BANK OF KOREA

Monetary Policy Report

2020. 3

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 March 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 November 2019 through the date of the Monetary Policy Board meeting for monetary policy decision-making in February 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.

March 2020

Juyeol Lee

Lee, Juyeol

Governor

Bank of Korea

Chairman	Lee, Juyeol
Member	Lee, Il Houng
Member	Cho, Dongchul
Member	Koh, Seung Beom
Member	Shin, Inseok
Member	Yoon, Myun-Shik
Member	Lim, Jiwon

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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Executive Summary

[Monetary Policy Operating Conditions]

1 A look at economic and financial conditions in Korea and abroad between November 2019 and February 2020 finds the following. The pace of global economic growth continued to slow. In the United States, economic activity has been rising at a moderate rate led by consumption, while the euro area saw continued low growth owing to sluggish investment. Growth in Japan remained slow due to weak consumption. In China, economic activity appears to have contracted greatly entering this year, affected by COVID-19.

Economic growth in major economies[1)]

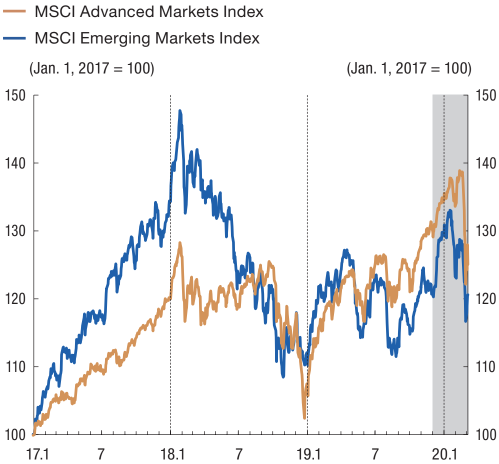
(%)

	2017	2018	2019				
			Year	Q1	Q2	Q3	Q4
US	2.4	2.9	2.3	3.1	2.0	2.1	2.1
Euro area	2.5	1.9	1.2	1.8	0.6	1.1	0.2
Japan	2.2	0.3	0.7	2.2	2.3	0.1	-7.1
China	6.9	6.7	6.1	6.4	6.2	6.0	6.0

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

The international financial markets stabilized after the signing of the Phase One trade deal between the US and China, but have seen a significant increase in volatility since late January, owing to concerns about the spread of COVID-19. Interest rates and stock prices in major countries fell by a large margin, while the US dollar mostly strengthened against major currencies and then depreciated due to the US Federal Reserve's policy rate cut in response to the spread of COVID-19.

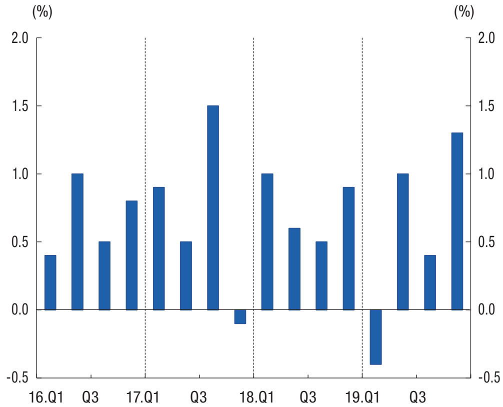
Share price indices of advanced and emerging markets



Source: Bloomberg.

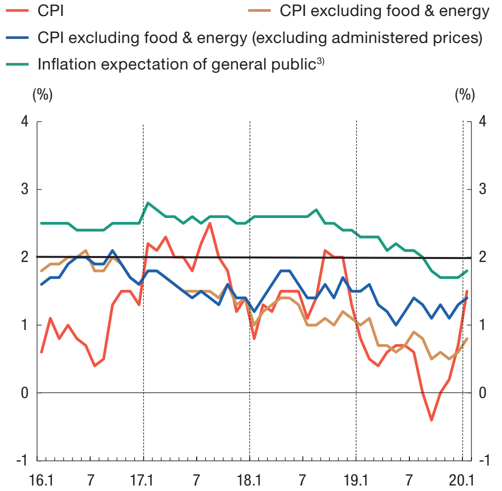
2 In the Korean economy, consumption continued to increase at a moderate pace and the sluggishness in facilities investment eased at the end of last year, while exports appeared to be improving somewhat during January. However, since February, economic growth has weakened due to the spread of COVID-19, led by a contraction in consumption and a slowdown in exports. Meanwhile, employment conditions showed sustained improvement in January, with the pace of increase in the number of persons employed having risen.

Real GDP growth[1)]



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

Inflation[1)2)]



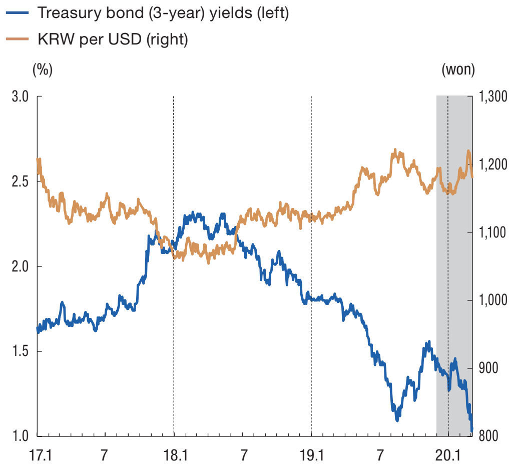
Notes: 1) The bold line indicates the inflation target.
2) Year-on-year.
3) Expectations for the CPI inflation rate one year in the future.
Sources: Bank of Korea, Statistics Korea.

③ Consumer price inflation rose to the mid-1% level in January, despite weak demand-side inflationary pressures and sustained downward pressures from government policy, as the base effects in agricultural, livestock & fisheries product prices dissipated and supply-side downward pressures eased. Core inflation excluding food and energy product prices was at the upper-0% level. The inflation rate expected by the general public fluctuated in the upper-1% range.

Housing sales prices decelerated in Seoul owing to housing market stabilization measures but increased at a high rate in the surrounding areas. The rest of the country showed a continued rise in housing sales prices led by certain metropolitan cities outside Seoul. Leasehold deposit prices have continued to rise since the fourth quarter of 2019, driven by a decline in the supply of new apartments and a pickup in leasehold demand from those waiting for new apartment subscriptions.

④ In the domestic financial markets, long-term market rates and stock prices rose on the back of growing expectations of an improvement in the domestic economy, but then shifted to a decline in late January, influenced by the spread of COVID-19. The Korean won/US dollar exchange rate fell and then rose significantly.

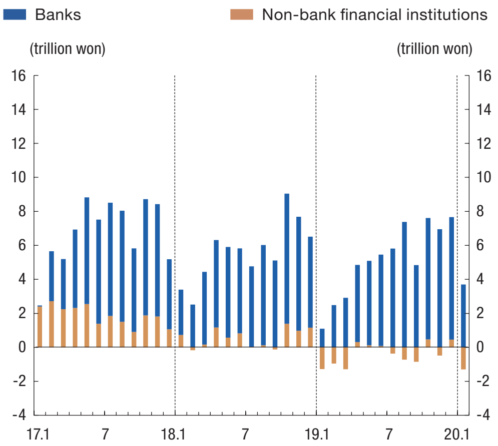
Korean Treasury bond yield and exchange rate (KRW per USD)



Sources: Bank of Korea, KOFIA.

5 Household lending increased, driven mainly by housing purchases and demand for lease-hold deposits. Corporate lending sustained its growth, led by loans to small and medium-sized enterprises thanks to banks' aggressive lending efforts.

Changes in household loans[1)2)]

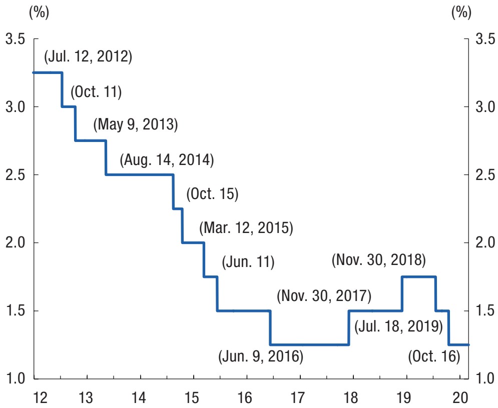


Notes: 1) Month-on-month.
2) Including mortgage transfers.
Source: Bank of Korea.

[Conduct of Monetary Policy]

6 The Bank of Korea maintained its accommodative policy stance to ensure that the recovery of growth continues and consumer price inflation can be stabilized at the target level (2.0%) over a medium-term horizon, while conducting its monetary policy with attention to financial stability as well. In this process it closely examined domestic and overseas risk factors such as global trade disputes, the spread and domestic economic implications of COVID-19, household debt growth and geopolitical risks. Under this policy stance, the Bank maintained the Base Rate at 1.25% per annum between November 2019 and February 2020.

Bank of Korea Base Rate[1)]



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

7 A detailed look at the Base Rate decisions by sector, and the backgrounds behind them, follows:

In the January meeting, the Board decided to leave the Base Rate unchanged at 1.25% considering that it was necessary to monitor future economic developments amid somewhat subdued uncertainties surrounding external conditions due to the progress in the US-China trade negotiations, while paying attention to financial stability risks. In spite of the sustained adjustment in construction investment and the decline in exports, the sluggishness of the domestic economy appeared to have had somewhat eased as facilities investment rose slightly and consumption growth expanded. The Board, therefore, judged that the domestic economy was forecast to grow largely in line with the growth path projected in November. Consumer price inflation had risen to the upper-0% level during December as the pace of decline in agricultural, livestock & fisheries product prices decelerated and petroleum product prices rose, and was forecast to rise to the 1% range. It seemed necessary to stay alert to the changes in risks from the financial stability perspective, given that the amount of increase in household lending had expanded and housing prices in Seoul and its surrounding areas had been rising rapidly.

In the February meeting, the Board kept the Base Rate at 1.25% against the following background. The unexpected outbreak and spread of COVID-19 at the end of January had weakened the domestic economy. Although the sluggishness in facilities investment had eased, the adjustment in construction investment had continued and consumption had contracted owing to growing anxiety, while exports and production activity had been partly disrupted. The growth outlook of the domestic economy for this year, therefore, was adjusted downward from 2.3% to 2.1%, under the assumption that the spread of COVID-19 would peak in March and then start to be contained. However, it was judged that the future growth path was highly uncertain and would depend on future developments in the COVID-19 outbreak. Meanwhile, consumer price inflation had risen to 1.5% in January, due largely to an upturn in the prices of agricultural, livestock and fisheries products and the larger increase in petroleum product prices. Looking ahead, it was forecast that consumer price inflation would run at the lower-1% level and then fall slightly to record around 1% during this year. In the present situation in which macroeconomic conditions were changing drastically within a short time, it was true that uncertainties surrounding the growth path were high. However, it was judged to be necessary to more closely examine whether COVID-19 would peak in March and then start to ease, or whether it would be prolonged. It was judged that microeconomic policy measures which allow selective support of vulnerable sectors heavily impacted by the spread of COVID-19 were more exigent and effective than policy rate adjustments, since shrinking domestic demand and production activities were mainly attributable to the spread of anxiety stemming from viral contagion risk, rather than to economic factors. It was also taken into consideration that attention should be paid to financial stability as well, particularly since household lending growth was still high and it was necessary to keep a closer watch on whether housing prices would be stabilized after the adoption of the government's measures for the real estate market.

8 On March 9, the Bank of Korea increased the ceilings of programs under the Bank Intermediated Lending Support Facility by a total of 5 trillion won, from 25 trillion won to 30 trillion won, to strengthen financial support for small and medium-sized enterprises (SMEs) experiencing funding bottlenecks due to the spread of COVID-19. Specifically, the Bank raised the reserve by 5 trillion won in order to support service-related

SMEs in the tourism, food & beverage, and distribution industries, as well as manufacturing SMEs having difficulties in procuring commodities and parts & components from China and those facing difficulties in exporting to China. Furthermore, the Bank increased the ceiling of the Support Program for New Growth Engine Development and Job Creation by 1 trillion won to support economic recovery, using excess funds from the Program for Stabilization of SME Lending.

Programs under the Bank Intermediated Lending Support Facility

(trillion won, %)

Program	Ceiling		Interest rate
	Before adjustment	After adjustment[1)]	
Support Program for Trade Financing	2.5	2.5	0.50
Support Program for New Growth Engine Development and Job Creation[2)]	10.0	11.0	0.50
Program for Stabilization of SME Lending[3)]	6.5	5.5	0.50~0.75
Support Program for Regional Enterprises	5.9	5.9	0.75
Reserve	0.1	5.1	0.75
Total	25.0	30.0	-

Notes: 1) As of March 9, 2020.
2) 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).
3) Includes the support that had been formerly provided under the Support Program for Facilities Investment.
Source: Bank of Korea.

9 The Bank of Korea continued its efforts for financial and foreign exchange market stability in response to changes in conditions at home and abroad. The Bank held a 「Financial and Economic Conditions Review Meeting」 to examine financial and FX market movements at home and abroad, in line with escalating military tensions between the US and Iran. In addition, the Bank set up and ran a 「COVID-19 Response Task Force」 from January 28 to monitor developments related to COVID-19 and international financial market developments around the clock, and to closely examine their possible impacts on the domestic financial sector and economy. The Bank also managed market liquidity sufficiently by implementing open market operations in a flexible manner. In March, as volatility increased sharply in the domestic and foreign financial and FX markets due to the acceleration of the global spread of COVID-19, the sudden policy rate cut by the US Federal Reserve, and the collapse of international oil prices, the Bank held a 「Monetary and Financial Response Task Force Meeting」 and announced that it would monitor market conditions and use all possible policy measures to seek financial stability as necessary.

The Bank continued its efforts for the preemptive identification of potential risks within the financial system as well. During its December 「Financial Stability Meeting」, the Bank examined sector-by-sector vulnerabilities in household and corporate credit markets, asset markets, and financial institutions, and financial system resilience against tail risks.

[Future Monetary Policy Directions]

10 Looking at the economic outlook,[1] it is forecast that GDP will grow by 2.1% this year and 2.4% next year under a scenario in which the spread of COVID-19 starts to ease after peaking in March. After a temporary slowdown due to the negative impacts from COVID-19, the domestic economy is expected to recover gradually from the second quarter if the spread of the virus starts to be contained in March, as private consumption and exports rebound amid continued fiscal expansion and a recovery in facilities investment. However, there is a notably high level of uncertainty surrounding the growth path, particularly as to how the COVID-19 situation develops.

Economic growth outlook[1)2)]

(%)

	2019[3)]			2020[e]			2021[e]
	H1	H2	Year	H1	H2	Year	Year
GDP	1.9	2.2	2.0	2.0	2.2	2.1	2.4
Private consumption	2.0	1.9	1.9	1.1	2.6	1.9	2.4
Facilities investment	-12.3	-2.6	-7.7	4.8	4.7	4.7	5.3
Intellectual property products investment	2.8	2.5	2.7	3.2	3.4	3.3	3.3
Construction investment	-5.1	-1.2	-3.1	-2.4	-2.0	-2.2	-0.9
Goods exports	-0.8	1.6	0.5	1.4	2.3	1.9	2.5
Goods imports	-3.2	1.6	-0.8	0.8	3.4	2.1	3.1

Notes: 1) Figures are the forecast as of February 2020.
2) Year-on-year.
3) Reflects fourth quarter preliminary figures (released on March 3).
Source: Bank of Korea.

Consumer prices are forecast to increase by 1.0% in 2020, higher than in 2019. Demand-side inflationary pressures remain weak and the government will maintain its social-welfare policy stance in 2020. On the other hand, supply-side inflationary downward pressures on prices are expected to ease. While agricultural and livestock prices increase from those of last year, which fell well below the average for past years, petroleum product prices also seem likely to show higher growth, due for instance to the expiration of a fuel tax cut. The rate of price inflation is expected to pick up to record 1.3% next year, owing to improved economic conditions and the reduced effects of social-welfare policies. Core inflation excluding food and energy prices is forecast to record 0.7% this year, and 1.1% next year. The upside and downside risks to the future inflation path are mixed. Some of the main upside risks are rising international commodity prices in line with the easing of COVID-19, and possible additional hikes in some public service charges. The downside risks, meanwhile, include stronger social-welfare policies regarding communication and healthcare, and a delayed improvement in domestic demand following the spread of COVID-19.

