ISSN 2005-2707

Monetary Policy Report

2019. 2

BANK OF KOREA

BANK OF KOREA

Monetary Policy Report

2019. 2

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 February 2019 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 October 2018 through the date of the Monetary Policy Board meeting for monetary policy decision-making in January 2019.

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.

February 2019

Lee, Juyeol
Governor
Bank of Korea

General Principles of Monetary Policy Operation

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

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

o **(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.

o **(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.

o **(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.

Contents

Executive Summary

I. Monetary Policy Operating Conditions 1
1. Global Economy 3
2. Real Economy 6
3. Prices 8
4. Financial and Foreign Exchange Markets 13

II. Conduct of Monetary Policy 19
1. Base Rate 21
2. Bank Intermediated Lending Support Facility 24
3. Financial Stability 25

III. Future Monetary Policy Directions 31
1. Growth and Price Forecasts 33
2. Major Considerations 35
3. Future Monetary Policy Operational Directions 39

List of Tables

[Tab. I- 1] Economic growth in major economies 3

[Tab. I- 2] Major economic growth indicators 7

[Tab. I- 3] Major employment-related indicators 7

[Tab. I- 4] Current account 8

[Tab. I- 5] Consumer prices 11

[Tab. I- 6] Rates of increase in housing sales and leasehold deposit prices 13

[Tab. I- 7] Corporate funding 15

[Tab. I- 8] Household lending by depository institutions 17

[Tab. II- 1] Programs under the Bank Intermediated Lending Support Facility 24

[Tab. II- 2] Timeline for increase in the collateral-to-net-debit cap ratio for guaranteeing net settlements 28

[Tab. II- 3] Scope of eligible securities as collateral for guaranteeing net settlements 28

[Tab. II- 4] Joint examinations with Financial Supervisory Service 29

[Tab. III- 1] Economic growth outlook 34

[Tab. III- 2] Inflation outlook 35

List of Figures

[Fig. I- 1] International oil prices 4
[Fig. I- 2] Long-term market interest rates in major economies 4
[Fig. I- 3] Share price indices of advanced and emerging markets 5
[Fig. I- 4] Major exchange rates 5
[Fig. I- 5] CPI inflation 8
[Fig. I- 6] Import prices 9
[Fig. I- 7] Gaps of major economic indicators 9
[Fig. I- 8] Per-person rate of wage increase 10
[Fig. I- 9] Contributions to CPI inflation 11
[Fig. I-10] Underlying inflation rates 11
[Fig. I-11] Inflation expectations 12
[Fig. I-12] Korean and US Treasury bond yields 13
[Fig. I-13] KOSPI and share volatility index 14
[Fig. I-14] Changes in and balances of foreigners' bond holdings 14
[Fig. I-15] Foreigners' net stock purchases and share in total holdings 15
[Fig. I-16] Corporate bond credit spreads and spread across credit ratings 16
[Fig. I-17] Exchange rates 17
[Fig. I-18] Domestic/international interest rate spread and swap rate 17
[Fig. I-19] Financial Conditions Index and real money gap 18

[Fig. II- 1] Bank of Korea Base Rate 21
[Fig. II- 2] Liquidity adjustment by means of open market operations 23
[Fig. II- 3] Bank of Korea Base Rate and overnight call rate 23
[Fig. II- 4] Ceiling and interest rates of Bank Intermediated Lending Support Facility 25

[Fig. III- 1] Percentage GDP gap ··· 35
[Fig. III- 2] Korea's exports to China and Chinese manufacturing PMI ··· 36
[Fig. III- 3] Forecasts for US Federal Reserve policy rate hikes ··· 36
[Fig. III- 4] Changes in share price indices in advanced and emerging market economies ··· 38
[Fig. III- 5] VIX and V-KOSPI ··· 38
[Fig. III- 6] CSI for prospective housing prices and housing purchase superiority indices ··· 38
[Fig. III- 7] Domestic household debt-to-nominal GDP ratio ··· 39

List of Boxes

[Box. III- 1] Details of Inflation Target for 2019 Onward ········ 42
[Box. III- 2] Relationship between Composite Consumer Sentiment Index and Private Consumption ········ 44

Executive Summary

[Monetary Policy Operating Conditions]

1 A look at financial and economic conditions in Korea and abroad between October 2018 and January 2019 finds the following. The pace of global economic growth eased somewhat. The United States showed firm growth as employment and consumption remained robust, while Japan emerged from its temporary sluggishness of the third quarter thanks to increased investment. In the euro area the recovery was somewhat weak, however, as a decline in external demand was followed by production setbacks in the automobile sector due to the implementation of new environmental regulations and by extreme weather events. In China meanwhile the rate of growth fell to 6.4% in the fourth quarter of last year, and the economic slowdown continued.

Economic growth in major economies[1)]

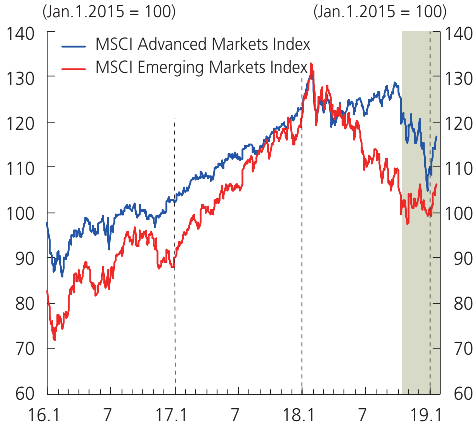
(%)

	2016	2017			2018		
		Year	Q3	Q4	Q1	Q2	Q3
US	1.6	2.2	2.8	2.3	2.2	4.2	3.4
Euro area	2.0	2.4	2.7	2.7	1.5	1.7	0.6
Japan	0.6	1.9	2.7	1.5	-1.3	2.8	-2.5
China	6.7	6.9	6.8	6.8	6.8	6.7	6.5 [6.4][2)]

Notes: 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.
2) Based on the fourth quarter of 2018.
Sources: Individual countries' published statistics.

The volatility in the international financial markets, which had expanded greatly from October of last year, lessened entering this year and the financial unrest in some weak emerging market economies eased somewhat. Long-term market interest rates in major countries fell, influenced by the likelihood that the US Federal Reserve would adjust the speed of its interest rate hikes and by concerns about a global economic slowdown. While stock prices declined greatly in advanced countries, due to slumps in corporate performances and to concerns about economic slowdowns, stock prices in EMEs, which had fallen greatly until October of last year, showed relatively low volatility. Entering this year stock prices have rallied in both advanced and emerging market countries.

Share price indices of advanced and emerging markets

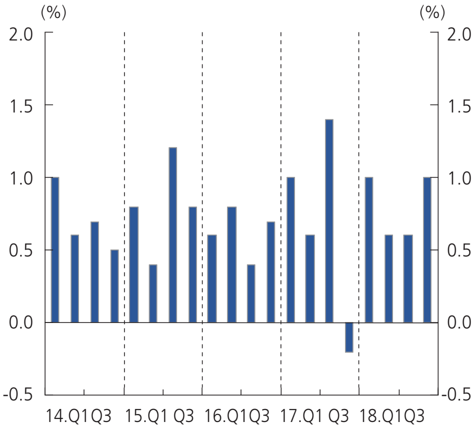


Source: Bloomberg

2 The Korean economy has continued to grow at the level of its potential growth rate. The adjustments in facilities and construction investment persisted during the third quarter of last year, but the economy grew by 0.6% quarter-on-quarter as consumption continued to increase modestly and exports sustained their buoyancy as well. In the fourth quarter the economy recorded a 1.0% growth rate, thanks to an expansion in government expenditures. Employment meanwhile was sluggish in the fourth quar-

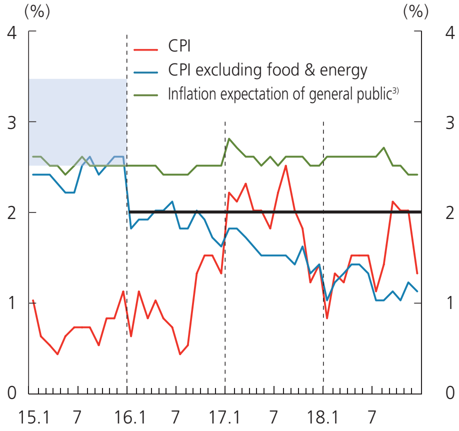
ter, with the year-on-year increase in the number of persons employed being a mere 88,000 persons.

Real GDP growth[1]



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

Inflation[1)2)]



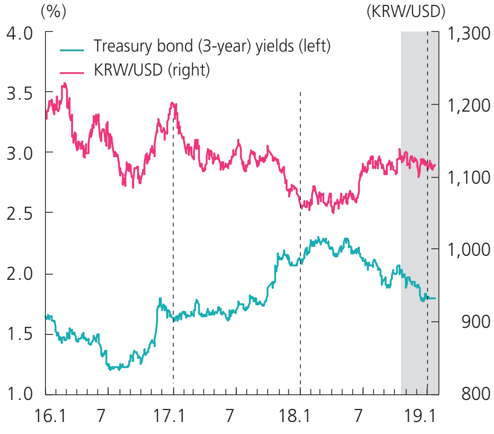
Notes: 1) Year-on-year.
2) The shaded area indicates the medium-term inflation target range during the 2013~2015 period, and the bold line the medium-term inflation target set for 2016 and onwards.
3) Expectations for the CPI inflation rate one year in the future.
Sources: Bank of Korea, Statistics Korea.

3 The rate of consumer price inflation showed the 2% level over the October to November period of last year, as the increases in agricultural and petroleum product prices accelerated, before in December then slowing to the lower 1% range on the effects of a drop in petroleum product prices. The rate of core inflation remained at the lower 1% level, and the inflation rate expected by the general public was in the mid-2% range.

The pace of increase in housing sales prices in Seoul and its surrounding areas slowed, on the effects of the measures taken by the government, while the extent of sales price decline in the rest of the country lessened as the increases seen in some regions picked up. Leasehold deposit prices continued to fall in both Seoul and its surrounding areas and the rest of the country.

4 In the domestic financial markets, long-term market interest rates continued to fall, due to the escalation of the US-China trade dispute, to concerns about slowdowns in growth domestically and abroad, and to a decline in the volume of Treasury bond issuance. They then fluctuated within a limited range from the middle of December, as the global risk aversion eased somewhat. Stock prices showed high volatility, and after falling to a considerable extent rebounded, while the Korean won/US dollar exchange rate was generally stable. Domestic portfolio investment by foreigners meanwhile reversed to an increase in November, before contracting this year led by funds for investment in bonds.

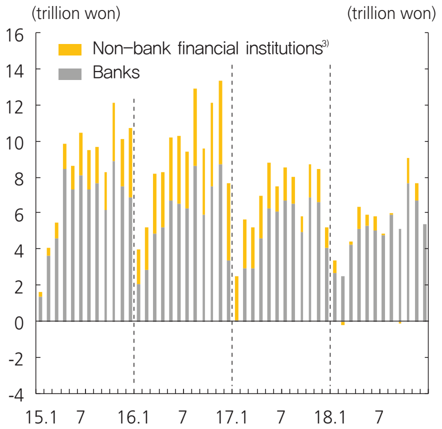
Korean Treasury bond yield and exchange rate (KRW/USD)



Sources: Bank of Korea, KOFIA.

5 Household lending expanded greatly in October, driven by factors such as demand for funds related to housing, but from November its growth lessened under the impacts of the implementation of the DSR regulation and of a reduction in housing sales transactions. For the year as a whole, the slowdown compared to the high rates of growth seen in normal years (2015~16) continued.

Changes in household loans[1)2)]

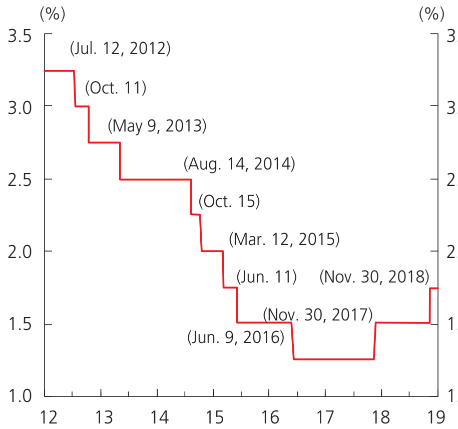


Notes: 1) Month-on-month.
2) Including mortgage transfers.
3) Data until Nov. 2018 available.
Source: Bank of Korea

[Monetary Policy Operating Conditions]

6 During the November 2018 through January 2019 period the Bank of Korea maintained its accommodative policy stance, to ensure that the recovery of economic growth would continue and that consumer price inflation could be stabilized at the target level 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 Korea's trading conditions vis-à-vis major countries, changes in the monetary policies of major countries' central banks, financial and economic conditions in EMEs, and the upward trend of household debt. Under this policy stance the Bank of Korea decided in November of last year to raise the Base Rate, which it had maintained at an annual 1.50% since November of 2017, by 0.25% point to operate it at 1.75% per annum.

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 monetary policy decisions during this period, and the backgrounds behind them, follows:

First, the hike of the Base Rate in November last year was a decision made in consideration of the points that the uncertainties about external conditions were high but the trend of growth not far from the level of the potential growth rate was continuing, while consumer price inflation was expected to fluctuate in the mid- to upper-1% range near the inflation target, and that if the Base Rate were kept low then the risks to financial stability could rise due to an expansion in the financial imbalances. With regard to the domestic economy, it was judged that the adjustments in facilities and construction investment had persisted, but that the trend of growth at the potential growth rate level had generally continued as consumption was expanding modestly and exports were also showing buoyancy, and these trends seemed likely to continue in the future as well. Consumer prices had shown a pace of increase at the 2% level, as the rises in agricultural and petroleum product prices had accelerated, and it was forecast that they would be near the target level for some time before then falling somewhat to fluctuate at the mid- to upper-1% level. On the financial stability side, it was forecast that the pace of growth in household lending would not increase greatly, thanks to the effects of government policies, but that it would still be faster than that of income. A monetary policy response to the risk of financial imbalance accumulation was thus judged necessary.

