.4	-12.1	-26.9	-64.3	-39.3	-32.0
	Self-employed workers	-5.2	-5.6	-6.1	-6.0	-2.3	-14.5	-16.3	-11.5
Unemployment rate[2]		3.8	3.8	3.5	3.6	3.7	4.2	3.8	4.2
Labor underutilization indicator 1[3]		6.1	6.4	6.1	5.7	7.4	8.7	7.6	7.4
Labor underutilization indicator 3[4]		11.6	11.8	11.3	10.7	12.9	14.4	13.5	13.2
Employment-to-population ratio[2]		60.7	60.9	60.9	61.2	61.1	59.5	59.9	59.8
Labor force participation rate[2]		63.1	63.3	63.2	63.5	63.4	62.1	62.2	62.4
Rate of change in the number of economically active population[1]		0.5	1.0	0.9	1.3	0.8	-1.3	-0.9	-0.9

Notes: 1) Year-on-year.
2) Seasonally adjusted.
3) (Unemployed persons + time-related underemployed persons) / economically active population.
4) (Unemployed persons + time-related underemployed persons + potential labor force) / (economically active population + potential labor force).

Source: Statistics Korea.

Current account surplus widens

The current account surplus widened year-on-year in the third quarter. This is due to a large increase in the goods account surplus as the export slump eased greatly with the resumption of economic activities in major economies. In particular, the goods account surplus widened considerably in September as exports rose year-on-year. The services account deficit narrowed year-on-year in the third quarter as payments decreased more than income receipts for travel and transportation, which also dropped due to COVID-19. The primary income account surplus narrowed with the decline in investment income revenue. The current account surplus widened year-on-year in October, as the goods account surplus expanded and the services account deficit narrowed.

The decline in exports (customs clearance basis, year-on-year) slowed greatly in the third quarter.[18] This is largely due to China's advance demand[19] for semiconductors, recovery of auto demand in the US, and exports of chemical and industrial products shifting to an increase thanks to strong sales of medicine and medical supplies. Exports decreased in October due to sluggish exports to other emerging economies including those in the Middle East and Latin America, but then shifted to an increase in November, as exports of IT products such as semiconductors and displays showed strength. On a daily average basis, exports continued to increase in November following the previous month.

18) Growth rate of exports (customs clearance basis, year-on-year): -10.3% (-4.2%, daily average) in August → 7.3% (-4.4%, daily average) in September → -3.8% (5.4%, daily average) in October → 4.0% (6.3%, daily average) in November.

19) Semiconductor exports to China increased by 16.6% year-on-year in September, as Chinese companies increased their purchases of memory chips ahead of additional US sanctions on Huawei (Sep. 15).

Imports (customs clearance basis, year-on-year) declined at a slower pace.[20] The decline in imports of raw materials (e.g. crude oil) and consumer goods (e.g. clothing) slowed, and imports of capital goods shifted to a rise led by semiconductors. Imports declined in October and November, affected by a sharp fall in raw material imports despite a rise in the imports of capital goods.

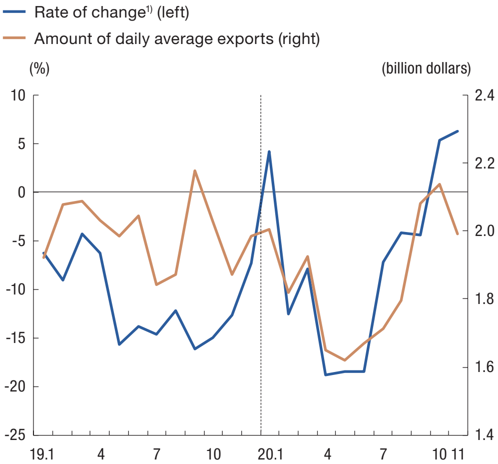
Table I-4. Current account

(billion dollars, %)

	2019					2020			
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Oct.
Current account	60.0	12.2	10.4	19.2	18.1	13.3	5.8	24.1	11.7
Goods	76.9	19.5	17.4	19.5	20.4	15.0	9.0	25.9	10.2
Exports[1]	542.2	132.7	138.5	134.7	136.4	130.2	110.4	130.1	44.9
(Rate of change)[2]	-10.4	-8.5	-8.7	-12.3	-11.8	-1.8	-20.3	-3.4	-3.8
Imports[1]	503.3	123.8	128.8	125.0	125.8	121.5	108.2	113.8	39.1
(Rate of change)[2]	-6.0	-6.5	-3.3	-4.1	-9.7	-1.8	-16.0	-8.9	-5.6
Services	-23.0	-7.2	-4.4	-5.4	-6.1	-5.2	-3.2	-3.9	-0.7
Credit	107.6	25.7	27.7	27.0	27.3	23.9	19.9	20.1	7.1
Debit	130.7	32.9	32.0	32.3	33.4	29.1	23.1	24.0	7.7
Primary income	12.2	1.5	-0.8	6.0	5.5	3.9	0.0	3.2	2.4
Secondary income	-6.1	-1.7	-1.8	-1.0	-1.7	-0.3	0.0	-1.0	-0.3

Notes: 1) Customs-clearance basis.
2) Year-on-year.
Sources: Bank of Korea, Korea Customs Service.

Figure 1-8. Daily average exports calculated on customs clearance basis



Note: 1) Year-on-year.
Source: Korea Customs Service.

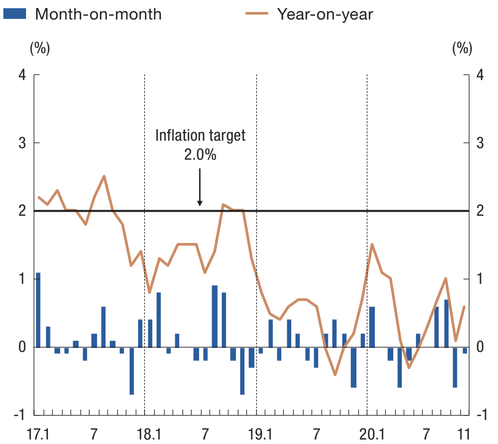
20) Growth rate of imports (customs clearance basis, year-on-year): -15.8% (-10.1%, daily average) in August → 1.6% (-9.5%, daily average) in September → -5.6% (3.4%, daily average) in October → -2.1% (0.0%, daily average) in November.

3. Prices

Consumer price inflation shows increased volatility

Consumer price inflation rose to the 1% level in September, affected by a hike in agricultural product prices owing to the worsening of weather conditions in the summer. It then fell sharply to 0.1% in October as the government support for telecommunications fees acted as a temporary downward pressure on inflation. It rose again to the mid-0% range in November, owing to sharply diminished effects of the support for telecommunications fees, although the upward trend in agricultural prices slowed somewhat.

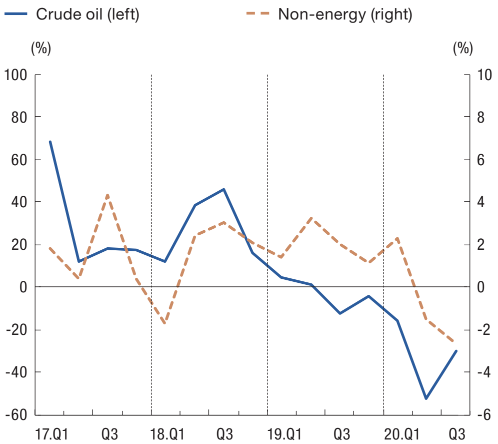
Figure I-9. CPI inflation



Sources: Bank of Korea, Statistics Korea.

With regard to the overseas factors affecting prices, recent declines in international oil prices[21] and the Korean won/US dollar exchange rate[22] accelerated the drop in crude oil import prices.[23] The decline in prices of non-energy imports, which affect domestic industrial product prices indirectly, accelerated,[24] influenced by the strengthening of the won.

Figure I-10. Import prices (Korean-won basis)[1]



Note: 1) Year-on-year.
Source: Bank of Korea.

As for domestic factors affecting prices, inflationary pressure on the demand side remained low, affected by sluggish private consumption. On the cost side, the rate of wage growth slowed substantially compared to last year due to the economic downturn resulting from the spread of COVID-19. In particular, wage growth in the personal services sector remained low after the second quarter, es-

21) The rate of decline in international oil prices (Dubai crude oil basis, year-on-year) slowed from 52.7% in the second quarter of this year to 30.4% in the third quarter, and accelerated to 31.4% in October and November.

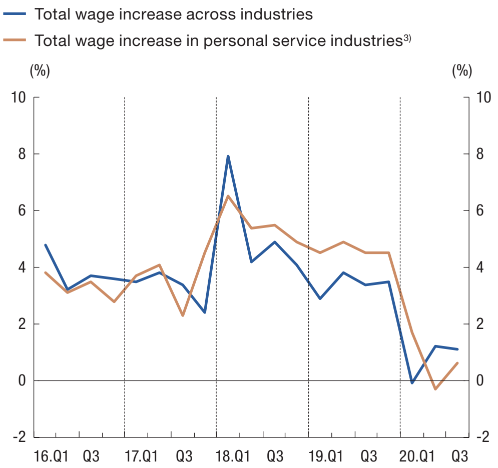
22) The extent of increase in the Korean won/US dollar exchange rate (year-on-year) reversed to negative from 4.6% to -0.5%, and the extent of decline accelerated to 4.0% in October and November.

23) The rate of decline in crude oil import prices (Korean won basis, year-on-year) slowed from 52.6% in the second quarter of this year to 30.1% in the third quarter, and accelerated again to 33.8% in October.

24) The rate of decline in non-energy import prices (Korean won basis, year-on-year) accelerated from 1.5% in the second quarter of this year to 2.7% in the third quarter and further to 3.9% in October.

pecially in face-to-face services like food & accommodation.

Figure I-11. Rate of wage increase (per employee)[1)2)]



Notes: 1) Based on the firms with one or more permanent employees.
2) Year-on-year.
3) Simple average of the wage increase in the industries related to personal services such as the accommodation and food service industries.
Source: Ministry of Employment and Labor.

A look at other factors affecting inflation finds that the prices of agricultural, livestock & fishery products exerted upward pressure on consumer price inflation, while government policies worked as a factor pushing inflation down. The prices of agricultural, livestock & fishery products maintained high upward trends, centering around agricultural product prices due to the worsening of weather conditions in the summer. In terms of government policy, while downward inflation pressure continued with the expansion of free high school education,[25)] the government's support for telecommunications fees worked as a factor sharply pushing inflation down in October. The rise in housing rental fees accelerated, owing to the recent rises in leasehold (*jeonse*) deposits and monthly rents (new contract basis).[26)]

Looking at the third-quarter changes in CPI inflation in the individual product categories, prices of agricultural, livestock & fishery products increased at a higher rate, while petroleum product prices fell sharply. As for services, public service charges maintained a downward trend, while private service charges increased at a slightly higher pace. In October and November, agricultural product prices continued to rise at a steep rate, housing rental fees and private service charges increased at a slightly faster pace, and petroleum product prices and public service charges declined at a faster rate.

25) Free education for second-year high school students was implemented from April 2020, and free education, scheduled to be introduced for first-year high school students in March 2021, was implemented earlier than scheduled in 2020.
26) The rate of increase in leasehold (*jeonse*) deposits and monthly rents (Korea Appraisal Board, relative to the last month of the preceding year) recorded -1.1% in 2019, and 2.6% from January to November this year.

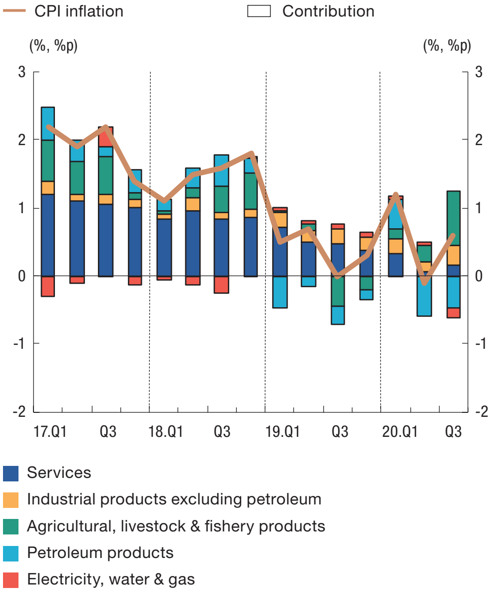
Table I-5. CPI inflation[1)]

(%)

	2018	2019			2020				
	Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.	Nov.
Consumer price index	1.5	0.4	0.0	0.3	1.2	-0.1	0.6	0.1	0.6
Agricultural, livestock & fishery products	3.7	-1.7	-5.4	-2.5	2.0	3.2	10.3	13.3	11.1
(Agricultural products)	8.1	-3.0	-8.7	-5.8	-0.5	-0.3	12.3	18.7	13.2
(Livestock products)	-3.5	0.0	-2.0	1.8	4.2	7.1	9.0	7.5	9.9
Industrial products	1.3	-0.2	-0.2	0.2	2.0	-1.4	-0.5	-1.0	-0.9
(Petroleum products)	6.8	-5.7	-6.0	-3.1	10.5	-13.7	-10.7	-14.0	-14.8
(Industrial products excluding petroleum)	0.5	0.7	0.8	0.7	0.8	0.5	1.0	1.0	1.2
Electricity, water & gas	-2.9	1.5	1.9	1.5	1.5	1.3	-4.3	-4.0	-4.1
Services	1.6	0.9	0.9	0.7	0.6	0.1	0.3	-0.8	0.4
(Rentals for housing)	0.6	-0.1	-0.2	-0.2	-0.1	0.1	0.3	0.5	0.6
(Public service charges)	0.2	-0.5	-0.4	-1.0	-0.6	-1.8	-1.7	-6.6	-2.0
(Private service charges)	2.5	1.9	1.7	1.6	1.3	1.0	1.2	1.4	1.3
CPI for living necessities	1.6	0.2	-0.3	0.3	1.9	-0.2	0.5	-0.7	-0.1
CPI excluding food & energy	1.2	0.7	0.7	0.6	0.6	0.1	0.4	-0.3	0.6
CPI excluding agricultural products & oils	1.2	0.9	0.8	0.7	0.8	0.5	0.8	0.1	1.0

Note: 1) Year-on-year.
Sources: Statistics Korea.

Figure I-12. Contributions to CPI inflation[1)]



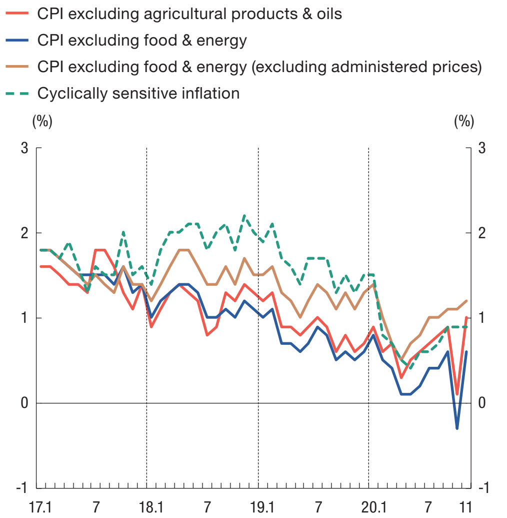
Note: 1) Year-on-year.
Sources: Bank of Korea, Statistics Korea.

Underlying inflation remains around 1%

Core inflation excluding food and energy prices declined temporarily in October due to the government's support for telecommunications fees, but rose to the mid-0% level in November as the effect dissipated. Core inflation movements can change depending on the trend in administered prices,[27)] which are greatly affected by government policy.[28)29)] A look at core inflation excluding administered prices shows that it rose gradually from May and has recently recorded the lower 1% level. Cyclically sensitive inflation[30)] maintained its upward trend at around the upper-0% level.

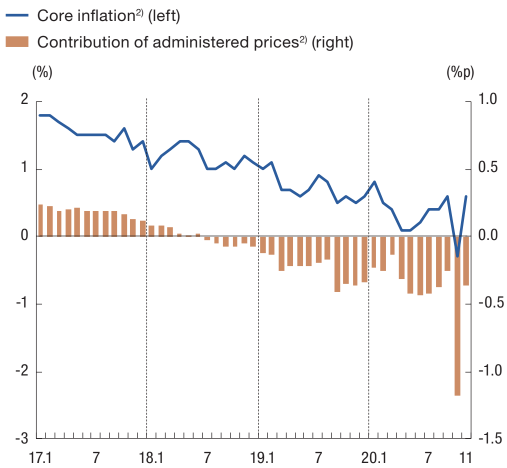
27) The core inflation index (excluding food and energy prices) with administered prices excluded is calculated by excluding the prices of public services, electricity, water, gas and school meals, which are greatly affected directly and indirectly by the government.
28) Expanded free school education, increased health insurance coverage, and telecommunications fees support acted as factors driving inflation down.
29) Administered prices have continued on a downward trend since 2018, reflecting government policy related to education, healthcare and telecommunications, and the decline accelerated this year.
30) Cyclically sensitive inflation is calculated based on the items from among the group of products comprising the core inflation index (excluding food and energy prices) that react sensitively to the percentage GDP gap.

Figure I-13. Underlying inflation rates[1]



Note: 1) Year-on-year.
Sources: Bank of Korea, Statistics Korea.

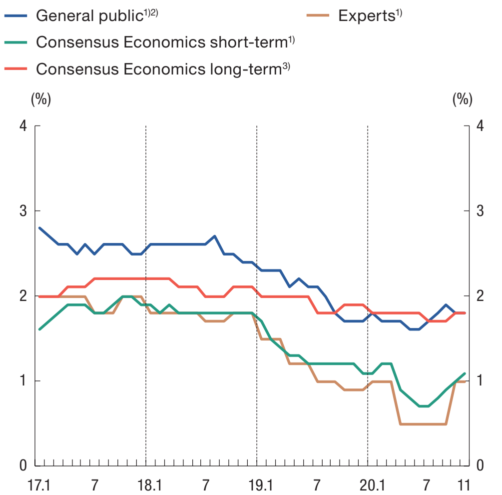
Figure 1-14. Contribution of administered prices to core inflation[1]



Notes: 1) Excluding food & energy.
2) Year-on-year.
Sources: Bank of Korea, Statistics Korea.

The short-term (one-year) inflation expectations of a group of experts[31] recently rose from the mid- to upper-0% level to around 1%, while the short-term expectations of the general public and the long-term expectations of experts remained at around the upper-1% level.

Figure I-15. Inflation expectations



Notes: 1) Expected CPI inflation rates for the next 12 months.
2) Based on new samples since September 2018.
3) Expected CPI inflation rates after 5 years.
Sources: Bank of Korea, Consensus Economics.

Housing sales and leasehold deposit prices rise at a faster pace

Entering November, the upward trend of housing sales prices[32] accelerated in Seoul and its surrounding areas (mainly in Gyeonggi province and Incheon), and in the rest of the country (mainly in metropolitan cities like Busan, Daegu and Ulsan).[33]

31) These figures are the results of surveys of domestic and foreign investment banks, securities companies, and market research institutions conducted by Consensus Economics, Inc.

32) Nationwide housing sales prices rose by 0.1% in May, 0.4% in June, 0.6% in July, 0.5% in August and 0.4% in September.

33) In November, housing sales prices in major regions rose by 0.7% in the Gyeonggi region, 0.4% in Incheon, 1.3% in Busan, 1.1% in Daegu and 1.1% in Ulsan.

Nationwide leasehold (*jeonse*) deposit prices rose at a higher pace in November both in Seoul and its surrounding areas and the rest of the country.[34)]

Table I-6. Rates of increase in housing sales and leasehold (*jeonse*) deposit prices[1)]

(%)

	2018	2019			2020				
	Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.	Nov.
Housing sales prices	1.1	-0.4	-0.1	0.7	1.2	0.8	1.5	0.3	0.5
Seoul and its surrounding areas	3.3	0.5	0.2	1.3	1.8	1.3	1.8	0.3	0.5
(Seoul)	6.2	1.2	0.4	1.8	0.6	0.0	1.4	0.2	0.2
Other areas	-0.9	-1.1	-0.4	0.2	0.5	0.4	1.3	0.3	0.6
Sales prices of apartments for reconstruction	17.7	12.2	4.3	6.5	1.4	1.2	4.2	0.9	0.7
Leasehold (*jeonse*) deposit prices	-1.8	-1.3	-0.3	0.4	0.7	0.5	1.3	0.5	0.7
Seoul and its surrounding areas	-1.5	-0.8	0.0	0.9	1.0	0.7	1.6	0.6	0.7
(Seoul)	0.3	-0.4	0.2	0.9	0.7	0.3	1.1	0.3	0.5
Other areas	-2.1	-1.7	-0.6	0.0	0.4	0.3	1.0	0.4	0.6

Note: 1) Compared with the last survey dates of the previous period.
Sources: Korea Appraisal Board, Real Estate 114.