Inflation outlook[1)2)]

(%)

		2019			2020[e]			2021[e]
		H1	H2	Year	H1	H2	Year	Year
CPI inflation		0.6	0.2	0.4	1.0	0.9	1.0	1.3
Core inflation	CPI excluding food & energy	0.8	0.7	0.7	0.7	0.8	0.7	1.1
	CPI excluding agricultural products & oils	1.0	0.8	0.9	0.8	0.9	0.8	1.2

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

11 In the future as well, the Bank of Korea will conduct its monetary policy so as to ensure that

1) Based on the Bank of Korea's「Economic Outlook Report」published on February 27, 2020

the recovery of economic growth continues and consumer price inflation can be stabilized at the target level (2.0%) over a medium-term horizon, while paying attention to financial stability.

As it is expected that domestic economic growth will be moderate and it is forecast that demand-side inflationary pressures will remain at a low level, the Bank will maintain its accommodative monetary policy stance. In this process it will judge whether to adjust the degree of monetary policy accommodation, while thoroughly assessing the severity of the COVID-19 outbreak and its impact on the domestic and global economies, the monetary policy responses of major countries, and changes in financial stability conditions such as the trend of increase in household debt. It will also closely monitor the development of global trade disputes and geopolitical risks.

I

Monetary Policy Operating Conditions

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1. Global Economy

Global economic growth continues to slow

The pace of global economic growth continued to slow. From late last year to early this year, there were signs of improvement in some business indicators, but growth appears to have slowed again recently, centered in China, due to the COVID-19 outbreak.[1] In the United States, economic activity rose moderately at the level of its potential growth rate,[2] as consumption increased modestly and growth in government expenditure expanded.[3] In the euro area, however, growth remained slow due to sluggish investment.[4] In Japan, GDP declined sharply in the fourth quarter of last year compared to the quarter before, owing to weak consumption in line with a consumption tax hike, and to production setbacks resulting from typhoons.[5] Growth has remained weak as well entering this year.[6] In China, the trend of growth in the fourth quarter was at the level of the previous quarter, but production and consumption seem to have contracted[7] greatly in January and February with the spread of COVID-19. Growth in the ASEAN-5 countries slowed, affected by sluggish exports. However, growth in India, which slumped last year, has recovered,[8] supported by active stimulus measures this year.

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

(%)

	2017	2018	2019 Year	2019 Q1	2019 Q2	2019 Q3	2019 Q4
World	3.8	3.6	2.9	-	-	-	-
Advanced economies	2.5	2.2	1.7	-	-	-	-
US	2.4	2.9	2.3	3.1	2.0	2.1	2.1
Euro area	2.5	1.9	1.2	1.8	0.6	1.1	0.2
Japan	2.2	0.3	0.7	2.2	2.3	0.1	-7.1
Emerging market and developing economies	4.8	4.5	3.7	-	-	-	-
China	6.9	6.7	6.1	6.4	6.2	6.0	6.0
India[3)]	7.0	6.1	..	5.7	5.6	5.1	4.7
ASEAN-5[4)]	5.3	5.2	4.8	4.8	4.8	4.9	4.6
Brazil	1.3	1.3	1.1	0.6	1.1	1.2	1.7
Russia	1.8	2.5	1.3	0.5	0.9	1.7	..

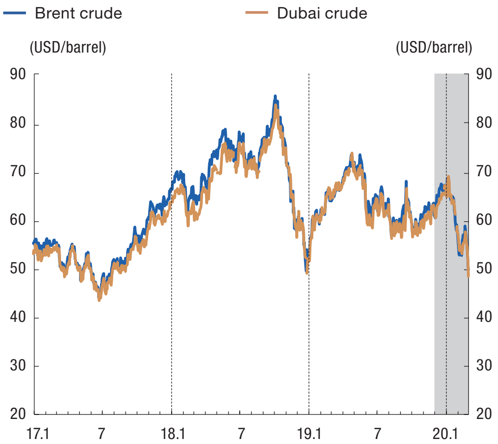
Notes: 1) Based on IMF statistics, except in the cases of individual countries, the euro area and ASEAN-5 which are based on their own published statistics.
2) The rates of growth are annualized quarter-on-quarter rates for advanced economies, and year-on-year rates for the others.
3) The annual growth 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.

1) The OECD composite leading indicator shifted to an upward trend, and the global manufacturing PMI exceeded the benchmark (50) for three consecutive months from November 2019 to January 2020 thanks to a recovery in new orders. However, the global manufacturing PMI declined to 47.2 in February, the lowest level since May 2009.
2) The US ISM manufacturing index declined in February compared to the previous month (50.9 in Jan. → 50.1 in Feb.) due to concerns about disruptions in global supply chains in line with the spread of COVID-19, but it still remained above the benchmark (50).
3) Government expenditure rose 2.6% (annualized quarter-on-quarter) in the fourth quarter of 2019, higher than the 1.7% growth recorded in the third quarter.
4) However, the manufacturing PMI in the euro area rose to 49.1 in February from 47.9 in January, as sentiment indicators in the manufacturing sector improved.
5) In the fourth quarter of 2019, real household consumption expenditure (households with two persons or more) and mining and manufacturing production decreased by 5.8% and 4.1% quarter-on-quarter, respectively.
6) The manufacturing PMI recorded 48.8 in January and 47.8 in February this year.
7) In February the manufacturing PMI recorded 35.7, a decline of 14.3 from the previous month (50) and the lowest level since the statistics were first compiled in 2005 (based on National Bureau of Statistics of China).
8) The manufacturing PMI remained at high levels, recording 55.3 in January and 54.5 in February this year.

International oil prices decline

International oil prices were on an upward trend as major oil producing countries agreed on an additional cut in their production late last year.[9] They then rose to the upper-60 dollar range early this year, driven by the heightening of geopolitical tensions in the Middle East with the military conflict between Iran and the US. However, oil prices have declined since late January owing to concerns about the global economic slowdown with the outbreak of COVID-19.

Figure I–1. International oil prices



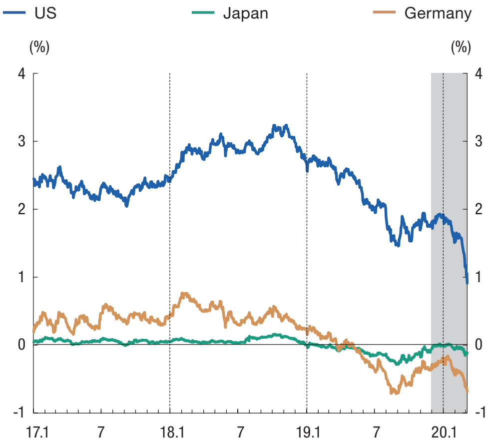
Source: Bloomberg.

International financial market volatility increases

International financial markets remained generally stable, but volatility has expanded greatly, affected by the spread of COVID-19 since late January.

Government bond yields in major countries rose as concerns about the US-China trade dispute eased,[10] but then declined substantially owing to concerns about the global economic slowdown with the outbreak of COVID-19 and continued accommodative monetary policy in major economies.

Figure I–2. Long-term market interest rates[1] in major economies



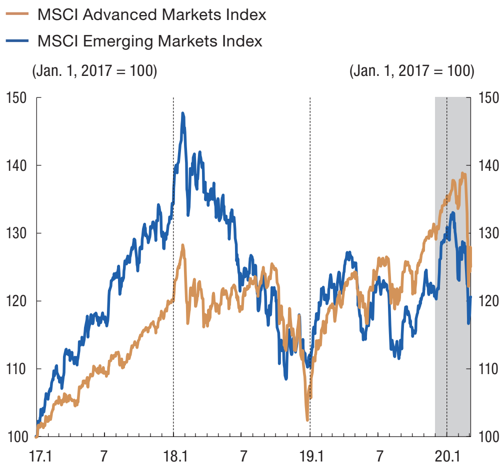
Note: 1) Treasury bond (10-year) yields.
Source: Bloomberg.

Stock prices fluctuated considerably and declined greatly in both advanced and emerging market economies.

9) On December 6, 2019, OPEC+ (10 OPEC countries and 10 non-OPEC countries) agreed to expand the size of oil production cuts in the first quarter of this year by an average of 0.5 million barrels per day (1.2 million barrels/day → 1.7 million barrels/day).

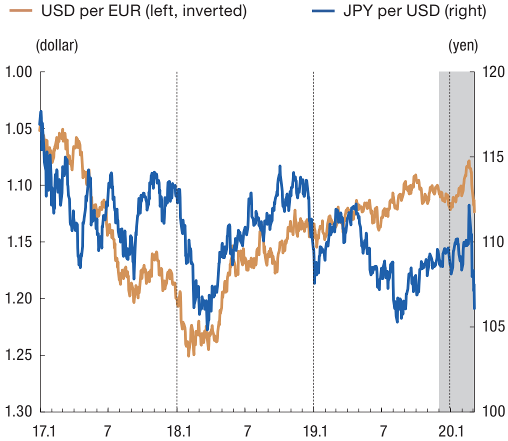
10) The US announced the Phase One trade agreement between the US and China (Dec. 13, 2019), and the two countries formally signed the agreement on January 15, 2020.

Figure I–3. Share price indices of advanced and emerging markets



Source: Bloomberg.

Figure I–4. Major exchange rates[1)]



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

The US dollar fluctuated against major currencies, affected by economic indicators in major economies, political uncertainty and accommodative monetary policy. It strengthened against the euro entering January due to uncertainties related to negotiations on future relations between the UK and the EU, and to sluggish economic indicators in the euro area. It then depreciated against the euro, influenced by the US Federal Reserve's policy rate cut in response to the COVID-19 outbreak.

2. Real Economy

Domestic economic growth weakens

As consumption increased modestly and the sluggishness of facilities investment eased somewhat late last year, the real GDP growth rate in Korea was 1.3% quarter-on-quarter (2.3% year-on-year) in the fourth quarter of last year. However, with the spread of COVID-19 since late January this year, the trend of growth is judged to have weakened with shrinking consumption and slowing exports.

In the fourth quarter of last year, private consumption continued its modest growth, increasing 0.9% quarter-on-quarter, as consumption of durable goods such as automobiles increased greatly, despite sluggish consumption of semi-durable goods such as clothing and a slight increase in services consumption. However, it then shrank greatly, led by retail sales and services consumption, affected by the COVID-19 outbreak since late January of this year. Government consumption showed a high rate of growth in the fourth quarter of last year, increasing 2.5% quarter-on-quarter, as health insurance payouts rose[11] following an additional expansion of health insurance coverage and government expenditures related to personnel and material expenses increased.[12] The sluggishness in facilities investment eased somewhat in the fourth quarter of last year. It continued to decline in year-on-year terms, but increased for three consecutive quarters in quarter-on-quarter terms. Investment in transportation equipment declined, led by other related equipment, while machinery investment rose owing to expanded introduction of semiconductor manufacturing equipment. Construction investment rose 7.0% quarter-on-quarter in the fourth quarter of last year, as civil engineering and non-residential building construction increased with the expansion of the government's budget implementation. However, an continued adjustment in construction investment has been seen this year with residential building construction remaining weak.

Table I–2. Major economic growth indicators[1)]

(%)

	2017	2018		2019				
		Year	Q4	Year	Q1	Q2	Q3	Q4
Real GDP	3.2	2.7	0.9 (2.9)	2.0	-0.4 (1.7)	1.0 (2.0)	0.4 (2.0)	1.3 (2.3)
(Private consumption)	2.8	2.8	0.8 (2.4)	1.9	0.1 (1.9)	0.7 (2.0)	0.2 (1.8)	0.9 (1.9)
(Government consumption)	3.9	5.6	2.8 (7.1)	6.5	0.4 (5.5)	2.2 (7.0)	1.4 (6.9)	2.5 (6.6)
(Facilities investment)	16.5	-2.4	3.2 (-5.3)	-7.7	-9.1 (-17.4)	3.2 (-7.0)	0.6 (-2.6)	3.3 (-2.5)
(Construction investment)	7.3	-4.3	1.8 (-5.7)	-3.1	-0.8 (-7.2)	1.4 (-3.5)	-6.0 (-3.7)	7.0 (1.1)
(Goods exports)	4.4	3.3	-2.4 (6.3)	0.5	-3.5 (-0.9)	0.7 (-0.7)	5.3 (-0.1)	1.1 (3.4)
(Goods imports)	8.8	1.6	2.2 (4.8)	-0.8	-4.2 (-5.7)	2.6 (-0.7)	1.4 (1.9)	1.7 (1.3)

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

11) Health insurance payouts rose 2.3% quarter-on-quarter in the fourth quarter of last year, a faster rate of growth than in the third quarter (0.6%). The year-on-year growth rate rose to 10.7% in the fourth quarter from 3.3% in the third quarter.

12) From October to November last year, the central government's personnel and material expenses rose by 3.5% year-on-year.

Improvement in employment continues

Employment conditions have recently continued to show improvement. In the fourth quarter of last year, the number of persons employed rose by 422,000 year-on-year, up from that in the previous quarter (+366,000). By industry, the trend of employment growth continued in some services sectors, including health & welfare, food & accommodation, and art, sport & leisure, while the extent of employment decline in the manufacturing industry lessened. The number of persons employed in January this year rose by 568,000 year-on-year, up from that in the previous month (+516,000). The seasonally adjusted unemployment rate rose to 3.6% in the fourth quarter of last year, slightly higher than that of the previous quarter (3.5%), and climbed to 4.0% in January.

Table I-3. Major employment-related indicators

(ten thousand persons, %)

	2018		2019			2020
	Year	Q4	Year	Q3	Q4	Jan.
Economically active population (Rate of change)1)	0.5	0.5	1.0	0.9	1.3	1.8
Number of employed persons (Changes)1)	9.7	8.8	30.1	36.6	42.2	56.8
Labor force participation rate2)	63.1	63.2	63.3	63.2	63.5	64.1
Employment-to-population ratio2)	60.7	60.7	60.9	60.9	61.2	61.6
Unemployment rate2)	3.8	3.9	3.8	3.5	3.6	4.0

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

Current account surplus narrows

The current account surplus narrowed slightly year-on-year in the fourth quarter of last year. This was mainly because the goods account surplus narrowed due to declines in the unit prices of semiconductors and petroleum products. The services account recorded a similar level of deficit year-on-year, as the deficits in the transport and other business services accounts widened while that in the travel account shrank. Meanwhile, the primary income account surplus increased thanks to improvement in the investment income account.

Exports (customs clearance basis, year-on-year) continued their trend of decline in the fourth quarter of last year, as exports of semiconductors and petroleum products were sluggish amid falling unit prices and as exports of ships declined. In January exports improved somewhat, rising on a daily average basis thanks to an easing of uncertainties resulting from the Phase One trade deal between the US and China. However, exports slowed again in February,[13] led by exports to China.[14]

The decline in imports (customs clearance basis, year-on-year) accelerated. Raw material imports including crude oil and petroleum products declined as international oil prices fell. Capital goods imports also dropped, led mainly by semiconductor equipment. Growth of consumer goods imports slowed as imports of non-durable consumer goods shifted to a decline. Entering this year, imports showed

13) In January, the growth rate of exports (customs clearance basis) was -6.3%, and 4.6% on a daily average basis. In February, it was 4.5% and -11.7%, respectively.

14) In February, the growth rate of exports to China (customs clearance basis) was -6.6%, and -21.1% on a daily average basis.

some improvement in January, before slowing again in February.[15)]

Table I–4. Current account

(billion dollars, %)

	2018		2019				
	Year	Q4	Year	Q1	Q2	Q3	Q4
Current account	77.5	19.5	60.0	12.2	10.4	19.2	18.1
Goods	110.1	24.7	76.9	19.5	17.4	19.5	20.4
Exports[1)]	604.9	154.5	542.2	132.7	138.5	134.7	136.4
(Rate of change[2)])	5.4	7.7	-10.4	-8.5	-8.7	-12.3	-11.8
Imports[1)]	535.2	139.3	503.3	123.8	128.8	125.0	125.8
(Rate of change[2)])	11.9	12.9	-6.0	-6.5	-3.3	-4.1	-9.7
Services	-29.4	-6.1	-23.0	-7.2	-4.4	-5.4	-6.1
Credit	103.7	27.7	107.6	25.7	27.7	27.0	27.3
Debit	133.0	33.8	130.7	32.9	32.0	32.3	33.4
Primary income	4.9	2.6	12.2	1.5	-0.8	6.0	5.5
Secondary income	-8.2	-1.7	-6.1	-1.7	-1.8	-1.0	-1.7

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

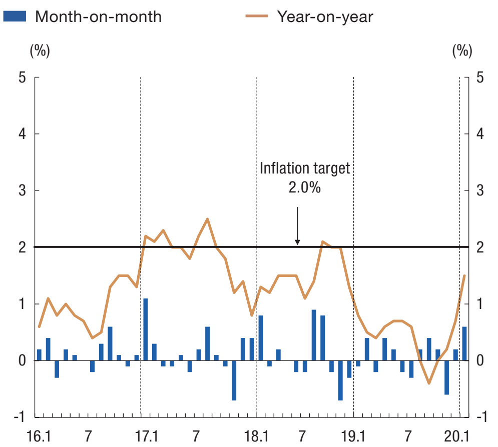
15) In January, the growth rate of imports (customs clearance basis) was -5.4%, and 5.6% on a daily average basis. In February, it was 1.4% and -14.4%, respectively.