In the meeting in January this year the Bank maintained the Base Rate at 1.75% per annum. This decision was made in view of the points that the Korean economy seemed likely to grow at a pace similar to that last year, due to the expansion in government expenditures, but there was a need to keep an eye on the increased uncertainties surrounding external conditions, as well as their impacts, and that examination was necessary of the effects of the policy rate hike implemented in November last year to contain the expansion in financial imbalances. The increase in consumer prices had slowed, on the effects of declines in petroleum product prices, and was forecast to fluctuate at the 1% level for the time being before then gradually rising to the mid-1% range from the second half. The amount of growth in household lending had lessened, but there was judged to be a need for attention to financial stability conditions including whether this trend would continue.

8 The Bank of Korea took into account the increasing difficulties of small-scale business owners due to factors such as the recent slumps in business conditions, and decided in November last year to temporarily extend the operating term of the Bank Intermediated Lending Support Facility's Support Program for Small-scale Business Owners for one year, until November of this year.

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. During the times of expanded domestic and foreign financial market volatility, the Bank convened meetings of its 「Monetary and Financial Task Force」 seven times, to examine financial and foreign exchange market developments and their effects. In addition, in order to respond preemptively to signs of tightening market liquidity at the end of the year it made flexible use of its open market operations instruments.

The Bank continued its efforts for the preemptive identification of potential risks within the financial system as well. During its December 「Financial Stability Meeting」 it closely assessed vulnerabilities by sector, in the household and corporate credit markets, the asset markets, at financial institutions, and examined the financial system's resilience to domestic and overseas shocks. In December it also completed construction of its new Extensive Stress Test model, which reflects all losses within both the banking and non-bank financial sectors and the transmissions of risks across sectors.

[Future Monetary Policy Directions]

10 It is forecast that the GDP growth rates both this year and next will show levels of 2.6%, similar to that last year. This year's growth rate forecast has been revised down slightly compared to the figure projected last October (2.7%), but the economy is expected to sustain a trend of growth that does not diverge much from the level of its potential growth rate. The uncertainties as to the future growth path are high. The major upside risks include a resolution of uncertainties through the reaching of a settlement in the US-China trade negotiations, improvements in domestic demand thanks to the government's expansionary fiscal policies, and increases in corporate investment in line with the government's economic revitalization policies. Among the downside risks are those of a slowdown in export growth due to intensifying global trade conflicts, of slackening global growth momentum owing to slowdowns in major economies, and of weakening global semiconductor demand.

Economic growth outlook[1)2)]

(%)

	2018			2019e			2020e
	Year	H1	H2	Year	H1	H2	
GDP	2.7	2.8	2.5	2.6	2.5	2.8	2.6
Private consumption	2.8	3.2	2.5	2.6	2.5	2.7	2.6
Facilities investment	-1.7	1.9	-5.3	2.0	-2.1	6.3	2.3
Intellectual property products investment	2.0	2.8	1.2	2.5	2.2	2.9	2.8
Construction investment	-4.0	-0.1	-7.4	-3.2	-6.1	-0.5	-2.0
Goods exports	3.9	2.8	4.9	3.1	2.4	3.8	3.0
Goods imports	1.7	2.5	0.9	2.3	0.6	4.0	2.5

Notes: 1) Year-on-year
2) Figures are the forecast as of Jan. 2019.
Source: Bank of Korea.

Concerning the headline consumer price index, it is forecast that the hikes in wages will cause service prices to rise but that the rate of price inflation will be in the mid-1% range during this year and next, as factors including the decline in oil prices put downward pressures on prices from the supply side amid not large demand-side pressures. By period, inflation is expected to pick up from 1.2% during the first half of this year to 1.5% in the second, as the cuts in the oil and individual consumption taxes are ended and public service charges rise. It is forecast that next year's consumer price inflation rate will be 1.6%. With regard to the future inflation path there is also a mix of both upside and downside risks. The former include risks of increased cost-side pressures due to the continuation of wage hikes, and of an improvement in domestic demand in consequence of the government's policies, while among the downside risks to inflation are the possibilities of strengthened welfare policies related to education and medical services, and of Korean won appreciation due to the easing of external risks.

Inflation outlook[1)2)]

(%)

		2018			2019e			2020e
		Year	H1	H2	Year	H1	H2	
CPI inflation		1.5	1.3	1.7	1.4	1.2	1.5	1.6
Core inflation	CPI excluding food & energy	1.2	1.3	1.1	1.4	1.2	1.5	1.5
	CPI excluding agricultural products & oils	1.2	1.2	1.1	1.5	1.3	1.6	1.5

Notes: 1) Year-on-year
2) Figures are the forecast as of Jan. 2019.
Sources: Bank of Korea, Statistics Korea.

11 The Bank of Korea will operate its future monetary policy in consideration of developments related to the uncertainties in Korea and abroad and their effects, as it closely checks to see whether growth and prices coincide with their forecast paths, while devoting attention to financial stability as well. In this process it will also carefully monitor the US-China trade dispute, the US Federal Reserve's normalization of its monetary policy, international financial market conditions, and the risks of financial imbalance accumulation.

The trade dispute between the United States and China is showing some signs of easing, but the related uncertainties are persisting. As concerns about the conflict continue, it is judged that some negative effects on economic indicators in the two countries as well as Korea are also appearing. If the trade negotiations between the two countries progress going forward and enter a resolution phase, positive effects due to the easing of uncertainties can be expected. But if the dispute escalates it is likely to cause considerable burdens to world trade and to Korean exports. In view of the Korean economy's high reliance on trade, it is judged important to devote attention to any changes in global trading conditions.

The US Federal Reserve has suggested recently that it will conduct its monetary policy more cautiously going forward, as it monitors changes in economic conditions. If the Fed reduces the speed of its monetary policy normalization, this is likely to work as a positive factor that reduces concerns about capital outflow pressures and causes financial market volatility to subside somewhat. As the rise in domestic market interest rates due to the Fed's policy rate hikes will be limited, the constraints on domestic economic growth can also ease. But since the Fed's recent statements that it will be patient in its monetary policy decision-making are being made against a background of concerns about US economic slowdown, there is a possibility that the increase in growth due to the Fed's adjusting the speed of its monetary policy normalization will be offset to a considerable extent. There is thus a need going forward to continue closely examining financial and economic developments in the US and globally, as well as any changes in the Fed's policy, and the effects that these factors have on the domestic economy.

In the international financial markets, there have been some differences in the movements of price variables and capital flows between the time before October last year and the period since then. Prior to October last year the financial unrest in vulnerable EMEs was quite noticeable, while the volatility in financial markets of advanced countries has been greater since October. This appears to have been a result of the fact that, while the concerns about accelerated monetary policy normalization by the Fed had worked as a factor heightening international financial market volatility, of late the concerns about weakening growth in advanced economies including the US, which have been driving world economic growth, are being more reflected in the financial markets. International financial market volatility has been easing somewhat this year, and Korea's domestic financial and foreign exchange markets are also showing general stability, but the uncertainties related to external conditions remain high and a careful eye will have to be kept on any changes in market conditions.

A look at the current situation of the domestic financial imbalances finds that the growth in household debt has been slowing, affected by the government's housing market stabilization measures and by the DSR regulation, and it is forecast that this will continue going forward as well. Particularly, housing prices in Seoul and the rest of its surrounding areas, which are closely related with the increase in household debt, are being forecast to remain stable for the time being. On the corporate lending side, meanwhile, the pace of growth in lending to self-employed business owners, including loans to the real estate and leasing industry, which had risen greatly, has been slowing of late under the influence of the government's regulations. However, in view of the fact that the aggregate household debt level is already high, on top of which the slowdown in household debt growth is only modest due to loan demand driven by the increased supply of new housing, there is a need for observation to see whether this slowdown continues. It also appears necessary to monitor future trends of lending related to real estate. In view of these conditions, it is judged that continued attention to the risks of financial imbalance accumulation is called for.

12 As the period of application of its 2016~2018 inflation target ended the Bank of Korea, in consultation with the government, set the inflation target to be applied from 2019 onward at the level of a 2.0% (year-on-year) rate of consumer price inflation, the same as previously. In order to enhance the stability of its system operation the Bank also did not specify the period of inflation target application, while in a move to strengthen its communication it decided to publish a biannual report examining the inflation target operating situation.

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 over a medium-term horizon, while also devoting attention to financial stability.

As it is forecast that the inflationary pressures on the demand side will not be high for the time being, while the domestic economy will sustain a rate of growth that does not diverge greatly from its potential level, the Bank plans to maintain its accommodative monetary policy stance. In this process it will closely examine the effects of the Base Rate hike in November of last year, the developments of external conditions and the resulting movements of growth and prices, and judge whether an additional adjustment in the degree of accommodation is called for. Since the uncertainties related to the global trade disputes, to the US Federal Reserve's monetary policy normalization, to financial and economic conditions in EMEs, and to geopolitical risks remain high, the Bank will carefully monitor their trends and impacts. Besides consumer price inflation, it will also closely review various auxiliary price indices, inflation expectations, international oil prices, global inflation, the GDP gap, and the spare capacities in employment and the manufacturing sector.

The Bank will in addition continue to operate its monetary policy with attention devoted to financial stability as well. The pace of household debt growth is slowing, but the Bank will watch to see whether this trend continues as it judges the possibility of the financial imbalances worsening.

I

Monetary Policy Operating Conditions

1. Global Economy 3
2. Real Economy 6
3. Prices 8
4. Financial and Foreign Exchange Markets 13

1. Global Economy

Slowdown in Pace of Global Economic Growth

The pace of global economic growth eased somewhat. The United States showed firm growth exceeding the level of its potential growth rate, as employment and consumption sustained their buoyancy thanks to improvements in the labor market and to its expansionary fiscal policies, while Japan emerged from its temporary sluggishness of the third quarter[1] owing to increased investment.[2] However, in the euro area the recovery was somewhat weak as a decline in external demand was followed by production setbacks in the automobile sector due to the implementation of new environmental regulations,[3] and by extreme weather events. In China the rate of growth fell to 6.4% in the fourth quarter, on the effects of the continued restructuring and the escalation of the US-China trade dispute, and the economic slowdown continued. India and the ASEAN-5 countries meanwhile continued their buoyant growth, at the levels of 7% and 5% respectively, driven by private consumption and by investment. In some vulnerable emerging market countries including Turkey, however, growth rates fell substantially on the impacts of factors such as financial unrest.

<Table I - 1> **Economic growth in major economies[1]**

(%)

	2016	2017[2]			2018[2]		
		Year	Q3	Q4	Q1	Q2	Q3
World	3.3	3.8	-	-	-	-	-
Advanced economies	1.7	2.4	-	-	-	-	-
US	1.6	2.2	2.8	2.3	2.2	4.2	3.4
Euro area	2.0	2.4	2.7	2.7	1.5	1.7	0.6
Japan	0.6	1.9	2.7	1.5	-1.3	2.8	-2.5
Emerging market and developing economies	4.4	4.7	-	-	-	-	-
China	6.7	6.9	6.8	6.8	6.8	6.7	6.5 [6.4][5]
India[3]	7.1	6.7	6.3	7.0	7.7	8.2	7.1
ASEAN-5[4]	5.0	5.3	5.6	5.5	5.5	5.3	5.0
Turkey	3.2	7.4	11.5	7.3	7.2	5.3	1.6

Notes: 1) Based on IMF statistics, except in the cases of individual countries, the euro area and ASEAN-5 which are based on their own published statistics.
2) The 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.
5) Based on the fourth quarter of 2018.
Sources: IMF, Individual countries' published statistics.

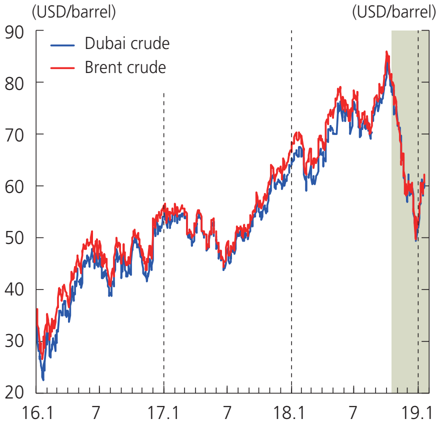
International Oil Prices Rebound Slightly after Large Decline

International oil prices, which had risen to the mid-80 dollars to the barrel range in early October last year, fell subsequently to the lower 50 dollars per barrel level, due to the US's granting certain countries exemptions[4] from application of its sanctions on Iran, to increases in supply in major oil-producing countries, to contractions in crude oil futures investment sentiment in line with concerns about the global economic slowdown, and to the temporary US federal gov-

1) Japan recorded negative growth in the third quarter, due to the effects of natural disasters including earthquakes and typhoons.
2) Capital goods shipments declined by 1.5% (quarter-on-quarter) in the third quarter, but increased by 3.0% during the October to November period.
3) As the authentication process of the new automobile emissions regulations (WLTP) implemented from September 2018 was delayed, temporary production snags occurred. In Germany notably, where the automobile sector accounts for a large share of the economy, there was a considerable slump with the economic growth rate recording -0.2% quarter-on-quarter in the third quarter of 2018.
4) As the US implemented its second round of sanctions on Iran (November 5, 2018), it granted six-month exemptions from sanctions application to eight major importers of Iranian crude oil (countries that accounted for 84% of Iranian crude oil exports in 2017), including China, India and Korea.

ernment shutdown. Entering this year international oil prices have reversed to gradually rise, owing to the beginning of production cuts by OPEC[5] and to the recovery of global investment sentiments, and have recorded the 60 dollar level.