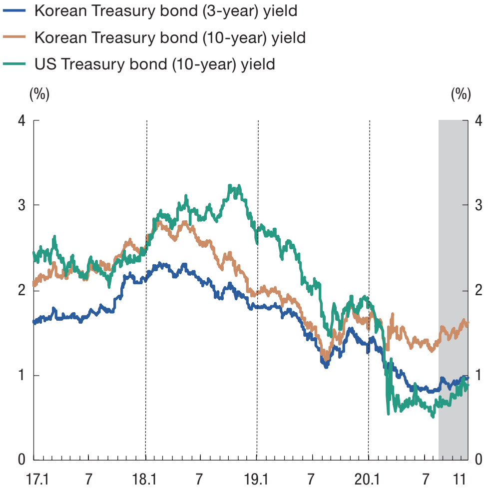
34) Nationwide leasehold (*jeonse*) deposit prices rose by 0.1% in May, 0.3% in June, 0.3% in July, 0.4% in August, and 0.5% in September.

4. Financial and Foreign Exchange Markets

Long-term market interest rates rise after fluctuating considerably

The Korean Treasury bond yield (3-year) fluctuated considerably depending on changes in conditions at home and abroad after August. It rose until early September (0.98% on Sep. 1) on concerns about an excess bond supply following the government's announcement of the next year's budget plan and the supplementary budget compilation.[35] It then fell to the low-0.80% level in late September, affected by the Bank of Korea's announcement of a plan to expand outright purchases of Treasury bonds (Sep. 8) and the resurgence of COVID-19. It rebounded after October (0.97% on Nov. 25), influenced by the rising US Treasury bond yield[36] stemming from expectations of an additional US stimulus deal, improvement in major domestic and international economic indices,[37] a lessening of uncertainties related to the US presidential election, and expectations of the development of COVID-19 vaccines.

Figure I-16. Korean and US Treasury bond yields



Sources: KOFIA, Bloomberg.

Short-term market interest rates generally stable

Short-term interest rates remained generally stable. The Monetary Stabilization Bond (MSB, 91-day) rate rose slightly on fund demand at the end of September, but then fell to the Base Rate level again due to increases in MMF deposits and reduction of MSB issuance.[38] CP rates (91-day, A1 rate) dropped to 1.09%, and CD rates (91-day) rose slightly in November (0.66%, Nov. 25), after generally maintaining the level of end-August.

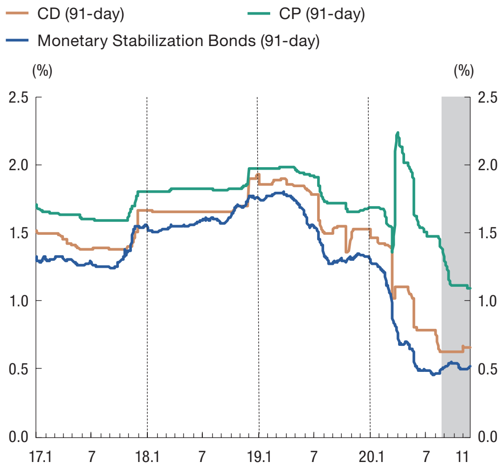
35) The fourth supplementary budget bill of 7.8 trillion won was passed through the National Assembly plenary meeting on September 22. It aimed at supporting small businesses and vulnerable groups hit by the resurgence of COVID-19.

36) From October 1 to November 3, the US Treasury bond yield (10-year) rose by 22bp (0.90% on Nov. 3).

37) The domestic GDP growth rate (quarter-on-quarter, 2.1%) and the US GDP growth rate (annualized quarter-on-quarter rate, 33.1%) in the third quarter were announced.

38) Net issuance of MSBs (trillion won): -0.4 in August 2020 → -1.9 in September → -2.8 in October.

Figure I-17. Short-term interest rates[1)]

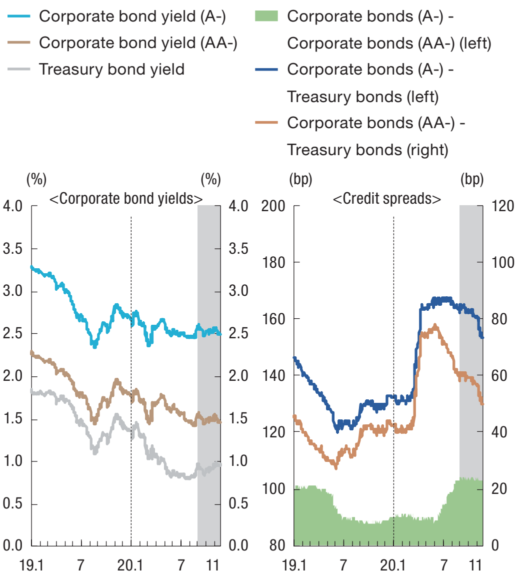


Note: 1) Monetary Stabilization Bond rates based on average rates estimated by private credit rating agencies; CD and CP rates based on final quoted yields.
Source: KOFIA.

Corporate bond credit spread narrows

The corporate bond credit spread narrowed with risk aversion reduced thanks to the market stabilization measures taken by the Bank of Korea and the government and to expectations for COVID-19 vaccines. The credit spread for prime bonds (AA-) narrowed from 61bp at the end of August to 50bp on November 25, and that for subprime bonds (A-) narrowed from 164bp to 153bp. In the case of subprime bonds, the credit spread remained far above the level seen before COVID-19 (42bp for AA- bonds, 133bp for A- bonds as of the end of January 2020).

Figure I-18. Corporate bond yields and credit spreads[1)]

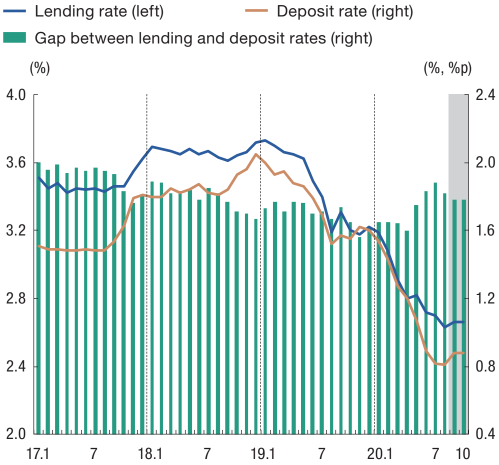


Note: 1) 3-year maturity basis; Treasury bond yields based on final quoted yields, and corporate bond yields on average yields estimated by four private credit rating agencies.
Source: KOFIA.

Bank lending and deposit rates hold steady after rising

Banks' interest rates on loans and deposits (new business) rose slightly in September and maintained the level of the previous month in October. Lending rates rose in September, partially reflecting the effects of banks' strengthened management of household debt as well as hikes in long-term and short-term interest rates. Deposit rates showed an upward trend in line with increases in market rates. Lending rates maintained a similar level as the previous month in October, as interest rates on household loans continued to increase, but interest rates on corporate loans declined slightly. Deposit rates were the same as in the previous month.

Figure I-19. Bank lending/deposit rates and spread

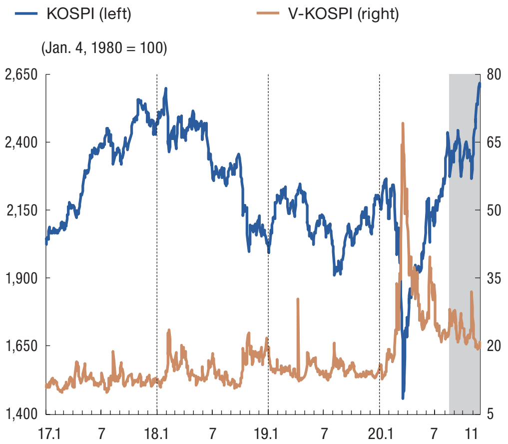


Source: Bank of Korea.

Stock prices rise sharply after fluctuating

Stock prices (KOSPI) rose in early September, driven by improved economic indicators in major economies and expectations of a semiconductor industry recovery, but fell in mid-September as investor sentiment deteriorated amid increased uncertainties related to the US presidential election and additional stimulus packages. Stock prices rebounded after late September, influenced by the slowing spread of COVID-19 in Korea, but fell again in mid-October, affected by lockdowns following the accelerated spread of COVID-19 in major countries, and rising uncertainties with respect to US politics. They recorded an all-time high[39] in November, soaring on the improvement in investor sentiment at home and abroad in line with the easing of uncertainties related to the US presidential election and expectations of COVID-19 vaccines and treatments. The stock price volatility index (V-KOSPI) fluctuated in line with developments of external risk factors.

Figure I-20. KOSPI and stock volatility index



Source: Koscom.

Foreign investors slightly reduce domestic bond investment, but significantly increase stock investment

Foreigners' domestic securities investment increased, led by stocks.

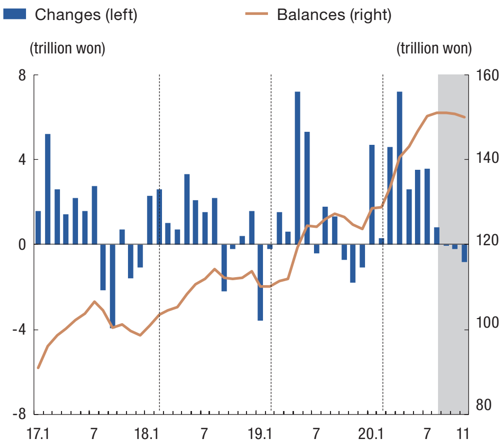
In the case of bond investment, growth moderated[40] due to the delayed reinvestment of maturing funds and reduced arbitrage incentive.[41] On November 25, foreigners' outstanding bond holdings fell slightly to 149.9 trillion won from a record-high month-end volume of 151.0 trillion won at the end of August.

39) The KOSPI rose above the previous high (2,598 on Jan. 29, 2018) to mark 2,618 on November 24. It then rose to 2,633 on November 27.

40) Changes in foreigners' outstanding bond holdings (trillion won) : monthly average of +3.8 from January to July 2020 → +0.8 in August → -0.0 in September → -0.2 in October.

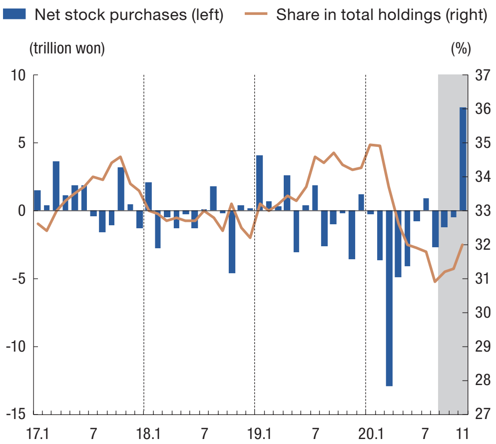
41) The difference between the interest rate differential and the swap rate (3-month, average during the period) narrowed from 65 basis points in the first quarter of 2020, 59 in the second quarter, 41 in the third quarter, 35 in October to 23 from November 1 to 25.

Figure I-21. Changes[1] in and balances[1] of foreigners' bond holdings



Note: 1) Based on November 25 for November 2020.
Source: Financial Supervisory Service.

Figure I-22. Foreigners' net stock purchases[1)2)] and share in total holdings[1)3)]



Notes: 1) Based on November 25 for November 2020.
2) Sum of net purchases in KOSPI and KOSDAQ markets.
3) Based on total stock market capitalizations.
Source: Koscom.

Concerning stock investment, net selling by foreign investors continued in September and October, but the size of net selling decreased gradually thanks to expectations of improved performance in the electrical & electronics sector. Entering November, foreign investors shifted to a large net buying,[42)] boosted by a lessening of uncertainties related to the US presidential election, as well as by expectations of an additional stimulus package in the US and of COVID-19 vaccine development.

Corporate lending continues to grow

Banks' lending to enterprises increased at a slower pace in the third quarter but continued to grow, led by lending to small and medium-sized enterprises (SMEs), thanks to COVID-19-related fund demand and to support from the government and banks. Lending to SMEs continued to grow by a large extent as financial support from the government and banks[43)] and demand from small and medium-sized corporations and sole proprietors for working capital continued due to the resurgence of COVID-19. However, lending to large enterprises shifted to a slight decrease, affected by slowing corporate demand for liquidity and improved funding conditions through corporate bonds. Growth in non-bank lending to enterprises slowed

42) Net buying of stocks by foreign investors amounted to 7.6159 trillion won from November 1 to 25, a record high after recording 7.8263 trillion won in September 2013.

43) Support measures include a financial support program for small businesses, policy financing for small, medium-sized and mid-market enterprises, the extension of loan maturity and deferment of principal and interest repayments for businesses affected by COVID-19.

somewhat. In the meantime, banks' lending to enterprises increased significantly in October due to continued lending to SMEs and the re-extension of bullet repayment loans to large firms at the end of the previous quarter.

Regarding direct funding by corporations, corporate bonds continued to record net issuance, led by prime bonds, but the size of net issuance[44] decreased, affected by seasonal factors such as summer holidays. The issuance of stocks increased, influenced by some companies' large initial public offerings and paid-in capital increases.

Table I-7. Corporate funding[1]

(trillion won, %)

		2018	2019			2020			
		Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.[2]
Loans	Total	81.8	90.2	20.3	24.0	47.2	62.9	32.9	··
	(Rate of change)[3]	(8.8)	(9.0)	(8.1)	(9.0)	(11.4)	(14.7)	(15.6)	··
	Banks	46.7	47.7	9.2	11.2	34.3	44.5	19.6	9.2
	(Large firms)	6.9	-1.8	-3.4	0.9	15.6	10.9	-0.8	1.0
	(SMEs)	39.8	49.4	12.7	10.3	18.8	33.6	20.3	8.2
	Non-banks[4]	35.1	42.5	11.1	12.8	12.9	18.4	13.4	··
Direct financing	Corporate bond net issuance[5]	5.2	15.8	4.1	2.3	2.9	7.8	3.0	1.1
	CP net issuance[6]	0.8	-1.3	0.0	-2.8	4.7	-2.0	-0.9	-0.5
	Stock issuance[7]	10.1	6.3	1.2	2.1	0.7	1.7	3.5	1.2

Notes: 1) Based on changes in balances during the periods.
2) Based on Bank of Korea advance estimate.
3) Year-on-year growth rate of loan balances.
4) Based on loans by mutual savings banks, credit unions, mutual credit cooperatives, community credit cooperatives, and insurance companies (including public and other lending).
5) Based on corporate bonds issued through public offering by non-financial corporations (excluding ABSs but including P-CBOs).
6) Based on CP handled by securities firms, merchant banking corporations and trust accounts of banks.
7) Initial public offerings and paid-in capital increases.

Sources: Bank of Korea, Financial Supervisory Service, Korea Securities Depository, Korea Credit Information Services.

44) Net issuance of prime bonds was reduced and net redemption of subprime bonds continued in the third quarter. In October, subprime bonds shifted to net issuance due to purchases by an SPV (425 billion won of subprime corporate bonds and CP in Oct.). Net issuance of corporate bonds (public offering, general enterprises only, ABS and P-CBOs excluded) are as follows:

(trillion won)

Type	2018	2019			2020			
	Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.
Prime (AA and above)	5.7	9.8	2.1	2.1	3.0	6.4	2.2	-0.2
Subprime (A and below)	0.7	6.1	2.2	-0.0	-0.1	-0.2	-0.6	0.8

Source: Korea Securities Depository.

Household lending grows by a large extent

Growth in household lending (based on depository institutions) accelerated greatly, driven by demand for funds for stock investment and for living expenses in addition to increased demand for housing-related funds.

Household lending by banks increased much more steeply in the third quarter than in the quarter before. Home mortgage loans rose greatly as housing sales transactions in Seoul and its surrounding areas soared, and as more people took out loans for leasehold (*jeonse*) deposits[45] as leasehold deposit prices climbed. Growth in other loans also expanded greatly, led by unsecured loans,[46] driven by demand for funds for stock investment and for living expenses in addition to demand for funds for housing purchases and leasehold deposits. Banks' household lending continued to show a high rate of growth in October, amid continued demand for housing-related funds in addition to seasonal factors such as increased payments during the Chuseok holiday.

Growth in household loans by non-banks accelerated, led by other loans of mutual credit cooperatives and savings banks.

Table I-8. Household lending by depository institutions[1)]

(trillion won, %)

	2018	2019			2020			
	Year	Year	Q3	Q4	Q1	Q2	Q3	Oct.[2)]
Total	67.3	56.3	16.1	21.8	20.3	18.3	32.1	‥
(Rate of change)[3)]	(6.2)	(4.9)	(5.1)	(4.9)	(6.4)	(6.5)	(7.8)	‥
Commercial & specialized bank loans[4)]	60.4	60.7	18.0	21.3	22.6	18.0	29.0	10.6
(Mortgage loans)[4)5)]	38.1	45.8	12.4	14.9	18.4	13.9	16.6	6.8
(Other loans, including through overdraft accounts)	22.4	14.9	5.6	6.3	4.2	4.2	12.3	3.8
Non-bank depository institution loans[4)]	6.8	-4.5	-1.9	0.5	-2.3	0.2	3.1	‥
(Mutual credit cooperatives)	7.5	0.6	-0.8	0.4	-0.9	1.1	2.1	‥
(Credit unions)	-1.4	-0.8	-0.3	-0.2	-0.7	-0.4	-0.1	‥
(Community credit cooperatives)	-1.9	-6.8	-1.5	-0.5	-1.5	-1.3	-0.8	‥
(Mutual savings banks)	2.5	2.6	0.7	0.8	0.8	0.9	1.8	‥
(Others)[6)]	0.2	-0.1	-0.1	0.1	-0.1	-0.1	0.0	‥

Notes: 1) Based on changes in balances during the periods.
2) Based on Bank of Korea advance estimate.
3) Year-on-year growth rate of loan balances.
4) Including mortgage transfers.
5) Including housing-related loans, such as loans for leasehold deposits, moving expenses and intermediate payments, that are not collateralized by houses.
6) Trust accounts of banks and postal savings.
Sources: Bank of Korea, Korea Housing Finance Corporation.

Korean won/US dollar exchange rate continues to fall

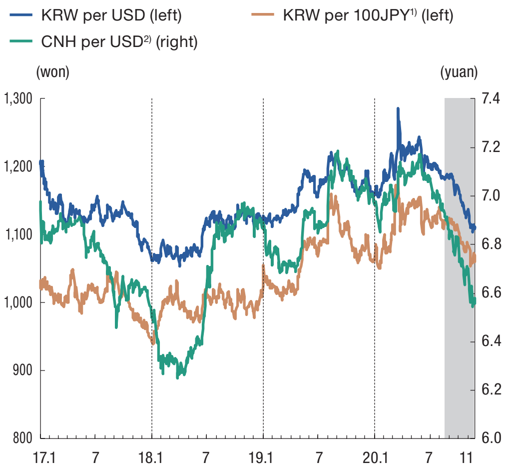
The Korean won/US dollar exchange rate fell rapidly from 1,180 won per dollar to 1,150 won per dollar in mid-September, due to the slowing of the COVID-19 resurgence and to

45) The growth of banks' leasehold deposit loans expanded from 7.0 trillion won in the second quarter of this year to 9.6 trillion won in the third quarter, and recorded 3.0 trillion won in October.

46) The growth of unsecured loans accelerated from 4.9 trillion won in the second quarter of this year to 11.5 trillion won in the third quarter, and recorded 3.2 trillion won in October (source: Financial Supervisory Service).

the recognition that the extent of the won's strengthening had been relatively limited.[47] It continued to drop after October and declined to 1,100 in late November, owing to favorable domestic economic indicators,[48] stronger Chinese yuan stemming from expectations of China's differentiated economic recovery, and improved global investment sentiment after the US presidential election. The Korean won/Japanese yen exchange rate showed movements similar to the Korean won/US dollar exchange rate, mainly affected by the spread of COVID-19, discussions regarding the US stimulus package and developments related to the US presidential election.

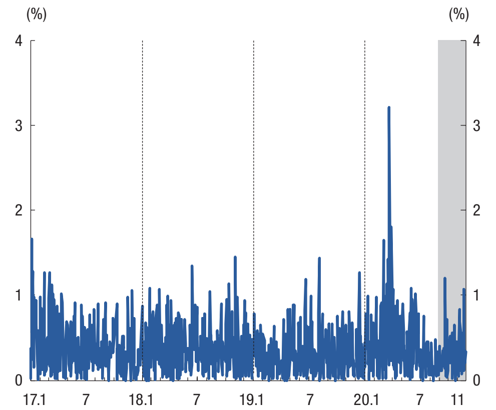
Figure I-23. Exchange rates



Notes: 1) Final transaction standard rate offered to customers posted by Hana Bank during the day.
2) Based on offshore rates.
Sources: Bank of Korea, Hana Bank.