3. Prices

Consumer price inflation rebounds to 1% level

Consumer price growth rose gradually from October last year and recorded the mid-1% level in January this year. This was a result of easing downward pressures from supply-side factors such as the base effect of agricultural, livestock & fishery product prices and the hike in international oil prices, amid weak demand-pull inflationary pressures and continued downward pressures from government policy.

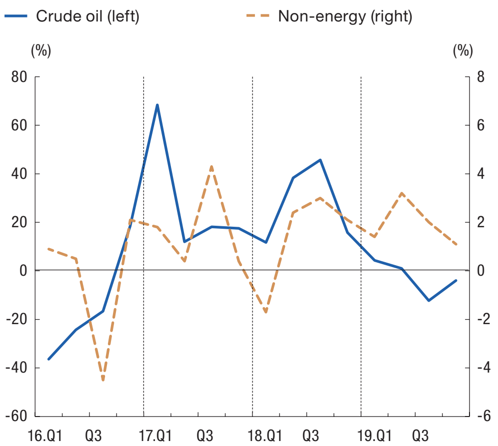
Figure I–5. CPI inflation



Sources: Bank of Korea, Statistics Korea.

With regard to the overseas factors affecting prices, the decline in crude oil import prices decelerated[16] from October last year, reflecting changes in international oil prices,[17] and this contributed to a rise in consumer price inflation. Prices of non-energy imports, which affect domestic industrial product prices indirectly, grew at a slightly slower pace[18], led by a slower rise in the Korean won/dollar exchange rate.[19]

Figure I–6. Import prices (Korean-won basis)[1]



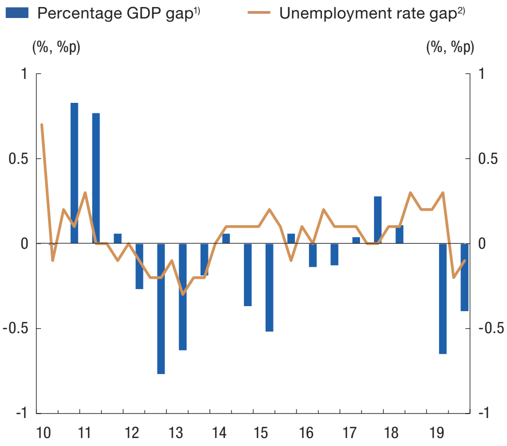
Note: 1) Year-on-year.
Source: Bank of Korea.

As for domestic factors influencing prices, inflationary pressures remained low on the demand side, with the percentage GDP gap remaining negative. On the cost side, the all-industry rate of wage growth declined compared to 2018, while the rates of wage increase in personal services industries such as

16) The extent of decrease in prices of crude oil imports (Korean won basis, year-on-year) narrowed from -12.3% in the third quarter of last year to -4.0% in the fourth quarter.
17) The decline in international oil prices (Dubai crude oil basis, year-on-year) slowed from -17.4% in the third quarter of last year to -8.9% in the fourth quarter.
18) The rate of increase in non-energy product import prices (Korean won basis, year-on-year) decelerated from 3.2% in the second quarter of last year to 2.0% in the third quarter and to 1.1% in the fourth quarter.
19) The extent of increase in the Korean won/US dollar exchange rate (year-on-year) narrowed from 6.5% in the third quarter of last year to 4.2% in the fourth quarter.

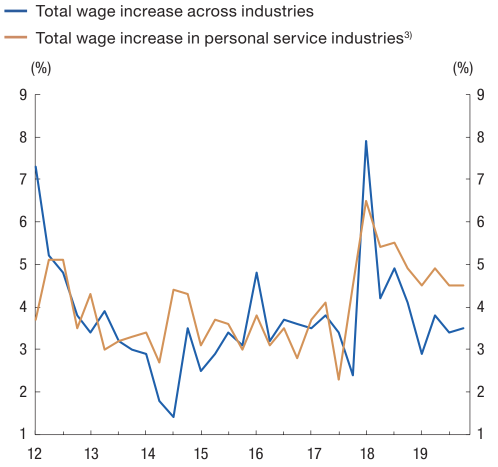
accommodation and food services remained higher than their normal year averages.

Figure I–7. Gaps of major economic indicators



Notes: 1) (Real GDP-potential GDP)/potential GDP, biannual basis
2) Unemployment rate (seasonally adjusted) - Non-accelerating inflation rate of unemployment (NAIRU, estimated by Bank of Korea).
Sources: Bank of Korea, Statistics Korea.

Figure I–8. 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 contributed to a rise in consumer price inflation while the government's strengthening of social-welfare policies related to education worked as a factor pushing inflation down in the fourth quarter of last year. The pace of decline in the prices of agricultural, livestock & fishery products slowed as the price of vegetables skyrocketed[20)] due to typhoons and as the base effect from the price surge[21)] during the third quarter of 2018 dissipated gradually. The government policies to expand free high school education and free high school lunches[22)] worked as a factor

20) In the fourth quarter of last year, the price of vegetables increased by 7.5% quarter-on quarter, far higher than the normal year average (-5.7% between 2009 and 2018).

21) During the third quarter of 2018, the prices of agricultural, livestock & fishery products increased by 6.5% quarter-on-quarter, much faster than the normal year average (2.5% between 2009 and 2018).

22) Free high school education was introduced for students in the third year of high school from September last year, and free high school lunch was expanded to other areas (Gyeonggi province).

pushing inflation down, while housing rental fees continued to decline year-on-year, affected by drops in leasehold deposits and monthly rents (new contract basis).[23)]

Looking at the changes in CPI inflation in the individual product categories, the rates of decline in agricultural, livestock & fishery product prices and petroleum product prices slowed significantly quarter-on-quarter in the fourth quarter. As for services, private service charges and housing rents increased at a pace similar to that of the previous quarter, while the rate of decline in public service charges accelerated. In January this year, the rate of increase in prices of agricultural, livestock & fishery products and petroleum products rose sharply while that of industrial products excluding petroleum and services accelerated slightly.

Table I–5. CPI inflation[1)]

(%)

	2018	2019					2020
		Year	Q1	Q2	Q3	Q4	Jan.
Consumer price index	1.5	0.4	0.5	0.7	0.0	0.3	1.5
Agricultural, livestock & fishery products	3.7	-1.7	0.2	1.2	-5.4	-2.5	2.5
(Agricultural products)	8.1	-3.0	1.3	1.6	-8.7	-5.8	1.0
(Livestock products)	-3.5	0.0	-1.6	1.7	-2.0	1.8	3.4
Industrial products	1.3	-0.2	-0.7	0.0	-0.2	0.2	2.3
(Petroleum products)	6.8	-5.7	-10.2	-3.5	-6.0	-3.1	12.4
(Industrial products excluding petroleum)	0.5	0.7	0.8	0.6	0.8	0.7	0.9
Electricity, water & gas	-2.9	1.5	1.3	1.3	1.9	1.5	1.5
Services	1.6	0.9	1.3	0.9	0.9	0.7	0.8
(Rentals for housing)	0.6	-0.1	0.1	-0.1	-0.2	-0.2	-0.2
(Public service charges)	0.2	-0.5	-0.3	-0.2	-0.4	-1.0	-0.5
(Private service charges)	2.5	1.9	2.3	1.7	1.7	1.6	1.7
CPI for living necessities	1.6	0.2	0.2	0.7	-0.3	0.3	2.1
CPI excluding food & energy	1.2	0.7	1.0	0.6	0.7	0.6	0.8
CPI excluding agricultural products & oils	1.2	0.9	1.1	0.9	0.8	0.7	0.9

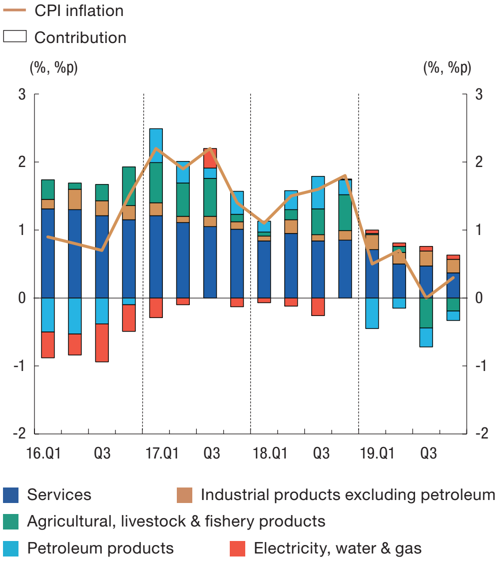
Note: 1) Year-on-year.

Sources: Statistics Korea.

In terms of the contribution to inflation of the individual product categories, while the negative contribution of agricultural, livestock & fishery product prices and petroleum product prices narrowed sharply compared to the previous quarter, that of service prices declined only slightly.

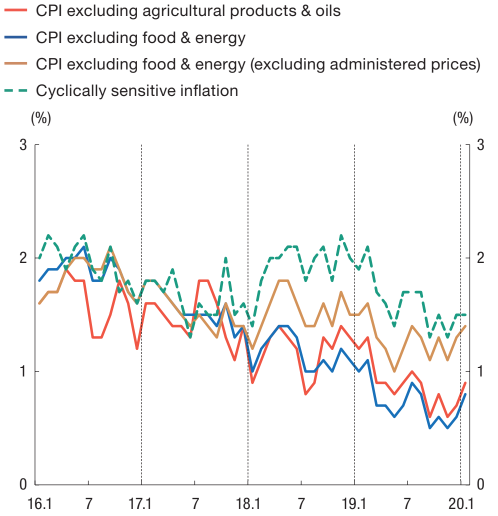
23) Leasehold deposits and monthly rents (Based on Korea Appraisal Board) decreased by 1.5% in 2018, and 1.1% in 2019.

Figure I-9. Contributions to CPI inflation[1)]



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

Figure I-10. Underlying inflation rates[1)]



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

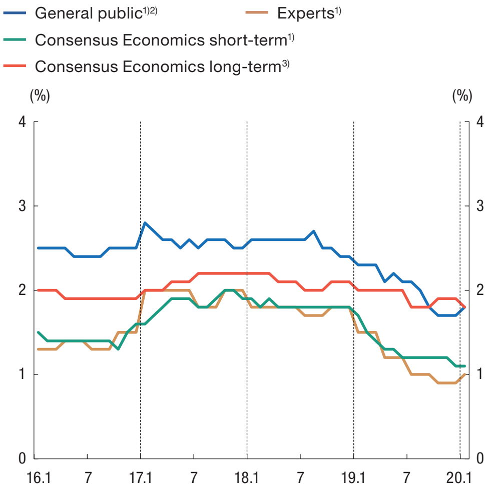
Underlying inflation continues to increase at a slow pace

Core inflation excluding food and energy prices continued to record the upper-0% range. Core inflation has been greatly influenced by the government's strengthening of its welfare policies, and thus a look at core inflation excluding administered prices[24)] shows that it rose by 1.2% in the fourth quarter, while cyclically sensitive inflation[25)] increased by 1.4%. In January this year, the underlying inflation rates rose slightly higher than in the fourth quarter of last year.

The inflation expectations of the general public for the next one year and long-term inflation expectations of a group of experts[26)] both fluctuated at around the upper 1% range.

24) The core inflation index 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.
25) Cyclically sensitive inflation was calculated based on the items from among the group of products comprising the core inflation index that react sensitively to the percentage GDP gap with food and energy product prices excluded.
26) These figures are the results of surveys of domestic and foreign investment banks, securities companies, and market research institutions conducted by Consensus Economics, Inc.

Figure I–11. 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.

Table I–6. Rates of increase in housing sales and leasehold deposit prices[1]

(%)

	2018	2019						2020	
	Year	Year	Q1	Q2	Q3	Q4	Dec.	Jan.	Feb.
Housing sales prices	1.1	-0.4	-0.4	-0.5	-0.1	0.7	0.4	0.3	0.3
Seoul and its surrounding areas	3.3	0.5	-0.5	-0.5	0.2	1.3	0.6	0.4	0.5
(Seoul)	6.2	1.2	-0.6	-0.3	0.4	1.8	0.9	0.3	0.1
Other areas	-0.9	-1.1	-0.4	-0.5	-0.4	0.2	0.2	0.2	0.2
Sales prices of apartments for reconstruction	17.8	10.6	-1.0	2.1	3.6	5.7	2.1	0.4	-0.1
Leasehold deposit prices	-1.8	-1.3	-0.7	-0.7	-0.3	0.4	0.2	0.3	0.2
Seoul and its surrounding areas	-1.5	-0.8	-0.9	-0.7	0.0	0.9	0.4	0.4	0.3
(Seoul)	0.3	-0.4	-1.1	-0.4	0.2	0.9	0.4	0.4	0.2
Other areas	-2.1	-1.7	-0.5	-0.7	-0.6	0.0	0.1	0.2	0.1

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

Housing sales prices continue high rate of increase in areas surrounding Seoul

Housing sales prices decelerated in Seoul owing to housing market stabilization measures[27] but increased at a high rate in the surrounding areas.[28] In the rest of the country, housing sales prices continued to increase, led by certain metropolitan cities such as Daejeon.

Nationwide leasehold deposit prices have continued to rise since the fourth quarter of 2019, driven by a decline in the supply of new apartments and a pickup in leasehold demand from those waiting for new apartment subscriptions.

27) In response to hikes in housing prices, the government announced 「Housing Market Stabilization Measures」 (Dec. 16, 2019), which feature additional regulations on lending for high-priced houses, stronger comprehensive real estate holding taxes and expanded areas subject to the presale price cap system.

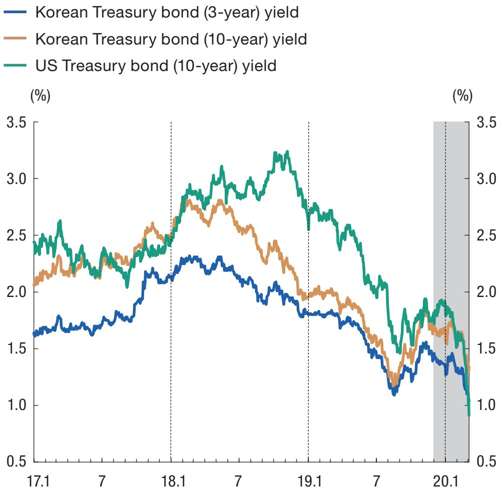
28) The rate of growth in housing sales prices in Gyeonggi and Incheon stood at 0.5% in December last year, 0.4% in January this year, and 0.7% in February.

4. Financial and Foreign Exchange Markets

Long-term market interest rates decline sharply

The Treasury bond yield (3-year) rose until mid-January on expectations of a domestic economic recovery entering this year, but declined from late January, affected by the spread of COVID-19. In particular, from late February, it dropped below the Base Rate, influenced by concerns about the economic slowdown with the spread of COVID-19 and by the US Federal Reserve's policy rate cut.

Figure I–12. Korean and US Treasury bond yields

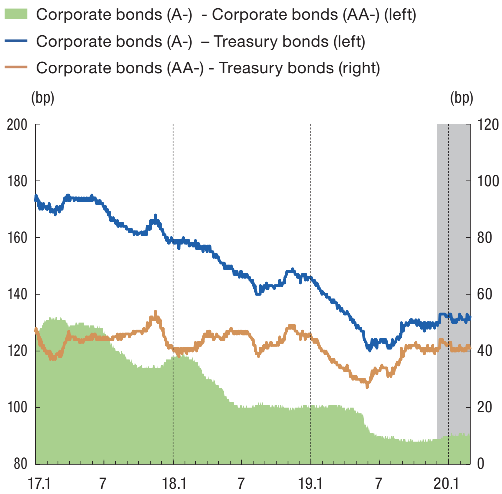


Sources: KOFIA, Bloomberg.

Corporate bond credit spread remains stable

The corporate bond credit spread fluctuated within a narrow range[29] as demand for corporate bonds remained solid in line with growing inflows of bond-type funds.[30]

Figure I–13. Corporate bond credit spreads and spread across credit ratings[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.