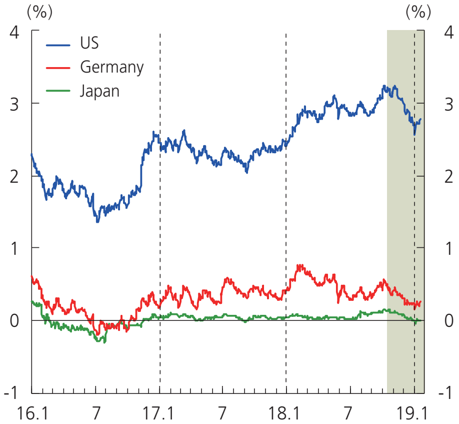
<Figure I - 1> International oil prices



Source: Bloomberg

Treasury bond yields also fell, affected by the dispute between the EU and Italy over Italy's budget and by the political anxieties related to Brexit, in addition to the sluggishness of euro area economic indicators.

<Figure I - 2> Long-term market interest rates[1] in major economies



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

International Financial Market Volatility Declines, after Expanding

The volatility in the international financial markets, which had risen greatly from October last year, lessened entering this year, and the financial unrest in some weak emerging market economies eased somewhat.

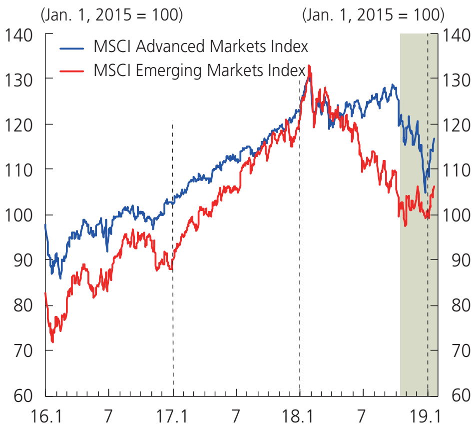
Amid expanded uncertainties about the stance of the US Federal Reserve toward further interest rate hikes, US Treasury bond yields declined on concerns about the global economic slowdown. German

Stock prices in advanced countries fell substantially, due to the sluggishness of major US corporations' performances and to concerns about the global economic slowdown. However, the trend of decline in EME stock prices, which had fallen greatly until October last year, faltered from November, and they showed relatively low volatilities compared to those in advanced countries. Entering this year stock prices have meanwhile rallied in both advanced and emerging market countries, influenced by expectations of progress in the US-China trade negotiations and by the recovery in investment sentiment in line with the likeli-

5) At the OPEC general meeting (December 6~7, 2018), OPEC and non-OPEC member countries agreed to cut production by an average of 1.2 million barrels per day (compared to the volume produced in October 2018) during the January to June period of this year.

hood that the US Federal Reserve will adjust the speed of its interest rate hikes.

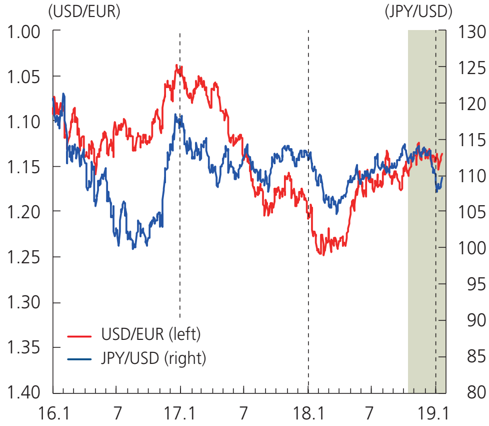
<Figure I - 3> Share price indices of advanced and emerging markets



Source: Bloomberg.

The US dollar has been appreciating slightly against the euro, owing to factors such as the sluggishness of economic indicators in the euro area and the uncertainties related to Brexit. Against the yen, in contrast, the dollar showed repeated fluctuations until the middle of December last year, but the extent of its depreciation has expanded since then due to the increased political uncertainties in the US as well as strengthening preferences for safe assets driven by concerns about the global economic slowdown.

<Figure I - 4> Major exchange rates[1)]



Note: 1) USD/EUR is based on the New York market rate at 16:30, and JPY/USD on the Tokyo market closing rate.
Source: Bloomberg.

2. Real Economy

Growth at Level of Potential Growth Rate

The Korean economy has sustained a pace of growth generally at the level of its potential growth rate, as the trends of growth in consumption and exports have been maintained despite the continued adjustments of facilities and construction investments. The real GDP growth rate was 0.6% quarter-on-quarter (2.0% year-on-year) in the third quarter of last year, and in the fourth quarter recorded 1.0% (3.1% year-on-year) as growth picked up thanks to an increase in government expenditures.

Private consumption has continued its trend of growth. During the third quarter of last year it increased by 0.5% quarter-on-quarter, due to the robustness of clothing sales, and in the fourth quarter its pace of growth picked up as consumption of services rose greatly.[6] The increase in government consumption has accelerated substantially. In the third quarter government consumption rose by 1.5%, owing to an additional expansion in health insurance coverage,[7] and in the fourth quarter its extent of increase widened further to 3.1%, driven mainly by expenditures related to goods and services[8] and to health insurance payouts.[9]

Facilities investment has continued its adjustment. During the third quarter it contracted by 4.4% quarter-on-quarter, due to sluggishness in investment for semiconductor and display manufacturing equipment. In the fourth quarter it expanded by 3.8% quarter-on-quarter, as the extent of decline in machinery, which had been in a slump, lessened, but in year-on-year terms it decreased for the third quarter in a row. Construction investment has also continued its fundamental adjustment. During the third quarter it decreased by 6.7% quarter-on-quarter, in line with reductions in the quantity of construction projects and in the SOC budget. In the fourth quarter it then increased by 1.2% quarter-on-quarter, led by non-residential construction and civil engineering, but on a year-on-year basis continued its decline under the impacts of the reduced quantity of construction projects.

6) Between October and November 2018 Statistics Korea's retail sales index (monthly average basis) decreased by 0.9% compared to the third quarter (+3.0% year-on-year), but its index of services rose by 0.5% (+3.3% year-on-year).
7) From July 2018 the beneficiary's share of the cost of an insured dental implant was cut from 50% to 30%, and health insurance payouts, which account for a considerable portion of in-kind social transfers related to expenditures on products supplied to households via market producers (health and industrial accident insurance payouts make up about 96% of them), were 15.2% higher year-on-year in the third quarter of 2018.
8) The central government's expenditures on goods and services showed an increase of just 0.8% year-on-year in the third quarter of 2018, but during the October to November period recorded a 21.2% increase.
9) During the October to November period of 2018 health insurance payouts were 22.6% greater year-on-year.

<Table I - 2> **Major economic growth indicators**[1]

(%)

	2016	2017		2018				
		Year	Q4	Year	Q1	Q2	Q3	Q4[2]
Real GDP	2.9	3.1	-0.2 (2.8)	2.7	1.0 (2.8)	0.6 (2.8)	0.6 (2.0)	1.0 (3.1)
(Private consumption)	2.5	2.6	1.0 (3.4)	2.8	0.7 (3.5)	0.3 (2.8)	0.5 (2.5)	1.0 (2.5)
(Government consumption)	4.5	3.4	0.5 (4.1)	5.6	2.2 (5.8)	0.3 (4.8)	1.5 (4.6)	3.1 (7.1)
(Facilities investment)	-1.0	14.6	-0.7 (8.6)	-1.7	3.4 (7.3)	-5.7 (-3.0)	-4.4 (-7.4)	3.8 (-3.3)
(Construction investment)	10.3	7.6	-2.3 (3.8)	-4.0	1.8 (1.8)	-2.1 (-1.5)	-6.7 (-8.9)	1.2 (-6.0)
(Goods exports)	2.1	3.8	-5.6 (0.1)	3.9	4.5 (1.5)	0.1 (4.1)	4.7 (3.4)	-2.9 (6.4)
(Goods imports)	3.3	7.4	-4.5 (1.6)	1.7	7.1 (4.0)	-3.6 (0.9)	-0.6 (-2.0)	1.2 (3.8)

Notes: 1) Quarter-on-quarter; Figures in parentheses are non-seasonally adjusted year-on-year rates.
2) Figures for fourth quarter preliminary.
Source: Bank of Korea.

Sluggishness In Employment Persists

Employment conditions have been sluggish, with the extent of year-on-year increase in the number of persons employed having been just 88,000 in the fourth quarter of last year. This was a result mainly of the fact that, although growth in service industry employment had picked up somewhat, the decline in manufacturing employment persisted. The extent of decline in employment in the shipbuilding industry lessened, while employment in the electronic parts and electrical equipment industries, which had increased greatly in the fourth quarter of 2017, reversed to a contraction in consequence of base effects. The seasonally adjusted unemployment rate fell compared to the previous quarter (4.0%) to register 3.8% in the fourth quarter.

<Table I - 3> **Major employment-related indicators**

(million persons, %)

	2017		2018				
	Year	Q4	Year	Q1	Q2	Q3	Q4
Economically active population	27.8	27.8	27.9	27.5	28.1	28.1	27.9
(Rate of change)[1]	1.2	1.0	0.5	0.7	0.5	0.4	0.5
Number of persons employed	26.7	26.9	26.8	26.3	27.0	27.0	27.0
(Change)[1]	0.32	0.27	0.10	0.18	0.10	0.02	0.09
Labor force participation rate[2]	63.2	63.2	63.1	63.3	63.1	63.1	63.2
Employment-to-population ratio[2]	60.8	60.9	60.7	60.9	60.7	60.5	60.7
Unemployment rate[2]	3.7	3.7	3.8	3.7	3.8	4.0	3.8

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

Current Account Surplus Continues

The current account has sustained its surplus. In the third quarter of last year the goods account surplus widened slightly compared to the same period the year before, while the deficit in the services account narrowed led by the travel and the transport accounts. During the October to November period the goods account surplus shrank slightly compared to the same period in 2017, but the current account surplus expanded as the deficit in the services account decreased.

The pace of growth in exports (customs clearance basis) slowed. During the third quarter of last year exports grew more slowly than in the second quarter, even despite the buoyancy of semiconductors and petroleum products, in line with the decreased number of working days due to the long Korean Thanksgiving holidays. In the fourth quarter the extent of export growth expanded, as exports of non-IT items such as automobiles and machinery showed buoyancy while the number of working days increased as well. On a monthly basis, however, export growth reversed to a decline in December,[10] owing to the drop in international oil prices and declines in semiconductor prices.

The pace of increase in imports (customs clearance basis) slowed as well.[11] Imports of capital goods reversed to a decline in the third quarter of last year, due to an adjustment in semiconductor facilities investment, and the extent of growth in raw materials imports lessened dramatically during December on factors including the plunge in international oil prices.

<Table I - 4> **Current account**

(billion dollars, %)

	2016	2017			2018			
		Year	Q3	Q4	Q1	Q2	Q3	Oct-Nov.
Current account	99.2	78.5	25.6	17.2	11.8	17.8	28.0	14.3
Goods	118.9	119.9	34.8	28.3	23.9	31.8	35.9	19.0
Exports[1)]	495.4	573.7	151.1	143.5	145.1	151.6	153.6	154.8[3)]
(Rate of change[2)])	-5.9	15.8	24.0	8.4	9.8	3.1	1.7	7.9[3)]
Imports[1)]	406.2	478.5	120.9	123.4	132.4	133.1	130.3	139.3[3)]
(Rate of change[2)])	-6.9	17.8	17.9	11.6	13.7	13.0	7.8	12.9[3)]
Services	-17.7	-34.5	-8.5	-10.6	-9.4	-6.5	-7.7	-4.5
Credit	94.9	87.5	22.8	22.7	23.4	24.3	24.3	16.5
Debit	112.6	122.0	31.3	33.2	32.8	30.8	32.0	21.0
Primary income	3.9	0.1	1.9	1.7	0.4	-5.2	1.9	1.0
Secondary income	-5.8	-7.1	-2.6	-2.1	-3.1	-2.3	-2.1	-1.2

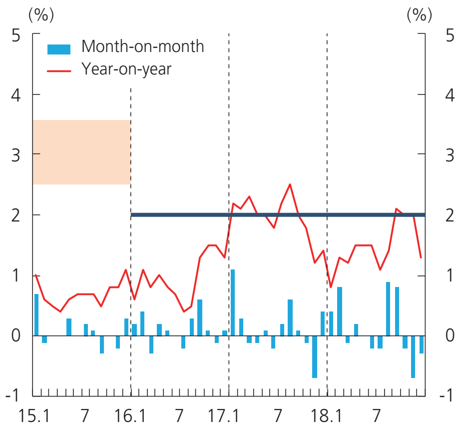
Notes: 1) Customs-clearance basis.
2) Year-on-year.
3) Based on the fourth quarter of 2018.
Sources: Bank of Korea, Korea Customs Service.

3. Prices

Consumer Price Inflation Fluctuates at 2% Level, then Falls

Consumer prices increased by 1.8% year-on-year in the fourth quarter of last year, and the pace of their increase accelerated slightly compared to the previous quarter (1.6%). However, after showing the 2% level from October through November, as agricultural and petroleum product prices rose more quickly, the rate of consumer price inflation slowed to the lower 1% range in December on the effects of declining petroleum product prices.