The volatility in the Korean won/US dollar exchange rate expanded temporarily in late September due to the resurgence of COVID-19 in Europe, but generally remained at the average level of last year (0.30%).

Figure I-24. KRW per USD exchange rate volatility[1]



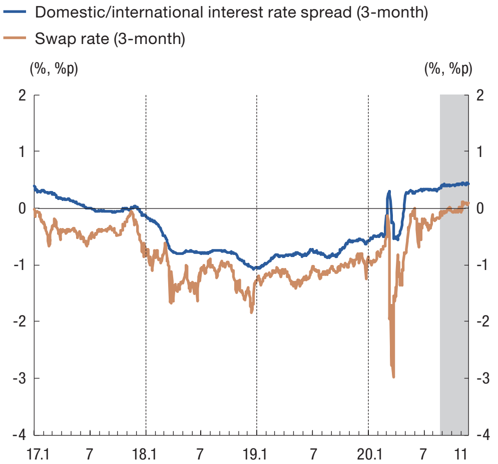
Note: 1) Daily change rate of the exchange rate.
Source: Bank of Korea.

The swap rate (3-month maturity) was stable, rising slightly thanks to favorable US dollar liquidity conditions.

47) From July 1 to September 14, the US dollar index (DXY) declined 4.5% and the Chinese yuan (CNH) appreciated by 3.5% against the US dollar, while Korean won appreciated by only 1.6%.

48) Quarter-on-quarter growth rate of GDP: -3.2% in the second quarter → +2.1% in the third quarter (market expectations +1.3%); year-on-year growth rate in mining and manufacturing production: -0.3% in August → +5.4% in September (market expectations +3.1%) (source of market expectations: Bloomberg).

Figure I-25. Domestic/international interest rate spread[1] and swap rate

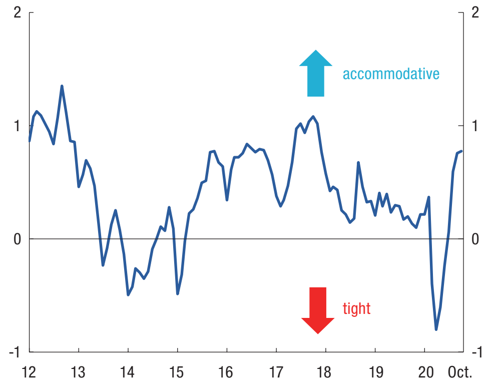


Note: 1) Yield on Korean Monetary Stabilization Bonds (MSBs) (3-month) - US LIBOR (3-month).
Source: Bank of Korea.

Accommodative financial conditions continue

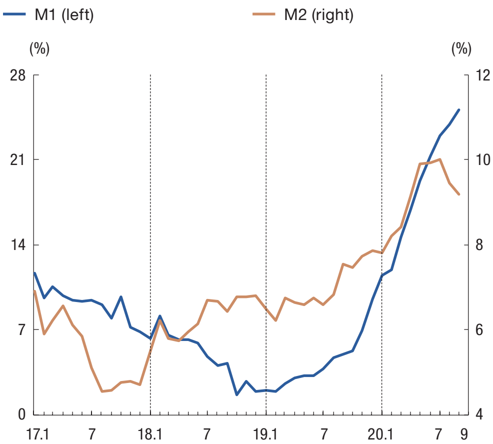
Domestic financial conditions are judged as accommodative. The Financial Conditions Index[49] hit bottom in April, continually rose from May, and exceeded the level seen before COVID-19 after August. The growth rate of M2 (broad money) slowed slightly, but maintained a considerably high rate of growth compared to the end of last year, standing at 9.2% in September 2020 (period average basis, year-on-year).

Figure I-26. Financial Conditions Index[1]



Note: 1) If the figure is above (below) zero, the long-term equilibrium, it means that financial conditions are accommodative (tight). The analysis period is from January 2000 to October 2020.
Source: Bank of Korea.

Figure I-27. Growth rate of key money supply indicators[1]



Note: 1) Period-average basis; year-on-year.
Source: Bank of Korea.

49) The Financial Conditions Index (FCI) assesses whether financial conditions are accommodative or tight and is calculated by standardizing the weighted sum of six major financial variables that are important in assessing financial conditions, such as interest rates, exchange rates and stock prices.

Box I-1.

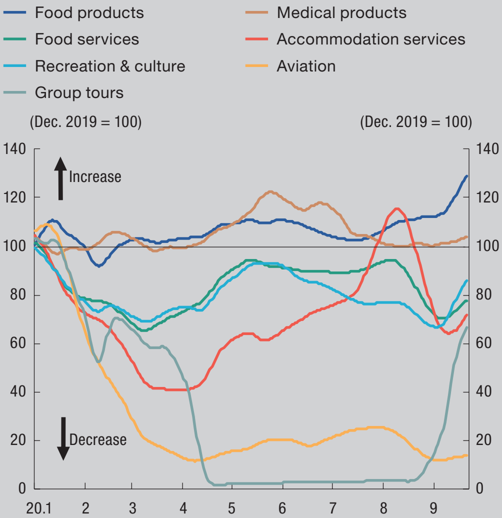
Effects of Changes in the Consumption Expenditure Structure on Prices since the Outbreak of COVID-19

Since the outbreak of COVID-19, the household consumption expenditure structure has changed significantly, affected by social distancing and lockdown measures and by enhanced social-welfare policies including free education. Given that the current consumer price index (CPI) is a weighted average index based on 2017, rapid changes in the consumption expenditure structure could widen the gap between perceived inflation[1] and CPI inflation. This section looks into changes in the consumption expenditure structure since COVID-19, estimates the inflation rate reflecting those changes (perceived inflation) to analyze the gap with CPI inflation, and presents implications.

(Changes in the household consumption expenditure structure since the outbreak of COVID-19)

Looking at changes in the household consumption expenditure structure[2] immediately after the outbreak of COVID-19, a rapid change in the consumption pattern was identified, with a sharp decline in consumption expenditure related mainly to face-to-face services. Food product and healthcare & medical spending increased relatively steeply whereas face-to-face service spending, including accommodation & food services and tourism & aviation, dropped significantly.[3]

Changes[1] in consumption pattern since outbreak of COVID-19



Note: 1) Comparison of consumption at respective point of time (based on 4-week moving average) with consumption in December 2019.

Source: Bank of Korea staff calculations.

In addition, the change in social-welfare policy related to education, mainly consisting of expanded free education including tuition, school lunches, textbooks and uniforms, resulted in a significant decline in the share of education-related spending from household consumption.[4]

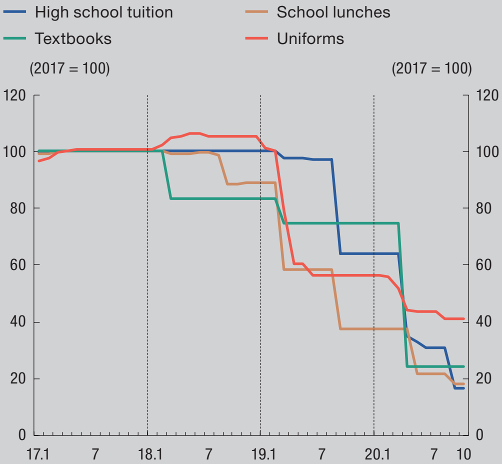
1) The similar methodology as in Cavallo (2020) was used for calculating perceived inflation: official CPI weights were adjusted reflecting the changes in the consumption expenditure structure since COVID-19, and then the adjusted weights were used to calculate revised inflation, which this section refers to as perceived inflation. Such inflation was called “Covid inflation” in Cavallo (2020) and Seiler (2020), and “adjusted CPI inflation” in Bank of Canada (2020). The calculated result of perceived inflation can differ if changes in the consumption expenditure structure which are not considered in this section are reflected.

2) Daily approved value of debit and credit cards (excluding corporate cards) was used.

3) For face-to-face services, contraction and recovery of sub-sectors since the outbreak of COVID-19 show differing developments.

4) If the decline in price indices of the items related to expanded free high school education (tuition, school lunches, textbooks and uniforms) since 2018 is considered as a reduction in household spending, the share of spending on respective items from the CPI shrinks from 0.80% in January 2018 to 0.16% in October 2020.

Changes in household spending related to education[1)]



Note: 1) The decline in each index following the expansion of free education (tuition, school lunches, textbooks and uniforms) is considered a reduction in household spending.
Source: Bank of Korea staff calculations.

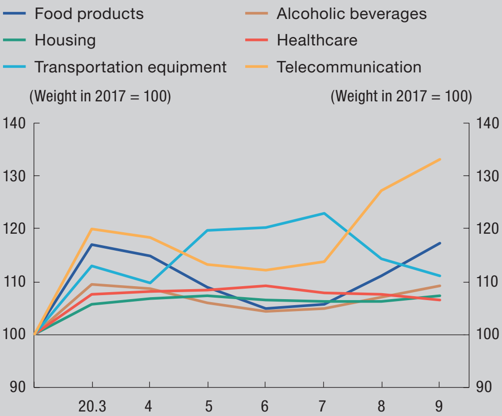
(Inflation rate reflecting the changes in the consumption expenditure structure)

Reflecting the above-mentioned changes in the consumption expenditure structure since COVID-19, weights for each spending purpose under the CPI were revised to newly calculate inflation rates.

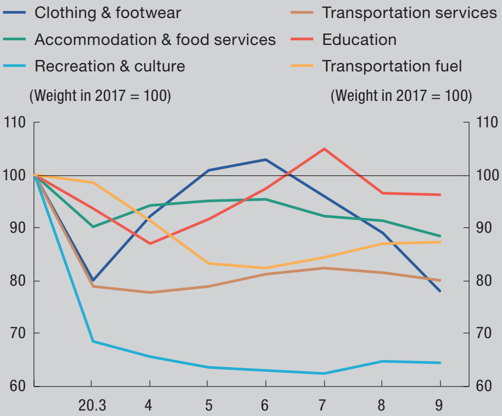
First of all, the weights for each spending purpose comprising the CPI were adjusted,[5)] reflecting the changes in the consumption pattern since the outbreak of COVID-19 and the reduction in livelihood expenses following the expansion of social-welfare policy related to education. The weights for food products, healthcare, housing and telecommunications increased relatively steeply since the outbreak of COVID-19, whereas the weights for accommodation & food services, transportation, recreation & culture, and education declined greatly.

Adjusted weights for each spending purpose reflecting changes in consumption expenditure structure[1)]

(Items with increased weights)



(Items with decreased weights)

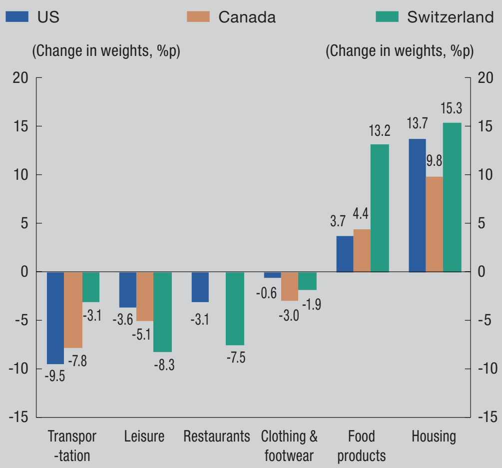


Note: 1) Weights have been adjusted each month since the outbreak of COVID-19 in March 2020. However, the weight for education has been adjusted since 2018, reflecting the decline in livelihood expenses caused by expanded free education.
Source: Bank of Korea staff calculations.

5) In order to see the changes in the consumption pattern, the value of consumption and spending was calculated using the transaction amount of debit and credit cards (excluding corporate cards), while supplementing with aviation & travel data and business trend data. Regarding the items related to education, the drop in livelihood expenses since shifting to free education (tuition, lunches, etc.) was considered as a decline in the spending ratio (weight) of those items.

Recent studies[6] show that major countries including the US, Canada and Switzerland would also see their weights adjusted in a similar pattern to Korea when the changes in the consumption expenditure structure since COVID-19 are reflected.

Major countries' adjusted weights reflecting changes in consumption expenditure structure[1]



Note: 1) For Canada, spending on items related to restaurants are included in food products.
Sources: Cavallo (2020), Bank of Canada (2020), Seiler (2020).

Looking at the changes in weights for each spending purpose and in inflation during the period from March to June when the changes in the spending structure were most prominent, the spending weight of food products since the outbreak of the disease rose greatly while its inflation accelerated significantly. On the other hand, the spending weight related to accommodation & food services, tourism & aviation and education declined, and the related inflation either shifted to negative or slowed greatly. Such changes before and after the outbreak of COVID-19 were more salient in services than in goods.

6) Cavallo (2020), Bank of Canada (2020), Seiler (2020).

Changes in weights and inflation for each spending purpose before and after COVID-19[1)2)]

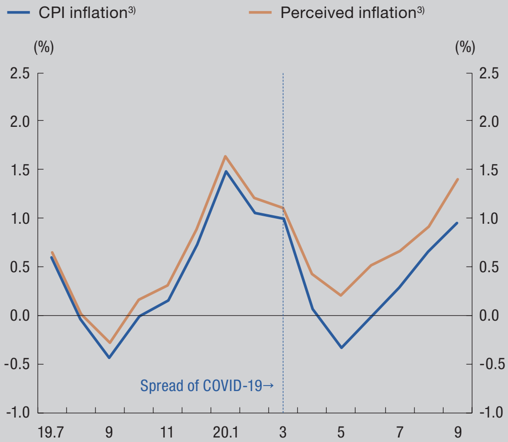
Notes: 1) Gap between before (Jan.-Feb. 2020) and after (Mar.-June 2020) the outbreak of COVID-19.
2) The size of circle represents CPI weights for each spending purpose.
Source: Bank of Korea staff calculations.

Based on the calculation of the inflation rate using the new weights that reflect the changes in the spending structure, perceived inflation has been exceeding CPI inflation by 0.2-0.6%p since the outbreak of COVID-19.

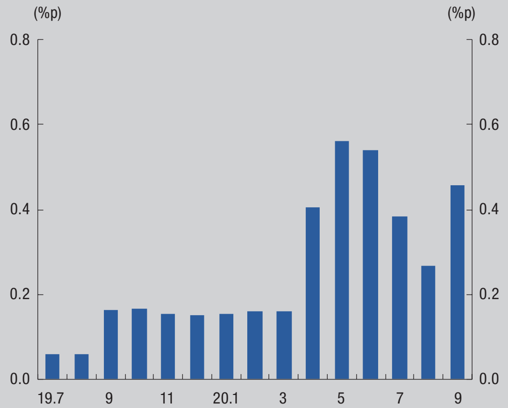
Recent studies[7] show that perceived inflation in major countries would also exceed their official CPI inflation when the changes in the consumption expenditure structure since COVID-19 are reflected.

Perceived inflation[1] reflecting changes in consumption expenditure structure

(Comparison with CPI[2] inflation)



(Gap with CPI[2] inflation)



Notes: 1) Inflation calculated by reflecting changes in expenditure structure since COVID-19.
2) Official CPI.
3) Year-on-year.
Source: Bank of Korea staff calculations.

Perceived inflation reflecting changes in consumption expenditure structure in major countries

(Year-on-year, %, %p)

	US (Apr.)	Switzerland (Apr.)	Canada (May)
· CPI inflation (A)[1]	0.35	-1.05	-0.4
· Perceived inflation (B)[2]	1.05	-0.38	-0.1
· Gap (B-A)	+0.70	+0.67	+0.3

Notes: 1) Official CPI of respective country.
2) Inflation calculated by reflecting changes in expenditure structure since COVID-19.
Sources: Cavallo (2020), Bank of Canada (2020), Seiler (2020).

(Summary and implications)

A calculation of perceived inflation by reflecting the rapid changes in the consumption expenditure structure since COVID-19 shows that it significantly exceeds CPI inflation.[8]

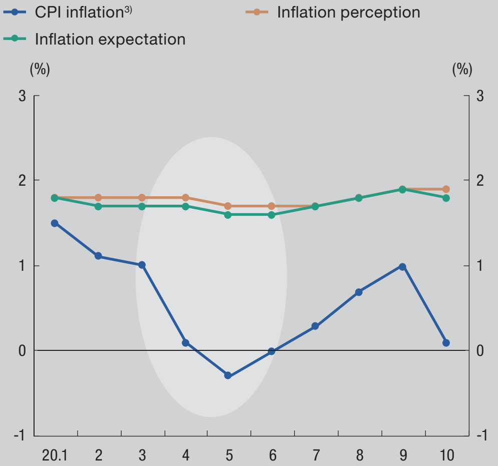
The relative stability of inflation perceptions and expectations by the general public since the coronavirus pandemic began, standing in contrast to the sharp decline in CPI inflation over the same period, implies that the heightened perceived inflation from the changes in the consumption expenditure structure may have had an effect.

In the meantime, the rapid change in the consumption expenditure structure following

7) Although the gap between perceived inflation and CPI inflation driven by changes in the consumption pattern was narrower in Korea compared to other major countries that implemented complete lockdowns, the gap was widened by the change in the spending structure caused by expanded free education.
8) Increased delivery fees and deteriorated service quality since the pandemic are also assessed to have worked as factors raising perceived inflation by the general public (New York Times, September 4, 2020).

COVID-19 is highly likely a temporary development, and this should therefore be taken into account when the CPI reference year is revised going forward.[9]

Inflation perception[1] and expectation[2] by general public since COVID-19



Notes: 1) Perceived CPI inflation over the past one year.
2) Expected CPI inflation for the coming one year.
3) Year-on-year.
Sources: Statistics Korea, Bank of Korea.

9) The 2020-based CPI is planned to be revised in December 2021.

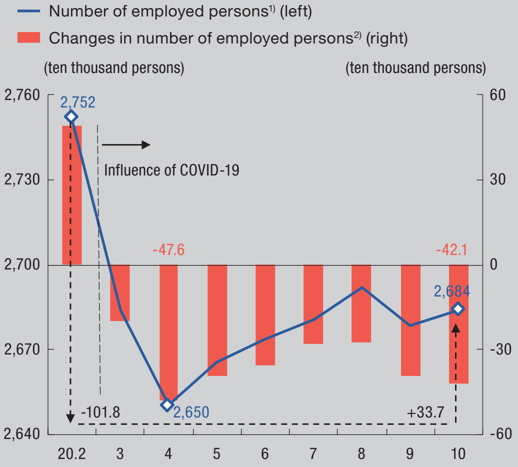
Box I-2.

Characteristics of COVID-19 Employment Shock

The number of employed persons (seasonally adjusted) declined by 1.02 million in March and April this year compared to February due to the COVID-19 shock, and recovered about one-third of the decline (0.34 million) from May to October. By sector, the number of employed persons saw the steepest declines in face-to-face service industries such as accommodation & food services, wholesale & retail, and education, and in temporary & daily workers.

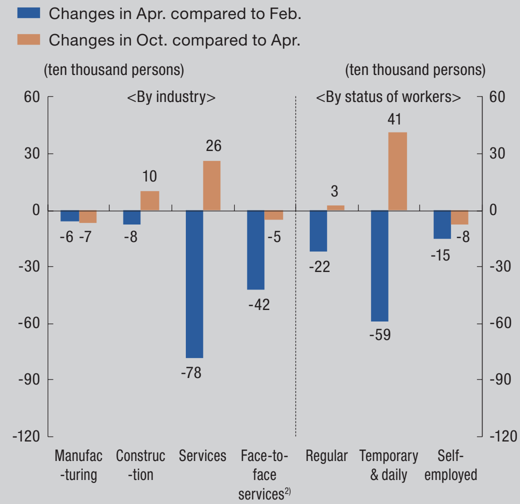
As the size and nature of the COVID-19 shock differ from those of the Asian financial crisis and the global financial crisis, the patterns of employment recovery could vary from the past crises. In this section, we will analyze the employment shock stemming from COVID-19 by comparing it with those of past crises,[1] and draw implications for the expected course of employment recovery.

Number of employed persons



Notes: 1) Seasonally adjusted.
2) Year-on-year.
Source: Statistics Korea's Economically Active Population Survey.

Changes in number of employed persons[1]



Notes: 1) Seasonally adjusted.
2) Accommodation & food services, wholesale & retail, education, art & sport & leisure, personal services.
Source: Statistics Korea's Economically Active Population Survey.

1) The starting point of the Asian financial crisis, the global financial crisis and COVID-19 was set at December 1997, November 2008 and February 2020, respectively.