Banks' lending rate unchanged since year-end while deposit rate declines

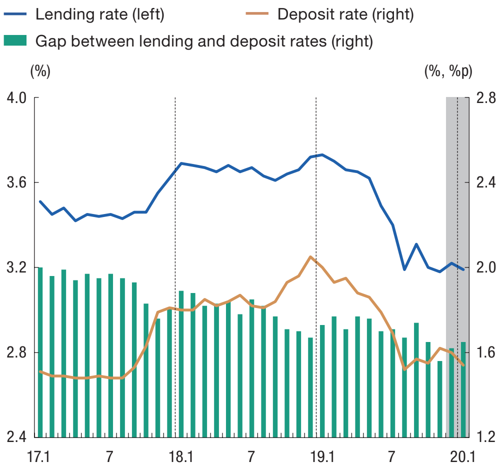
Banks' interest rate on loans was 3.19% in January this year, similar to that in November last year. Despite drops in major benchmark market interest rates, the decline was limited as some corporate loans with relatively high

29) The corporate bond credit spread (AA- grade) was 42bp on a monthly average in December 2019, and remained at a similar level (41bp) entering this year.

30) Inflows of bond-type funds have risen by 3.2 trillion won since January 2020 (based on Feb. 28 figure). They reversed to an increase in January in month-on-month terms, for the first time in the four months since September last year.

interest rates took up a larger share of bank loans and the premiums of bank mortgage loans rose. On the other hand, banks' interest rate on deposits declined from late last year to stand at 1.54% in January, owing to falls in market interest rates and banks' reduced incentives to attract time deposits.[31]

Figure I–14. Bank lending/deposit rates and spread

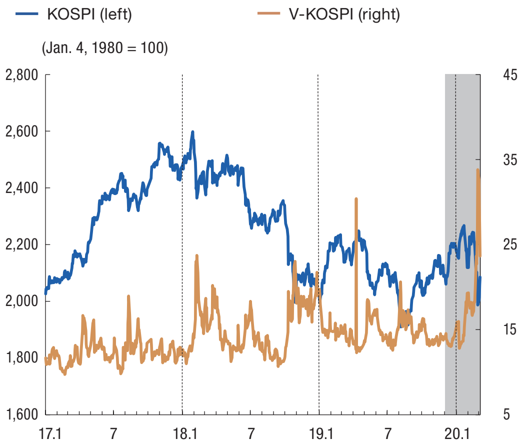


Source : Bank of Korea.

Stock prices plummet after a rise

Stock prices (KOSPI) continued to rise from December last year on the progress toward the Phase One trade agreement between the US and China and expectations for a recovery in the global semiconductor industry, but fell significantly from late January due to the spread of COVID-19 and consequent concerns about the global economic slowdown. They rebounded considerably thanks to policy measures taken by major economies, but dropped significantly again from late February with the spread of COVID-19. The stock price volatility index (V-KOSPI) remained generally low until mid-January, before rising sharply.

Figure I–15. KOSPI and stock volatility index



Source: Koscom.

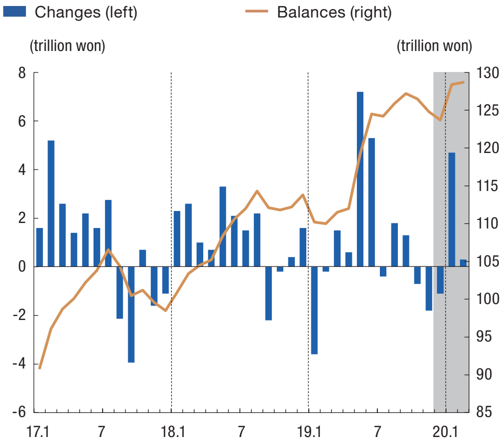
Domestic portfolio investment by foreigners declines

Domestic portfolio investment by foreigners recorded net inflows entering this year, led by bond funds, but reversed to a decrease in February with stock funds flowing out on a massive scale.

Bond investment continued to decrease until December last year owing to delayed reinvestment of maturing funds, but increased entering this year, led by public funds such as sovereign funds.

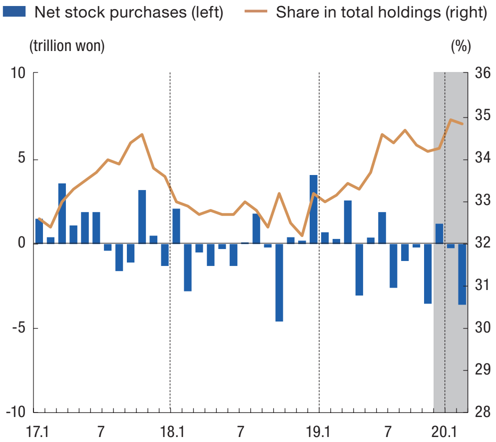
31) This is mainly because some commercial banks met the requirements of a new loan-to-deposit ratio regulation (implemented on Jan. 2020) in December last year by increasing their financing through time deposits.

Figure I–16. Changes in and balances of foreigners' bond holdings



Source: Financial Supervisory Service.

Figure I–17. Foreigners' net stock purchases[1)] and share in total holdings[2)]



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

Investment in domestic stocks showed continued net selling from August last year, but shifted to net purchases at the year-end, led by the electric & electronic industry, in line with expectations for a recovery in the semiconductor industry and with the easing of the US-China trade dispute. However, it reversed to net selling[32)] again from late January this year as risk aversion grew amid concerns about the economic slowdown with the spread of COVID-19.

Lending to enterprises continues to rise

Banks' lending to enterprises continued to grow steadily. In the fourth quarter of last year, loans to large corporations reversed to a slight increase owing to reduced direct funding, and loans to SMEs increased considerably thanks to banks' aggressive lending efforts despite seasonal factors such as temporary redemptions at the year-end. In January this year, lending to both large corporations and SMEs increased by a large extent, driven by re-extension of loans that had been temporarily redeemed at the end of last year.

Direct funding by corporations continued to increase. Net issuance of corporate bonds continued in the fourth quarter of last year as businesses' demand for issuance persisted. There was a net redemption of CP in the

32) Between January 21 and February 28, 2020, foreign investors sold 5.4 trillion won worth of domestic stocks (KOSPI and KOSDAQ).

fourth quarter due to seasonal factors such as year-end temporary redemptions, but then a large net issuance of CP in January as companies reissued CP.

Table I-7. Corporate funding[1]

(trillion won)

		2018		2019					2020
		Year	Q4	Year	Q1	Q2	Q3	Q4	Jan.[2]
Loans	Banks	46.7	5.6	47.7	12.6	14.6	9.2	11.2	8.6
	(Large firms)	6.9	1.4	-1.8	0.2	0.5	-3.4	0.9	3.1
	(SMEs)	39.8	4.2	49.4	12.4	14.1	12.7	10.3	5.4
	Non-banks[3]	44.5	11.5	50.8	9.2	13.1	12.6	15.8	··
Direct financing	Corporate bond issuance[4]	5.2	-0.6	15.8	6.3	3.1	4.1	2.3	0.1
	CP issuance[5]	0.8	-2.0	-1.3	1.3	0.2	0.0	-2.8	4.2
	Stock issuance[6]	10.1	1.9	6.3	1.0	2.0	1.2	2.1	0.0

Notes: 1) Based on changes in balances during the periods.
2) Based on Bank of Korea advance estimate.
3) Based on loans by mutual savings banks, credit unions, mutual credit cooperatives, community credit cooperatives, and insurance companies (including public and other lending).
4) Based on corporate bonds issued through public subscription by non-financial corporations (excluding ABSs but including P-CBOs).
5) Based on CP handled by securities firms, merchant banking corporations and trust accounts of banks.
6) Initial public offerings and paid-in capital increases.
Sources: Bank of Korea, Financial Supervisory Service, Korea Securities Depository, Korea Credit Information Services.

Volume of increase in household lending expands

Growth in household lending accelerated due to housing purchases and demand for leasehold deposit loans.

Household lending by banks increased at a faster rate in the fourth quarter of last year. Home mortgage loans increased more rapidly than in the quarter before and the same period of the previous year, due to greater demand for conversion to low-interest rate loans[33] amid continued demand for funds related to housing sales transaction in Seoul and its surrounding areas and for leasehold deposit loans.[34] Other loans also continued to increase, led by demand for housing-related funds. In January this year, household lending by banks sustained growth at a rate higher than the normal year average as demand for housing-related funds and for rollover to low-interest rate loans continued.

Household lending by non-bank depository institutions shifted from a decline in the third quarter to an increase in the fourth quarter, due to reduced redemptions of group loans extended by community credit cooperatives and increased lending of other loans by mutual cooperatives.

33) Due to the implementation of relief loans (after Oct. 2019), some non-banks' mortgage loans were converted into bank loans.
34) Leasehold deposit loans by banks increased by 7.1 trillion won in the third quarter of last year, and by 7.7 trillion won in the fourth quarter.

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

(trillion won)

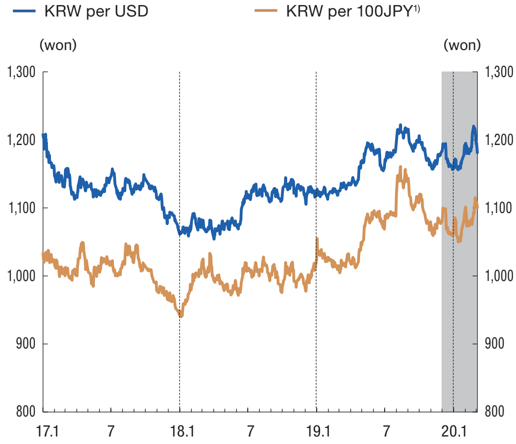
	2018		2019					2020
	Year	Q4	Year	Q1	Q2	Q3	Q4	Jan.[2]
Commercial & specialized bank loans[3]	60.4	19.7	60.7	6.5	14.9	18.0	21.3	3.7
(Mortgage loans)[3)4]	38.1	13.3	45.8	7.9	10.6	12.4	14.9	4.3
(Other loans, including through overdraft accounts)	22.4	6.4	14.9	-1.4	4.3	5.6	6.3	-0.6
Non-bank depository institution loans[3]	6.8	3.5	-4.5	-3.5	0.5	-1.9	0.5	··
(Mutual credit coopera-tives)	7.5	2.9	0.6	-0.1	1.2	-0.8	0.4	··
(Credit unions)	-1.4	0.1	-0.8	-0.4	0.1	-0.3	-0.2	··
(Community credit cooperatives)	-1.9	-0.6	-6.8	-3.2	-1.6	-1.5	-0.5	··
(Mutual savings banks)	2.5	0.9	2.6	0.3	0.8	0.7	0.8	··
(Others)[5]	0.2	0.2	-0.1	-0.1	-0.0	-0.1	0.1	··

Notes: 1) Based on changes in balances during the periods.
2) Based on Bank of Korea advance estimate.
3) Including mortgage transfers.
4) Including loans related to housing such as those for lease-hold deposit housing.
5) Trust accounts of banks and postal savings.
Sources: Bank of Korea, Korea Housing Finance Corporation.

Volatility in Korean won/dollar exchange rate expands

The Korean won/US dollar exchange rate declined to the 1,160 won level late last year as risk aversion alleviated owing to reduced uncertainties related to the US-China trade dispute and Brexit. However, the exchange rate rose sharply from late January this year as concerns grew about the spread of COVID-19. The Korean won/Japanese yen (100 yen) rate showed movements similar to the won/dollar exchange rate, mainly affected by changes in preferences for safe assets stemming from external risk factors such as the US-China trade negotiations and COVID-19.

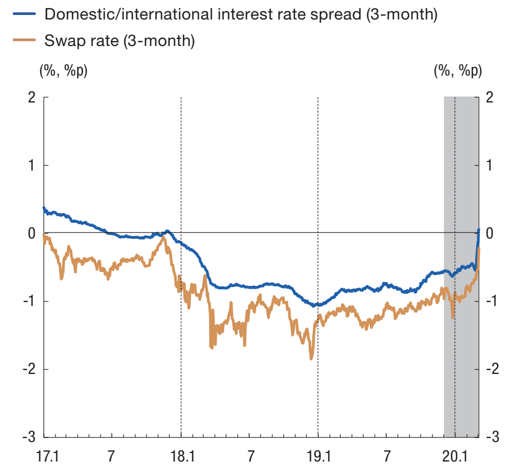
Figure I-18. Exchange rates



Note: 1) Final transaction standard rate offered to customers posted by Hana Bank during the day.
Sources: Bank of Korea, Hana Bank.

The swap rate (3-month maturity) declined temporarily in December last year due to banks' demand for foreign currency liquidity before the year-end, but then increased due to the US Federal Reserve's policy rate cut.

Figure I-19. Domestic/international interest rate spread[1] and swap rate

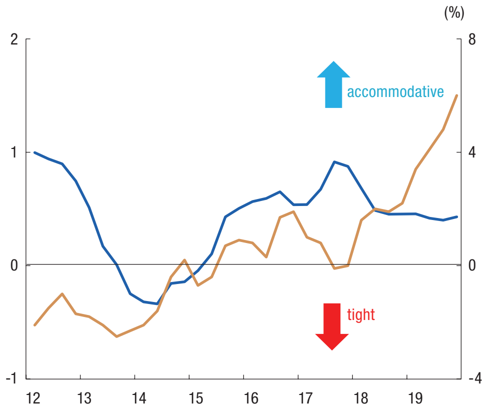


Note: 1) Yield on Korean Monetary Stabilization Bonds (MSBs) (3-month) - US LIBOR (3-month).
Source: Bank of Korea.

Accommodative financial conditions continue

Domestic financial conditions are judged as accommodative. The Financial Conditions index[35] remains at an accommodative level. In terms of the real money gap,[36] the real money supply substantially exceeds its long-term equilibrium level.

Figure I–20. Financial Conditions Index[1] and real money gap[1)2)]



Notes: 1) If the figure is above zero (below zero), a long-term equilibrium, it means that financial conditions are accommodative (tight). Analysis period is from the first quarter of 2000 to fourth quarter of 2019.

2) Based on M2.

Source: Bank of Korea.

35) 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.

36) This refers to the divergence between the real money supply at a specific point in time and the long-term equilibrium money supply, and is used for judging whether there is an excess (gap > 0) or shortfall (gap < 0) of the real money supply compared to the long-term equilibrium money supply.

Box I-1.

Response of Domestic Financial Markets After COVID-19 Outbreak and Comparison with Past Cases of Infectious Diseases[1)]

With the spread of COVID-19, domestic financial markets showed expanded volatilities with stock prices and long-term market interest rates both plunging. After the first domestic confirmed case was reported (Jan. 20), the financial markets showed instability. However, they regained their footing entering February, only to become unstable again as COVID-19 rapidly entered into a phase of community spread. The following section will compare the response of the domestic financial markets after the outbreak of COVID-19 with other major infectious disease outbreaks since 2000: SARS (Mar. 2003), swine flu (Apr. 2009) and MERS (May 2015), and draw some implications from these comparisons.

The degree to which financial market price variables reacted[2)] after the spread of COVID-19 was relatively large compared to the past cases. After the COVID-19 outbreak began, stock prices declined 6.4% over the course of eight trading days, the second largest fall since the second phase of the SARS outbreak[3)] (-9.3%). After February 19 when concerns about community spread escalated, stock prices dropped as much as 11.5%, a sharper decline than during the second phase of the SARS outbreak. Long-term interest rates fell 21bp right after the COVID-19 outbreak, similar to the average seen in the past cases (-22bp), but they dropped an additional 27bp after February 19.

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1) To rule out factors other than infectious diseases as much as possible, such as the impacts of domestic and foreign real economic and financial conditions at the time, we compared the short-term responses of domestic financial markets right after the outbreak of each infectious disease. The base date (T) for the outbreak of each infectious disease is set as the date when the WHO announced its first situation report about the outbreak (Jan. 21 for COVID-19), but the base date for MERS, which spread mainly within the country, is the date when the first confirmed case occurred.