<Figure I - 5> **CPI Inflation[1)]**



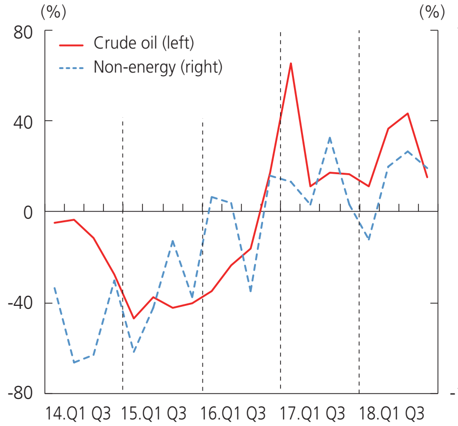
Note: 1) The shaded area indicates the medium-term inflation target range during the 2013~2015 period, and the bold line the medium-term inflation target set for 2016 and onwards.
Sources: Bank of Korea, Statistics Korea.

With regard to the overseas factors affecting prices, the rate of increase in crude oil import prices, which directly affect petroleum product prices, slowed substantially dur-

10) Exports recorded the following rates of year-on-year growth: September to October 2018 5.6% → November 3.8% → December -1.3%.
11) They recorded the following rates of year-on-year growth: September to October 2018 12.5% → November 11.4% → December 1.2%.

ing the fourth quarter of last year,[12] and the extent of increase in the prices of non-energy imports, which affect domestic non-petroleum product prices indirectly, declined as well.[13] The Korean won/US dollar exchange rate worked as a factor pushing import prices up, as it was higher in the fourth quarter of last year than during the same period the year before.[14]

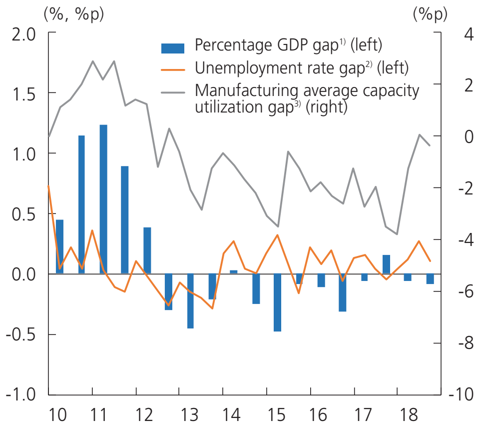
<Figure I - 6> Import prices (Korean-won basis)[1)]



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

In the case of the domestic factors influencing prices, on the demand side the percentage GDP gap was maintained at around 0% in the fourth quarter of last year, as the trend of economic growth at a rate near its potential level continued. Meanwhile, indicators showing the levels of utilization of production factors, including the unemployment gap and the manufacturing capacity utilization rate gap, also showed levels similar to those in the previous quarter. On the cost side, the pace of wage growth well above its normal years' average was sustained. In particular, the rate of wage increase in service industries such as food and alcoholic beverage services, where the proportions of personnel expenses are high,[15] is exceeding the all-industry rate of wage increase, and seems likely to have worked as a factor causing the costs of eating out and other private service charges to have risen.

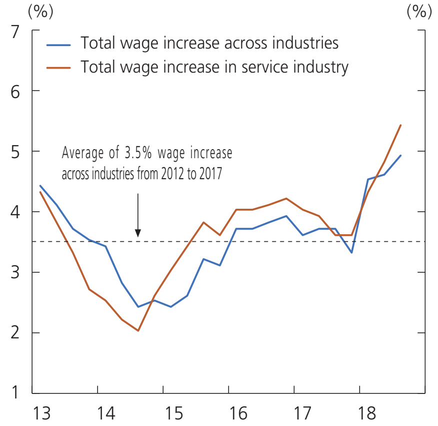
<Figure I - 7> Gaps of major economic indicators



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).
3) Capacity utilization rate-Average capacity utilization during previous 10 years; Electronics parts and communication devices excluded; A figure below 0 indicates the existence of idle production capacity; Fourth quarter figure is an average of the Oct.~Nov. 2018 period.
Sources: Bank of Korea, Statistics Korea.

12) The rate of increase in prices of crude oil imports (Korean won basis, year-on-year) fell greatly to 16.4% in the fourth quarter of 2018, compared to 45.9% in the third quarter.
13) The rate of increase in non-energy product prices (Korean won basis, year-on-year) slowed from 4.5% in the third quarter of 2018 to 1.0% in the fourth quarter.
14) The Korean won/US dollar exchange rate (year-on-year) reversed from a -1.0% decline during the third quarter of 2018 to a rise of 2.1% in the fourth quarter.
15) During the third quarter of 2018 the per-person rate of wage increase in the food and alcoholic beverage services (four quarter moving average), at 11.1% year-on-year, greatly exceeded the rate of wage growth (4.8%) for industry as a whole.

<Figure I - 8> **Per-person rate of wage increase**1)2)



Notes: 1) Based on the firms with one or more permanent employees; Figure for service industry is a simple average of the total wages in the sub-categories excluding defense and public administration.
2) Year-on-year; Four quarter moving average.
Source: Ministry of Employee and Labor.

A look at other factors affecting inflation finds that the prices of agricultural and livestock products continued their trends of increase, owing to the base effects of their large declines in 2017.[16] Concerning the government policies, the continuation of the welfare measures in the education and medical service sectors,[17] as well as the oil tax cut,[18] worked as factors pushing inflation down, and the ending of the cut in electricity fees implemented from August to September, in addition to the hikes in some public service charges,[19] worked to push it up. As for housing rental fees, meanwhile, their pace of increase slowed in line with the increased quantity of available new apartments.

Looking at the changes in CPI inflation in the individual product categories, the paces of increase in agricultural, livestock and marine product prices and private service charges were sustained, while electricity, water and gas charges reversed to show increases as well. The rate of growth in petroleum product prices in contrast fell to a considerable extent. Looking at the degrees of contribution to inflation of the individual product categories, while the contribution of service prices maintained its level of the previous quarter, the positive contribution of agricultural, livestock and marine product prices rose and the negative contribution of electricity, water and gas charges seen during the previous quarter reversed to a positive one. The positive contribution of petroleum product prices on the other hand declined substantially.

16) During the fourth quarter of 2018 the prices of agricultural, livestock and marine products fell compared to the previous quarter, but owing to the base effect of their large decline in 2017 they showed a high pace of year-on-year increase.
17) During the fourth quarter of 2018 the application of health insurance coverage for cerebrovascular MRIs (October) and the provision of free school uniforms (November, Suwon) were implemented.
18) In order to ease the burdens of small-scale business owners and ordinary citizens, the government has temporarily (from November 6, 2018 to May 6, 2019) cut the fuel taxes for gasoline, diesel fuel and butane LPG, by 15%.
19) Due to the hikes in public transportation fees in some regions (for city buses in Gangwondo, and taxis in Daegu), and to increases in international airfares, the pace of inflation accelerated slightly.

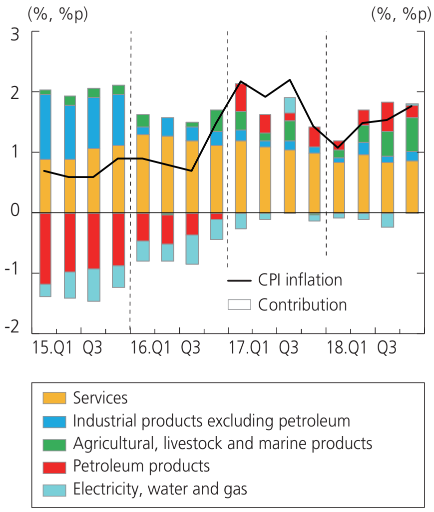
<Table I - 5> **Consumer prices**[1]

(%)

	2017			2018				
	Year	Q3	Q4	Year	Q1	Q2	Q3	Q4
Consumer price index	1.9	2.2	1.4	1.5	1.1	1.5	1.6	1.8
Agricultural, livestock, and marine products	5.5	7.2	1.3	3.7	0.7	2.0	4.9	7.1
(Agricultural products)	4.6	7.9	-0.2	8.1	2.6	6.9	9.5	13.6
(Livestock products)	6.5	6.8	1.5	-3.5	-3.7	-6.1	-2.8	-1.3
Industrial products	1.4	1.0	1.4	1.3	0.7	1.5	1.8	1.1
(Petroleum products)	7.7	3.4	7.9	6.8	3.8	6.7	11.7	5.1
(Industrial products excluding petroleum)	0.5	0.5	0.4	0.5	0.3	0.7	0.3	0.5
Electricity, water, and gas	-1.4	7.9	-3.3	-2.9	-1.9	-3.0	-7.0	0.3
Services	2.0	1.9	1.8	1.6	1.5	1.7	1.5	1.6
(Housing rental fees)	1.6	1.6	1.3	0.6	1.0	0.7	0.5	0.3
(Public service charges)	1.0	1.0	0.7	0.2	0.5	0.3	0.0	0.1
(Private service charges)	2.5	2.4	2.4	2.5	2.2	2.7	2.5	2.6
CPI for living necessities	2.5	3.1	1.6	1.6	1.0	1.5	1.7	2.1
CPI excluding food & energy	1.5	1.4	1.4	1.2	1.2	1.4	1.1	1.1
CPI excluding agricultural products & oils	1.5	1.7	1.3	1.2	1.1	1.3	1.0	1.3

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

<Figure I - 9> **Contributions to CPI inflation**[1]

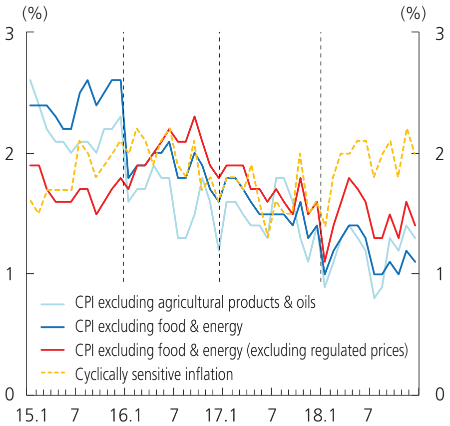


Note: 1) Year-on-year.
Source: Statistics Korea.

Maintenance of Underlying Price Movements at Mid-1% Level

The rate of core inflation (index with food and energy prices excluded) sustained its slow pace of growth in the lower 1% range during the fourth quarter of last year. Considering that the core inflation is greatly influenced by the government's strengthening of its welfare policies, a look at the core inflation with regulated prices excluded[20] shows that it rose by 1.5% to maintain a pace of increase in the mid-1% range continuing on from that (1.4%) in the quarter before. Cyclically sensitive inflation[21] showed a rate of increase for the fourth quarter of 2.0%, identical to that in the third quarter.

<Figure I - 10> **Underlying inflation rates**[1]

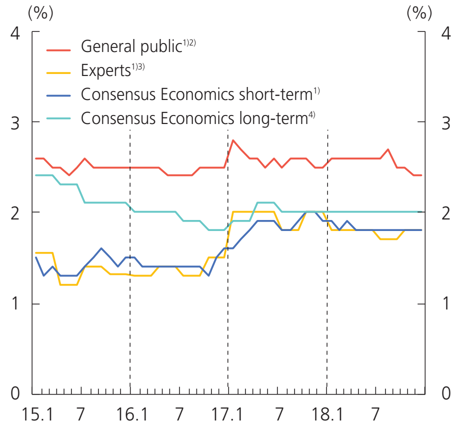


Note: 1) Year-on-year.
Sources: Bank of Korea, Statistics Korea.

20) The core inflation index with regulated prices excluded is calculated by excluding the prices of public services, electricity, water, gas and school meals, which are greatly affected both directly and indirectly by the government.
21) We calculated cyclically sensitive inflation based on the items, in the group of products comprising the core inflation index with food and energy product prices excluded, which react sensitively to the percentage GDP gap.

The inflation expectations (for the next one year) of the general public showed the middle 2% level.[22] In the economic experts group, their short-term (for the next one year) and long-term (for the next five years) inflation expectations both maintained the same levels (1.8% and 2.0% respectively) as in the quarter before.

<Figure I - 11> **Inflation expectations**



Notes: 1) Expected CPI inflation rates for the next 12 months.
2) Based on new samples for periods after September 2018.
3) Quarterly Basis.
4) Expected CPI inflation rates for the next 60 months.
Sources: Bank of Korea, Consensus Economics.

Pace of Increase in Housing Sales Prices in Seoul and Surrounding Areas Slows, while Leasehold Deposit Prices Fall

During the fourth quarter of last year nationwide housing sales prices recorded a pace of increase similar to that in the third quarter, although looked at on a monthly basis there was a continuing trend of slowdown after October.[23] By region, the trend of increase in Seoul and the rest of its surrounding areas slowed compared to the previous quarter, under the impacts of the government measures.[24] In the other parts of the country in contrast, their extents of decline narrowed overall, as the extents of increase in Daegu, Gwangju, Daejeon expanded.

Nationwide housing leasehold deposit prices continued their declines in both Seoul and its surrounding areas and the rest of the country, under the effects of increased quantities of available new apartments.

22) The inflation expectations of the general public fell to 2.4% in the fourth quarter of 2018 compared to 2.6% during the previous quarter. This was partly a result of the reform of the sample, which led expected inflation in September of last year to change from 2.7% before the reform to 2.5% after it.
23) Nationwide housing sales prices have recorded the following rates of month-on-month growth: August 2018 0.0% → September 0.3% → October 0.2% → November 0.1% → December 0.0%.
24) The government announced a set of 「Housing Market Stabilization Measures」 (September 13, 2018), with its major contents including a strengthening of the comprehensive real estate tax, regulation of lending to owners of multiple housing units, and an adjustment of the tax benefits given to rental business owners as well as the regulation of lending to them.