(Characteristics of COVID-19 employment shock)

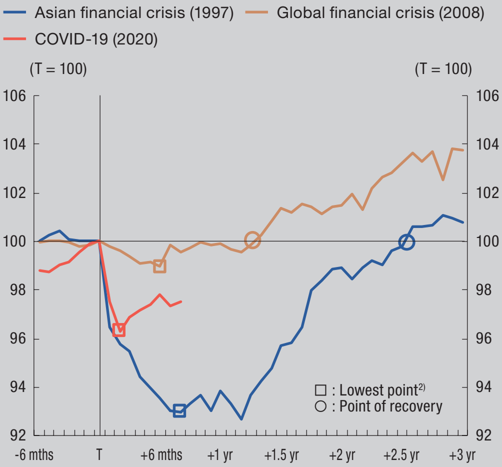
The total number of the employed (seasonally adjusted) declined significantly in March and April due to the COVID-19 shock and bottomed out in May, but the pace of recovery has been slow. During the Asian financial crisis and the global financial crisis, it took 31 months and 16 months, respectively, for the number of the employed to recover to the pre-crisis level, and the period of employment recovery was longer than that of decline. In case of the COVID-19 shock, the pace of recovery is assessed as being modest after the number of the employed hit bottom at a rapid pace.

Size of job decline and recovery period by crisis[1)]

	Asian financial crisis	Global financial crisis	COVID-19
Extent of decline (high-low[2)] point)	-1.48 million (-7.0%)	-0.25 million (-1.1%)	-1.02 million (-3.7%)
Period of recovery to pre-crisis level	31 months	16 months	-
Period of decline	8 months	6 months	2 months
Period of recovery	23 months	10 months	-

Notes: 1) Seasonally adjusted.
2) Point at which decline ends.
Source: Statistics Korea's Economically Active Population Survey.

Employment path[1)] by crisis

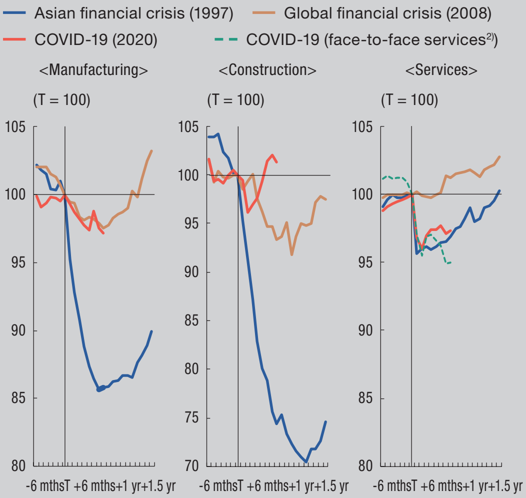


Notes: 1) Seasonally adjusted. 2) Point at which decline ends.
Source: Statistics Korea's Economically Active Population Survey.

The employment shock from COVID-19 is different from those from the past crises. It first hit service industries requiring face-to-face interactions and then spread to the manufacturing and construction industries. During the Asian financial crisis, employment conditions worsened in all industries owing to widespread bankruptcies following deterioration in corporate financial conditions. All industries experienced worsening labor market conditions during the global financial crisis as well, as the global financial unrest was transmitted to the domestic economy.

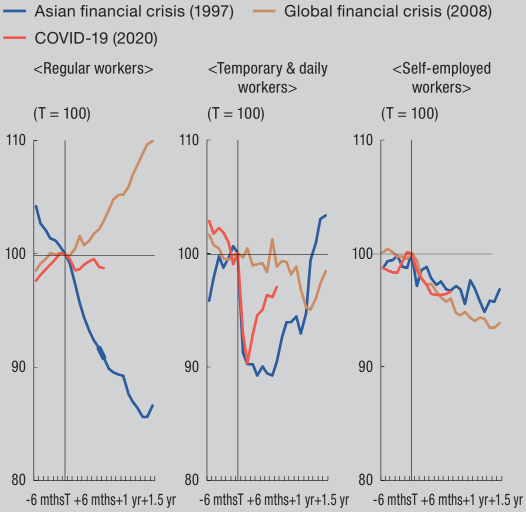
By status of workers, deterioration in employment conditions was first seen among temporary & daily workers, and then spread to the self-employed and regular workers. During the Asian financial crisis, the job crisis affected both regular and temporary & daily workers because of massive business failures, but during the global financial crisis, self-employed businesses were hit hardest as their financial conditions deteriorated greatly.

Employment path[1)] by crisis, by industry



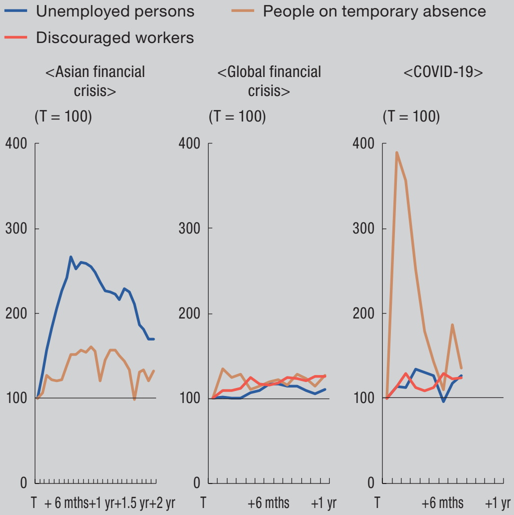
Notes: 1) Seasonally adjusted.
2) Accommodation & food services, wholesale & retail, education, art & sport & leisure, personal services.
Source: Statistics Korea's Economically Active Population Survey.

Employment path[1)] by crisis, by status of workers



Note: 1) Seasonally adjusted.
Source: Statistics Korea's Economically Active Population Survey.

Path of the unemployed, people on temporary absence and discouraged workers by crisis[1)2)]



Notes: 1) Data on discouraged workers available from November 1999.
2) Seasonally adjusted.
Source: Statistics Korea's Economically Active Population Survey.

The increase in the number of temporarily absent and discouraged workers is another characteristic of the COVID-19 crisis. During the Asian financial crisis, bankruptcies led to mass layoffs, and led to high unemployment rather than temporary absences, but during this crisis, the number of the temporarily absent, rather than the unemployed, surged due to the suspension of business operations following the spread of the pandemic and reduced demand due to social-distancing measures.[2)3)] The number of persons discouraged from searching for work increased significantly as well.

Lastly, large shocks occurred simultaneously both on the supply and demand side of the labor market, as the sluggishness in consumption of goods and services continued, due for example to social-distancing measures after the COVID-19 outbreak, which slowed business recruitment and diminished the labor market participation of households. Compared to the past, labor demand decreased greatly, as job postings and hiring of new employees declined and involuntary unemployment[4)] increased. At

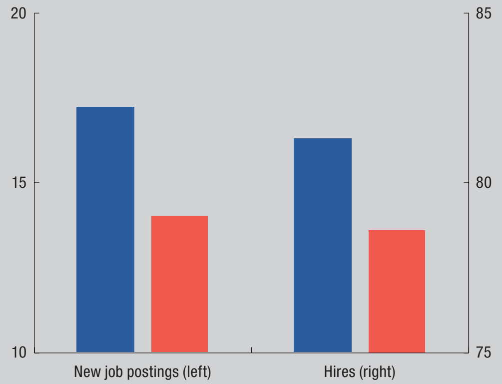
2) In the US, the record-level rise in temporary layoffs at the initial stage of COVID-19 contrasts starkly with past crises that typically start with an increase in permanent layoffs (Gallant et al., 2020). In the US, workers suffering temporary absences due to business slumps and suspension of operations are classified as temporarily laid-off and are included in the group of the unemployed, while in Korea, such workers (those with paid leave, and those with unpaid leave who are able to return to work within six months) are categorized as employed according to the ILO standard, and thus are not included in the unemployed group.

3) It is judged that the surge in the number of people on temporary absence at the initial stage of the COVID-19 crisis was partly affected by the government's measures to stabilize employment such as wage subsidies.

4) To the question "Why did you quit your previous job" in the Economically Active Population Survey, unemployed people who answered the closure and suspension of business, honored and early retirement, layoffs, completion of temporary or seasonal work, absence of work and the slump in business are defined as those in involuntary unemployment. The number of people in involuntary unemployment (seasonally adjusted) increased from 0.315 million in February this year to 0.5-0.6 million after March.

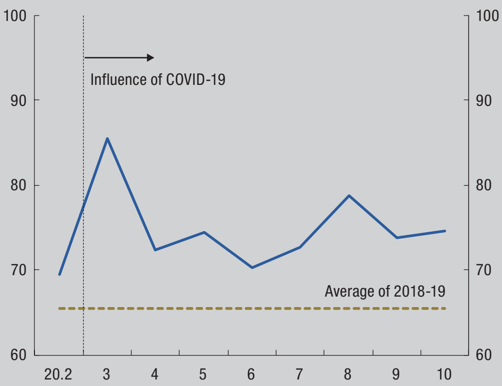
the same time, labor supply also shrank as a larger number of persons transitioned from the economically active population to the economically inactive population.

Job postings and hires[1)2)]



Notes: 1) Excluding agriculture, forestry and fisheries industry.
2) Seasonally adjusted.
Sources: Korea Employment Information Service's statistics on job searching and recruitment, Ministry of Employment and Labor's Labor Force Survey at Establishments.

Size of transition from economically active population to economically inactive population[1)2)]

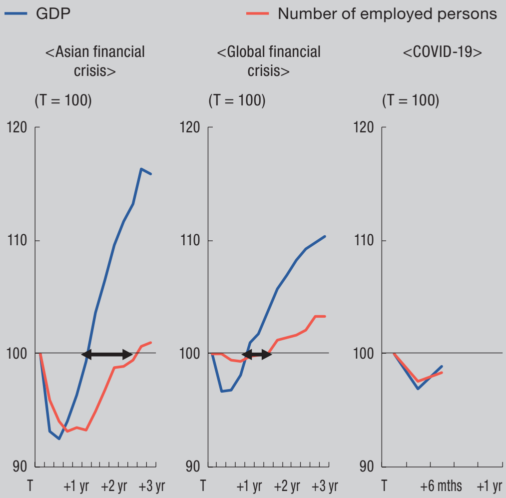


Notes: 1) Calculating the size of transition after the same person identification of the Economically Active Population Survey.
2) Seasonally adjusted.
Source: Raw data of Statistics Korea's Economically Active Population Survey.

(Expected course of employment recovery after COVID-19)

The employment paths during the past crises show asymmetric recovery patterns. It took more time for the number of the employed to recover to the pre-crisis level than to decline. The employment slump continued for a considerable time even after the economy returned to normal. During the Asian financial crisis and the global financial crisis, it took an additional one year and six months, respectively, for employment to recover to its pre-crisis level after the economic recovery. Even when COVID-19 subsides and the economy returns to its pre-crisis level in the future, the employment slump is not expected to be resolved quickly.

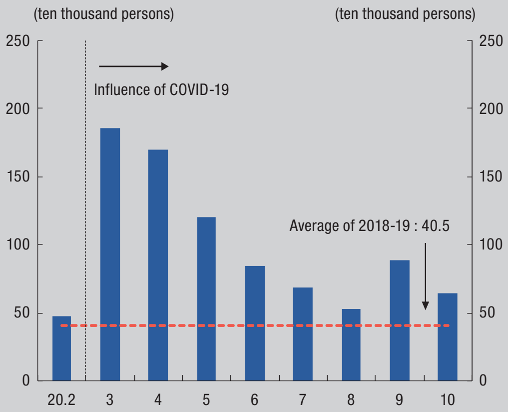
GDP and employment path by crisis[1)2)]



Notes: 1) The starting points of the Asian financial crisis, the global financial crisis and the COVID-19 crisis were Q4 1997, Q3 2008 and Q1 2020, respectively.
2) Seasonally adjusted.
Sources: Bank of Korea, Statistics Korea's Economically Active Population Survey.

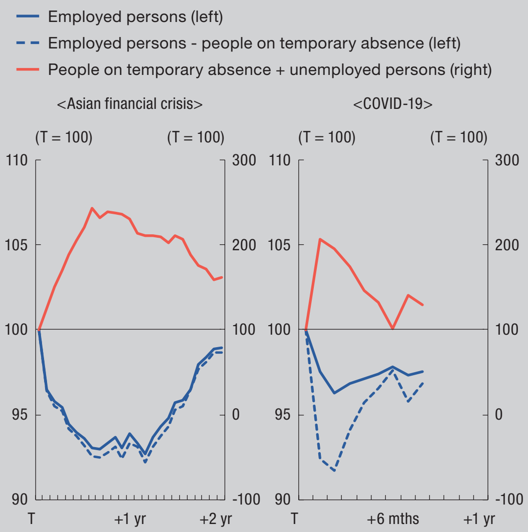
The employment recovery could be slow, as new hiring is reduced and delayed until most workers on temporary absence and in unemployment return to work.[5)6)] During the Asian financial crisis, it took a considerable time for the number of the employed to increase after the numbers of those on temporary absence and the unemployed stopped rising. This year, the service industry saw workers on temporary absence increase significantly due to the employment shock.[7)] As their recall rate (average of 36.8% between March and October[8)]) is far below that in the manufacturing (47.6%) and construction (45.5%) industries, the employment recovery process is likely to be slow.

Number of people on temporary absence after COVID-19[1)]



Note: 1) Seasonally adjusted.
Source: Statistics Korea's Economically Active Population Survey.

Path of the employed, the unemployed, and people on temporary absence by crisis[1)]



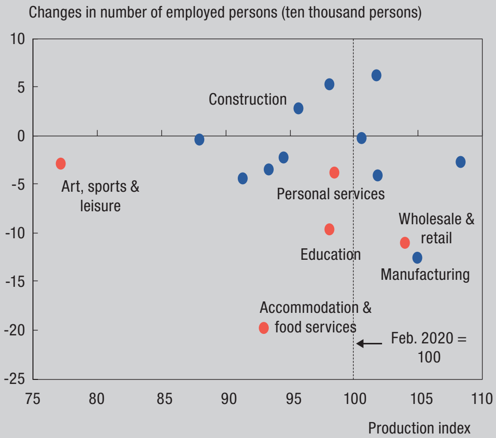
Note: 1) Seasonally adjusted.
Source: Statistics Korea's Economically Active Population Survey.

The fact that employment worsened mostly in the face-to-face service industry, which is expected to experience a prolonged business slump after COVID-19, is another factor that delays employment recovery. Due to the nature of COVID-19, until vaccines or treatments are widely available, the effects of social-distancing measures will continue, and business slumps in some face-to-face service industries such as accommodation & food services and arts, sports & leisure will go on for a considerable time. In addition, during the past crises, compared to other service industries, it took longer time for the

5) According to Fujita and Moscarini (2013), in terms of search period and costs, companies tend to prefer recalling their laid-off employees to hiring new ones.
6) The number of the unemployed declined considerably in August, falling temporarily below the pre-crisis level. This is estimated to be partly due to the fact that some unemployed persons stopped looking for work and transitioned to the economically inactive population. In August, the number of discouraged workers increased 139,000 year-on-year, which is larger than the increase in the previous month (55,000).
7) From March to October this year, the average number of people on temporary absence (seasonally adjusted) was 890,000 in the service industry, far above corresponding figures in the manufacturing industry (100,000) and the construction industry (48,000).
8) This is an estimate using the raw data of the Economically Active Population Survey and is calculated using the average monthly recall rate, which does not consider the absence periods of individual persons.

number of the employed in the face-to-face service industry to recover to the pre-crisis level.[9]

Production index[1)2)3)] and changes in number of employed persons[1)2)4)] by industry



Notes: 1) Seasonally adjusted.
2) Red dots indicate face-to-face service industry.
3) Index in Sep. 2020 compared to Feb. 2020.
4) Changes in the number of employed persons in Oct. 2020 compared to Feb. 2020.
Sources: Statistics Korea's Economically Active Population Survey, Monthly Industrial Statistics.

High uncertainties related to infectious disease developments, such as the resurgence of COVID-19, are highly likely to delay the employment recovery, particularly for regular workers. This is because in the case of regular workers companies tend to wait and see until uncertainties are resolved due to high recruitment costs.

We analyzed the impulse-response from the shock by status of workers,[10] using a VAR model, and found that uncertainty shocks have negative impacts on the number of regular workers.

(Assessment)

As seen from above, the employment shock from COVID-19 is different from those from other economic crises in the past, as it is attributable to the suspension of business operations and contraction of economic activities following the spread of an infectious disease. The number of temporary & daily workers declined sharply, especially in the face-to-face service industry, while the numbers of temporarily absent and discouraged workers, rather than that of the unemployed, increased significantly. In addition, labor demand and supply shocks occurred simultaneously on a large scale, as firms' hiring slowed and household participation in the labor market shrank.

Considering past employment recovery patterns and the characteristics of the COVID-19-triggered employment shock, a recovery to the pre-crisis level is expected to take considerable time, and the recovery will be differentiated by sector (by industry and by status of workers). This is because in the past crises, sluggish

9) Employment recovery period by sector during the past crises is as follows:

	All industry[1)]	Service industry[1)]	Face-to-face service industry[1)2)]
Asian financial crisis	31 months	18 months	21 months
Global financial crisis	16 months	5 months	41 months

Notes: 1) Time taken to recover to the pre-crisis highest level (Dec. 1997 for the Asian financial crisis, and Nov. 2008 for the global financial crisis), seasonally adjusted.
2) Accommodation & food services, wholesale & retail, educational services.
Source: Statistics Korea's Economically Active Population Survey.

10) We estimated the impacts of uncertainty shocks on the number of regular workers, using short-run restrictions on six variables (stock index, KOSPI 200 volatility index, call rate, CPI, number of regular workers, GDP). The results show that uncertainty shocks reduced the number of regular workers, and this negative effect is most evident in the second quarter. Also, Bloom (2009) analyzed that expanded uncertainty increased corporate real-option value to waiting, thus delaying investment and recruitment decisions.

employment conditions continued after the economic recovery, and also because there is a possibility that new recruitment could be reduced or delayed until most people who became unemployed or temporarily absent after COVID-19 return to their work. The pace of employment recovery is projected to be modest, as uncertainties regarding the path of the pandemic are high and the employment shock was large in the face-to-face service industry, where the business slump is expected to be prolonged.

It should be noted that hysteresis in the labor market and reduced household income due to the prolonged employment slump could act as medium- and long-term factors limiting growth.

II

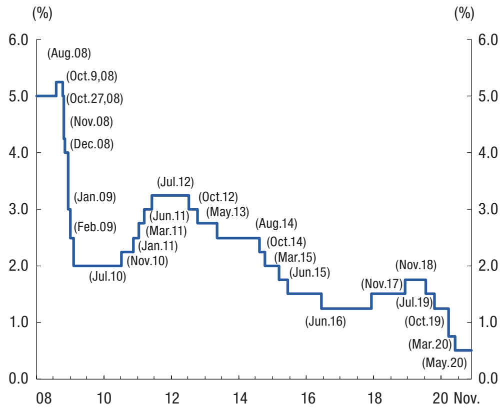
Conduct of Monetary Policy

1. Base Rate

Base Rate operated at 0.50%

The Bank of Korea maintained its accommodative policy stance to support the recovery of growth and to help inflation stabilize at the 2% target over a medium-term horizon. In this process, it closely examined risk factors such as the global and domestic development of the COVID-19 pandemic, its financial and economic impacts at home and abroad, and changes in financial stability conditions. Under this policy stance, the Bank maintained the Base Rate at 0.50% per annum.

Figure II-1. Bank of Korea Base Rate[1)]



Note: 1) Figures in parentheses refer to the months of Base Rate adjustments.
Source: Bank of Korea.

A detailed look at the Base Rate decisions during this period, and the backgrounds behind them, are as follows.

At the October meeting, the Board decided to leave the Base Rate unchanged at 0.50%, considering that it was necessary to monitor the effects of the monetary and fiscal measures taken so far, the development of COVID-19 at home and abroad, and subsequent changes in financial and economic conditions, as the slump in exports was easing and the expansionary fiscal policy stance was being strengthened under accommodative financial conditions amid high uncertainties surrounding the growth path. It was expected that the economy would recover gradually, led by exports as the slump in exports eased, although consumption was tepid, affected by the resurgence of COVID-19, and the recovery in facilities investment was subdued. However, it was judged that uncertainties surrounding the growth path were still high due to the spread of COVID-19 worldwide. Consumer price inflation had risen to around 1% in September, driven mainly by a large increase in the prices of agricultural, livestock and fishery products due to severe weather conditions. It was forecast that consumer price inflation would run at the low- to mid-0% level for some time, reflecting weak demand-side inflationary pressures and prolonged effects from the drop in global oil prices. From the financial stability perspective, household loan growth had picked up and housing prices continued on an increasing trend in all parts of the country.