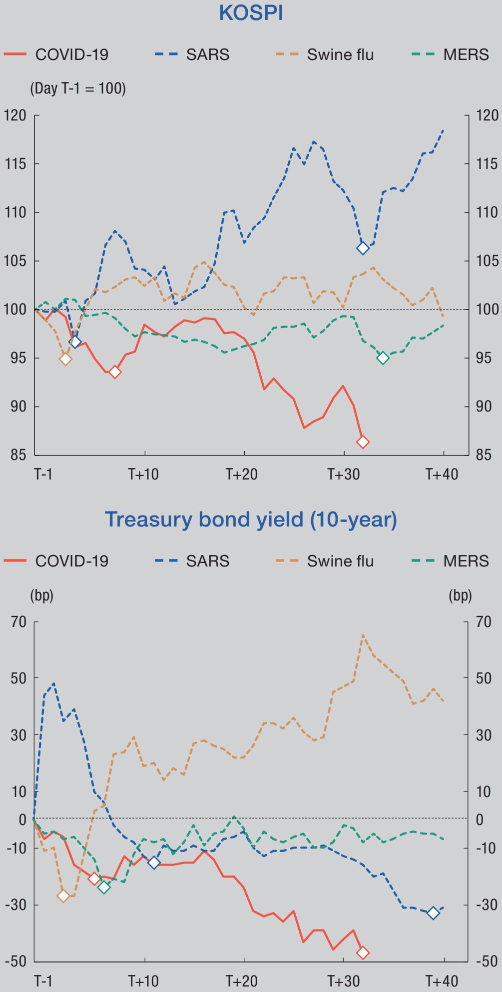
2) This is defined as the maximum rate (extent) of decline after the base date (T) for the outbreak of each infectious disease. The following table shows the figures for each period.

	COVID-19 Jan. 21 - Mar. 9	(Jan. 21 - Feb. 18)	(Feb. 19 - Mar. 9)	Average of past cases	SARS (1st phase)	SARS (2nd phase)[2)]	Swine flu	MERS
Maximum rate of decline in KOSPI[1)] (%)	-13.6	-6.4	-11.5	-5.6	-3.2	-9.3	-5.0	-4.9
Maximum extent of decline in Treasury bond yield (10-year)[1)] (bp)	-47	-21	-27	-22	-15	-23	-27	-24

Notes: 1) The maximum accumulated rate (extent) of decline after the base date (during the period indicated for COVID-19).
2) The base date for the second phase of SARS (T) is April 21, 2003.

3) The SARS outbreak is divided into the first and the second phases, considering that financial markets calmed at an early stage only to show expanded price variable volatility after April 21 on sharply growing concerns that the disease could not be contained within China.

Changes in stock prices and long-term interest rates after the spread of major infectious diseases



Note: 1) The sign (◇) refers to the lowest point of stock prices and Treasury bond yield after the spread of infectious diseases.
Sources: KOFIA, Koscom.

In terms of the pace of recovery, after past spreads of infectious diseases, financial market price variables recovered to their pre-crisis levels within 13 trading days after the shocks occurred, with the exception of long-term rates after the second phase of the SARS outbreak. However, as of March 9, 33 trading days after the COVID-19 outbreak began, stock prices and long-term rates still remained below their pre-crisis levels.

Pace of recovery in stock prices and long-term interest rates after short-term shocks resulting from the spread of major infectious diseases

(Trading days)

	KOSPI	Treasury bond (10-year) yield
COVID-19	-	-
SARS(1st phase)	1	9
SARS(2nd phase)	7	More than two months
Swine flu	2	3
MERS	12	13

Note: 1) The time it took to recover from the lowest point to the pre-crisis level.
Sources: KOFIA, Koscom.

In terms of portfolio investment by foreigners, stocks and bonds were found to differ. In the case of bond investment, foreign investors expanded their investment in bonds by 3.7 trillion won (amounting to 3.0% of the balance of foreigners' holdings) during the 27 trading days following the COVID-19 outbreak.[4)5)]

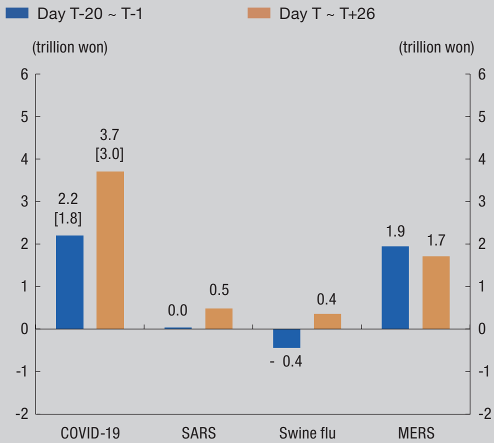
On the other hand, as for stock investment, foreign investors sold 5.4 trillion won worth of domestic stocks during the 27 trading days following the start of the COVID-19 outbreak.[6)] This is in stark contrast to the swine flu outbreak

4) However, between March 1 and 9, bond investment declined by 0.1 trillion won, affected by concerns over the spread of COVID-19.
5) During the outbreaks of swine flu and MERS, bond investment increased by 0.4 trillion and 1.7 trillion won, respectively. When SARS broke out, foreigners' bond holdings were minimal (0.6 trillion won at the end of Feb. 2003) as bond investment by foreigners had not yet started in earnest at that time.
6) In the early stage of COVID-19, the size of net selling amounted to only 1.8 trillion won over 19 trading days, but as community spread started, the size of net selling increased to 3.5 trillion won over 8 trading days from February 19 to the end of the month. There was a net selling of 3.3 trillion won between March 1 and March 9.

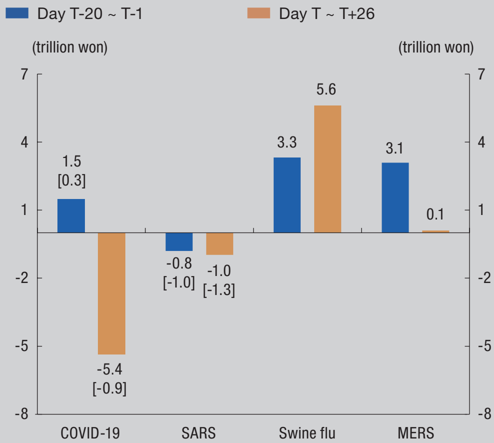
during which foreign investors purchased 5.6 trillion won worth of stocks as major countries cut their policy rates sharply in response to the global financial crisis. Moreover, this is also somewhat different from the MERS and SARS outbreaks when there were slight net purchases and selling, respectively.

Foreigners' portfolio investment after outbreaks of major infectious diseases[1)]

Changes in foreigners' bond investment[2)3)]



Net sales of stocks by foreigners[3)]

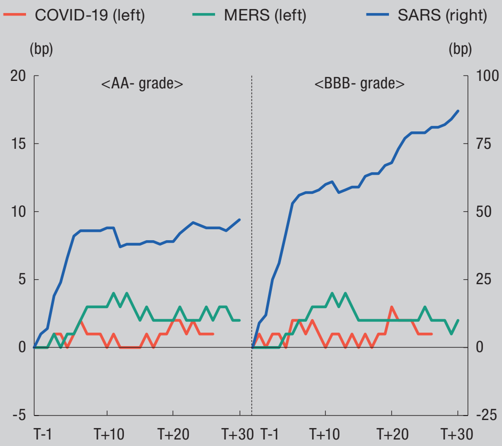


Notes: 1) Based on February 28 (T+26).
2) Changes in holdings during the period.
3) Figures in [ ] refer to the share of net sales relative to the size of the previous holdings (%).
Sources: Financial Supervisory Service, Koscom.

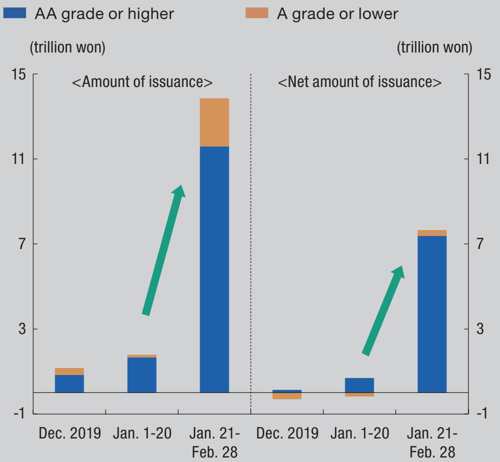
In the corporate bond market, there was little change in credit risk aversion after the COVID-19 outbreak began as credit spreads expanded slightly. This is quite different from the MERS and SARS outbreaks when credit spreads expanded considerably and remained higher for a considerable time. In particular, when SARS broke out, the corporate bond credit spread increased by 47bp for prime (AA-) bonds and 87bp for subprime (BBB-) bonds on a 30-trading day average, influenced by the defaults of credit card companies and the SK Global window-dressing case. On the other hand, credit spreads recorded a 1bp average rise for both prime and subprime bonds after the spread of COVID-19 started. In the primary market, it is assessed that the corporate bond market has remained stable overall. Prime and subprime bonds both recorded a net issuance, driven by robust investment demand amid investment resumption by institutions at the beginning of the year and increased inflows of bond-type funds.

Changes in corporate bond market after outbreaks of major infectious diseases

Changes in corporate bond credit spread[1]



Issuance of corporate bonds[2] before and after COVID-19



Notes: 1) Relative to Treasury bond yield (3-year), accumulated extent of change relative to the date immediately preceding the base date (T-1).
2) Based on unsecured corporate bonds with credit ratings.
Sources: KOFIA, Koscom.

In summary, bond investment by foreign investors and corporate bond market conditions have generally been favorable by the end of February since the spread of COVID-19. However, price variables in domestic financial markets have reacted sensitively to COVID-19 developments, with their volatilities expanding greatly. This result seems to reflect market concerns that negative impacts on the real economy could increase as COVID-19 entered a phase of community spread contrary to initial expectations. As market sentiment has become fragile in line with the rapid spread of COVID-19 and the high related uncertainties, the financial markets could react sensitively even to a small shock, and so close monitoring of market conditions is required.

Box I-2.

Characteristics and Implications of Recent Credit Growth

Current situation

Recently, market liquidity has been growing more rapidly with increased credit supply from financial institutions. In particular, the fast growth of private credit[1] since the second half of last year has led to an accelerated increase in M1 and M2. On the other hand, growth of the real economy, including consumption and investment, has slowed compared to the past. This has resulted in a faster pace of increase in the private credit-to-GDP ratio ("private credit ratio" hereafter).

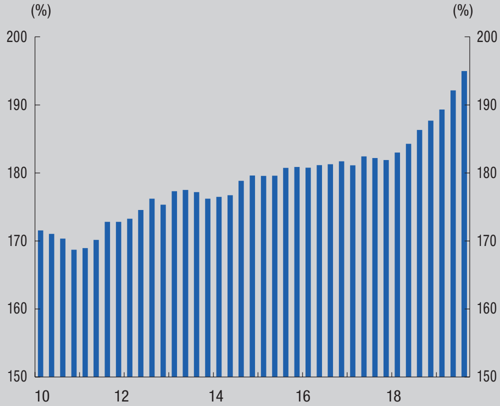
Growth rates of liquidity and private credit[1]

(%)

		Q4 2017	Q2 2019	Q4 2019
	M1	6.9	3.3	9.6
Liquidity[2]	M2	4.7	6.7	7.9
	Lf	6.1	8.0	8.2
Private Credit		5.6	6.2	6.1[3]

Notes: 1) Year-on-year.
2) Average outstanding balance of the last month of each quarter.
3) As of Q3 2019.
Source: Bank of Korea.

Private credit-to-GDP ratio[1]



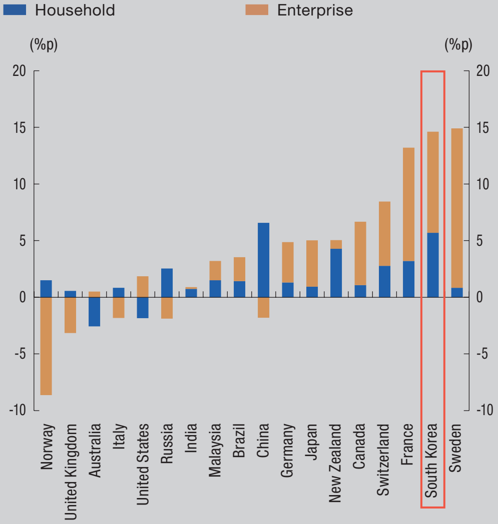
Note: 1) For calculation of quarterly figures, GDP is calculated as the sum of the GDP of the respective quarter and of the three preceding quarters (the same applies hereafter).
Source: Bank of Korea.

Comparison with the past and with major countries

The private credit ratio has been rising at a very rapid pace compared to the past and to the ratios of other major countries. It has risen by 13.1%p since 2018 (as of the third quarter of 2019, compared with the fourth quarter of 2017), well above the amount of increase seen during the eight years following the global financial crisis (8.4%p from 2010 to 2017). It was also the second largest increase among 52 major countries,[2] following Sweden. By sector, the household credit ratio continued to rise at a steady pace, whereas the corporate credit ratio, which had previously remained stable overall, has accelerated recently.

1) Private credit is the sum of household credit (loans, government loans) and corporate credit (loans, bonds, government loans) from the Flow of Funds.
2) Based on the countries included in research by the Institute of International Finance.

Changes in private credit ratios of major countries[1)2)]



Notes: 1) Since 2018 (as of Q3 2019, compared with Q4 2017).
2) As announced in January 2020.
Source: Institute of International Finance.

Estimation of credit cycle

Our analysis of the private credit cycle[3)] finds that it has been in an expansion period since the first quarter of 2018. This is the fourth expansion since 2000, and the amount of increase in the private credit ratio during this period is assessed to be quite considerable relative to the previous expansion periods. During the current expansion period, the amount of increase (12.0%p) has been smaller than that of the second period (36.3%p) but larger than those of the first (4.2%p) and third periods (10.6%p).

Increase in credit ratio by credit expansion period

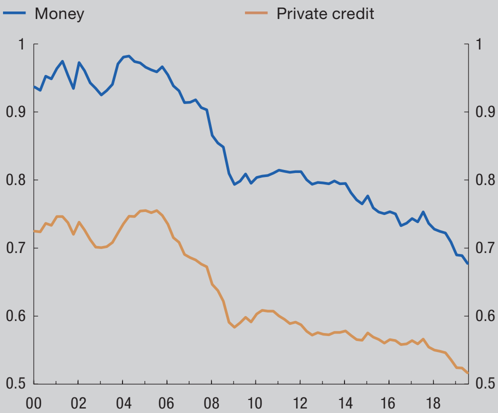
Credit cycle expansion period	Term	Amount of increase[1)](%p)
Average of periods ①-③	-	17.0 (1.1)
Period ①	Q3 2000 - Q2 2003	4.2 (0.3)
Period ②	Q4 2005 - Q2 2009	36.3 (2.4)
Period ③	Q1 2011 - Q1 2015	10.6 (0.6)
Period ④	Q1 2018 ~	12.0 (1.7)

Note: 1) Amount of increase in the private credit ratio; figures in parentheses are quarterly averages.
Source: Bank of Korea.

Relationship with real economy

The relationship between the real economy and changes in credit is estimated to have weakened recently. The velocity of money has been declining at a faster pace and that of private credit also showed similar movements when the same method was applied.

Velocity of money[1)] and private credit

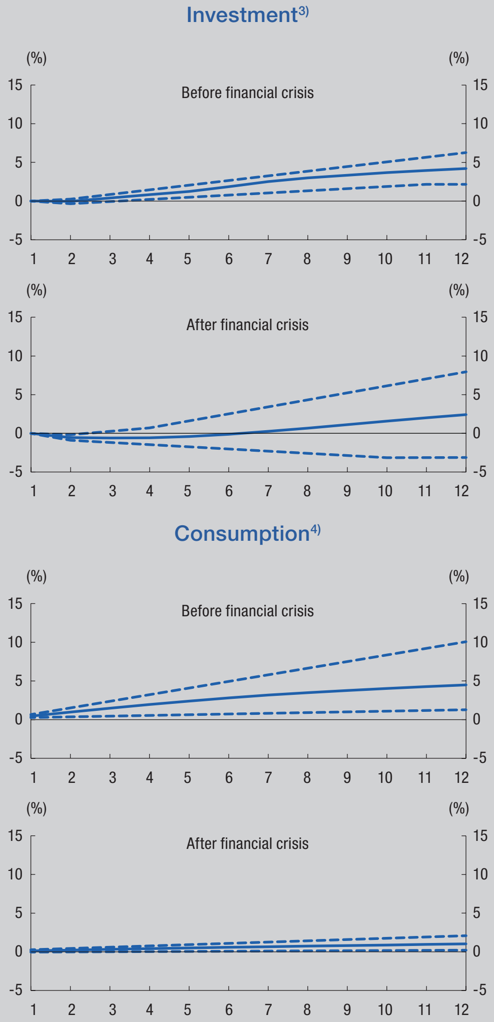


Note: 1) M2 (average outstanding balance) basis.
Source: Bank of Korea.