<Table I - 6> **Rates of increase in housing sales and leasehold deposit prices[1]**

(%)

	2017			2018				
	Year	Q3	Q4	Year	Q1	Q2	Q3	Q4
Housing sales prices	1.5	0.6	0.4	1.1	0.5	0.0	0.3	0.3
Seoul and its surrounding areas	2.4	0.8	0.7	3.3	1.1	0.4	1.0	0.7
(Seoul)	3.6	0.9	1.2	6.2	2.4	0.8	2.2	0.8
Other areas	0.7	0.3	0.1	-0.9	-0.1	-0.3	-0.3	-0.1
Reconstructed apartment sales prices	16.0	3.8	4.9	15.4	7.9	1.8	5.2	-0.1
Leasehold deposit prices	0.6	0.2	0.1	-1.8	-0.3	-0.7	-0.5	-0.3
Seoul and its surrounding areas	1.4	0.5	0.2	-1.5	-0.3	-0.8	-0.3	-0.2
(Seoul)	2.0	0.6	0.5	0.3	0.3	-0.6	0.5	0.0
Other areas	-0.1	-0.1	-0.1	-2.1	-0.3	-0.7	-0.7	-0.5

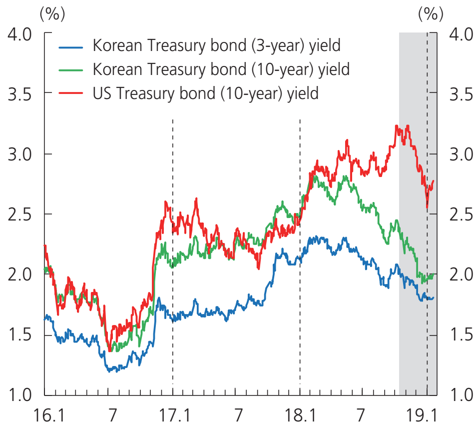
Note: 1) Compared with the last survey dates of the previous periods.
Sources: Korea Appraisal Board, Real Estate 114.

4. Financial and Foreign Exchange Markets

Long-term Market Interest Rates Decline

The Treasury bond yield (3-year) declined from mid-October until mid-December last year, due to factors such as the escalation of the US-China trade dispute, concerns about slowdowns in growth in Korea and abroad, and a reduction in the volume of Treasury bond issuance. After that they fluctuated within a limited range, as the global risk aversion eased somewhat on the likelihood of a reduction of the speed of its policy rate hikes by the US Federal Reserve and on expectations of progress in the US-China trade negotiations.

<Figure I - 12> **Korean and US Treasury bond yields**

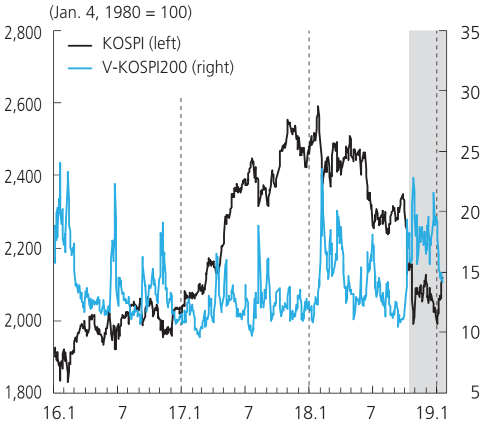


Sources: KOFIA, Bloomberg.

Stock Prices Rebound after Falling

Stock prices (KOSPI), after falling to a large extent in October due to the impacts of stock price movements in major countries, rebounded slightly. Entering December they fell again, affected by the sluggish economic indicators in major countries and by the downward revisions of forecasts for global IT company performances, but have rebounded this year on the expectations of progress in the US-China trade negotiations and the likelihood of the Federal Reserve's reducing the speed of its rate hikes. The stock price volatility index (V-KOSPI200), after having risen greatly in October last year due to an expansion in external risks, has fallen slightly this year.

<Figure I - 13> **KOSPI and share volatility index**



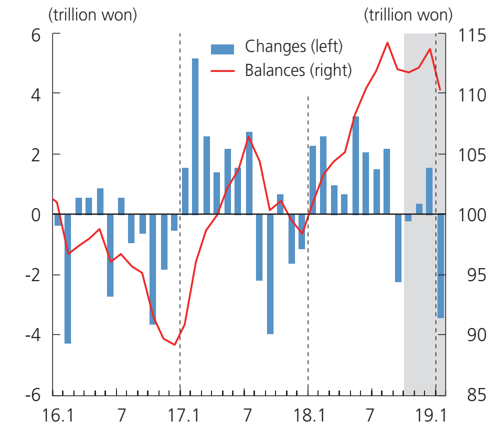
Source: Koscom.

Decline in Domestic Portfolio Investment by Foreigners this Year

Domestic portfolio investment by foreigners reversed to an increase in November last year, before then declining this year led especially by funds for investment in bonds.

Bond investment by foreigners decreased a bit in October, owing to a large volume of Monetary Stabilization Bonds that reached maturity, but during the November to December period it then expanded as the arbitrage incentives grew. Entering this year it has contracted, due to an increase in sales to realize marginal profits and to sluggishness in the reinvestment of maturing funds. As to the types of investors involved, while investment by the public sector including international organizations has steadily grown, private sector investment, by banks, has reversed to a decline this year after having increased greatly in December.

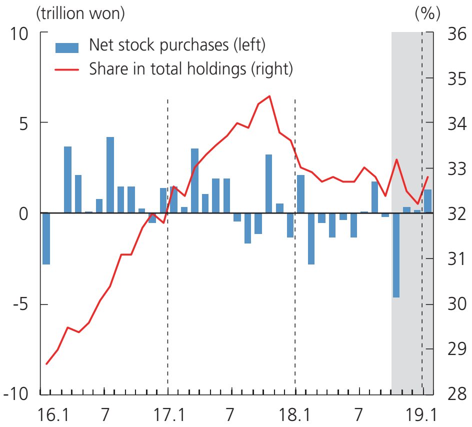
<Figure I - 14> **Changes[1] in and balances[1] of foreigners' bond holdings**



Note: 1) Figures for Jan. 2019 based on the period from Jan. 1 to 18.
Source: Financial Supervisory Service.

Foreign investment in domestic stocks recorded a large volume of net sales during October, as investment sentiments contracted owing to factors such as the intensification of the US-China trade conflict and the plunges in stock prices globally, but from November this reversed to slight net purchases, due to expectations of an easing of trade frictions, and entering this year the amount of net purchases has expanded as investment sentiments have improved.

<Figure I - 15> **Foreigners' net stock purchases[1)2)] and share in total holdings[1)3)]**



Notes: 1) Figures for Jan. 2019 based on the period from Jan. 1 to 18.
2) Sum of net purchases in KOSPI and KOSDAQ markets.
3) Based on total stock market capitalizations.
Source: Koscom.

Favorable Corporate Funding Conditions

Corporate lending by banks increased less during the fourth quarter of last year than it had in the third quarter, under the impacts of seasonal factors mainly, while the amount of growth in non-bank financial institutions' corporate lending declined greatly compared to the quarter before. Corporations' direct funding decreased compared to the previous quarter as well. There were net redemptions of corporate bonds, affected by institutions' year-end closings of books, and of CP due to temporary redemptions for companies' year-end debt ratio management. The volume of net stock issuance on the other hand rose slightly compared to the previous quarter, as the amount of paid-in capital increases by large corporations expanded.

<Table I - 7> **Corporate funding[1)]**

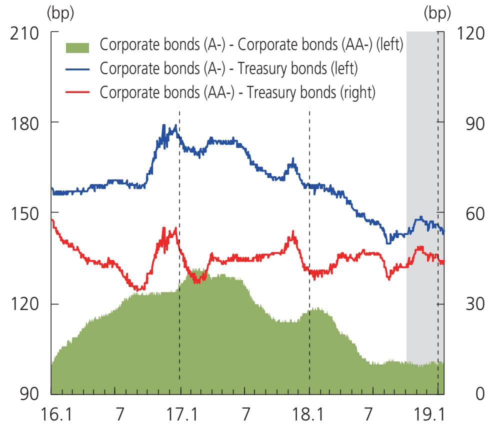
(trillion won)

		2016	2017		2018			
			Year	Q4	Q1	Q2	Q3	Q4
Loans	Banks[2)]	23.9	40.4	5.4	14.6	10.0	16.5	5.1
	(Large firms)	-9.9	-3.7	-3.1	1.8	2.3	1.4	0.9
	(SMEs)	33.8	44.0	8.6	12.7	7.7	15.2	4.2
	Non-banks[3)]	30.0	41.8	11.6	9.5	12.2	11.3	7.0
Direct financing	Corporate bond issuance[4)]	-6.7	-3.5	-4.7	2.0	2.6	1.2	-0.6
	CP Issuance[5)]	-2.1	2.3	-1.0	2.4	-0.3	0.7	-2.1
	Stock issuance[6)]	15.9	13.9	4.6	3.9	2.7	1.6	1.9

Notes: 1) Based on changes in balances during the periods.
2) Figures for December 2018 preliminary.
3) Based on loans by mutual savings banks, credit unions, mutual credit cooperatives, community credit cooperatives and insurance companies (including public and other lending); Figures for the fourth quarter of 2018 based on October~November figures.
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.

Corporate bond spreads widened somewhat in October, as Treasury bond yields fell to relatively large extents, but subsequently narrowed again as demand for corporate bonds remained steady in line with their advantageous interest rates. The credit spread between prime (AA-) and subprime (A-) bonds maintained its lowest level since the end of 2015.

<Figure I - 16> Corporate bond credit spreads1) and spread across credit ratings



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

Slowdown in Household Lending Growth Continues

The volume of growth in household lending (depository institution basis) increased more during the fourth quarter of last year than it had in the third, due to a large expansion in October, but from November the amount of growth lessened.[25] For the year as a whole, the slowdown in household lending growth[26] compared to normal years (2015~16), when it had shown a high level, continued during 2018.

The amount of increase in household lending by banks, especially of other loans such as unsecured loans, declined from November, affected by the implementation of the DSR regulation[27] and by a reduction in housing sales transactions. Home mortgage lending grew at a high rate, as demand for funds for purchasing housing and for paying of leasehold deposits increased, while demand for group loans for making intermediate and final payments on apartments grew as well.

Household lending by non-bank deposit-taking institutions increased by more than in the quarter before,[28] but the amount of increase was well below the normal years' level.[29]

25) Household lending (deposit-taking bank basis) recorded the following amounts of growth: September 2018 5.1 trillion won → October 7.7 trillion won → November 6.7 trillion won → December 5.4 trillion won.
26) Household lending by deposit-taking institutions recorded the following quarterly average amounts of increase: 2014 14.6 trillion won → 2015 25.1 trillion won → 2016 27.8 trillion won → 2017 20.3 trillion won → 2018 16.5 trillion won (the December 2018 data for deposit-taking banks is the advance estimates, while the data for non-bank financial institutions is through November).
27) From October 31, 2018 banks are required, when extending household loans, to calculate the borrowers' ratios of total loan principal and interest payments relative to their incomes (DSR: Debt Service Ratio), and to manage their lending to ensure that loans with DSRs above 70% do not exceed certain proportions (commercial banks 15%, specialized banks 25%, regional banks 30%) of their household loans as a whole. Non-bank financial institutions are currently in the course of DSR trial implementation, and are scheduled to introduce the ratio as a management indicator in all sectors, sequentially, during the first half of 2019.
28) Mutual credit cooperatives' household loans increased by more than in the quarter before, owing to demand for housing-related funds and to fund demand for the harvest season, while household lending by mutual savings banks grew slightly more due to the extensions of medium-level interest rate loans by some savings banks. Community credit cooperatives' lending declined, as their existing intermediate payment fund loans were repaid upon the borrowers moving into their housing,
29) The amount of increase in household loans of non-bank deposit-taking institutions during the fourth quarter each year averages approximately 7.2 trillion won (2012~17 basis).

<Table I - 8> **Household lending by depository institutions[1)]**

(trillion won)

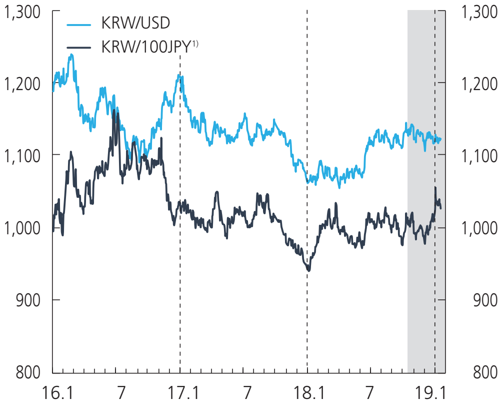
	2016	2017		2018			
		Year	Q4	Q1	Q2	Q3	Q4[2)]
Commercial & specialized bank loans[3)]	68.6	58.7	17.6	9.5	15.5	15.7	19.8
(Mortgage loans)[3)]	55.8	37.0	9.1	5.9	8.7	10.2	13.2
(Other loans including loans through overdraft accounts)	12.9	21.6	8.4	3.6	6.8	5.6	6.5
Non-bank depository institution loans[3)]	42.6	22.6	4.8	0.7	2.6	0.0	2.4
(Mutual credit cooperatives)	19.3	9.3	2.6	0.8	2.6	1.2	1.8
(Credit unions)	6.3	1.2	0.0	-0.6	-0.5	-0.4	0.0
(Community credit cooperatives)	12.4	9.4	1.8	0.2	-0.1	-1.4	-0.2
(Mutual savings banks)	4.6	2.7	0.4	0.5	0.5	0.6	0.7
(Others)[4)]	0.0	0.1	0.1	-0.1	0.1	0.1	0.1

Notes: 1) Based on changes in balances during the periods.
2) The December figures for banks are the Bank of Korea advance estimates, and the fourth quarter figures for the non-bank deposit-taking institutions based on Oct~Nov period.
3) Including mortgage transfers.
4) Trust accounts of banks, and postal savings.
Sources: Bank of Korea, Korea Housing Finance Corporation.