At the November meeting, the Board left the Base Rate unchanged at 0.50%. The Board judged there was a need to maintain the current policy stance as uncertainties surrounding the growth path remained elevated, regarding for example early vaccine rollouts and developments related to the global spread of COVID-19, although expectations for an economic recovery were heightened as better-than-expected results had been reported with respect to COVID-19 vaccine development. The Korean economy continued to recover at a modest pace overall, but showed varying movements by sector. The improvement in exports continued and facilities investment had started to recover, led by the IT sector, while the recovery in private consumption was slow with the resurgence of COVID-19 and the adjustment in construction investment continued. Going forward, the domestic economy was likely to recover gradually, led mainly by exports and investment. GDP was projected to grow at slightly below -1% in 2020 and around 3% in 2021. It was forecast that consumer price inflation would remain at the low- to mid-0% level for some time and then moderately increase to around 1% in 2021, owing to improvement in the domestic economy and the base effect of international oil price declines this year. In the meantime, the Board saw a need to closely monitor the effects of the government's housing and macroprudential policies and consequent changes in financial stability conditions, as housing prices in all parts of the country continued their upward trends and the growth in household loans accelerated.

Open market operations to maintain call rate at Base Rate level

In order to influence the overnight call rate so that it does not deviate greatly from the Base Rate, the Bank of Korea adjusts market liquidity by utilizing its open market operation instruments, including issuance of Monetary Stabilization Bonds (MSBs), RP transactions, and deposits into the Monetary Stabilization Account (MSA).

The total amount of liquidity adjustment needed (average balance basis) increased in the third quarter followed by another slight uptick in October, affected mainly by the Bank of Korea's outright purchase of Treasury bonds[50] and the heightened ceiling of the Bank Intermediated Lending Support Facility. The Bank responded primarily by expanding RP transactions,[51] while flexibly adjusting the amount of deposits into the MSA given the supply and demand conditions in the short-term money market. The issuance of MSBs was expanded in the third quarter, but reduced[52] in October in consideration of the burden placed on bond supply and demand from the government's implementation of the fourth supplementary budget. As a result, the call rate remained generally stable at around the Base Rate.

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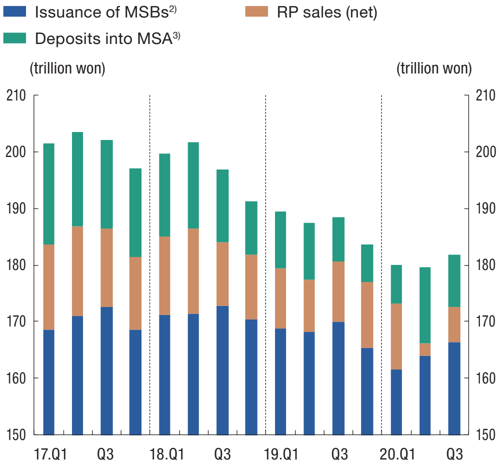
50) To curb the heightening volatility of market interest rates in line with the spread of COVID-19 while securing securities eligible for RP sales, the Bank conducted outright purchases of Treasury bonds amounting to 6.0 trillion won in total, purchasing 1.5 trillion won each in March, April, July and August. Moreover, in line with the plan announced on September 8 to expand outright purchases of Treasury bonds by approximately to 5.0 trillion won, the Bank conducted outright purchases of 5.0 trillion won on three occasions between September and November.

51) As the full-allotment RP purchase program expired at the end of July, the (net) RP sales (average balance basis) rose by 4.0 trillion won in the third quarter compared to the previous quarter and by 2.7 trillion won in October compared to the previous month.

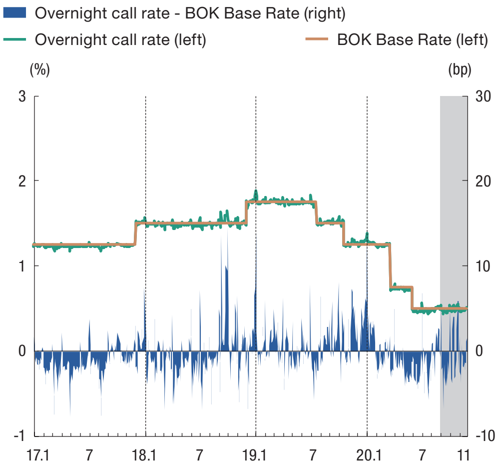
52) The issuance of MSBs (average balance basis) rose by 2.4 trillion won in the third quarter compared to the previous quarter, but dropped by 4.2 trillion won in October compared to the previous month.

Figure II-2. Liquidity adjustment[1] by means of open market operations



Notes: 1) Quarterly average balance basis.
2) Monetary Stabilization Bonds.
3) Monetary Stabilization Account.
Source: Bank of Korea.

Figure II-3. Bank of Korea Base Rate and overnight call rate



Source: Bank of Korea.

2. Bank Intermediated Lending Support Facility

Ceiling raised by 8 trillion won in response to resurgence of COVID-19

To ensure that banks actively lend to small and medium-sized enterprises, the Bank of Korea operates the Bank Intermediated Support Facility, through which it supports banks by supplying them with funds at interest rates lower than the Base Rate. When necessary, the Monetary Policy Board adjusts the Bank Intermediated Lending Support Facility's total ceiling, and its individual program ceilings and reserves, in consideration of financial and economic trends and SME funding conditions.

After having raised the ceiling of the Bank Intermediated Lending Support Facility by 10 trillion won in total on two occasions, in March and May, the Bank of Korea increased the ceiling by another 8 trillion won on October 5 from 35 trillion won to 43 trillion won, in an attempt to support SMEs and small businesses whose financial difficulties had been aggravated by the resurgence of COVID-19. Specifically, the Bank provided 3 trillion won of new funding to support small businesses affected by COVID-19,[53] and increased the ceiling of the existing program that supports SMEs affected by COVID-19 by 3 trillion won from 10 trillion won to 13 trillion won, while extending the program by six months.[54] In addition, the Bank used another 2 trillion won for an increase from 3 trillion won to 5 trillion won of the ceiling of the program that supports facilities investment[55] of startups, of businesses that create jobs, and of material, parts and equipment businesses, all of which can act as growth engines of the Korean economy and contribute to employment, while extending the program by one year.[56]

The enhanced financial assistance by the Bank is expected to reduce the interest service burden of and provide greater financial access to small businesses and SMEs hit by COVID-19, while acting as a new growth engine of the Korean economy and contributing to employment.

The increased ceilings of each program under the Bank Intermediated Lending Support Facility are as follows: 2.5 trillion won for the Support Program for Trade Financing, 13 trillion won for the Support Program for New Growth Engine Development and Job Creation, 5.5 trillion won for the Program for Stabilization of SME Lending, 5.9 trillion won for the Support Program for Regional SMEs, 13 trillion won for the Support Program for SMEs Affected by COVID-19 and 3 trillion won for the Support Program for Small Businesses. The total ceiling stands at 43 trillion won, which includes reserves of 0.1 trillion won. The interest rates on support programs under the Bank Intermediated Lending Support Facility are 0.25% per annum.

53) The Bank is supporting 100% of banks' loans to small businesses which are not under any distress, including delinquent loans, capital impairment and closure, until the end of March 2021.

54) The end of program operation (bank lending basis) has been pushed back from the end of September 2020 to the end of March 2021.

55) The Bank is supporting 25% of banks' loans to eligible companies (50% for material, parts & equipment companies) for up to 5 years.

56) The end of program operation (bank lending basis) has been pushed back from the end of September 2020 to the end of September 2021.

Table II-1. Programs under the Bank Intermediated Lending Support Facility

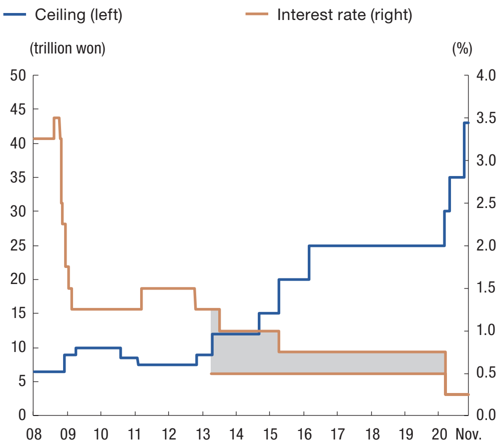
(trillion won, %)

Program	Ceiling		Interest rate
	Before adjustment	After adjustment	
Support Program for Trade Financing	2.5	2.5	0.25
Support Program for New Growth Engine Development and Job Creation[1]	11.0	13.0	0.25
Program for Stabilization of SME Lending[2]	5.5	5.5	0.25
Support Program for Regional SMEs	5.9	5.9	0.25
Support for SMEs Affected by COVID-19	10.0	13.0	0.25
Support for Small Businesses	-	3.0	0.25
Total	35.0[3]	43.0[3]	-

Notes: 1) The Support Program for High-tech and Other Start-up SMEs was expanded and reorganized as the Support Program for New Growth Engine Development and Job Creation (September 2017).
2) Includes the support that had been formerly provided under the Support Program for Facilities Investment.
3) Includes reserves of 0.1 trillion won.

Source: Bank of Korea.

Figure II-4. Ceiling and interest rates of Bank Intermediated Lending Support Facility



Source: Bank of Korea.

3. Market Stabilization Measures

Increased outright purchase of Treasury bonds

By the end of August, the Bank of Korea had conducted outright purchase of Treasury bonds on four occasions amounting to 6 trillion won. In addition to this, the Bank announced on September 8 a plan[57] to expand outright purchases to a total of around five trillion won between September and the year-end, as a preemptive response to any possible mismatch in the supply and demand of Treasury bonds and consequent expanded volatility in market interest rates, caused by the implementation of the government's fourth supplementary budget. The Bank purchased Treasury bonds on three occasions, on September 24 (2.0 trillion won), October 28 (1.5 trillion won) and November 27 (1.5. trillion won), with total purchases amounting to 5.0 trillion won (as of the end of November).

Table II-2. Outright purchases of Treasury bonds[1)]

(trillion won)

Date	Amount	Date	Amount
March 20	1.5	September 24[2)]	2.0
April 10	1.5	October 28[2)]	1.5
July 2	1.5	November 27[2)]	1.5
August 31	1.5	Total	11.0

Notes: 1) As of the end of November 2020.
2) Conducted at the month-end according to the plan on the expansion of outright purchases of Treasury bonds.
Source: Bank of Korea.

Extended Corporate Bond-Backed Lending Facility

The Bank introduced the Corporate Bond-Backed Lending Facility as a safeguard against the possibility of enterprises, banks and non-bank financial institutions facing a significant deterioration in their funding capacity. Despite the fact that the Korean financial markets remain stable, the Bank extended[58] operation of the facility again by three months to February 3, 2021, in consideration of the continuing COVID-19 pandemic and the still high financial and economic uncertainties at home and abroad. It was also decided to maintain the same lending conditions,[59] including eligible institutions, ceilings, interest rates and eligible collateral.

57) Outright purchases are conducted at the end of each month if possible but in consideration of market circumstances, and it was decided to announce the purchase volume and items one business day before the auction.

58) The Corporate Bond-Backed Lending Facility was originally set to expire on August 3, 2020 but the operation period has been extended twice (from August 3, 2020 to November 3, 2020 to February 3, 2021).

59) Eligible institutions: banks, securities firms and insurance firms; ceiling of the facility: 10 trillion won; lending rate: 85 bp spread to 182-day MSB rate; collateral: prime corporate bonds (rated AA- or above) issued by non-financial companies with remaining maturity of 5 years or less.

Continued credit market support through SPV that purchases corporate bonds and commercial paper

The Bank of Korea jointly with the government and a policy financial institution (Korea Development Bank) established[60] on July 14 an SPV that manages purchases of corporate bonds and commercial paper, including lower-rated instruments, to stabilize the credit securities market. In the first round of funding, the SPV raised 3 trillion won in total[61] which includes the first loan amounting to 1.78 trillion won extended by the Bank on July 23, and began purchasing corporate bonds and CP in full force from July 24. The SPV purchased 2.2 trillion won[62] worth of corporate bonds and CP as of the end of November 2020.

Table II-3. SPV's purchases of corporate bonds and CP[1)2)] by credit rating

(100 million won, %)

Credit Rating	Value	Share
AA(A1)	4,900	22.7
A(A2)	12,151	56.4
BBB(A3)	4,510	20.9
Total	21,561	100.0

Notes: 1) As of the end of November 2020.
2) Face value basis.
Source: Bank of Korea.

Introduction of foreign currency liquidity supply facility through transactions of foreign currency bond repurchase agreements

As part of its efforts to secure new policy instruments for FX market stability, the Bank of Korea launched a new facility under which it supplies foreign currency liquidity through transactions of foreign currency bond repurchase agreements in competitive auctions.[63] This facility will be activated when necessary in reflection of foreign currency market conditions, and is expected to contribute to preventing any instability in fund demand and supply from triggering systemic risks, in times when the foreign exchange intermediary function of banks weakens.

60) Approximately 10 trillion won will be raised, consisting of 8 trillion won of primary loans extended by the Bank of Korea, 1 trillion won of investment by Korea Development Bank (KDB) (the government) and 1 trillion won of subordinated loans extended by KDB. The total amount can be expanded to up to 20 trillion won, if necessary.
61) Consists of a 1.78 trillion won primary loan by the Bank of Korea, investment of 1 trillion won by KDB and a 0.22 trillion won subordinated loan by KDB.
62) The SPV purchased 1.1 trillion won worth of corporate bonds and 1.1. trillion won worth of CP.
63) The Bank supplies US dollar liquidity by purchasing US Treasury bonds via repurchase agreements from domestic financial institutions including banks, insurance firms and securities firms, using the Bank's FX reserves.

Table II-4. Bank of Korea's market stabilization measures related to COVID-19

(as of December 9, 2020)

Policy response measures			Major details
Base Rate	Base Rate cuts		• 1.25% → 0.50% (0.75%p)
Bank Intermediated Lending Support Facility	Raised ceiling		• 25 trillion won → 43 trillion won (+18 trillion won)
	Lowered interest rate		• 0.5%-0.75% → 0.25%
Market stabilization measures	Liquidity provision	Carried out full-allotment RP purchases	• Amount supplied: A total of 19.43 trillion won (expired at the end of July)
		Carried out RP purchases from non-bank financial institutions	• Amount supplied: A total of 3.5 trillion won (1.0 trillion won on March 19, 2.5 trillion won on March 24)
		Broadened the range of institutions eligible for open market operations	• The range of institutions eligible for RP transactions was broadened (expired at the end of July).
		Broadened the range of securities eligible for open market operations	• The list of securities eligible for outright transactions and RP transactions was broadened.
		Expanded the range of eligible collateral for lending facilities	• The range of eligible collateral required for borrowing from the Bank's lending facilities was expanded.
		Improved collateral availability of financial institutions	• The ratio of collateral for guaranteeing net settlements was lowered (70% → 50%). • The eligible collateral for guaranteeing net settlements was broadened.
	Stabilization of Treasury, corporate bond and CP markets	Performed outright purchases of Treasury bonds	• Amount purchased: A total of 11.0 trillion won (1.5 trillion won each in March, April, July and August, 2.0 trillion won in September, 1.5 trillion won in October and 1.5 trillion won in November)
		Launched the Corporate Bond-Backed Lending Facility	• Ceiling: 10 trillion won, •Operation expire date: February 3, 2021 • Eligible collateral: Prime corporate bonds (rated at least AA-) with remaining maturity of five years or less
		Supported the credit market through an SPV that purchases corporate bonds and commercial paper	• Size: 10 trillion won (The size can be expanded to up to 20 trillion won, in accordance with market conditions) • Size of the Bank's loan to SPV: 1.78 trillion won
	FX market stabilization	Signed a bilateral currency swap agreement with the US Federal Reserve	• A 60.0 billion US dollar bilateral currency swap arrangement was signed. • Maturity: End of March, 2021
		Implemented competitive US dollar loan facility auctions	• A total of 19.872 billion US dollars was supplied.
		Raised the ceilings on FX derivatives positions of banks	• Domestic banks (40% → 50%) and foreign bank branches (200% → 250%)
		Temporarily lifted the levy on financial institutions' non-deposit FX liabilities	• Banks, securities companies, credit card companies and insurance companies were exempted from the levy for three months (during the period between April and June 2020).
		Supplied foreign currency liquidity through purchase of foreign currency bond repurchase agreements	• The Bank of Korea will provide US dollar funding to domestic financial institutions through foreign currency bond repurchase agreements. • Eligible bonds: US Treasury bonds (US government agency bonds if necessary)

Source: Bank of Korea.

4. Other Monetary Policy Measures

The Bank of Korea is also working to strengthen its global cooperation and improve the safety and efficiency of the payment and settlement systems, while enhancing monitoring of financial and FX market movements and of financial stability conditions.

Monitoring of global financial and FX market conditions enhanced

The Bank of Korea constantly monitored movements in the domestic and international financial and FX markets. The Bank also looked closely into the impacts of domestic and international risk factors on the financial and FX markets by running the emergency response system during times of heightened market volatility.

Through the COVID-19 Response Task Force set up in late January, the Bank of Korea continuously and carefully monitored developments of the COVID-19 pandemic and the impacts on the domestic and international financial sectors and economies, as well as changes in financial and FX market conditions following the Bank's implementation of market stabilization measures. The Bank held a Financial and Economic Conditions Review Meeting during the Chuseok holidays, on October 4, to monitor developments in international financial market conditions, while holding another meeting on November 4 to review the reactions to and the impacts of the US presidential election in the domestic and global financial markets.[64)]

Early warning activities regarding potential financial system risks strengthened

The Bank of Korea continued its preemptive identification of and early warning activities related to potential risk factors within the financial system that could be caused by the escalated uncertainties at home and abroad from the prolonged COVID-19 pandemic, and the subsequent contraction of the real economy.

In the September Financial Stability Meeting, the Bank examined how the changes in real and financial sector conditions brought on by the prolonged pandemic could affect Korea's financial system. Using the new financial stability index (FSI-Q),[65)] the Bank analyzed possible changes in financial vulnerabilities including the recent decoupling of the financial and real sectors, based on which the downside risks to the real economy were examined. The Bank also thoroughly reviewed potential risks related to private sector debt which had increased over the course of responding to the economic slump, as well as the impact on financial institutions' soundness of their stronger search-for-yield under the low interest environment.

64) At the October meeting, the Bank reviewed developments in international financial and FX markets in relation to uncertainties surrounding the US presidential election and progress in economic stimulus implementation, and their subsequent impacts on domestic markets. At the November meeting, the Bank thoroughly evaluated possible effects of the US presidential election on the Korean economy, including escalation of volatility in price variables in line with the progress of vote counting.

65) The new FSI-Q is a newly developed index that enables evaluation of financial stability conditions in consideration of potential vulnerabilities within the financial system caused by, for example, search-for-yield and credit accumulation, and of the financial system's capacity to withstand those vulnerabilities.

Meanwhile, the Bank shared views and discussed responsive measures regarding the key current issues and risks related to Korea's financial stability with related institutions through the Macroeconomic and Financial Meeting and other consultative bodies.

In mid-October, the Bank resumed the joint examination of financial institutions, which had been suspended after the coronavirus outbreak, and monitored current issues and potential risks within the financial system. It conducted a comprehensive examination of individual banks' risks by assessing their lending practices, loan soundness management, COVID-19-related financial support and compliance with the Bank of Korea's regulations.

Table II-5. Joint examinations[1] with Financial Supervisory Service

(times)

2016	2017	2018	2019	2020 Jan. ~ Nov.
6	6	5	6	2

Note: 1) Based on the number of examinations.
Source: Bank of Korea.

In addition, the Bank actively participated in international discussions on financial institution supervision, including the SEACEN Meeting of Directors of Supervision, and exchanged views on current financial issues.

Global financial cooperation strengthened

The Bank of Korea participated in conference calls hosted by international organizations and consultative bodies, such as the BIS, G20 and IMF. Through these meetings, the Bank collected information on the developments of global financial and economic conditions including the resurgence of COVID-19 and issues surrounding major economies, while reviewing their potential impacts on the Korean economy in a timely manner, thereby enhancing the effectiveness of the Bank's policy responses and bolstering global policy coordination.