3) The cycle was estimated by applying the band-pass (BP) filter to the private credit ratio, in reference to the BIS (2014), Christiano-Fitzgerald (2003), etc. Note that the estimated credit cycle could vary depending on the method of analysis used to estimate the cycle.

The result of VAR analysis implies that the transmission of corporate and household credit growth to investment and consumption has also dwindled since the global financial crisis. The transmission of corporate credit to investment has not been pronounced in the post-crisis period, with the significance level low as well. The same is true for household credit, of which the transmission to consumption shows a decline both in size and in statistical significance.

Response of investment and consumption to credit growth shock[1)2)]

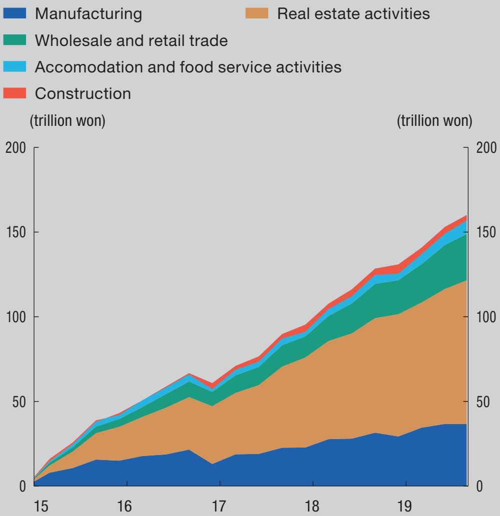


Notes: 1) Accumulated response to a 1-standard deviation credit growth shock by quarter; the dotted line is the confidence interval of ±1 standard deviation.
2) Before financial crisis: Q1 2000 - Q4 2007, after financial crisis: Q1 2010 - Q3 2019.
3) Using a 3-variable VAR model where variables include investment, composite leading indicator and corporate credit.
4) Using a 3-variable VAR model where variables include consumption, housing prices and household credit.

Source: Bank of Korea.

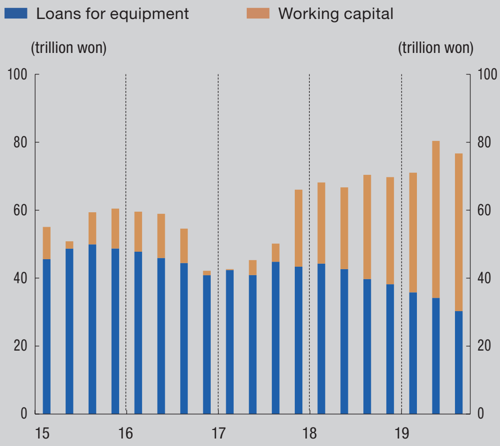
The weakening of corporate credit transmission is judged to be attributable to the credit supply rising mainly in sectors such as real estate that have a low production inducement effect,[4] while a much faster increase has been seen in loans related to working capital than in those related to facilities investment due mainly to heightened economic uncertainty.

Changes in outstanding loans by industry[1]



Note: 1) Changes in deposit-taking banks' lending to each industry (accumulated basis, 0 at 2014-end).
Source: Bank of Korea.

Corporate lending by purpose[1)2)]



Notes: 1) Year-on-year.
2) Based on depository institutions (all industries).
Source: Bank of Korea.

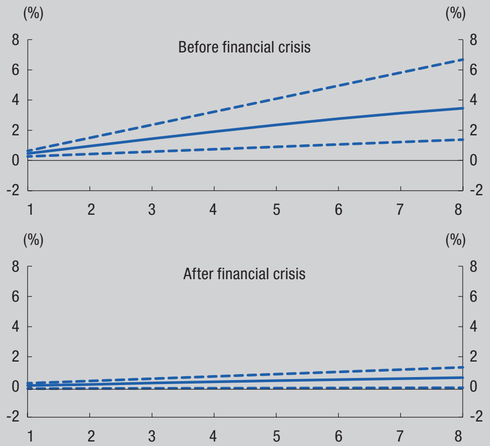
As for household credit, which consists largely of housing-related loans, the transmission of its growth[5] to a rise in housing prices and then to an increase in consumption is assessed to be uncertain. While the causal relationship between household credit and housing prices is clearly identified,[6] the wealth effect of rising housing prices is estimated to have low statistical significance.

4) Of the increase/decrease of loans by industry (deposit-taking banks basis), the share of the manufacturing sector dropped from 33.7% in 2005-2009 to 19.4% in 2015-2019, whereas the share of the real estate sector rose from 19.8% to 45.2%.

5) Housing-related loans have shown a sustained increase since the global financial crisis, and are estimated to stand at 80% of household disposable income as of the third quarter of 2019.

6) The relationship between household credit and housing prices was analyzed using the Granger causality test, where the causation in both directions was estimated to be statistically significant under the 5%-significance level.

Response of consumption to positive housing price shock[1)2)]



Notes: 1) Accumulated response to a shock of a 1-standard deviation increase of housing prices; the dotted line is the confidence interval of ±1 standard deviation.
2) Using a 3-variable VAR model where variables include consumption, housing prices and household credit.

Source: Bank of Korea.

Implications

The credit cycle has been in an expansion period since 2018, with the private credit ratio rising at a faster pace than in the past and compared to those of major countries. Such credit growth works as a factor easing financial conditions through, for example, increasing market liquidity. However, its positive impact on the real economy is estimated to be weaker than in the past. This seems to be attributable to a sustained credit expansion in the real estate sector and rising demand from corporations for securing funds preemptively in the face of heightened economic uncertainty. Therefore, in order to enhance the transmission of accommodative monetary policy to the real economy through the credit channel, micro-economic policy efforts will be needed to help facilitate the flow of market funds into productive sectors.

II

Conduct of Monetary Policy

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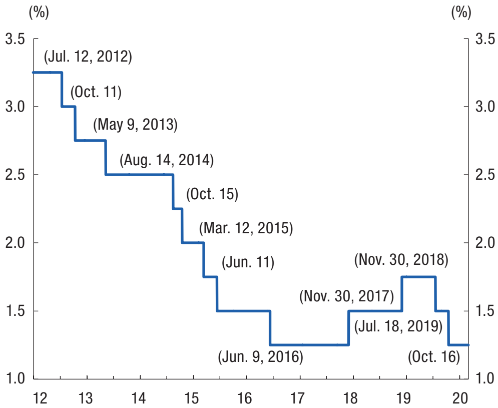
2. Bank Intermediated Lending Support Facility 35
3. Financial Stability 37

1. Base Rate

Base rate operated at 1.25% per annum

The Bank of Korea maintained its accommodative policy stance to ensure that the recovery of growth continues and consumer price inflation can be stabilized at the target level (2%) over a medium-term horizon, while conducting its monetary policy with attention to financial stability as well. In this process it closely examined domestic and overseas risk factors such as global trade disputes, the spread and domestic implications of COVID-19, household debt growth and geopolitical risks. Under this policy stance, the Bank decided to maintain the Base Rate at 1.25% per annum between November 2019 and February 2020.

Figure II–1. Bank of Korea Base Rate[1]



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

A detailed look at the monetary policy decisions during this period, and the background behind them, are as follows:

In the January meeting, the Board decided to leave the Base Rate unchanged[37] at 1.25% considering that it was necessary to monitor future economic developments amid somewhat subdued uncertainties surrounding external conditions due to the progress in the US-China trade negotiations, while paying attention to financial stability risks. In spite of the sustained adjustment in construction investment and the decline in exports, the sluggishness of the domestic economy appeared to have somewhat eased as facilities investment rose slightly and consumption growth expanded. The Board, therefore, judged that the domestic economy was forecast to grow largely in line with the growth path projected in November. Consumer price inflation had risen to the upper-0% level during December as the pace of decline in agricultural, livestock & fishery product prices decelerated and petroleum product prices rose, and it was forecast to rise to the 1% range. It seemed necessary to stay alert to the changes in risks from the financial stability perspective, given that the amount of increase in household lending had expanded and housing prices in Seoul and its surrounding areas had been rising rapidly.

37) Board members Dongchul Cho and Inseok Shin expressed opposition to maintaining the Base Rate at 1.25%, and argued for a 0.25% percentage point cut.

In the February meeting, the Board kept[38] the Base Rate at 1.25% against the following background. The unexpected outbreak and spread of COVID-19 at the end of January had weakened the domestic economy. Although the sluggishness in facilities investment had eased, the adjustment in construction investment had continued and consumption had contracted owing to growing anxiety, while exports and production activity had been partly disrupted. The growth outlook of the domestic economy for this year, therefore, was adjusted downward from 2.3% to 2.1%, under the assumption that the spread of COVID-19 would peak in March and then start to be contained. However, it was judged that the future growth path was highly uncertain and would depend on future developments in the COVID-19 outbreak. Meanwhile, consumer price inflation had risen to 1.5% in January, due largely to an upturn in the prices of agricultural, livestock and fishery products and the larger increase in petroleum product prices. Looking ahead, it was forecast that consumer price inflation would run at the lower-1% level and then fall slightly to record around 1% during this year. In the present situation in which macroeconomic conditions were changing drastically within a short time, it was true that uncertainties surrounding the growth path were high. However, it was judged to be necessary to more closely examine whether COVID-19 would peak in March and then start to ease, or whether it would be prolonged. It was judged that microeconomic policy measures which allow selective support of vulnerable sectors heavily impacted by the spread of COVID-19 were more exigent and effective than policy rate adjustments, since shrinking domestic demand and production activities were mainly attributable to the spread of anxiety stemming from viral contagion risk, rather than to economic factors. It was also taken into consideration that attention should be paid to financial stability as well, particularly since household lending growth was still high and it was necessary to keep a closer watch on whether housing prices would be stabilized after the adoption of the government's measures for the real estate market.

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 operations instruments including issuance of Monetary Stabilization Bonds (MSBs), RP transactions, and deposits into the Monetary Stabilization Account (MSA).

During the fourth quarter of last year, the total amount of liquidity adjustment needed (average balance basis) decreased compared to the preceding quarter, due to the government's repayment of debt to the Bank and the sustained influence of expanded currency issuance[39] during the Chuseok holiday in Sep-

38) Board members Dongchul Cho and Inseok Shin expressed opposition to maintaining the Base Rate at 1.25%, and argued for a 0.25% percentage point cut.

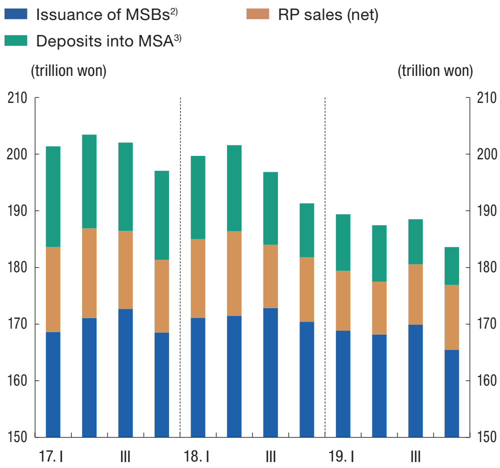
39) Due to the continued impact of the expanded currency issuance during the Chuseok holiday (5 trillion won over the period of ten business days immediately before the Chuseok holiday) in September last year, the value of outstanding currency (average balance basis) at the fourth quarter increased by 2.9 trillion won compared to the preceding quarter.

tember. The amount of liquidity adjustment needed dropped again in January from the preceding month, owing to increased currency issuance during the Lunar New Year holiday[40] and to increased deposits to the money market deposit accounts.[41] The Bank responded by reducing the issuance of MSBs and the amount of deposits into the MSA.

Meanwhile, in response to the sharp rise in the call rate at the end of last year caused by a temporary mismatch in the supply and demand of funds,[42] and as a preemptive measure against the potential expansion of financial market volatility from the spread of COVID-19 in late January of this year, the Bank managed sufficient market liquidity through flexible open market operations by reducing the volume of RP sales and the amount of deposits into the MSA.[43]

As a result, the call rate remained generally stable at around the Base Rate.

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.

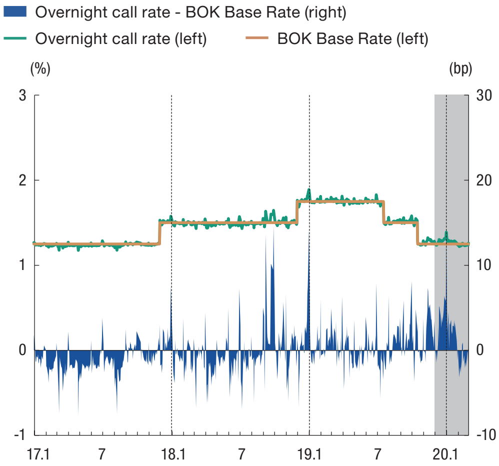
40) Due to the expanded currency issuance during the Lunar New Year holiday in January (5.6 trillion won over ten business days immediately before the Lunar New Year holiday), the value of outstanding currency (average balance basis) increased by 4.3 trillion won compared to the preceding month.

41) This leads to an increase in the required reserves against deposits which financial institutions must deposit with the Bank, which then results in a corresponding reduction in the amount of excess liquidity that needs to be withdrawn by the Bank through open market operations.

42) At the end of a year, the mismatch in supply and demand of funds tends to deepen owing mainly to the government's withdrawal of excess treasury funds, to an increase in corporations' MMF buybacks and to the banking sector's management of financial ratios.

43) This is in comparison to those that reached maturity. In order to respond to the supply and demand mismatch of short-term funds at the end of last year, the Bank reduced RP sales by 6.0 trillion won (2.0 trillion won on Dec. 19 and 4.0 trillion won on Dec. 26) and reduced MSA deposits by 4.5 trillion won (1.5 trillion won on Dec. 17 and 3.0 trillion won on Dec. 31). Meanwhile, in response to the spread of COVID-19, the Bank reduced RP sales by 11.9 trillion won (3.9 trillion won on Jan. 30, 6.0 trillion won on Feb. 13 and 2.0 trillion won on Feb. 27) and reduced MSA deposits by 3.0 trillion won (Feb. 25) from the end of January to the end of February.

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



Source: Bank of Korea.

2. Bank Intermediated Lending Support Facility

Total ceiling for Bank Intermediated Support Facility adjusted upward by 5 trillion won

To ensure that banks are active in lending to small and medium-sized enterprises, the Bank of Korea operates the Bank Intermediated Support Facility system, through which it supports banks by supplying them with funds at interest rates lower than the Base Rate. Operation of the Bank Intermediated Lending Support Facility ensures that funds are allocated to productive sectors, and contributes to boosting the effectiveness of monetary policy through the credit channel. 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.

On March 9, the Bank of Korea increased the ceilings of programs under the Bank Intermediated Lending Support Facility by a total of 5 trillion won, from 25 trillion won to 30 trillion won, to strengthen financial support for small and medium-sized enterprises (SMEs) experiencing funding bottlenecks due to the spread of COVID-19. Specifically, the Bank raised the reserve by 5 trillion won in order to support service-related SMEs in the tourism, food & beverage, and distribution industries, as well as manufacturing SMEs having difficulties in procuring commodities and parts & components from China and those facing difficulties in exporting to China. Furthermore, the Bank increased the ceiling of the Support Program for New Growth Engine Development and Job Creation by 1 trillion won to support economic recovery, using excess funds from the Program for Stabilization of SME Lending.

As a result of these changes, the ceiling of each program under the Bank Intermediated Lending Support Facility is currently as follows: 2.5 trillion won for the Support Program for Trade Financing, 11 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 and 5.9 trillion won for the Support Program for Regional Enterprises. The total ceiling is 30 trillion won, which includes reserves of 5.1 trillion won. The interest rates of the programs under the facility are 0.50-0.75% per annum.

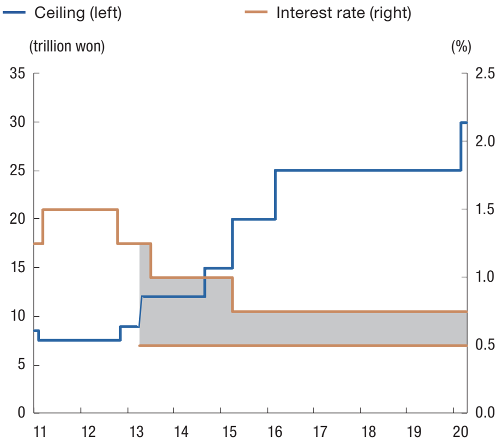
Table II-1. Programs under the Bank Intermediated Lending Support Facility

(trillion won, %)

Program	Ceiling		Interest rate
	Before adjustment	After adjustment[1]	
Support Program for Trade Financing	2.5	2.5	0.50
Support Program for New Growth Engine Development and Job Creation[2]	10.0	11.0	0.50
Program for Stabilization of SME Lending[3]	6.5	5.5	0.50~0.75
Support Program for Regional Enterprises	5.9	5.9	0.75
Reserve	0.1	5.1	0.75
Total	25.0	30.0	-

Notes: 1) As of March 9, 2020.
2) 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).
3) Includes the support that had been formerly provided under the Support Program for Facilities Investment.
Source: Bank of Korea.