Korean Won/US Dollar Exchange Rate Generally Stable

The Korean won/US dollar exchange rate rose greatly to the 1,140 won level in October last year, owing to a contraction in investment sentiments in line with the global stock market unrest. It subsequently fell, however, on weakening expectations of interest rate hikes by the US Federal Reserve, and then fluctuated at around 1,120 won while showing relative stability. The Korean won/Japanese yen (100 yen) rate rose to a large extent in January this year, influenced by the trend of yen appreciation following the plunge in US technology stocks, but after that the amount of its increase lessened, as investment sentiments recovered somewhat owing to factors including expectations of progress in the US-China trade negotiations.

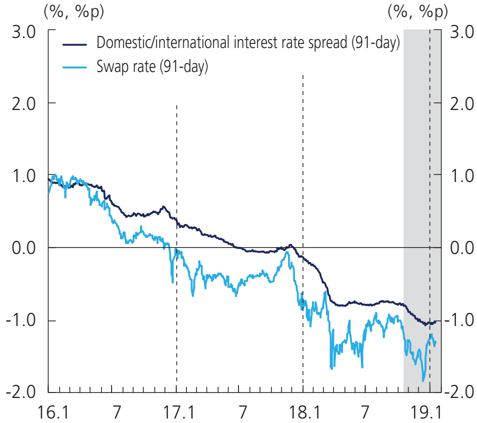
<Figure I - 17> **Exchange rates**



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

The swap rate (3-month maturity) fell considerably from October last year, due to the widening of the negative domestic-overseas interest rate spread following the rise in US interest rates (LIBOR), as well as to banks' demands for foreign currency liquidity in preparation for the end of the year. From mid-December it rose again, however, in line with the resolution of year-end factors.

<Figure I - 18> **Domestic/international interest rate spread[1)] and swap rate**

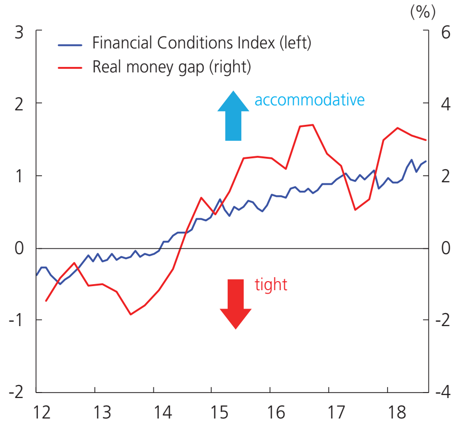


Note: 1) Yield on Korean Monetary Stabilization Bonds (MSBs) (91-day) - US LIBOR (91-day).
Source: Bank of Korea.

Accommodative Financial Conditions Continue

It is assessed that domestic financial conditions are still accommodative. The real money gap[30] remains substantially positive, as the real money supply continues to exceed its long-term equilibrium level, and the Financial Conditions Index[31] has also shown an accommodative level.

<Figure I - 19> **Financial Conditions Index[1)] and real money gap[1)2)]**



Notes: 1) If the figure is positive (negative), it means that financial conditions are accommodative (tight).
2) Based on M2.
Source: Bank of Korea.

30) 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 a shortfall (gap < 0) of real money supplied compared to the long-term equilibrium money supply:

$$\text{Real money gap}_t = \frac{\text{Real money supply}_t - \text{Equilibrium money supply}_t}{\text{Equilibrium money supply}_t} \times 100$$

31) The Financial Conditions Index (FCI), an aggregate of several financial variables to form one information variable, is used as an index for assessing whether financial conditions are accommodative or tight. It is calculated by including in it 50 financial variables regarded as important, such as credit indicators, liquidity indicators, market volatility indicators, and survey data from financial institutions. After extraction (through iterative estimation using the least squares method) of the factors best reflecting common movements among the 50 total financial variables, the index is standardized (mean: 0, standard deviation: 1) and calculated.

II

Conduct of Monetary Policy

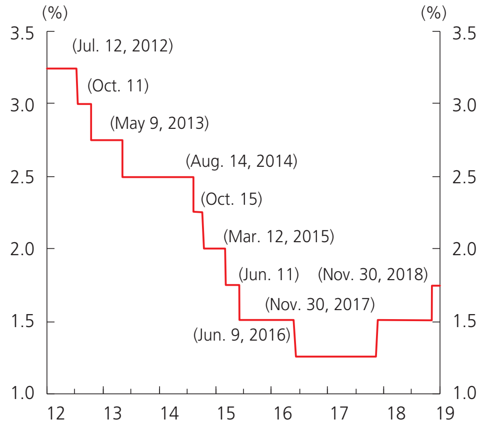
1. Base Rate 21
2. Bank Intermediated Lending Support Facility 24
3. Financial Stability 25

1. Base Rate

Increase from 1.50% to 1.75% per Annum in November 2018

During the November 2018 through January 2019 period the Bank of Korea maintained its accommodative policy stance, in order to ensure that the recovery of economic growth would continue and that consumer price inflation could be stabilized at the target level 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 Korea's trading conditions vis-à-vis major countries, changes in the monetary policies of major countries' central banks, financial and economic conditions in EMEs, and the upward trend of household debt. Under this policy stance the Bank of Korea decided in November last year to raise the Base Rate, which it had maintained at an annual 1.50% since November 2017, by 0.25% point to operate it at 1.75% per annum.

<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 backgrounds behind them, follows:

First, the hike of the Base Rate in November of last year[32)] was a decision made in consideration of the points that the uncertainties about external conditions were high but the trend of growth not far from the level of the potential growth rate was continuing, while consumer price inflation was expected to fluctuate in the mid- to upper-1% range near the inflation target, and that if the Base Rate were kept low then the risks to financial stability could rise due to an expansion in the financial imbalances. With regard to the domestic economy, it was judged that the adjustments in facilities and construction investment had persisted, but that the trend of growth at the potential growth rate level had generally

32) Board members Dongchul Cho and Inseok Shin expressed opinions opposed to raising the Base Rate to 1.75%, and insisted that it should be maintained at 1.50%.

continued <refer to Table I-2> as consumption was expanding modestly and exports were also showing buoyancy, and these trends seemed likely to continue in the future as well. Consumer prices had shown a pace of increase at the 2% level <refer to Figure I-5>, as the rises in agricultural and petroleum product prices had accelerated, and it was forecast that they would be near the target level for some time before then falling somewhat to fluctuate at the mid- to upper-1% level. On the financial stability side, it was forecast that the pace of growth in household lending would not increase greatly, thanks to the effects of government policies, but that it would still be faster than that of income. A monetary policy response to the risk of financial imbalance accumulation was thus judged necessary.

In the meeting in January of this year the Bank maintained the Base Rate at 1.75% per annum. This decision was made in view of the points that the Korean economy seemed likely to grow at a pace similar to that last year, due to the expansion in government expenditures, but there was a need to keep an eye on the increased uncertainties surrounding external conditions, as well as their impacts, and that examination was necessary of the effects of the policy rate hike implemented in November last year to contain the expansion in financial imbalances. The increase in consumer prices had slowed <refer to Figure I-5>, on the effects of declines in petroleum product prices, and was forecast to fluctuate at the 1% level for the time being before then gradually rising to the mid-1% range from the second half. The amount of growth in household lending had lessened, but there was judged to be a need for attention to financial stability conditions including whether this trend would continue.

Open Market Operations to Maintain Call Rate at Base Rate Level

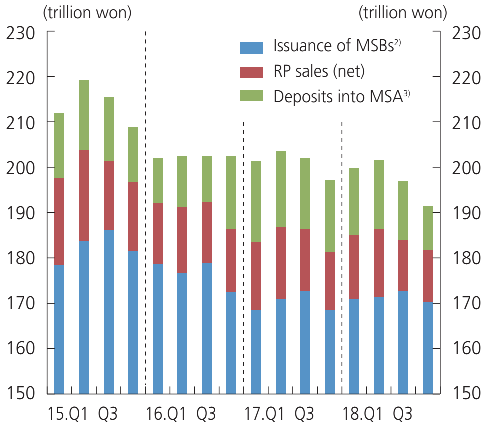
In order to influence the overnight call rate so that it does not deviate greatly from the Base Rate, the Bank of Korea adjusts market liquidity utilizing its open market operations instruments through issuance of Monetary Stabilization Bonds, purchases and sales of RPs, and deposits into the Monetary Stabilization Account.

During the fourth quarter of last year the Bank of Korea reduced the total amount of its liquidity adjustment (average balance basis) compared to the quarter before, in response to an increase in its issuance of currency.[33] Meanwhile, as the November Monetary Policy Board meeting to determine the monetary policy directions approached there were decreased demands for purchases of MSBs and deposits into the Monetary Stabilization Account, due to cautions concerning the Base Rate decision. The Bank responded to this through flexible utilization of its open market operations instruments, and on the one hand expanded

33) As the effects of the increased currency issuance at the end of September last year (5.5 trillion won during the ten business days prior to the Chuseok holidays) continued, the 2.9 trillion won quarter-on-quarter increase in currency issuance (average balance basis) during the fourth quarter led to a decline in financial institutions' reserve deposits at the Bank of Korea, and the amount of liquidity adjustment decreased.

the amount of its sales of RPs slightly, while also substantially reducing the amounts of its MSB issuance and deposits in the Monetary Stabilization Account.

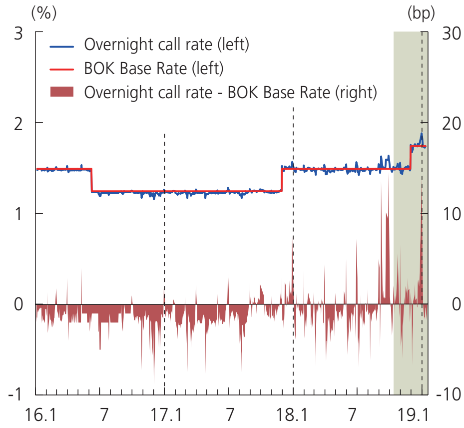
<Figure II - 2> Liquidity adjustment[1] by means of open market operations



Notes: 1) Quarterly average balance basis.
2) Excluding 3.48 trillion won (Mar. 27, 2014~Mar. 26, 2015) and 3.45 trillion won (Oct. 16, 2015~Oct. 14, 2016) of MSB sales to Korea Development Bank through negotiated transactions.
3) Monetary Stabilization Account.
Source: Bank of Korea.

Meanwhile, as the Bank managed market liquidity flexibly in preparation for a possible rise in overnight interest rates in line with any imbalance between supply and demand in the short-term funding markets at the year-end,[34] the call rate showed general stability at around the level of the Base Rate.

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



Source: Bank of Korea.

34) At the year-end there is a normal tendency of increased fund supply and demand imbalances in the short-term financial markets, owing to the government's withdrawal of surplus Treasury funds, to increased MMF repurchases by corporations, and to management ratio adjustments in the banking sector.

2. Bank Intermediated Lending Support Facility

Temporary Extension of Operating Term of Support Program for Small-scale Business Owners

To ensure that banks are active in extending loans 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.

In November last year the Bank of Korea took into consideration the growing difficulties of small-scale business owners due to factors such as the recent slumps in business conditions, and decided to temporarily extend the operating term of the Support Program for Small-scale Business Owners for one year, until November this year.

The Bank Intermediated Lending Support Facility is being operated with a total ceiling of 25 trillion won, including 1.5 trillion won under the Support Program for Trade Financing, 6 trillion won under the Support Program for New Growth Engine Development and Job Creation, 11 trillion won under the Program for Stabilization of SME Lending, 0.5 trillion won under the Support Program for Small-scale Business Owners, and 5.9 trillion won under the Support Program for Regional Enterprises. The facility's interest rates range from 0.50% to 0.75% per annum, depending upon the program.

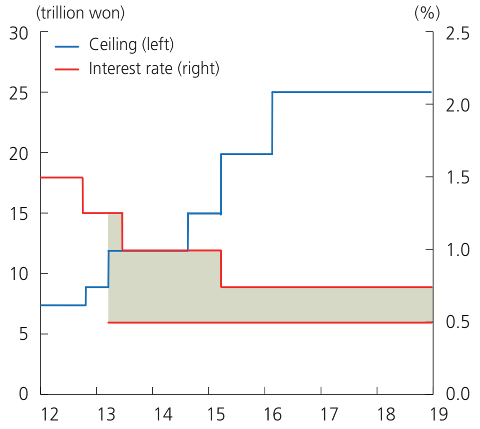
<Table II - 1> **Programs under the Bank Intermediated Lending Support Facility**

(trillion won, %)

Program	Ceiling	Interest rate
Support Program for Trade Financing	1.5	0.50
Support Program for New Growth Engine Development and Job Creation[1]	6.0	0.50
Program for Stabilization of SME Lending[2]	11.0	0.50~0.75
Support Program for Small-scale Business Owners	0.5	0.50
Support Program for Regional Enterprises	5.9	0.75
Total	25.0[3]	-

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

<Figure II - 4> **Ceiling and interest rates of Bank Intermediated Lending Support Facility**



Source: Bank of Korea.

3. Financial Stability

Since financial imbalances can, if they continue, ultimately lead macroeconomic stability to deteriorate, it is necessary in the conduct of monetary policy to consider financial stability as well. Based upon this standpoint the Bank of Korea has devoted efforts to achieve financial and foreign exchange market stability, to identify potential financial system risk factors at an early stage, to strengthen the global financial safety nets, and to enhance payment and settlement system stability and efficiency.

Promotion of Financial and Foreign Exchange Market Stability

The Bank of Korea continued its efforts for financial and foreign exchange market stability in response to changes in conditions in Korea and abroad. While on the one hand regularly monitoring the movements of major price variables and global funds, the in- and outflows of foreigners' portfolio investment funds, and the foreign currency funding conditions of financial institutions, the Bank also promoted financial and foreign exchange market stability by responding actively whenever possibilities of expanded market volatility arose, through activation of its emergency response system.