The Bank also continued its efforts to reinforce multi-layered financial safety nets, by for instance broadening currency swap networks with major central banks. In October, it renewed its currency swap arrangement with the People's Bank of China, enabling a more stable supply of sufficient foreign currency liquidity by increasing[66] the amount and lengthening the period of the agreement. In September, the Bank contributed to the amendment[67] of the Chiang Mai Initiative Multilateralization (CMIM), a regional, multilateral currency swap agreement, through the ASEAN+3 Finance Ministers' and Central Bank Governors' Meeting, enhancing the arrangement's effectiveness. It also actively participated in the CMIM test run,[68] which was conducted with a view to raising the CMIM's

66) The swap agreement amount has been increased from 360 billion yuan/64 trillion won to 400 billion yuan/70 trillion won, and the period has been extended from three years to five years.
67) The key changes in the amendment include a hike in the IMF delinked portion of the CMIM (from 30% to 40%) and the introduction of local currency usage.
68) The CMIM test run conducted this year was the 11th round and involved actual transactions of funds following last year's test. The test was conducted under the scenario of two central banks requesting currency swap funds and other ASEAN+3 members including Korea providing the requested funds.

operational readiness.

Safety and efficiency of payment and settlement enhanced

The Bank of Korea continued efforts to enhance the safety and efficiency of the payment and settlement systems.

The Bank of Korea completed development of its next-generation BOK-Wire+, a project initiated in 2015, and successfully began operating the system in October 2020. Since its first operation in 1994, the system has been made more complex by incorporating new components including a hybrid settlement system, Delivery-versus-Payment and an intraday RP system. Thanks to the launch of the next-generation BOK-Wire+ with an improved settlement method and reorganized settlement accounts, the safety and efficiency of the system is expected to significantly strengthen.

The Bank devoted efforts to ensure smooth domestic implementation of the Principles for Financial Market Infrastructures (PFMI)[69] and other international standards in the field of payment and settlement. The Bank examined the Korea Financial Telecommunications and Clearings Institute's compliance with the PFMI and cyber-risk response framework in operating its electronic banking network, checks clearing service, interbank funds transfer system and open banking system. The Bank is planning to provide recommendations on areas that are identified as needing improvement. In mid-October, through a join examination of one financial investment company, the Bank assessed its compliance with relevant regulations as well as its settlement risk management practice, and recommended improvements in some areas.

In addition, the Bank is reviewing technological and legal requirements for the adoption of central bank digital currency (CBDC) to preemptively cope with future changes in the payment and settlement environment which could increase the need for CBDC adoption. The Bank is also carrying out research and pursuing a consultation project with a third party to set up and test a pilot system.

69) Following the global financial crisis, a need was identified to expand over-the-counter derivatives market infrastructures and strengthen the international standards for the operation of financial market infrastructures. Accordingly, the BIS Committee on Payments and Market Infrastructures (CPMI), jointly with the International Organization of Securities Commissions (IOSCO), integrated the existing international standards, and in April 2012 they were established as the new international standards for payment and settlement. CPMI-IOSCO has enacted additional international standards as supplementary guidelines for PFMI compliance, including its Guidelines on cyber resilience for financial market infrastructures (June 2016), Recovery of financial market infrastructures (July 2017) and Resilience of central counterparties (CCPs): Further guidance on the PFMI (July 2017).

Box II-1.

Transmission of Accommodative Monetary Policy since COVID-19

Since the COVID-19 shock began, the Bank of Korea has been actively implementing accommodative monetary policy to cope with negative impacts of the shock on the economy and financial sector. In addition to directly affecting the real economy, the COVID-19 shock worsened financial conditions, leading to a further shrinkage of the real economy. If the shock aggravates financial instability, this could restrict major transmission channels of monetary policy, such as interest rates, credit and asset prices. In this regard, the Bank of Korea cut the Base Rate on two occasions by a total of 75 basis points and made full use of policy instruments other than interest rates in order to improve liquidity and credit flows. In this section, we examine the transmission of accommodative monetary policy since the outbreak of COVID-19 in terms of the financial and real sectors.

Monetary policy instruments other than interest rates used to cope with COVID-19

Improving interest rate channel and providing liquidity	Facilitating credit flows
- Outright Treasury bond purchases - Introduced full-allotment RP purchases - Expanded the range of institutions and securities eligible for open market operations	- Raised the ceiling of the Bank Intermediated Lending Support Facility - Provided financing to an SPV set up to purchase corporate bonds and commercial paper - Introduced the Corporate Bond-Backed Lending Facility

Source: Bank of Korea.

(Financial sector)

Monetary easing is seen to have been smoothly transmitted to the financial markets mainly through the interest rate and credit channels. The Base Rate cuts have led to substantial declines in market interest rates as well as deposit and lending rates of financial institutions, while working to increase credit to the private sector in terms of both household and corporate lending. Stock prices have rebounded quickly after falling significantly immediately after the spread of COVID-19. As a result, the Financial Conditions Index (FCI),[1] representing overall financial conditions, rapidly increased after having bottomed out in April, exceeding its pre-COVID-19 level from August onwards.

Changes in market and deposit/lending rates following Base Rate cuts[1)2)]

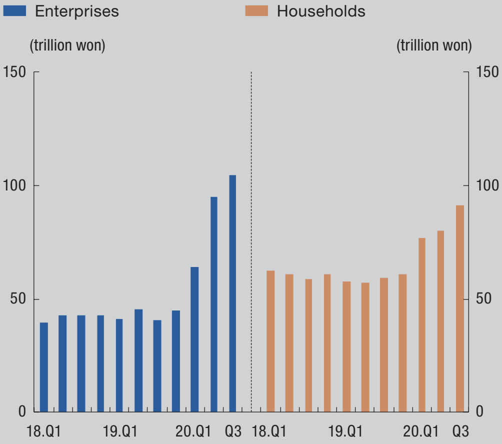
(%, %p)

Timing of Base Rate cuts	Size of Base Rate cuts	Treasury bonds (3-year)	Corporate bonds (3-year)[3)]	Lending rates[4)]	Deposit rates[4)]
July 2012 - May 2013	3.25→2.50 (-0.75)	-0.51	-0.63	-1.14	-0.98
Aug. 2014 - June 2016	2.50→1.25 (-1.25)	-1.53	-1.44	-1.17	-1.25
July - Oct. 2019	1.75→1.25 (-0.50)	-0.19	-0.08	-0.44	-0.24
Mar. - May 2020	1.25→0.50 (-0.75)	-0.52	-0.18	-0.47	-0.65

Notes: 1) (Interest rate during the month one month after the last Base Rate cut) - (interest rate during the month two months before the first Base Rate cut) during each period.
2) Daily average during the month for market interest rates; deposit/lending rates are on a monthly basis.
3) Rated AA-; averages by private credit rating agencies.
4) Weighted average rates based on the amounts newly handled by deposit banks.
Sources: Bank of Korea, Korea Financial Investment Association.

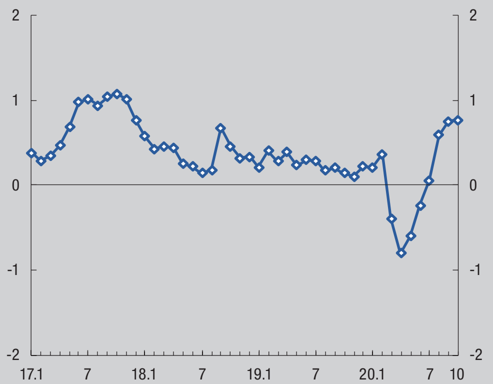
1) The Financial Conditions Index is calculated by standardizing the weighted sum of six financial variables, including interest and exchange rates and stock prices, that are considered important in the assessment of financial conditions. A figure exceeding (falling below) 0 represents accommodative (tightening) financial conditions.

Growth[1)] in household and corporate lending[2)]



Notes: 1) On an end-quarter balance basis; year-on-year.
2) Based on deposit banks.
Source: Bank of Korea.

Financial Conditions Index

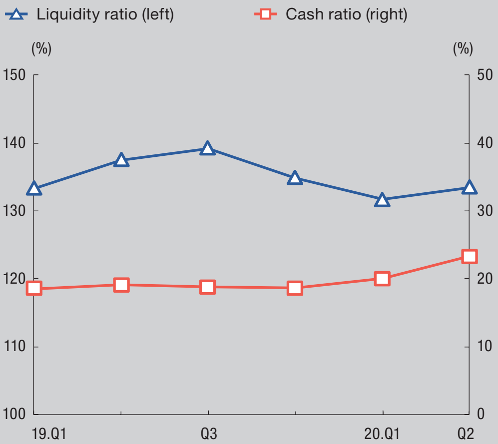


Source: Bank of Korea.

As financial conditions have been picking up, funding conditions of economic agents have also been improving. In the corporate sector, funding conditions have improved, and as a result, the corporate financial situation has gotten better and interest burden has eased. A look at corporate liquidity conditions using corporate micro data (KIS-Value) shows that corporate liquidity (the ratio of liquid assets to liquid liabilities) and cash (the ratio of cash and cash equivalents to liquid liabilities) ratios increased quarter on quarter in the second quarter. In addition, the BSI on the corporate financial situation, in both the manufacturing and services industries, fell significantly immediately after the outbreak of COVID-19 and recovered considerably afterwards.

In the household sector, falling interest rates are expected to ease the interest burdens of indebted households and low-income households in particular. An analysis based on the Survey of Household Finances and Living Conditions for 2019 indicates that, if interest rates on the financial liabilities of indebted households decline by 75 basis points, lower-income households will see a larger decrease in their debt service ratio (DSR). Looking at households as a whole, however, financial assets (savings) exceed financial liabilities, which will likely deteriorate the household interest account in the long term.

Corporate liquidity[1)] and cash ratios[2)]



Notes: 1) Liquid assets/liquid liabilities.
2) Cash and cash equivalents/liquid liabilities.
Sources: KIS-Value, Bank of Korea.

BSI on corporate financial situation

	Jan. 2020	Mar.	May	July	Aug.	Sep.	Oct.	Nov.
All industries	83	68	66	76	78	76	81	83
Manufacturing	83	71	64	73	77	77	84	83
Services	83	62	67	77	79	74	81	81

Source: Bank of Korea.

Changes in DSR[1)] of indebted households in case of 75 bp interest rate decline[2)]

(%p)

1st quintile	2nd	3rd	4th	5th	Total
- 3.7	- 2.1	- 1.8	- 1.7	- 1.4	- 1.6

Notes: 1) The ratio of principal and interest repayments to disposable income of indebted households by income quintile group (using the Survey of Household Finances and Living Conditions for 2019).
2) The decrease in interest repayments is calculated on the assumption that interest rates on financial liabilities decline by 75 basis points, and then deducted from principal and interest repayments and added to disposable income.
Sources: Statistics Korea, Bank of Korea.

(Real sector)

According to an analysis using the Bank of Korea's macro-econometric model (BOK20),[2)] the impact of a 25 basis point Base Rate cut on GDP (on an cumulative effect basis) is estimated at +0.06% in the first year and +0.08% in the second year, and its impact on consumer price inflation at +0.03% in the first year and +0.04% in the second year.

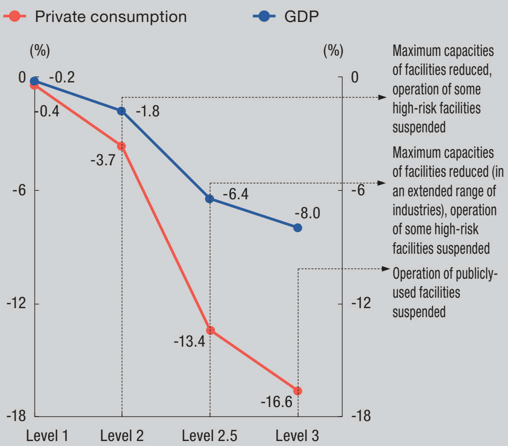
However, since the COVID-19 shock has contracted both supply and demand and heightened economic uncertainty, the transmission of accommodative monetary policy to the real economy may weaken compared with the past.

Particularly, social distancing and avoidance of outside activities following the outbreak of COVID-19 have been working to contract consumption. An analysis of private consumption on the assumption that each level[3)] of social-distancing restrictions are faithfully observed estimates that these restrictions are directly responsible for a 4% (year-on-year) decrease in private consumption under Level 2 and for a 17% decline under Level 3.[4)] Since the outbreak of COVID-19, private consumption has shrunk to a larger extent than during the financial crisis, which is partly responsible for a substantial decrease in business sales.[5)] In addition, uncertain economic conditions due to the COVID-19 shock are seen to possibly have negative impacts on businesses' investment decision-making.

Meanwhile, changes in the economic structure that have continued since the global financial crisis may have weakened the effect of monetary easing on consumption and investment.[6)]

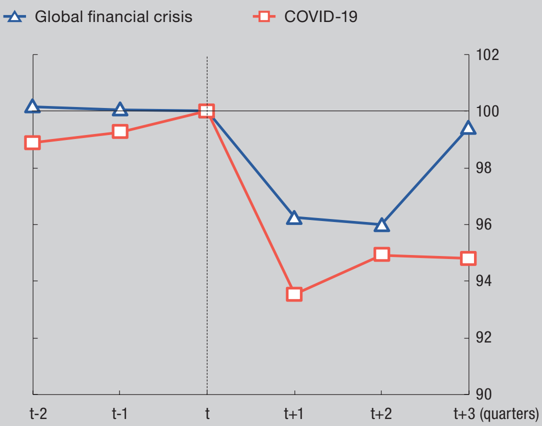
2) More detailed information on BOK20 and the results of economic research using this model can be found in Results of Bank of Korea Macro-Econometric Model (BOK20) Construction (Monthly Bulletin, 2020 August issue).
3) Based on the measures prior to the revision of the social-distancing scheme (took into effect on November 7).
4) Based on the assumption that each level of operation restrictions are faithfully observed in the services industry, expected sales decreases are estimated for individual industry sectors (with use of the Service Industry Survey for 2018 by Statistics Korea) and then converted to decreases in intermediate input and value added using the input-output tables.
5) Business sales were reported to have declined 10.1% year on year in the second quarter of 2020 (BOK Financial Statement Analysis, September 15, 2020).
6) For instance, a slowdown in productivity growth and a decline in companies' dependence on external funds may work to weaken the influence of interest rates on investment, and population aging and household debt growth can work to weaken the consumption-boosting effect of accommodative monetary policy.

Effects of social distancing measures on private consumption, by level[1)2)]



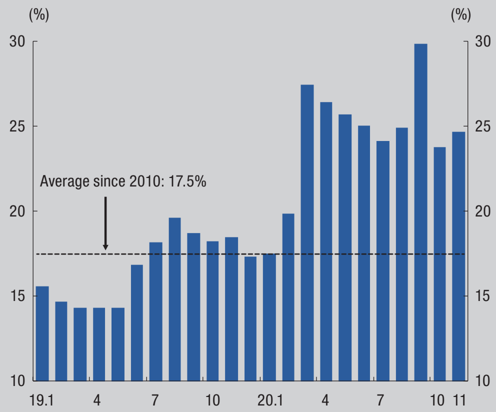
Notes: 1) Based on the period prior to the revision of the social distancing measure (took effect on November 7).
2) Estimation is based on the assumption that each level of social distancing restrictions is perfectly observed.
Sources: Statistics Korea, Ministry of Health and Welfare, Bank of Korea.

Private consumption before/after global financial crisis and COVID-19[1)2)]



Notes: 1) Standardized as t=100 (based on Q3 2008 for global financial crisis and Q4 2019 for COVID-19).
2) Based on the advance estimates for the Q3 2020 (t+3) figures.
Source: Bank of Korea.

Percentage of respondents choosing "uncertain economic conditions" among difficulties faced by manufacturing industry



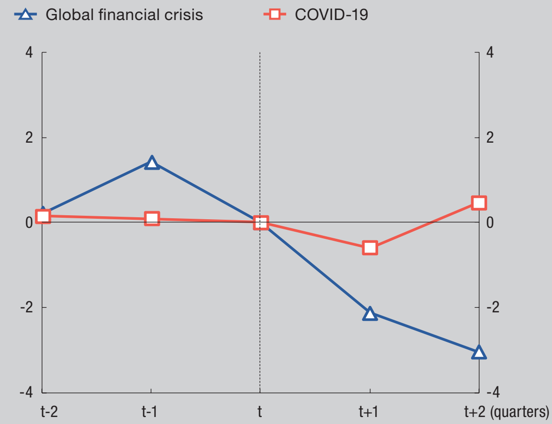
Source: Bank of Korea.

However, monetary easing since the outbreak of COVID-19 is seen to have been improving financial conditions to prevent a vicious circle in which a worsening real economy causes financial instability, further worsening the real economy, and to reduce the likelihood of an occurrence of macroeconomic tail risk, substantially easing negative impacts of tightening financial conditions on the real economy.

According to the results of an analysis using a VAR model, improvements in financial conditions (an increase in the FCI) are estimated to have significant effects on the real economy (a narrowing of the negative output gap). A simulation based on the assumption that the FCI remains unchanged from its April level, a record low since the outbreak of COVID-19, widens the negative output gap further than in reality. The results suggest that delayed improvements in financial conditions would have lowered the growth path of the domestic economy further than in reality.[7)]

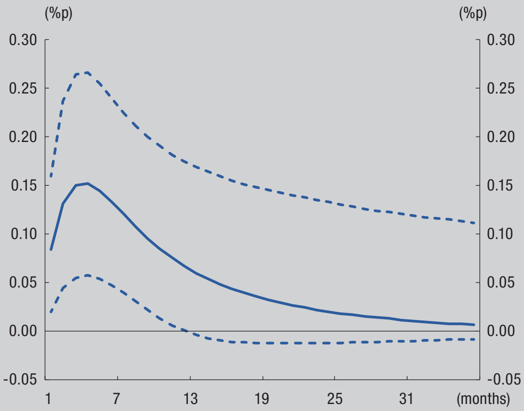
7) The ECB's analysis shows that monetary easing through the implementation of the Pandemic Emergency Purchase Programme (PEPP), the expansion of the existing asset purchase programs and the revision of TLTRO Ⅲ since the outbreak of COVID-19 has improved financial conditions and raised the economic growth rate by 1.3%p (based on the cumulative rate until 2022). Refer to Economic Bulletin (ECB, Issue 5, 2020) for details.

Changes[1] in the Financial Conditions Index before/after global financial crisis and COVID-19



Note: 1) Standardized as t=0 (based on Q3 2008 for global financial crisis and Q1 2020 for COVID-19).
Source: Bank of Korea.

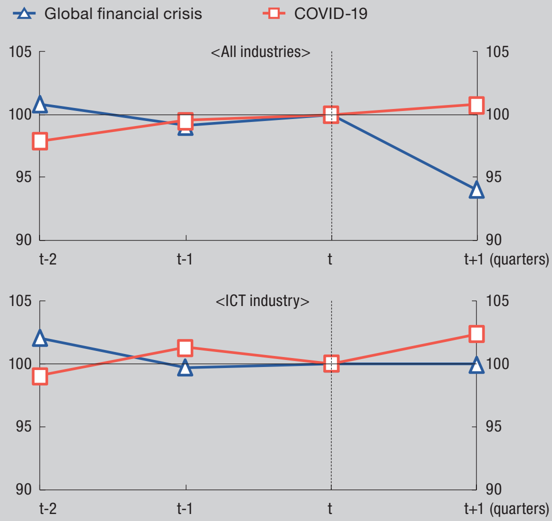
Response of output gap to Financial Conditions Index increase shock[1)2)]



Notes: 1) A three-variable (FCI, output gap and CPI growth rate) VAR model was estimated under a Bayesian approach (estimation period: Jan. 2010 - Aug. 2020). This response function shows the response of the output gap to a one standard deviation increase in the FCI.
2) The dotted line represents a 68% posterior probability band.
Source: Bank of Korea.

By sector, financial condition improvements for example through monetary easing are seen to have been contributing to preventing a contraction in investment by improving corporate funding conditions rather than boosting consumption. According to the results of an empirical analysis using corporate micro data (KIS-Value), monetary easing has positive effects on corporate investment (growth in tangible assets) by increasing liquidity (cash and cash equivalents) in the corporate sector.[8] During the global financial crisis, a delay in financial condition improvement led to rapid contraction in facilities investment, but recent movements differ from those during the global financial crisis, exhibiting a slight increase particularly in the information and communications technology industry.

Private-sector facilities investment before/after global financial crisis and COVID-19[1)2)]



Notes: 1) Including intellectual property product investment (seasonally adjusted).
2) Standardized as t=100 (based on Q3 2008 for global financial crisis and Q1 2020 for COVID-19).
Source: Bank of Korea.

8) A panel analysis of non-financial institutions included in KIS-Value that are subject to external audit shows that a Base Rate cut leads to an increase in cash and cash equivalents, leading to a significant increase in corporate investment (growth in tangible assets).