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



Source: Bank of Korea.

3. Financial Stability

As persistent financial imbalances can ultimately lead to deterioration of macroeconomic stability, it is necessary in conducting monetary policy to consider financial stability as well. From this standpoint, the Bank of Korea has devoted efforts to achieve financial and foreign exchange market stability, to provide early warnings for potential financial system risk factors, to strengthen global financial safety nets and to enhance the stability and efficiency of the payment and settlement systems.

Promotion of financial and foreign exchange market stability

The Bank of Korea continued its efforts to ensure financial and foreign exchange market stability in response to changes in conditions in Korea and abroad. The Bank kept a close eye on the impacts of external and domestic risk factors, while, in times of heightened market volatility, activating the emergency response system and implementing timely market stabilization measures.

The Bank held a 「Financial and Economic Conditions Review Meeting」 to examine financial and FX market movements at home and abroad in line with escalating military tensions between the US and Iran. In addition, the Bank set up and ran the 「COVID-19 Response Task Force」 from January 28 to monitor developments related to COVID-19 and international financial markets around the clock, and to closely examine their possible impacts on the domestic financial sector and economy. The Bank also managed market liquidity sufficiently by implementing open market operations in a flexible manner. In March, as volatility increased sharply in the domestic and foreign financial and FX markets due to the acceleration of the global spread of COVID-19, the sudden policy rate cut by the US Federal Reserve, and the collapse of international oil prices, the Bank held a 「Monetary and Financial Response Task Force Meeting」 and announced that it would monitor market conditions and use all possible policy measures to seek financial stability as necessary.

Strengthening of early warnings of potential risks in financial system

In response to growing financial stability risk owing to the worsening of external and domestic conditions, the Bank of Korea strengthened its efforts for the preemptive identification and early warnings of potential risks within the financial system.

During its 「Financial Stability Meeting」 in December, the Bank carefully assessed the sectoral vulnerabilities of the household and corporate credit markets, of asset markets and of financial institutions, while also looking into the resilience of the financial system against unforeseen shocks. Despite a slight deterioration in the financial soundness of the household and corporate sectors caused by the domestic and global economic slowdowns, and the occasional escalation of volatility in the financial and foreign exchange markets resulting from the developments in external issues such as the US-China trade dispute, the Korean financial system remained stable in general. Taking into account the loss-absorbing capacities of financial institutions and the payment capacity of the external sector, the financial system was assessed to have remained resilient.

Meanwhile, the Bank conducted in-depth analyses and provided measures to tackle issues such as the following: the accumulation of household debt; the delay in deleveraging among the elderly, which could work as a potential medium- to long-term risk factor to financial stability in Korea; possible downward adjustments to the credit ratings of domestic companies owing to a deterioration in their business environment from economic slowdowns at home and abroad; and an increase in investors' risk appetite in a search for yield in the low-interest environment.

The Bank of Korea conducted joint examinations of financial institutions and enhanced monitoring of them in order to assess potential risks within the financial system, while devoting efforts to share information and to strengthen cooperation with domestic and foreign supervisory authorities. It also carried out a sectoral examination of the management of foreign bank branches to analyze changes in business behaviors and related risks, and their impact on financial system stability. Through risk assessment of individual banks, the Bank of Korea took a comprehensive review of each bank's loan portfolios, its management of loan soundness and its compliance with the Bank of Korea's regulations.

Table II-2. Joint examinations[1] with Financial Supervisory Service

(times)

2016	2017	2018	2019	2020 Jan. - Feb.
6	6	5	6	-

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

Strengthening of global financial cooperation

The Bank of Korea actively participated in discussions at international organizations and consultative bodies including the BIS, the IMF and the G20, where it worked to closely monitor global financial and economic developments and current issues in major economies, to examine the impacts on the Korean economy, and to seek preemptive measures in response.

The Bank made sustained efforts to expand Korea's multi-layered foreign exchange safety nets, in an attempt to prepare for growing uncertainties at home and abroad. More specifically, the Bank extended the terms of the currency swap agreements with the central banks of Malaysia and Australia by three years each in February. The currency swap amount committed under the agreement with the Reserve Bank of Australia, in particular, has been expanded by 20% on the basis of Australian dollars,[44] leading to a further enhancement of multi-layered financial safety nets and to a stronger economic and financial partnership between the two countries. The Bank also actively participated in discussions for im-

44) The swap volume has been expanded from 10 billion Australian dollars/9 trillion Korean won to 12 billion Australian dollars/9.6 trillion Korean won (approximately 8.1 billion US dollars).

proving regional financial safety nets. It made wide-ranging efforts to bolster the effectiveness of the ASEAN+3 Chiang Mai Initiative Multilateralization (CMIM), the region's multilateral currency swap agreement, and played a leading role in reaching an agreement on measures to strengthen financial support at the ASEAN+3 Finance and Central Bank Deputies' Meeting in December of last year.

Enhancement of safety and efficiency of payment and settlement systems

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

The Bank devoted efforts to ensure smooth domestic implementation of the「Principles for Financial Market Infrastructures (PFMI)」[45) and other international standards in the field of payment and settlement. The Bank examined the Korea Financial Telecommunications and Clearing 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. Furthermore, through a joint examination of one domestic bank, 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 has been continuing its research on crypto-assets, central bank digital currency and distributed ledger technology, and it set up a dedicated team (Digital Currency Research Team) in February in order to proactively respond to the rapid changes regarding the CBDC issue.

45) 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* (Jun. 2016), *Recovery of financial market infrastructures* (Jul. 2017) and *Resilience of central counterparties (CCPs): Future guidance on the PFMI* (Jul. 2017).

III

Future Monetary Policy Directions

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1. Growth and Price Forecasts[46)]

Domestic economic growth to improve after temporary contraction

Under the scenario in which the spread of COVID-19 starts to ease after peaking in March, GDP growth rates for this year and the next are forecast to be 2.1% and 2.4%, respectively. If the spread of the virus starts to be contained in March, the domestic economy is expected to recover gradually from the second quarter after a temporary slowdown due to negative impacts from COVID-19, as private consumption and exports rebound amid continued fiscal expansion and a recovery in facilities investment. However, there is a notably high level of uncertainty surrounding the growth path, particularly as to how the COVID-19 situation will develop going forward.

By sector, although private consumption is expected to contract on a short-term basis due to the spread of COVID-19, it is forecast to recover at a relatively rapid pace after the coronavirus outbreak subsides. With consumption of services and goods such as semi-durable goods expected to decline owing to the heightened anxiety, the higher proportion of retail sales through online shopping is projected to offset the negative effects to some degree. However, it seems likely that the services consumption slump will ease and residents' overseas consumption will return to previous levels after the COVID-19 situation subsides. Meanwhile, the government's strengthening of welfare policies including the expansion of the basic pension is likely to contribute to increasing the consumption capacity of vulnerable groups.

Facilities investment has shown signs of improvement this year led by machinery, and is projected to rebound led by the IT sector including semiconductors and display equipment in line with a future recovery in global demand. Intellectual property products investment will sustain its solid growth thanks to favorable conditions for R&D investment and the increasing demand for new technology-based software. Construction investment is expected to continue declining, especially in residential building construction. However, the extent of decline will gradually lessen, led by a recovery of civil engineering investment such as SOC.

Exports are forecast to improve modestly this year as global trade recovers gradually thanks to the easing of US-China trade tensions and a recovery in the semiconductor industry. The current account surplus is projected to decrease compared to last year, led by the widening of the services account deficit due to the decline in the number of foreign tourists from fear about the spread of COVID-19, as well as by the narrowing of the primary income account surplus.

46) Based on the Bank of Korea's 「Economic Outlook Report」 released on February 27, 2020.

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

(%)

	2019[3)]			2020[e]			2021[e]
	H1	H2	Year	H1	H2	Year	Year
GDP	1.9	2.2	2.0	2.0	2.2	2.1	2.4
Private consumption	2.0	1.9	1.9	1.1	2.6	1.9	2.4
Facilities investment	-12.3	-2.6	-7.7	4.8	4.7	4.7	5.3
Intellectual property products investment	2.8	2.5	2.7	3.2	3.4	3.3	3.3
Construction investment	-5.1	-1.2	-3.1	-2.4	-2.0	-2.2	-0.9
Goods exports	-0.8	1.6	0.5	1.4	2.3	1.9	2.5
Goods imports	-3.2	1.6	-0.8	0.8	3.4	2.1	3.1

Notes: 1) Figures are the forecast as of February 2020.
2) Year-on-year.
3) Reflects fourth quarter preliminary figures (released on March 3).
Source: Bank of Korea.

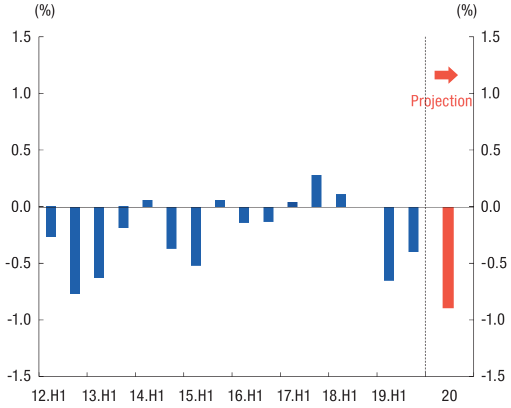
Inflation forecast to be around 1% in 2020

Consumer price inflation is expected to be 1.0% in 2020, higher than in 2019. Demand-side inflationary pressures are likely to be weak and the government's welfare policy stance will be sustained, but the supply-side downward pressures from agricultural, livestock, & fishery product prices are expected to ease. While agricultural, livestock, & fishery product prices are likely to increase compared to last year when the prices stayed far below past averages, the growth rate of petroleum product prices is expected to increase on the expiration of the fuel tax cut. With the improving economic conditions next year, consumer price inflation is forecast to record 1.3%, higher than that of this year, owing to the reduced effects of social welfare policies. Core inflation excluding food and energy prices is forecast to be 0.7% this year and 1.1% next year.

A look at various factors affecting prices shows that, in terms of overseas factors, international oil prices are forecast to increase modestly affected by a gradual recovery in demand after the spread of COVID-19 subsides, but there remain potential uncertainties regarding COVID-19 developments and supply conditions. In terms of domestic factors, demand-side inflationary pressures are weak, and the rate of wage growth is expected to be slow due to poor business performance. However, the high rate of wage growth that has been seen mainly in industries related to personal services exists as a potential inflationary pressure on the cost side. Regarding other factors, declines in vegetable production owing to autumn typhoons could push inflation up for some time. Concerning government policies, the strengthening of social welfare policies in education and healthcare is expected to exert downward pressure on prices, but hikes in some public service fees and insurance premiums could work as factors boosting inflation. Housing rental fees are expected to rise at a rapid pace, affected by recent increases in leasehold deposit prices and monthly rents (based on new contracts).

The upside and downside risks to the future inflation path are mixed. Some of the main upside risks are a rise in international commodity prices in line with the easing of COVID-19 and the possibility of additional hikes in some public service fees. The downside risks, meanwhile, include stronger welfare policies regarding telecommunication and healthcare, and a delayed recovery in domestic demand owing to the spread of COVID-19.

Figure III-1. Percentage GDP gap[1)2)]



Notes: 1) Figures are the forecast as of February 2020.
2) Figure for 2020 is annual basis.
Source: Bank of Korea.

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

(%)

		2019			2020e			2021e
		H1	H2	Year	H1	H2	Year	Year
CPI inflation		0.6	0.2	0.4	1.0	0.9	1.0	1.3
Core inflation	CPI excluding food & energy	0.8	0.7	0.7	0.7	0.8	0.7	1.1
	CPI excluding agricultural products & oils	1.0	0.8	0.9	0.8	0.9	0.8	1.2

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

2. Major Considerations

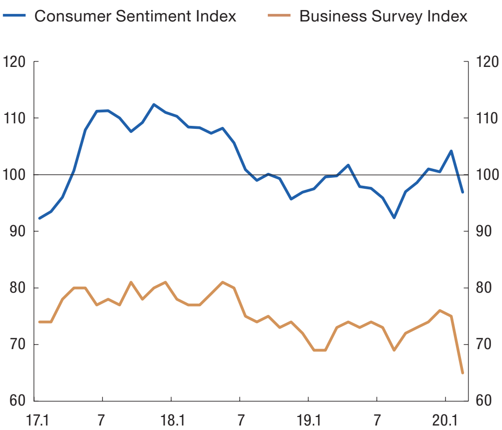
The Bank of Korea will operate its future monetary policy as it closely checks the impacts of uncertainties at home and abroad on the growth and inflation forecast paths, while devoting attention to financial stability as well. In this process, it will also carefully monitor the degree of the spread of COVID-19, developments in global trade disputes and geopolitical risks, conditions in domestic and international financial markets, and financial stability conditions.

Extent of the spread of COVID-19

Due to the outbreak of COVID-19, economic activity in China, the world's largest trading and tourism partner, has significantly declined. The outbreak has also contracted domestic consumption in Korea and disrupted its exports and production activity. With the recent global spread of COVID-19, concerns about global economic conditions are mounting. Since COVID-19 is spreading very rapidly and widely, there is high uncertainty concerning the future growth of the domestic economy.

Looking at the transmission channels of the effects of the spread of COVID-19, a prolonged slump in domestic consumption led by the services industry due to a decline in households' economic activity could weaken corporate investment sentiment and in turn negatively affect facilities investment. The drop in the number of foreign tourists will likely work as a factor reducing services exports. Considering China's growing economic size and higher interconnectedness with the world economy through global supply chains, together with the wider spread of COVID-19 to many other nations, the adverse impacts of COVID-19 in terms of the contraction in global trade and disruption to global value chains could be larger than those of previous infectious diseases.

Figure III-2. Consumer CSI[1] and corporate BSI[2]



Notes: 1) Long-term average from 2003 to 2019 is set at 100.
2) Weighted averages of BSI by industry ((Share of positive responses – Share of negative responses) × 100 + 100)
Source: Bank of Korea.

Figure III–3. China's trade volume and proportion in world trade

Source: WTO.

As the economic repercussions of COVID-19 could vary widely depending on the degree of its spread and duration, it is difficult to estimate its effects accurately at present. Therefore, it is necessary to continue closely monitoring the impacts of COVID-19 on the future growth path.

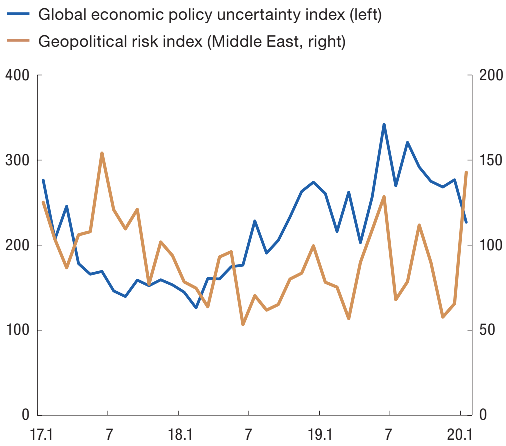
Global trade disputes and geopolitical risks

Uncertainties remain as to global trade disputes and geopolitical risks.

The uncertainties over trade disputes have somewhat eased due to the Phase One trade agreement between the US and China.[47] However, since future negotiation agenda concerns China's systems and its economy's structural aspects, such as government subsidies, reform of state-owned enterprises, intellectual property rights and technology transfers, the conflict between the two countries is unlikely to be resolved in a short period of time. Concerns have also been raised that the trade dispute between the US and the EU[48] could intensify over the introduction of a digital tax by Europe and the hike in the tariff rate on European aircraft by the US.

There still remain geopolitical risks including the post-Brexit[49] follow-up negotiations between the UK and the EU, as well as political unrest in the Middle East. As the UK and the EU have starkly different views over the agenda and the process of negotiations and an extension of the transition period, uncertainty about the negotiation process could expand going forward. In addition, it is judged that while there is little possibility that the military tension between the US and Iran or the civil war in Libya will escalate, political unrest in the Middle East is unlikely to be resolved in a short period of time.