During times of increased domestic and overseas financial market volatility, driven by declines in stock prices in major countries due to the overvaluations of tech stocks and to escalation of the US-China trade dispute, as well as by the US Federal Reserve's hike in its policy rate (December 2018), the Bank of Korea convened meetings of its 「Monetary and Financial Task Force」 seven times, to examine financial and foreign exchange market developments and their effects and convey messages to stabilize the markets, while strengthening its communication to prevent the spread of market anxieties.

Meanwhile, in a situation in which the extent of policy rate inversion vis-à-vis the United States had expanded, the Bank closely monitored the flows of funds of foreign portfolio investors in line with the ongoing concerns about outflows of their funds due to the increased uncertainties caused by the buildup of various global risks, while at the same time examining financial and foreign exchange market risk factors.

Efforts for Preemptive Identification of and Responses to Potential Financial System Risks

The Bank of Korea devoted efforts for the preemptive identification of and provision of early warnings against potential risks within the financial system.

During its 「Financial Stability Meeting」 in December last year, the Bank closely assessed the sectoral vulnerabilities of the household and corporate credit markets, the asset markets and financial institutions, and examined the financial system's resilience to domestic and external shocks. First, in reflection of the concerns being raised about the increasing debt repayment burdens of households as the growth of their debts had outpaced that of their incomes for a long period of time, the Bank examined the debt repayment capacities of households overall from the perspectives of their asset holdings and incomes. It also utilized microdata on the borrowers of household loans, and analyzed the trends of changes in their principal and interest repayment capacities compared to their incomes, and the distributions of borrowers based on the levels of their principal and interest repayment burdens. In particular, with regard to borrowers whose principal and interest repayment volumes are exceeding their annual incomes, the Bank carried out an in-depth examination of the related risks from the perspectives of their credit ratings, income levels and whether or not they have multiple loans. It also considered the concerns about deteriorations in corporate financial soundness in consequence of the US-China trade dispute, and examined from diverse angles the financial characteristics of companies subject to external audits. While on the one hand analyzing the channels through which companies' levels of financial soundness have worsened or improved, the Bank suggested response plans for achieving the normalizations of business and restructurings of firms with weak financial soundness. It in addition constructed an Extensive Stress Test model,[35] which reflects all losses within the individual banking and non-bank financial

35) The Bank of Korea developed a systemic risk assessment model related to banks in 2012, and a model targeting non-bank financial institutions in June 2018. These single business sector models reflect, together with the first-round effects of a shock on an individual financial institution, the second-round effects in which shocks are amplified and spread through risk transmission among financial institutions within the sector concerned. However, a single business sector model cannot reflect the transmission effects from a default risk materializing in a specific sector that spreads to financial institutions in other sectors, and can therefore underestimate the risks to the financial system. The Extensive Stress Test model constructed in December 2018 has made up for these limitations.

sectors as well as the transmissions of risk across sectors.

Meanwhile, the Bank continued its efforts to respond to the domestic and overseas risks to financial stability, including the household debt buildup and the monetary policy normalization by the US Fed. Through meetings of its 「Household Debt Task Force」 it examined household debt conditions and the related risks, while it also participated in the 「Macroeconomic Finance Meetings」 and, together with the government and the supervisory authorities, analyzed the effects of the Federal Reserve's policy rate hikes and the global stock market unrest, and sought measures for responding.

Efforts to Strengthen Global Financial Safety Nets Continue

The Bank of Korea attended meetings of international organizations and consultative bodies including the BIS, the IMF and the G20, where it worked to identify in a timely manner changes in global financial and economic conditions and their effects, and discussed crucial pending issues including the monetary policy stances of major countries and protectionism.

The Bank also devoted efforts to strengthening Korea's multi-layered foreign exchange safety nets. In particular, as the central bank of one joint chair country of the ASEAN+3 meetings[36] last year, the Bank completed the revision of the written agreement on Chiang Mai Initiative Multilateralization (CMIM), the region's multilateral currency swap arrangement. Specifically, at the Manila Finance Ministers' and Central Bank Governors' Meeting in May, it drew member countries to an agreement on the major plans for revision of the written agreement,[37] including the strengthening of CMIM's support system, and at the Busan Vice Ministers' and Senior Deputy Governors' meeting in December it then confirmed the revised written agreement.[38] It appears that, through these achievements, the system for fund support by CMIM as a regional financial safety net will be strengthened going forward.

Enhancement of Payment and Settlement System Safety and Efficiency

The Bank of Korea continued its efforts to enhance the safety and efficiency of the payment and settlement systems. First, it devoted efforts to ensure smooth domestic implementation of the 「Principles for Financial Market Infrastructures[39] (PFMI)」 and other international standards[40] in the field of pay-

36) This meeting is chaired jointly by one of the ten ASEAN countries and one country from among Korea, China and Japan, with the countries taking turns as chairs in serial order. Last year Korea and Singapore accepted the positions as joint chair countries, and this year China and Thailand are taking charge of them.

37) The revision included a strengthening of CMIM's fund support system through an expansion of the period of support, an increase in the introduction of credit provision conditionality, and improvements of the cooperation with the IMF and of external communication.

38) The revision of the CMIM written agreement was finalized through an agreement among member countries during the ASEAN+3 Vice Ministers' and Senior Deputy Governors' meeting in Busan in December last year, and after final approval at the Finance Ministers' and Central Bank Governors' meeting in May this year it is scheduled to be enacted once the process of its signing by all of the individual member countries has been completed.

39) Following the identification after the global financial crisis of the needs to expand the over-the-counter derivatives market infrastructures and strengthen the international standards for the operation of financial market infrastructures, the BIS's 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.

ment and settlement. In December last year, in order to manage the credit risks of banks participating in net settlement in accordance with international standards,[41] the Bank decided to raise the collateral-to-net debit cap ratio for guaranteeing net settlement (collateral-to-net debit cap ratio hereafter) from its former level of 50% to 100%, and to implement this in stages between 2019 and 2022 in consideration of the time needed by banks to prepare.

<Table II - 2> **Timeline for increase in the collateral-to-net-debit cap ratio for guaranteeing net settlements**

(%)

Present	Aug. 2019	Aug. 2020	Aug. 2021	Aug. 2022
50	70	80	90	100

In addition, in order to alleviate net settlement participant banks' collateral funding burdens after this hike in the collateral-to-net debit cap ratio, the Bank expanded the scope of the securities eligible to serve as collateral.[42] However, so as to prevent any concentration of these additional eligible securities, as well as to prepare against any related liquidity risks, the Bank limited the proportion of the additional eligible securities to 50 percent or less of total securities being held as collateral.[43]

<Table II - 3> **Scope of eligible securities as collateral for guaranteeing net settlements**

Before change	After change	Implementation date
· Bonds issued by or of which debt service is guaranteed by the government · Bank of Korea Monetary Stabilization Bonds	(same as left)	-
· MBS issued by Korea Housing Finance Corporation (termporary until 2018-end)	· MBS issued by Korea Housing Finance Corporation (permanent)[1]	Dec. 20, 2018
<newly implemented>	· Industrial finance bonds (issued by the Korea Development Bank), small and medium-sized business financial bonds (issued by the Industrial Bank of Korea), export-import financial debentures (issued by Export-Import Bank of Korea) · Securities selected temporarily by the Bank of Korea governor in cases of emergency	Aug. 1, 2019

Note: 1) Actions to temporarily recognize MBS issued by the Korea Housing Finance Corporation as collateral for net settlements to end as of end-2018 as planned.

Related to BOK-Wire+, the large-value payment system that it is operating directly, the Bank of Korea also carried out an assessment of its compliance with international standards and its system for responding to cyber risks,[44] and decided to improve some details such as its management of

40) As supplementary guidelines for PFMI compliance, CPMI-IOSCO has enacted additional international standards including its 「Guidance on cyber resilience for financial market infrastructures」 (June 2016), 「Recovery of financial market infrastructures」 (July 2017), and 「Resilience of central counterparties (CCPs): Further guidance on the PFMI」 (July 2017).

41) In the 「Principles for Financial Market Infrastructures」 (PFMI), the securing of a level of collateral able to completely (100%) cover an FMI's credit risks is demanded. (Principle 4. Credit risk: An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.)

42) The recently added eligible securities are mortgage-back securities (HF MBSs) issued by Korea Housing Finance Corporation, industrial finance bonds issued by the Korea Development Bank, small and medium-sized business financial bonds issued by Industrial Bank of Korea, export-import financial debentures issued by the Export-Import Bank of Korea, and securities selected temporarily by the Bank of Korea governor in cases of emergency.

43) This was done to ensure, among the collateral held for net settlement, an amount of the previously approved eligible securities (which are eligible to serve as collateral for Bank of Korea loans) above a certain level, so that they can also be used as collateral for Bank of Korea loans when necessary.

44) In order to secure the objectivity of assessments, it newly established a process in which the views of external experts are reflected.

operational risks. With regard to individual financial companies, the Bank conducted joint examinations of two banks and one financial investment company, to examine whether they were complying with the related regulations as well as their settlement risk management, and recommended improvements in some areas.

In connection with central bank digital currencies (CBDC), which are now being discussed by some central banks and international organizations like the BIS, the Bank included the results of research conducted by its own internal 「Virtual Currency and CBDC Joint Research T/F」, and published a report on 「Central Bank Digital Currency (CBDC)」 in January this year.

Examination of Potential Financial System Risks, through Joint Financial Institution Inspections

For the early identification of potential risks in the financial system, the Bank of Korea conducted joint examinations of financial institutions with the Financial Supervisory Service, as well as regular monitoring of them, while also making efforts to strengthen its exchanges of information with domestic and overseas supervisory authorities and its communication with financial institutions.

During the October 2018 to January 2019 period the Bank carried out three joint examinations of banks, including sectoral inspections of regional banks' lending and risk assessments of individual domestic banks. Through the sectoral examinations of regional bank lending, the Bank examined changes in regional banks' business behaviors and potential risks and the current operation of its Support Program for Regional Enterprises. Through its examinations of risks at individual domestic banks, it looked into the operating conditions at the banks concerned, their lending situations and related risk factors, their systems for cyber risk response, and their compliance with Bank of Korea regulations.

<Table II - 4> **Joint examinations[1] with Financial Supervisory Service**

(times)

2015	2016	2017	2018	Jan. 2019
7	6	6	5	-

Note: 1) Examinations of banks.
Source: Bank of Korea.

The Bank meanwhile also held joint examination workshops with the Financial Supervisory Service and the Korea Deposit Insurance Corporation, and strengthened its system for cooperation with them and other related institutions. It also devoted efforts to achieving smooth communication with financial institutions, by holding meetings with the heads of their departments in charge of inspections and delivering the results of its examinations to them.

Besides this the Bank of Korea participated in meetings of the Supervisory Colleges hosted by major countries' supervisory authorities, where it discussed the changes in global business strategies of large foreign banks operating in Korea, their subsequent performances, their governance, and the conditions of their operational risk management. Moreover, through meetings with staff charged with handling operational risk of the United Kingdom, France and the EU, the Bank exchanged information on the supervision and inspection of Operational Resilience and of Information & Communication Technology (ICT) risks.

III

Future Monetary Policy Directions

1. Growth and Price Forecasts ········· 33
2. Major Considerations ········· 35
3. Future Monetary Policy Operational Directions ········· 39

1. Growth and Price Forecasts[45)]

Domestic Economy Forecast to Sustain Growth Similar to Last Year's

It is forecast that the GDP growth rates both this year and next will show levels of 2.6%, similar to that recorded last year. This year's growth rate forecast has been revised downward slightly compared to the figure projected last October (2.7%), but the economy is expected to sustain a trend of growth that does not diverge much from the level of its potential growth rate.

Looking at the various drivers of growth, it is forecast the private consumption will continue to increase modestly, but that the pace of its increase will slow slightly compared to last year due to a slowing pace of income growth and to the sluggishness of consumer sentiment. However, the government's policies to expand transfer payments and revitalize domestic demand will support modest growth in private consumption.

It is forecast that facilities investment will reverse to an increase during this year. The investments by major IT firms that were postponed last year are expected to recover from the second half of this year. As for next year, the uncertainties in the world economy will work as limiting factors, but it appears likely that facilities investment will continue to gradually increase, driven by IT sector facilities investment thanks to a continuing trend of growing demand for IT machinery and for related services. Intellectual property products investment is foreseen continuing its modest expansion, as R&D investment shows buoyancy and demand for software based on new technology rises as well. It is forecast that construction investment will continue its trend of decrease, led by building construction. The trend of decline in residential building construction is expected to accelerate greatly, affected by reduction in new construction projects, and it is forecast that non-residential building construction, mainly of commercial-use buildings, will be sluggish also owing to the increased supply.

Exports are expected to show a lower rate of growth than last year, as a result of slowdowns in growth in major countries and of continuing uncertainties related to the US-China trade tensions. The current account seems likely to maintain its surplus, but the amount of the surplus will decline compared to last year as the goods account surplus narrows.

45) This section was drawn up based on the Bank of Korea's 「Economic Outlook Report」 announced on January 24, 2019.

<Table III - 1> **Economic growth outlook**[1]

(%)

	2018			2019e			2020e
	Year	H1	H2	Year	H1	H2	
Real GDP	2.7	2.8	2.5	2.6	2.5	2.8	2.6
Private consumption	2.8	3.2	2.5	2.6	2.5	2.7	2.6
Facilities investment	-1.7	1.9	-5.3	2.0	-2.1	6.3	2.3
Intellectual property products investment	2.0	2.8	1.2	2.5	2.2	2.9	2.8
Construction investment	-4.0	-0.1	-7.4	-3.2	-6.1	-0.5	-2.0
Goods exports	3.9	2.8	4.9	3.1	2.4	3.8	3.0
Goods imports	1.7	2.5	0.9	2.3	0.6	4.0	2.5

Note: 1) Year-on-year; Jan. 2019 forecast basis.
Source: Bank of Korea.