(Overall assessment)

Since the spread of COVID-19, accommodative monetary policy, including Base Rate cuts, is considered to have been smoothly transmitted to the financial markets and contributed to preventing the real economy from shrinking excessively due to the COVID-19 shock. Market interest rates as well as deposit and lending rates have declined substantially while funding conditions of households and corporations have improved, resulting in a decrease in financial market volatility and somewhat favorable credit flows. If these improvements in financial conditions had been delayed, the negative output gap would have widened further than it did. In a situation where shocks on the real economy could lead to a contraction of financial conditions resulting in a further contraction of the real economy, monetary easing is seen to have improved financial conditions to prevent the vicious circle between financial instability and deterioration of the real economy.

However, attention should be paid to the fact that heightened uncertainties resulting from the COVID-19 pandemic, changes in the economic structure since the global financial crisis, and household debt growth remain as factors limiting the transmission of monetary policy to the real economy.

Box II-2.

Key Aspects and Evaluation of Expanded Bank Intermediated Lending Support Facility

In order to support small businesses and SMEs whose financial difficulties had been aggravated by the spread of COVID-19, the Bank of Korea raised the ceiling of the Bank Intermediated Lending Support Facility on three occasions (March, May and October 2020) by a total of 18 trillion won,[1] and cut the interest rate by 0.50%p, from 0.75% to 0.25%. Of the 18 trillion won, 13 trillion won was provided to SMEs affected by COVID-19 and 3 trillion won to small businesses,[2] while the other 2 trillion won was used to support facility investment of startups, of businesses that create jobs, and of material, parts and equipment businesses. This paper looks into the significance of the Bank Intermediated Lending Support Facility, and the current status and effectiveness of the Support Program for SMEs Affected by COVID-19 implemented in March.[3]

(Significance of Bank Intermediated Lending Support Facility)

The Bank Intermediated Lending Support Facility is a lending program that provides loans to financial institutions at low interest rates based on certain criteria, including the financial institution's SME loans, within the program's total ceiling. This program supplements or strengthens the transmission effect of the Bank's monetary policy, including adjustment of the Base Rate, into the real sector by addressing financial market failure, preventing a contraction of the financial intermediary function, and providing liquidity in a crisis.

Specifically, financial institutions might prefer lending to large firms over lending to robust SMEs due to information asymmetry in financial markets, which is also known as adverse selection. Such market failure can be partly addressed through the Bank Intermediated Lending Support Facility, which aims to support SME lending. Given that the lending rate of the facility is lower than banks' average funding rates, it also alleviates possible deterioration of profitability of financial institutions and the subsequent weakening of the financial intermediary function under the low interest rate environment. The facility could play a particularly strong and effective role under crisis situations, when market failure further escalates and financial intermediary functions significantly contract, as the facility can work as a tool for supplying liquidity to SMEs and banks.

Major central banks have also either newly introduced or expanded the size of SME lending facilities in their responses to COVID-19. The US Federal Reserve, the Bank of Japan and the Reserve Bank of New Zealand have adopted new lending facilities to support SME lending, while the Bank of England and the Reserve

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1) The Bank raised the ceiling by 5 trillion won each in March and May, and by an additional 8 trillion won in October.

2) Although small businesses were eligible to receive the Bank's support for SMEs affected by COVID-19, a separate ceiling for small businesses was introduced in October as their difficulties were aggravated due to the resurgence of COVID-19 since August.

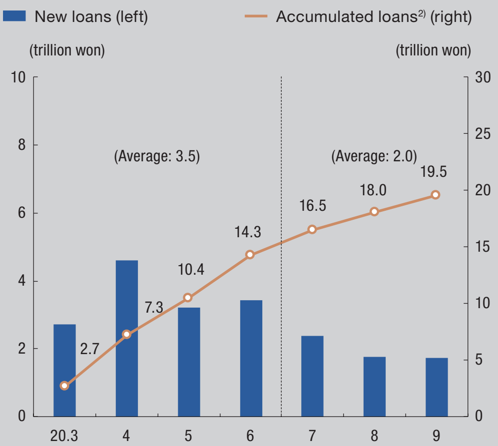
3) The Support Program for Small Businesses and Support Program for Facility Investment are not included in the analysis, as it has been only two months since their introduction (Oct. 5).

Bank of Australia are operating lending facilities for companies and households with a focus[4] on expanding support for SME lending.

(Current status of Support Program for SMEs Affected by COVID-19)

The volume of bank loans extended under the Support Program for SMEs Affected by COVID-19 between March and September 2020 stood at 19.5 trillion won, while the number of companies that have used the program recorded 78,155, with the average loan volume per company amounting to 250 million won. The total volume of loans per month rose rapidly after adoption of the program on March 9, reaching a monthly average of 3.5 trillion won between March and June, but then declined to a monthly average of 2.0 trillion won between July and September. Meanwhile, the volume of loans extended to financial institutions by the Bank of Korea under this program stands at 11.5 trillion won as of the end of November,[5] exhausting 88.1% of the total ceiling (13 trillion won).

Bank loans under Support Program for SMEs Affected by COVID-19[1)]



Notes: 1) Based on companies eligible to receive the Bank of Korea's Support Program for SMEs Affected by COVID-19 (the same is applied below).
2) Excluding early redemption and redemption at maturity.
Source: Bank of Korea.

Looking at the volume of bank loans under the program by region, it was the largest in Seoul (5.0 trillion won), followed by Gyeonggi (3.2 trillion won), Daegu & Gyeongbuk (2.9 trillion won) and Daejeon & Chungnam (1.4 trillion won). This was mainly because the number of SMEs is large in these regions, and companies' business operations have greatly contracted due to the wide spread of COVID-19 in these regions.

4) The Bank of England and the Reserve Bank of Australia are extending low-interest rate loans to financial institutions of up to 500% of the respective institution's SME loan growth (100% of large company loan growth).
5) The Bank's support for each respective month's outstanding loan balance is provided two months later (e.g. the outstanding loan balance as of the end of September is provided in November).

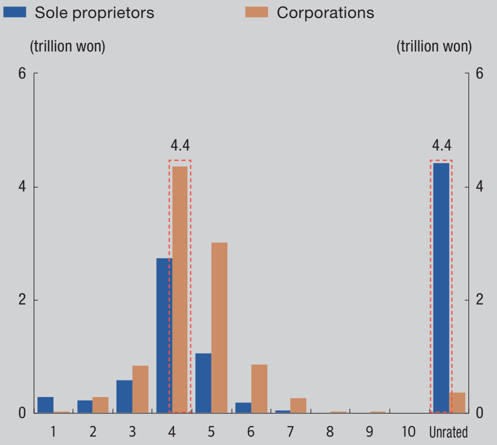
Volume and share of loans under Support Program for SMEs Affected by COVID-19 by region

(100 million won, %)

	Volume	Share
Seoul	50,093	25.7
Gyeonggi	31,757	16.3
Daegu & Gyeongbuk	29,401	15.1
Daejeon & Chungnam	14,060	7.2
Gwangju & Jeonnam	12,985	6.7
Busan	12,563	6.4
Gyeongnam	12,218	6.3
Others[1]	32,107	16.4
Total	195,184	100.0

Note: 1) Chungbuk, Incheon, Ulsan, Jeju, Jeonbuk and Gangwon.
Source: Bank of Korea.

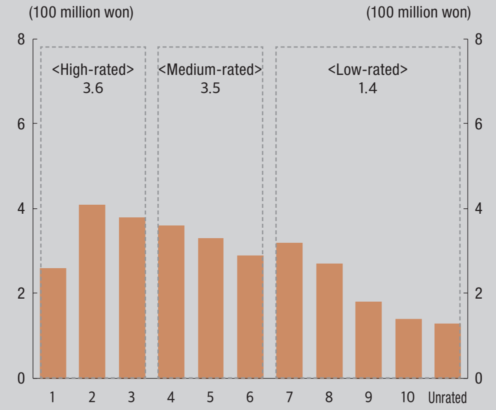
Volume of loans under Support Program for SMEs Affected by COVID-19 by credit rating and by business type



Source: Bank of Korea.

By credit rating, the share of loans to medium-rated companies (grades 4-6) is well above half the total volume, accounting for 62.5%, while the share of loans to high-rated companies (1-3) accounts for 11.3% and that of loans to low-rated companies (7-10) accounts for a mere 1.7%. It appears that the loans under the program were extended primarily to robust companies which are facing temporary funding difficulties. The volume of loans was the largest among unrated[6] companies for sole proprietors and for grade 4 loans for corporations, each standing at 4.4 trillion won. The average loan volume per company was larger among higher rated companies.[7]

Average loan volume per company under Support Program for SMEs Affected by COVID-19, by credit rating



Source: Bank of Korea.

By business type, the share of loans extended to sole proprietors (48.8%) was similar to that extended to corporations (51.2%) but considerably higher than the share of loans extended to sole

6) This rating is managed by banks separately from their internal credit rating system (ranging from 1 to 10) for companies that either do not have any transactions with the respective bank or do not meet their criteria such as assets or sales. Unrated companies consist mainly of small businesses such as SOHOs (Small Office Home Office).
7) The average loan volume per company stands at 360 million won for high-rated companies (grades 1-3), 350 million won for medium-rated companies (grades 4-6) and 140 million won for low-rated companies (grades 7-10).

proprietors under the Support Program for Regional SMEs of the Bank Intermediated Lending Support Facility (31.9%). This was probably because the loans under the Support Program for SMEs Affected by COVID-19 were extended primarily to small businesses with relatively smaller business size that were facing greater difficulties in securing funds. The average loan volume per company among corporations (380 million won) was more than double the average loan volume among sole proprietors (180 million won).

Volume of loans by program and by business type under Bank Intermediated Lending Support Facility

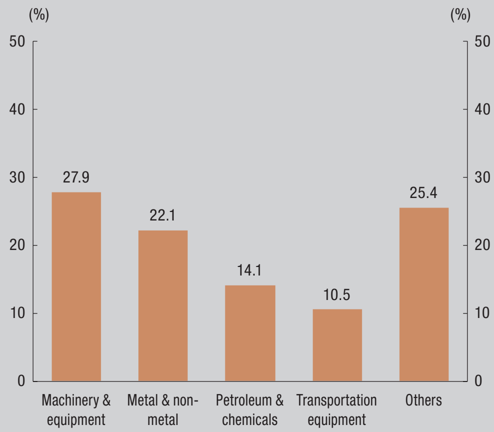
(trillion won, %)

	Volume of loans[1]		
	Sole proprietors	Corporations	Total
Support Program for SMEs Affected by COVID-19	9.5 (48.8)	10.0 (51.2)	19.5 (100.0)
Support Program for Regional SMEs	7.5 (31.9)	15.9 (68.1)	23.4 (100.0)

Note: 1) Figures inside parentheses indicate share.
Source: Bank of Korea.

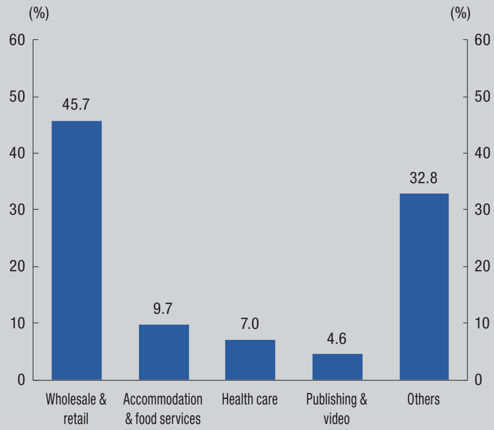
By industry, the volume of loans extended to companies in the service industry (70.6%) was 2.5 times that extended to companies in the manufacturing industry (27.8%). This was mainly because the service sector contracted relatively more severely due to the government's social-distancing measures and the subsequent decline in consumers' activities outside the home. Within the manufacturing industry, the volume of loans was the largest for the machinery & equipment sector (27.9%), followed by the metal & non-metal sector (22.1%). Within the service industry, more than half of the total volume of loans was extended to the wholesale & retail sector (45.7%) and the accommodation & food services sector (9.7%), which are the sectors hit hardest by COVID-19.

Share of loans by manufacturing subsector under Support Program for SMEs Affected by COVID-19



Source: Bank of Korea.

Share of loans by service subsector under Support Program for SMEs Affected by COVID-19



Source: Bank of Korea.

(Effectiveness of Support Program for SMEs Affected by COVID-19)

A comprehensive look at the volume of loans under the program shows that the Bank of Korea's Support Program for SMEs Affected by COVID-19 can be assessed to have contributed to raising financial access for SMEs and small businesses that are facing temporary financial difficulties.[8] The Bank's low interest rate loans to commercial banks have induced expanded credit supply to companies hit by the pandemic, and the banking sector's loans under the program (19.5 trillion won) accounted for 31.2% of the total growth in SME lending (62.6 trillion won) during the period from March to September 2020.[9] Given that the share of loans to medium-rated companies account for more than half of the total loans, it appears that the Bank of Korea's support program has helped improve financial conditions of robust SMEs that are cash strapped due to the temporary drop in sales from COVID-19, rather than being used for securing healthy companies' precautionary cash holdings or sustaining distressed companies.

In addition, the Bank of Korea's support for SMEs affected by COVID-19 is assessed to have helped reduce the interest payment burden for SMEs and small businesses. According to our monitoring of commercial banks, the lending rate (new business basis) applied to SMEs affected by COVID-19 in September 2020 stood at 2.41-2.97%, while the affected companies have received a 21-129 bp interest rate cut thanks to the Bank's support.

(Overall assessment)

The Support Program for SMEs Affected by COVID-19 is seen to have helped enhance financial access and reduce the interest payment burden for small businesses and SMEs facing temporary financial difficulties, thereby preventing a possible contraction of the financial intermediary function from COVID-19 and complementing the monetary policy transmission effect.

The Bank of Korea will continue to thoroughly monitor COVID-19 developments and subsequent changes in financial and economic conditions, as well as SMEs' funding conditions, while improving operating methods with a view to ensuring smooth credit supply to coronavirus-impacted companies. The Bank will also sustain its efforts to enhance the adequacy of financial assistance by, for instance, conducting strengthened loan review to identify violation of relevant regulations.

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8) Of the loans extended to SMEs affected by COVID-19, 80.2% were provided to regional SMEs that do not have any history of using the Support Program for Regional SMEs under the Bank Intermediated Lending Support Facility.

9) According to our monitoring of market participants, the Bank of Korea's support program enables swift credit supply to affected companies, as it is operated by reducing the interest rates of the bank's own loan products, meaning that loan officers are highly skilled and loan screening takes little time.

III

Future Monetary Policy Directions

1. Growth and Price Forecasts[70)]

Domestic economy to show modest recovery

The GDP growth rate is forecast to be -1.1% this year and 3.0% and 2.5% in 2021 and 2022, respectively.[71)] The slump in goods exports will ease gradually and domestic demand will show modest recovery with the continued accommodative fiscal policy.

By sector, private consumption is forecast to shift to an increase next year, but its recovery is expected to be slow, due mainly to a delay in improvement in household income conditions in line with a prolonged COVID-19 pandemic and to concerns about health risks. Delayed improvements in employment conditions and business conditions of the self-employed are expected to result in low household incomes, and it is difficult to expect a rapid recovery in consumer sentiment due to concerns about infections. While goods consumption is forecast to show favorable movements, voluntary social distancing is likely to work to limit recovery in consumption of face-to-face services, and recovery in overseas consumption by Korean residents is also expected to be slow, due largely to cross-border travel restrictions and avoidance of overseas travel. However, the government's income and consumption support measures and an increase in savings since the outbreak of COVID-19 are expected to contribute to a recovery in private consumption.

Facilities investment is expected to sustain its growth next year, boosted by the favorable IT sector and a resumption of investment in the non-IT sector. The IT sector is expected to see continued strong investment, driven primarily by improvement in the semiconductor industry, and the non-IT sector is likely to witness an increase in investment to foster new growth industries and cover maintenance expenses in line with the easing of global economic sluggishness. Intellectual property products investment is projected to continue its solid upward trend, as R&D investment is forecast to sustain favorable movements led by the expected recovery of corporate sales, increased demand for non-face-to-face services and the expanded government budget, and other intellectual property products investment is also expected to grow, boosted by increased demand for new technology-based software. Construction investment is forecast to shift to an increase next year, as civil engineering will likely show favorable movements thanks to the sustained expansion in the government's SOC budget, and the sluggishness of residential building construction is expected to ease.

Exports are projected to continue to improve, driven by a recovery in the global economy and trade. The current account surplus is expected to narrow, with the goods account surplus decreasing slightly due to rising oil prices and the services account deficit widening again following the slowing spread of COVID-19.

70) Based on the Bank of Korea's「Economic Outlook Report」released on November 26, 2020.

71) The current outlook is based on the assumption that the global spread of COVID-19 will be worse than expected this winter and then start to ease gradually from mid or late next year and the global economy will accordingly return to the pre-pandemic level in the second half of next year, while Korea will experience a sustained resurgence of COVID-19 through the winter and see local outbreaks occurring sporadically thereafter.

There is a high level of uncertainty surrounding the growth path. The upside risks to growth include early rollout of COVID-19 vaccines and treatments, additional aggressive stimulus measures at home and abroad and improvements in the global trade environment. Among the downside risks are faster spread of COVID-19 at home and abroad, a delay in the semiconductor industry's recovery and increasing tensions between the US and China.

Table III-1. Economic growth outlook[1)2)]

(%)

	2019	2020			2021^{e}			2022^{e}
	Year	H1	H2^{e}	Year^{e}	H1	H2	Year	Year
GDP	2.0	-0.7	-1.4	-1.1	2.6	3.3	3.0	2.5
Private consumption	1.7	-4.4	-4.1	-4.3	2.9	3.2	3.1	2.5
Facilities investment	-7.5	5.6	5.7	5.7	4.9	3.6	4.3	3.2
Intellectual property products investment	3.0	3.3	4.2	3.8	3.8	4.0	3.9	3.7
Construction investment	-2.5	1.7	-2.9	-0.7	-1.8	2.6	0.5	2.1
Goods exports	0.5	-2.9	-0.4	-1.6	9.3	1.9	5.3	2.3
Goods imports	-0.8	-0.9	-0.3	-0.6	7.5	4.5	5.9	3.2

Notes: 1) Year-on-year.
2) Figures are the forecast as of November 2020.
Source: Bank of Korea.

Inflation forecast to rise gradually to record 1.0% next year

Consumer price inflation is forecast to record 0.5% in 2020, as the weakening of demand-side inflationary pressures, lower international oil prices than those of last year and downward inflationary pressures on the government policy side are exerting downward pressures. However, consumer price inflation is forecast to rise to 1.0% in 2021, as economic conditions improve and the impacts of (year-on-year) declines in international oil prices dissipate. Consumer price inflation is expected to record 1.5% in 2022, boosted by sustained improvement in economic activity and faster growth in international oil prices. Meanwhile, core inflation excluding food and energy prices is forecast to rise from 0.3% this year to 1.0% in 2021 and 1.3% in 2022.

A look at various factors affecting prices shows that, in terms of overseas factors, international oil prices are expected to show modest growth, but there are latent uncertainties including COVID-19 developments and supply conditions. The Korean won/US dollar exchange rate has declined rapidly since the second half of this year to recently fall below the level prior to the spread of COVID-19. In terms of domestic factors, demand-side inflationary pressures have strengthened gradually and the rate of wage growth is forecast to increase somewhat, in line with a modest recovery in economic activity and corporate profitability, but the pace of growth is likely to be slower than usual. Regarding other factors, growth in agricultural product prices is expected to decelerate gradually, with the easing of supply disruptions for vegetables that had been caused by severe weather conditions during the summer. Downward inflationary pressures on the government policy side are likely to weaken next year. While social-welfare policies related to health care will continue to be strengthened, the weakening of downward inflationary pressures from government policies related to education and communication[72)] and the base-period effect from the individual consumption tax cut for

72) This is attributable mainly to the dissipation of downward inflation pressures from free high-school education and free school meals this year and to the base-period effects from support for mobile charges (in October).

automobiles (to be terminated in December) are expected to work as factors bringing inflation up. Recent sustained increases in leasehold (*jeonse*) deposit prices and monthly rents (based on new contracts) are forecast to gradually speed up the pace of growth in housing rental fees.

There is a mix of both upside and downside risks to the price path. Upside risks to prices include stronger economic improvement following the development of COVID-19 vaccines, and an acceleration of the rise in international commodity prices. Among the downside risks are weaker economic recovery resulting from the resurgence of COVID-19, and a larger appreciation of the Korean won.