Figure III–4. Global uncertainty index



Source: Economic Policy Uncertainty.

Therefore, as domestic and overseas financial and economic conditions could be affected substantially by changes in global trade disputes and geopolitical risks, developments in this regard should be watched closely.

47) The US and China signed a Phase One trade deal on January 15 that includes additional imports of US goods and services by China and the gradual lifting of additional tariffs on Chinese goods by the US.

48) The European Council announced that it would draw up a final report on a digital tax by the end of 2020 through the OECD. The US decided to raise the tariff rate on EU aircraft from 10% to 15%, effective March 18, 2020.

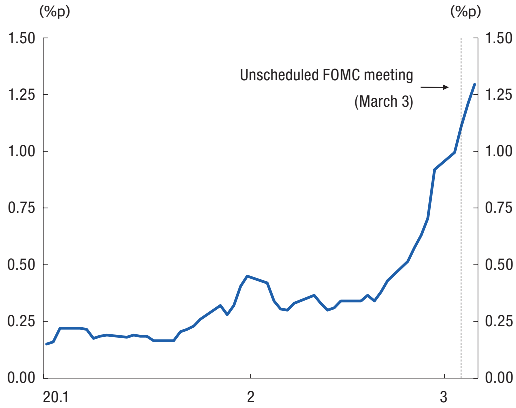
49) The UK officially left the EU on January 31. The negotiations during the transition period, starting from February 1 (running until December 31), will cover agenda items that were not dealt with during the Brexit negotiations.

Domestic and international financial market conditions

In the global financial markets, the volatility of major price variables has increased greatly in line with COVID-19 developments. With downside risks to the economy growing due to COVID-19, market participants expect an additional cut in the federal funds rate by the US Federal Reserve[50] by year-end. Until mid-February global stock prices showed a sharp upward trend with the US Dow Jones Index closing at an all-time high, but they plummeted afterwards on heightened concerns about the spread of COVID-19. As long-term interest rates fell in major countries, reversals of short- and long-term interest rates occurred. Inflows of global fund investment to advanced economies expanded, while those to emerging market economies slowed.

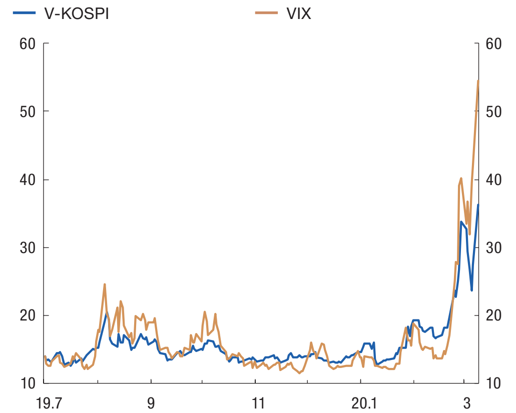
The domestic financial market has shown trends broadly similar to those of the global financial markets. Treasury bond yields (3-year) and stock prices fell sharply, and the Korean won/dollar exchange rate rose considerably. Foreigners' portfolio investment posted net sales, led by securities investment, after the second half of February.

Figure III–5. Expected reduction in US Federal Reserve's policy rate in 2020[1)2)]



Notes: 1) Calculated from the Federal Funds futures rate.
2) As of March 5, 2020.
Sources: Bloomberg, US Federal Reserve.

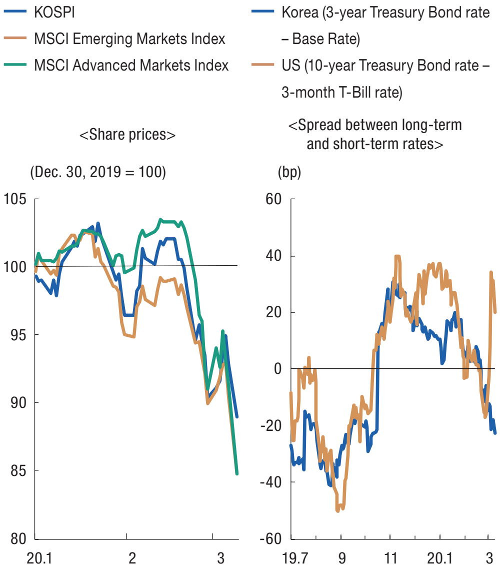
Figure III–6. Domestic and international financial market volatility



Sources: Bloomberg, Koscom.

50) In view of the risks to economic activity concerning the spread of COVID-19, the US Federal Reserve convened an unscheduled meeting on March 3 and lowered the target range for the federal funds rate by 0.5%p (1.00%-1.25%).

Figure III–7. Share prices and spread between long-term and short-term rates



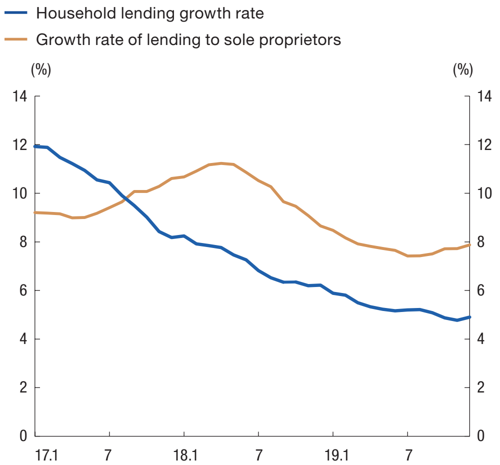
Sources: Bank of Korea, Bloomberg.

Going forward, financial and foreign exchange markets at home and abroad are highly likely to respond more sensitively in line with COVID-19 developments, real economic activity and the policy responses of major economies. Therefore, it is necessary to continue closely monitoring changes in major price variables and foreign portfolio investment trends.

Financial stability conditions

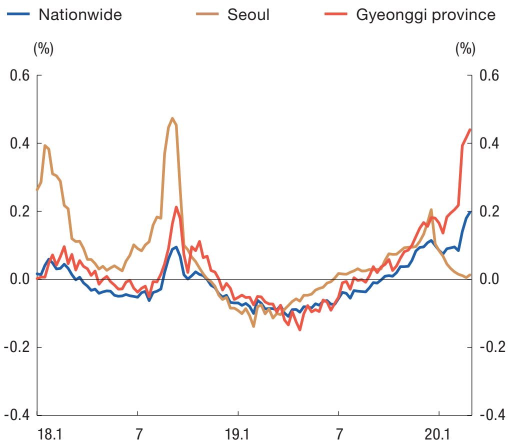
Looking at the recent financial stability conditions, household lending has grown at a faster pace, mainly due to the continued demand for housing purchases and leasehold deposits. Housing prices, which are closely related to household debt, have increased at a high rate, especially in the areas surrounding Seoul, despite the government's real estate policies. Meanwhile, the growth rate of loans to sole proprietors has also increased again since last September.

Figure III–8. Growth rate of loans to households[1)3)] and sole proprietors[2)3)]



Notes: 1) Based on depository institutions; including mortgage transfers.
2) Based on banks.
3) Year-on-year.
Source: Bank of Korea.

Figure III–9. Rate of increase in apartment sales price by region[1)]



Note: 1) Week-on-week.
Source: Korea Appraisal Board.

Government policies are expected to slow the growth rate of lending to households and sole proprietors going forward. However, lending has recently expanded and the expectations of additional rises in housing prices have remained high[51] despite the government's real estate stabilization measures. Therefore, there is a need to continue the close monitoring of financial stability conditions, while being attentive to the possibility of expanded fund inflows into the real estate market.

51) The CSI on prospective housing prices (nationwide) stood at 115 (October 2019) → 120 (November) → 125 (December) → 116 (January 2020) → 112 (February).

3. Future Monetary Policy Operational Directions

Base Rate operation

In the future as well, the Bank of Korea will conduct its monetary policy so as to ensure that the recovery of economic growth continues and consumer price inflation can be stabilized at the target level (2.0%) over a medium-term horizon, while also paying attention to financial stability.

As it is expected that domestic economic growth will be moderate and it is forecast that demand-side inflationary pressures will remain at a low level, the Bank will maintain its accommodative monetary policy stance. In this process it will judge whether to adjust the degree of monetary policy accommodation, while thoroughly assessing the severity of the COVID-19 outbreak and its impact on the domestic and global economies, changes in monetary policies of major countries, and developments of global trade disputes and geopolitical risks.

In addition, the Bank will continue to conduct its monetary policy with attention devoted to changes in financial stability conditions as well. As the growth rate of household debt is still high and it remains to be seen whether housing prices will stabilize, the Bank will closely monitor the impacts of its accommodative policy stance on financial stability, such as the growing trend of household debt.

Enhancement of monetary policy effectiveness

Considering the high uncertainties in the policy environments at home and abroad, the Bank will make efforts to ensure consistency in communication. As the market pays close attention to domestic and global economic conditions, the Bank will make continuous efforts to explain in more detail the background behind monetary policy decisions, and to provide accurate and objective information on economic conditions and forecasts. Moreover, as inflation persistently hovers below the target level, the Bank of Korea will examine on a regular basis how the inflation target is managed and provide detailed explanations to enhance economic agents' understanding of inflation conditions.

Promotion of financial and foreign exchange market stability

The Bank of Korea will continue its efforts to promote the stability of financial and foreign exchange markets. There is a possibility that the financial and foreign exchange markets could respond sensitively to developments of domestic and external risks. Going forward, the Bank will closely examine cash flows and major price variables in the financial and foreign exchange markets and the flows of foreigners' investment funds and will take active steps whenever concerns about market instability arise.

Maintenance of financial system stability

The Bank of Korea will thoroughly monitor financial system stability in line with changes in domestic and overseas financial and economic conditions and continue early warning activities concerning potential risks to the financial system. To this end, the Bank plans to examine the capacities of households, corporations and financial institutions to respond to many different stress conditions using an integrated stress test model, while stepping up its monitoring of household debt and real estate market conditions, and corporations' financial soundness. Regarding new types of risk that could arise from structural changes in the financial environment including advancement in digital financial innovation, the Bank will study the effects on the financial system in a preemptive manner.

Box III-1.

Effects of COVID-19 Outbreak on Real Economy

As COVID-19 has spread to Korea and across the globe after originating in China last December, it has had repercussions not only on China's economy but also on the domestic real economy, both directly and indirectly. In the case of SARS, the spread was confined to China and its neighboring countries and its economic shocks were short-lived, and thus its impacts on the domestic economy were limited. However, with China now the world's largest market for trade and tourism and a key player in global value chains, and COVID-19 spreading to many other nations, the effects of the recent situation are expected to be greater than those of past outbreaks. Against this backdrop, this paper examines the effects of the spread of COVID-19 on the real economy through different transmission channels.

Duration of past global infectious diseases

	SARS	MERS
Duration for the world	November 2002 - July 2003	First outbreak in April 2012
Duration for Korea[1]	April - May 2003	May - July 2015

Note: 1) The period that runs from the first confirmed case to the last confirmed case.

The COVID-19 outbreak affects the real economy through the channels of domestic demand, trade in goods and services, and manufacturing production disruption. First, the contraction in household economic activity is expected to lead to a considerable decrease in domestic consumption, especially in the culture, leisure, and restaurant services sectors. If the situation is prolonged, it will negatively affect facilities investment by denting corporate investment sentiment (the channel of domestic demand such as consumption and investment). Second, services exports will decline owing to the drop in the number of foreign tourists, and services imports and private consumption will also shrink in line with the fall in outbound overseas travel (the channel of services trade). Third, Korea's goods exports to China could decrease in line with China's economic slowdown, and its exports to other countries could also be affected due to sluggish global trade (the channel of goods trade). Last, if the recovery of China's manufacturing base is delayed for a long time, this could cause disruption to global value chains and in turn have adverse effects on the production of the domestic manufacturing industry (the channel of manufacturing production disruption).

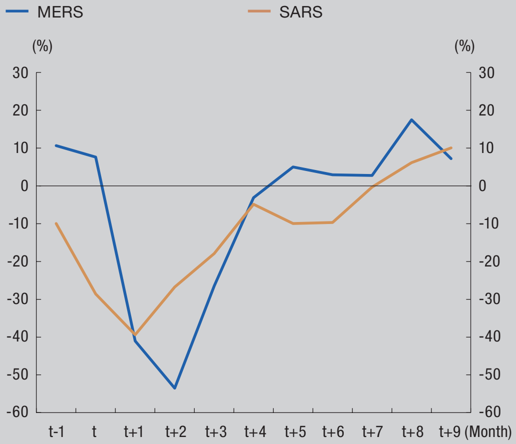
COVID-19 is working as a factor pushing down the domestic growth rate this year through the aforementioned transmission channels.

First, the number of foreign tourists has fallen sharply owing to the weaker demand for travel, and the situation is expected to persist for some time. This is similar to the situation when the number of foreign travelers plunged because of the MERS outbreak.[1] In particular, since Chinese tourists account for the largest proportion among total foreign tourists,[2] the spread of the novel coronavirus is likely to have huge negative effects on services exports.

1) Immediately after the MERS outbreak, the number of foreign tourists dropped by 1.67 million over four months before shifting to a rise.

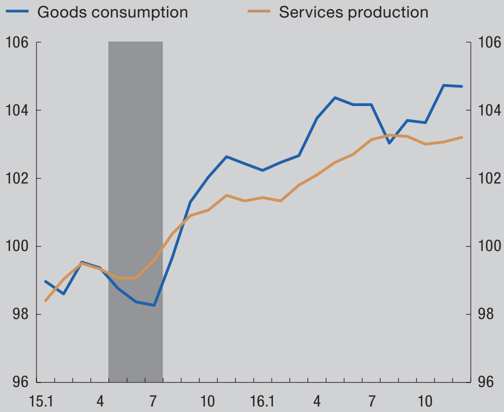
2) China accounted for 34.4% of total foreign tourists in 2019.

Number of foreign tourists during past infectious disease outbreaks[1)]



Note: 1) Year-on-year.
Source: Korea Tourism Organization.

Goods consumption and services industry production during the MERS outbreak[1)]



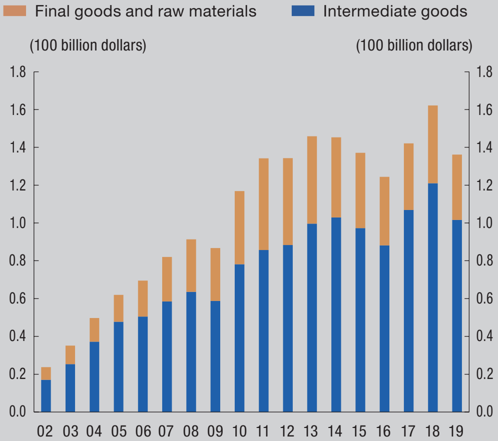
Note: 1) Based on 3-month moving averages.
Source: Statistics Korea.

Private consumption, led by services, is likely to shrink as well. Consumption in the service sector, including tourism, leisure, food & accommodation, and healthcare, has been very sluggish,[3)] while negative impacts have also been seen in goods consumption, especially in offline retail sales. Looking at past cases such as MERS, goods consumption slowed considerably during the outbreak but then rebounded sharply once the virus receded. Therefore, goods consumption is expected to recover at a relatively rapid pace when the situation improves. In addition, the sharp increase in the share of sales of non-store retail[4)] including online shopping appears to partly offset the effects from sluggish offline retail sales.

Negative impacts are being seen in goods exports, led by the largest export items to China such as chemical and industrial products and petrochemical products. However, when the coronavirus pandemic recedes, the capacity utilization rate of production facilities in China is expected to ramp up and Korea's exports will improve gradually, led by exports to China.[5)] Meanwhile, COVID-19 appears to have had only limited effects on investment for now. However, if the coronavirus outbreak is prolonged, there is a chance that both production and investment could suffer significant disruptions.

3) During the MERS outbreak, the growth contributions of major items related to services consumption, including "restaurants and accommodation services," "entertainment, sports and culture," and "medical and healthcare," were lowered.
4) The proportion (based on sales figures) of sales of non-store retail rose from 11.5% in 2015 to 16.8% in 2019.
5) The share of intermediate goods in total exports to China in 2019 stood at 74.6%.

Korea's exports[1] to China



Note: 1) Based on customs clearance.
Source: Korea Customs Service.

Given that COVID-19 has spread to other regions including Europe, the adverse impacts on the domestic economy from related shocks could be amplified through the various transmission channels. Therefore, it is necessary to keep a close eye on COVID-19 developments and the subsequent repercussions.

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