Table III-2. Inflation outlook[1)2)]

(%)

		2019	2020			2021e			2022e
		Year	H1	H2e	Yeare	H1	H2	Year	Year
CPI inflation		0.4	0.6	0.5	0.5	0.7	1.2	1.0	1.5
Core inflation	CPI excluding food & energy	0.7	0.4	0.3	0.3	0.7	1.3	1.0	1.3
	CPI excluding agricultural products & oils	0.9	0.6	0.7	0.7	0.8	1.2	1.0	1.3

Notes: 1) Year-on-year.
2) Figures are the forecast as of November 2020.
Source: Bank of Korea.

2. Major Considerations

Looking ahead, the Bank of Korea will operate its monetary policy while closely watching the impacts of upside and downside risks at home and abroad on the growth and inflation forecast paths, and devoting attention to financial stability as well. In this process, it will also carefully monitor COVID-19 developments, changes in external conditions including the new US government's economic policy, and consequent financial market trends, as well as the possibility of an accumulation of financial imbalances.

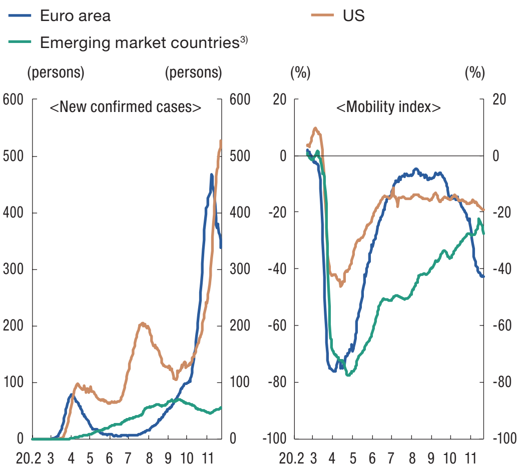
COVID-19 developments at home and abroad

Uncertainties related to future COVID-19 developments are seen to remain high. Although the likelihood of early vaccine rollouts is increasing, the global spread of the virus has recently been accelerating significantly.

The global spread of COVID-19 has been recently speeding up again significantly. Europe has re-adopted[73] lockdown measures due to the rapid acceleration of its spread since October, and the US has strengthened measures to combat COVID-19 with the number of new cases per day jumping to nearly 200,000 since November. In emerging market countries, the spread of COVID-19 has been contained somewhat, but the number of new cases per day remains high. If the current spread of COVID-19 continues, the global economy may weaken again despite recent signs of recovery, and this could have negative impacts on Korea's exports.

Korea has also seen a resurgence of COVID-19 since November, and consequent measures such as the strengthening of social distancing could weaken the recovery of private consumption, particularly in the services sector.

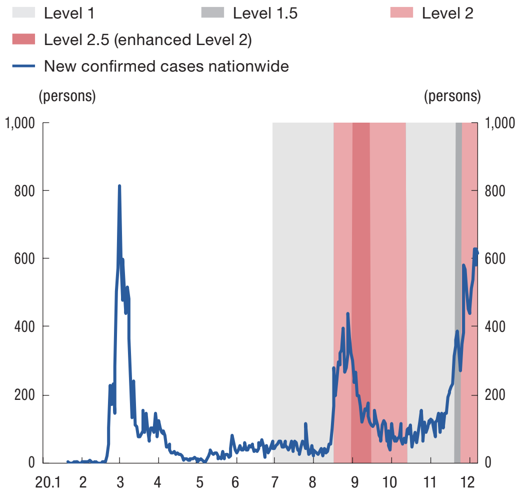
Figure III-1. New confirmed COVID-19 cases[1)] and mobility index[2)]



Notes: 1) Daily new confirmed cases per million persons by region (based on 7-day moving averages).
2) Retail and recreation related index; comparison of frequency and duration of travel to a certain location with those of the period prior to the outbreak of COVID-19 (Jan. 3 through Feb. 6, 2020), using Google location information (based on 7-day moving averages).
3) India, Brazil, Russia, Mexico and Turkey.
Sources: Our World in Data, Google Mobility.

73) The mobility index for the euro area (population-weighted average; based on retail and recreation index) declined significantly in November, due to the strengthening of measures to combat COVID-19 following its resurgence (-6.7% in August → -8.7% in September → -18.1% in October → -38.3% during November 1-20; averages during periods).

Figure III-2. Number of new confirmed COVID-19 cases in Korea[1)]



Note: 1) The shaded areas represent the stages of social distancing measures in the Seoul and its surrounding areas since June 28.
Source: Korea Disease Control and Prevention Agency.

Despite the recent rapid resurgence of COVID-19, there is a growing prediction that the pandemic might be contained earlier than expected, with a number of COVID-19 vaccine trials showing far better results than expected. As a result, economic sentiment seems to have improved significantly and expectations of economic recovery seem to have grown substantially. However, since the safety of vaccines needs to be verified further and full vaccination through mass production of vaccines will need a substantial period of time, it is necessary to take more time to see whether any vaccine will be deployed earlier than expected.

Since future economic trends depend highly on COVID-19 developments, it is necessary to closely monitor the severity of the resurgence of COVID-19 at home and abroad and consequent response measures, progress related to vaccine rollouts, and the impacts on the Korean economy.

New US government's economic policy

There remain uncertainties related to the economic policies, such as fiscal and trade policies, of the new US administration taking office in January 2021.

With former Vice President Biden winning the presidential election as markets and the media expected, related political risks are seen to have eased substantially. President-elect Biden revealed a plan to expand fiscal expenditure and pursue eco-friendly policies to overcome the crisis, and if expansionary fiscal policy is implemented as planned, this will help improve US economic growth and consequently have positive impacts on Korea's exports. In addition, expanded investment in eco-friendly infrastructure is expected to positively affect growth of related industries in Korea.[74)] However, whether the presidential transition will be delayed and whether the Republican Party will retain its Senate majority[75)] remain as factors heightening uncertainty concerning future policy implementation.

74) However, in order to strengthen environmental regulations, President-elect Biden promised to impose carbon adjustment fees or import quotas on carbon-intensive goods exported by countries not complying with the Paris agreement. There are concerns that this would lead to cost increases in domestic energy-intensive industries, consequently weakening the export competitiveness of related industries.

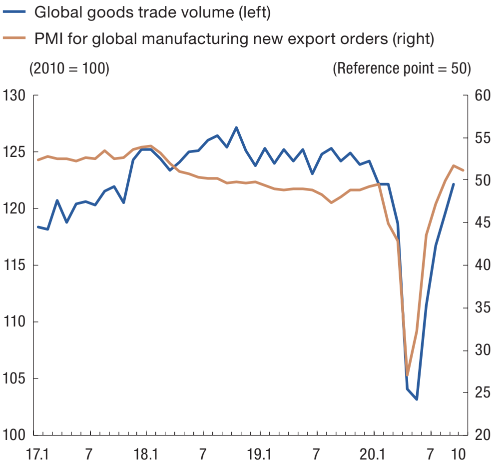
75) In the US Senate election held together with the presidential election, Republicans secured 50 seats and Democrats 48. The two runoff elections in Georgia on January 5, 2021 will likely determine which party controls the Senate.

Table III-3. Biden's key campaign promises (economic policies)

Sector	Major contents
Macroeconomic policy	▪ Implementing stimulus measures to cope with COVID-19 ▪ Increasing corporate and income tax rates
Industrial policy	▪ Eco-friendly policy • Investing 2 trillion dollars in electric vehicles and eco-friendly power generation • Rejoining Paris Climate Accord, imposing carbon adjustment fees on countries failing to meet their climate and environmental obligations ▪ Strengthening US manufacturing competitiveness • Investing in future industries including 5G and AI (300 billion dollars) • Purchasing US goods and services (400 billion dollars)
Trade policy	▪ Reviewing a return to multilateral trade agreements ▪ Confronting China's unfair trade practices

Sources: JoeBiden.com, Bank of Korea International Economic Review (2020-22).

Figure III-3. Global goods trade volume and PMI for manufacturing new export orders



Sources: CPB, JP Morgan.

In terms of trade policy, President-elect Biden is expected to promote a return to multilateral trade agreements, while focusing on alliances and collaboration. This is likely to ease uncertainties surrounding the global trade environment and contribute to a recovery of global trade. However, since the Biden government seems generally likely to retain a tough stance against China, US-China conflicts are unlikely to ease dramatically, and in this regard, the trade dispute between the two countries is likely to remain as a factor limiting global trade recovery going forward. Furthermore, the possibility of a prolongation of services trade sluggishness due to limited global personnel exchanges, rearrangement of global value chains, and China's strengthening of its domestic demand-oriented growth strategy[76] are forecast to remain as structural factors limiting global trade growth.

Financial market risk factors at home and abroad

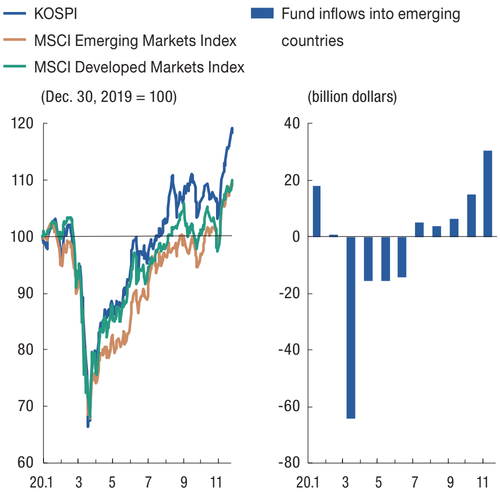
Domestic and overseas financial markets remain stable overall, but attention should be paid to risk factors that may increase market volatility.

Concerning the global financial markets, volatility increased temporarily influenced by the global resurgence of COVID-19, but risk aversion has eased rapidly since November due largely to the easing of uncertainties related to the US presidential election and expectations of early rollout of vaccines. As a result, global stock prices and long-term interest rates rose, the US dollar weakened and domestic price variables exhibited similar movements. In addition, inflows of global funds into emerging markets expanded and foreign portfolio

76) China announced at the 5th Plenary Session of the Chinese Communist Party's (CCP) Central Committee (October 26-29) that it would promote a dual circulation strategy (aiming at spurring domestic demand and expanding external openness) focusing on fostering domestic demand. China's move to strengthen the domestic demand-oriented development model is likely to limit the expansion of global trade.

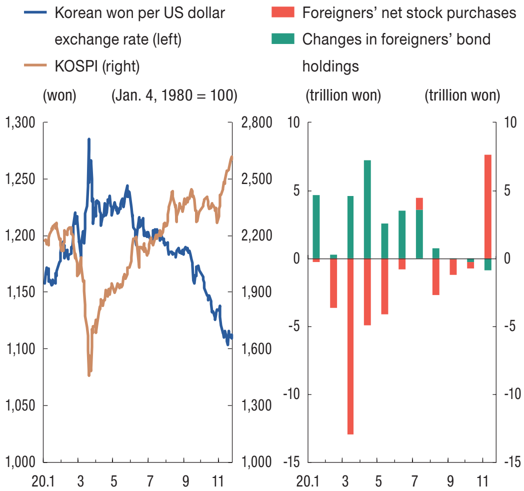
investment into the Korean market, and the stock market in particular, recorded a large net purchase in November.

Figure III-4. Global stock prices and fund inflows into emerging countries



Sources: Bank of Korea, Bloomberg, EPFR.

Figure III-5. Korean won per US dollar exchange rate, stock prices and foreigners' portfolio investment[1)]



Note: 1) Based on the figure recorded on the 25th for November.
Sources: Bank of Korea, Koscom, Financial Supervisory Service.

Domestic and international financial markets are forecast to remain stable overall going forward. However, there remain risk factors such as the resurgence of COVID-19 and a consequent delay in economic recovery, possible asset price adjustments, and the possible materialization of credit risks of vulnerable businesses, and in this regard, attention should be paid to the possibility of renewed financial unrest, including higher volatility of major price variables, depending on developments of these risk factors.[77)]

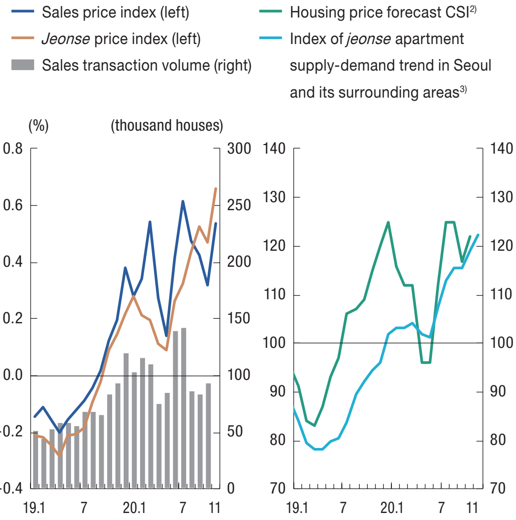
77) The IMF announced that, according to its survey of 29 major countries, the number of countries with medium and high risk of financial vulnerabilities in the government and corporate sectors increased from 10 and 14 in April 2020 to 12 and 21, respectively, in October 2020. The IMF mentioned that this was attributable to expanded fiscal deficits following aggressive debt issuance by governments since the outbreak of COVID-19 and increased debt levels by corporations to cope with cash shortages (source: 「Global Financial Stability Report」, October 2020).

Concerns about accumulation of financial imbalances

Concerns are growing about the accumulation of financial imbalances, as housing prices and household debt have been growing at faster paces recently.

Housing sales price growth slowed somewhat from August but has recently accelerated again both in Seoul and its surrounding areas and in the rest of the country.[78] Leasehold (*jeonse*) deposit prices are also showing a strong rise due mainly to supply-demand imbalances,[79] and as a result, part of the *jeonse* demand has shifted to sales demand, working to speed up the housing sales price increase. In line with this, growth in household loans has accelerated significantly,[80] and both housing-related loans and other loans are showing rapid growth, boosted by demand for housing purchases and leasehold deposits (*jeonse*) combined with individual investors' fund demand for stock investment.

Figure III-6. Housing market price indices,[1] sales transaction volume and sentiment index



Notes: 1) All housing types, nationwide; year-on-year.
2) A figure exceeding 100 indicates that a forecast for an upward trend is dominant.
3) A figure exceeding 100 indicates that demand exceeds supply.
Sources: Korea Appraisal Board, Bank of Korea.

Household lending is forecast to continue to sustain a trend of increase at a level exceeding that of recent years for the time being, led chiefly by continued inflows of funds into the housing market. Despite the government's housing market-related measures,[81] housing-related lending is highly likely to maintain its strong growth for some time, as expectations of further housing price rises remain

78) The apartment sales price growth rate rose from 0.09% in the third week of October to 0.15% in the first week of November and to 0.18% in the third week of November in Seoul and its surrounding areas, while increasing from 0.14% in the third week of October to 0.19% in the first week of November and to 0.32% in the first week of November (record highs since weekly statistics were first compiled in May 2012) in the rest of the country (source: Korea Appraisal Board).

79) The *jeonse* supply and demand index for apartments in Seoul and its surrounding areas stood at 122.3 in November 2020, a record high since October 2015 (122.4) (source: Korea Appraisal Board).

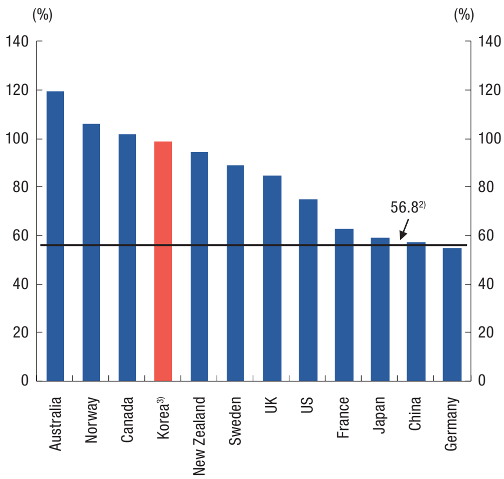
80) Growth in bank lending to households (year-on-year, %): 9.4 in June 2020 → 9.6 in July → 10.0 in August → 10.5 in September → 10.8 in October.

81) In November, the government announced plans to realize declared real estate values (November 3 by relevant ministries), measures to curb household loans including credit loans (November 13 by the Financial Services Commission) and housing stabilization measures for low-income and middle-class households (November 19 by relevant ministries).

strong, affected mainly by concerns about short-term supply-demand imbalances[82] and by expectations of a continuation of accommodative financial conditions, and as demand for funds for leasehold deposits (*jeonse*) continues to grow. Credit loans are also expected to sustain their upward trend for some time, considering the amount already approved but not yet extended up to the limit.[83] However, the recently announced government plans to manage credit loans[84] are likely to work to gradually ease the trend of growth in credit loans with a time lag.

Since household debt in Korea is higher than that in major countries and continues to grow, it is necessary when operating monetary policy to pay attention to the possibility of the accumulation of financial imbalances and keep a close eye on changes in financial stability conditions, including fund flows into the housing market and household debt growth.

Figure III-7. Household debt-to-GDP ratio[1)]



Notes: 1) As of Q1 2020 (Q2 2020 for Korea).
2) Average of 42 countries, excluding Korea, among the BIS survey targets.
3) Calculated by dividing the outstanding amount of loans and government loans from flow of funds data for Q2 2020 by the total nominal GDP for Q2 2020 and the preceding three quarters.

Sources: BIS, Bank of Korea staff calculation.

82) The number of newly occupied apartments in Seoul and its surrounding areas is expected to stand at 193,000 in 2020, 134,000 in 2021 and 156,000 in 2022 (source: 「Measures to Expand Housing Supply in Seoul and its Surrounding Areas」, released on August 4, 2020 by the Ministry of Land, Infrastructure and Transport).

83) Among banks' credit line loans to households from January through October 2020, the unused amount (loan ceiling - outstanding amount of loans extended) increased by 10.1 trillion won, which is about 174% of the increased amount during the same period of last year (5.8 trillion won) (source: Financial Supervisory Service).

84) The Financial Services Commission unveiled (on November 13) measures to curb household loans including credit loans, requiring stronger management of credit lending to high-income earners.

3. Future Monetary Policy Operational Directions

Base Rate operations

The Bank of Korea will continue to conduct its monetary policy in order to support the economy and stabilize consumer price inflation at the target level (2%) over a medium-term horizon, while paying attention to financial stability.

As the recovery in the Korean economy is expected to be modest and inflationary pressures on the demand side are forecast to remain weak, the Bank will maintain its accommodative monetary policy stance. In this process, it will thoroughly assess COVID-19 developments, their impacts on the financial markets and economy, and changes in financial stability conditions such as household debt growth.

Enhancement of monetary policy effectiveness

The Bank of Korea will continue its effort to enhance monetary policy effectiveness. Given the ongoing high uncertainties surrounding economic conditions at home and abroad, the Bank will provide accurate, objective and detailed information that will aid the assessment of macroeconomic and financial conditions, to ensure that economic agents can better understand the Bank's policy decisions and form rational expectations of future policy directions. While continuing to closely monitor whether the channel by which monetary policy is transmitted to the real sector through the financial market is working smoothly, the Bank will sustain its effort to expand its policy toolkit, beyond interest rates, to be used as the situation requires. In addition, as inflation has hovered below the target level for an extended period, the Bank will endeavor to provide more detailed explanation of the causes of low inflation and the trends of underlying inflation and cyclically sensitive inflation to ensure that economic agents' inflation expectations remain stable. Meanwhile, as economic conditions are changing rapidly and expectations on the role of the central bank and monetary policy are growing accordingly, the Bank will also strengthen its effort to examine and improve the monetary policy framework over a medium- to long-term horizon.

Promotion of financial and foreign exchange market stability

The Bank of Korea will make particular efforts to maintain the stability of financial and foreign exchange markets and seamless credit flows. There is a possibility that the domestic financial and foreign exchange markets could respond sensitively to changes in domestic and international risk factors such as the spread of COVID-19. In light of this, the Bank will continue to closely monitor major price variables and supply and demand conditions of bond and foreign exchange markets, and in the event of a sharp increase in volatility due for instance to herding behavior, the Bank will take appropriate market stabilization measures in a timely manner. With regard to the current measures to support the credit markets, the Bank will closely examine what effects these measures have produced and whether they have helped restore the intermediary role of financial markets, and decide whether to extend these measures.

Maintenance of financial system stability

The Bank of Korea will thoroughly monitor financial system stability conditions in line with changes in domestic and overseas financial and economic conditions and strengthen early warning activities concerning potential risks to the financial system. The Bank will particularly examine carefully if the weakening of debt servicing capacities of vulnerable households and corporations, due to a delay in economic recovery following the resurgence of COVID-19, works as a factor undermining financial system stability.

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