The uncertainties concerning the future growth path are high. The major upside risks include a resolution of uncertainties through the reaching of a settlement in the US-China trade negotiations, improvements in domestic demand thanks to the government's expansionary fiscal policies, and increases in corporate investment in line with the government's economic revitalization policies. Among the downside risks are those of a slowdown in export growth due to intensifying global trade conflicts, of slackening global growth momentum owing to slowdowns in major economies, and of weakening global semiconductor demand.

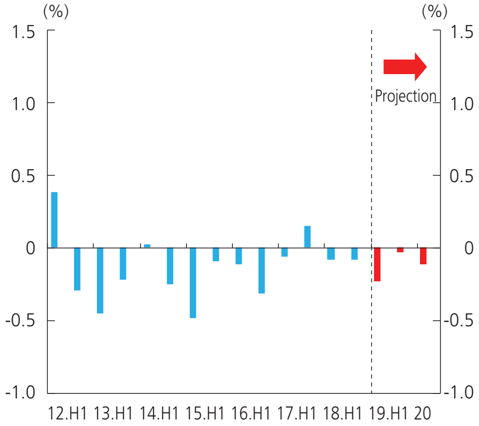
Inflation at Mid-1% Level Expected

With regard to the headline consumer price index, it is forecast that the hikes in wages will cause service prices to rise but that the rate of price inflation will be in the mid-1% range during this year and next, as factors including the drop in oil prices put downward pressures on prices from the supply side amid not large demand-side pressures. By period, inflation is expected to pick up from 1.2% during the first half of this year to 1.5% in the second, as the cuts in the oil and individual consumption taxes are ended and public service charges rise. It is forecast that next year's consumer price inflation rate will be 1.6%. Core inflation with food and energy prices excluded is expected to be 1.4% during this year, and 1.5% in 2020.

A look at the various factors affecting prices finds that, in terms of overseas factors, the slowdown[46] in world economic growth will restrict the pace of import price inflation, amid expectations that international oil prices will be lower than last year.[47] In terms of domestic factors, the upward demand-side pressures will not be large, but it is forecast that service industry wages will continue their high pace of increase seen last year. Meanwhile, it is expected that the downward pressures on public service charges will continue, owing to the strengthening of welfare policies, but that the increases in some transportation service fees, on which upward pressures have accumulated over time, will work as factors pushing public service charges higher. It is forecast that housing rental prices will show trends of slowing, as a result of the increased volume of new apartment units available.

46) The IMF has forecast that the rate of increase in unit export prices of advanced countries that are highly correlated with Korean import prices will slow (2018 2.5% → 2019 1.6%).
47) Major forecasting institutions (EIA, IHS, OEF) expect that oil prices (Brent crude basis) will fall from the lower 70 dollars-to-the barrel level of last year to 60 dollars this year.

<Figure III - 1> **Percentage GDP gap**[1]



Note: 1) Jan. 2019 forecast basis.
Source: Bank of Korea.

<Table III - 2> **Inflation outlook**[1]

(%)

		2018			2019e			2020e
		Year	H1	H2	Year	H1	H2	
CPI inflation		1.5	1.3	1.7	1.4	1.2	1.5	1.6
Core Inflation	CPI excluding food & energy	1.2	1.3	1.1	1.4	1.2	1.5	1.5
	CPI excluding agricultural products & oils	1.2	1.2	1.1	1.5	1.3	1.6	1.5

Note: 1) Year-on-year; Jan. 2019 forecast basis.
Sources: Bank of Korea, Statistics Korea.

With regard to the future inflation path, there is also a mix of both upside and downside risks. The former include risks of increased cost-side pressures due to the continuation of wage hikes, and of an improvement in domestic demand in consequence of the government's policies, while among the downside risks to inflation are the possibilities of strengthened welfare policies related to education and medical services, and of Korean won appreciation due to the easing of external risks.

2. Major Considerations

The Bank of Korea will operate its future monetary policy in consideration of developments related to the uncertainties in Korea and abroad and their effects, as it closely checks to see whether growth and prices coincide with their forecast paths presented in Section 1 of Part Ⅲ, while devoting attention to financial stability as well. In this process it will also carefully monitor the US-China trade dispute, the US Federal Reserve's normalization of its monetary policy, international financial market conditions, and the risks of financial imbalance accumulation.

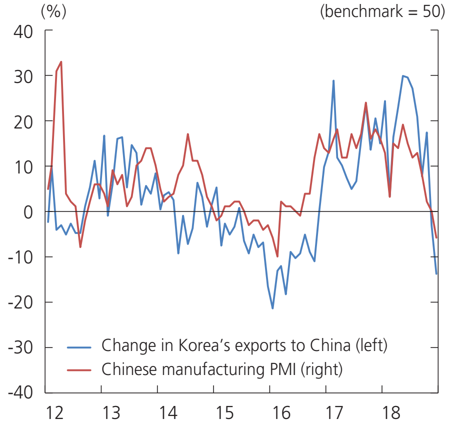
US-China Trade Dispute

The trade dispute between the United States and China is showing some signs of easing, but the related uncertainties are persisting. As concerns about the conflict continue, it is judged that some negative effects on economic indicators in the two countries as well as Korea are also appearing. The indices related to the US[48] and Chinese manufacturing sectors have fallen to large extents, and during December last year China's exports declined for the first time in nine months.[49] As the contraction in Chinese economic agents' sentiments has led to a slowdown in domestic demand, Korea's exports to China have reversed to record declines since November last year.

48) In December 2018 the US ISM manufacturing index fell to the greatest extent since the global financial crisis (59.3 → 54.1), and recorded its lowest level since November 2016.
49) The rate of increase (year-on-year) in Chinese exports was -4.4% in December 2018, and shrank for the first time since the previous March (-3.0%).

If the trade negotiations between the two countries progress going forward and enter a resolution phase, positive effects due to the easing of uncertainties can be expected, but there are many problems involved in the conflict between the two countries, related to trade and diplomacy, and the possibility of the dispute becoming prolonged can also not be ruled out. If it escalates it is likely to cause considerable burdens to world trade[50] and to Korean exports. In view of the Korean economy's high reliance on trade, it is important to devote attention to any changes in global trading conditions.

<Figure III - 2> **Korea's exports to China[1] and Chinese manufacturing PMI**

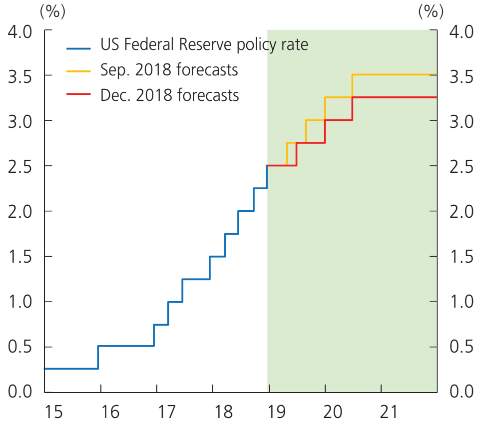


Note: 1) Year-on-year.
Sources: Korea International Trade Association, Bloomberg.

US Federal Reserve Monetary Policy Normalization

The US Federal Reserve, which has maintained a trend of policy rate hikes since 2015, has recently suggested that it will conduct its monetary policy more cautiously going forward as it monitors changes in economic conditions.

<Figure III - 3> **Forecasts for US Federal Reserve policy rate hikes**



Note: 1) Based on median values in dot plots of FOMC members' assessments from Summary of Economic Projections (upper levels of ranges in which those values fell indicated).
Source: US Federal Reserve.

If the Federal Reserve reduces the pace of its monetary policy normalization, there is a possibility that this will work as a positive factor in the Korean financial sector and economy. As the concerns ease about EME financial unrest, which had expanded until recently due to concerns about the speed of US interest rate hikes, there is a possibility that the volatilities in the international finan-

50) In its World Economic Outlook published in October last year the IMF reduced its forecasts for 2019 economic growth in the US and China by 0.2% points each from the preceding forecasts, for reasons including the US-China trade dispute, and in its outlook in January this year mentioned the uncertainties concerning trade policy as a major downside risk to the world economy.

cial markets will subside somewhat. In the domestic financial markets, if the speed of widening of the Korea-US policy rate reversal slows, the concerns related to capital outflow pressures are expected to lessen. As the rise in domestic market interest rates following the Fed's rate hikes becomes limited, it seems likely that the degree of constraints on domestic economic growth can also ease.

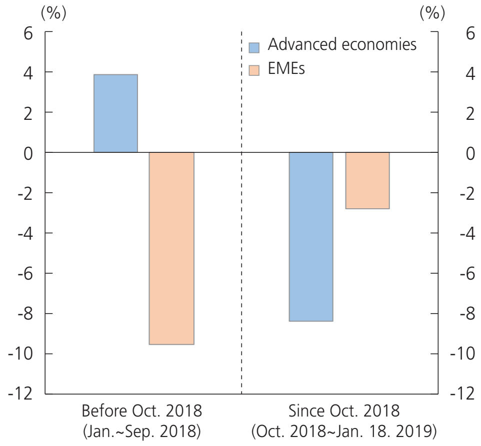
However, there are also still several factors restricting such positive effects. Since the uncertainties related to the Fed's policy remain high, there is a possibility that domestic and overseas financial market volatilities can rise again depending on its trends. Moreover, since the Fed's recent statements that it will be patient in its monetary policy decision-making are being made against a backdrop of concerns about a US economic slowdown, if the economy does in reality slow down, there is a possibility that the increase in growth due to the Fed's reduction of the speed of its monetary policy normalization will be offset to a considerable extent. There is thus a need going forward to continue closely examining financial and economic developments in the US and globally, and any changes in the Fed's policy, as well as the effects that these factors have on the domestic economy.

International Financial Market Conditions

In the international financial markets, there have been some differences in the movements of price variables and capital flows between the time before October last year and the period since then.

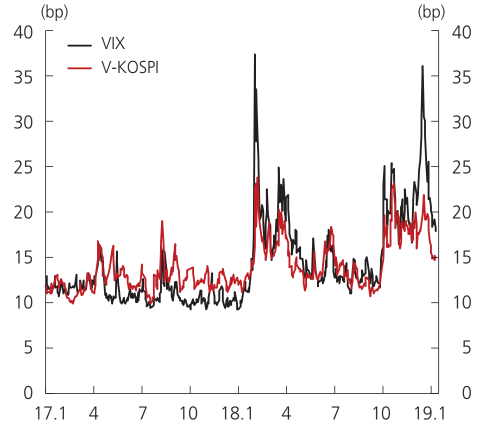
Prior to October the financial unrest in vulnerable EMEs in the process of the US Federal Reserve's monetary policy normalization was quite noticeable, while the volatility in advanced country financial markets has been greater since October last year. From October stock prices in advanced countries fell to large extents, and the stock price volatility indices reflecting market anxieties soared as well before they did subsequently ease but are still at high levels. In EMEs, in comparison, the unrest has been calming down somewhat recently, with global investment funds flowing back in and currency values rising. This appears to have been a result of the fact that, while the concerns about accelerated monetary policy normalization by the Fed had worked as a factor heightening international financial market volatility, of late the concerns about weakening growth in advanced economies including the US, which have been driving world economic growth, are being more reflected in the financial markets.

<Figure III - 4> **Changes in share price indices in advanced and emerging market economies**[1]



Note: 1) MSCI basis.
Source: Bloomberg.

<Figure III - 5> **VIX and V-KOSPI**



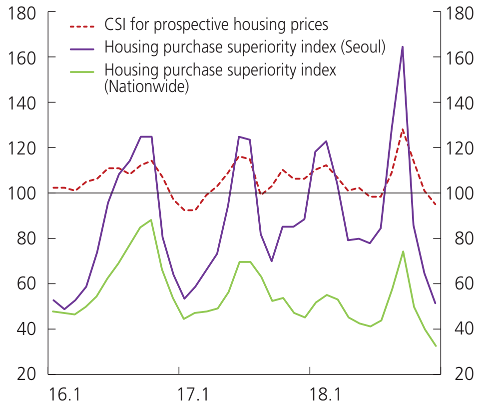
Source: Bloomberg.

International financial market volatility has been easing somewhat this year, and Korea's domestic financial and foreign exchange markets are also showing general stability. The uncertainties about external conditions remain high, however, and a careful eye will have to be kept on any changes in market conditions.

Financial Imbalances Situation

A look at the current situation of the domestic financial imbalances finds that the growth in household debt has been slowing, affected by the government's housing market stabilization measures and by the DSR regulation, and it is forecast that this will continue going forward as well. Particularly, housing prices in Seoul and the rest of its surrounding areas, which are closely related with the increase in household debt, are being forecast to remain stable for the time being. On the corporate lending side, meanwhile, the pace of growth in lending to self-employed business owners, including loans to the real estate and leasing industry, which had risen greatly, has been slowing of late under the influence of the government's regulations.

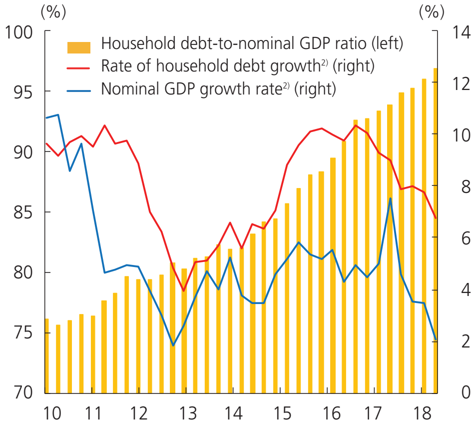
<Figure III - 6> **CSI for prospective housing prices and housing purchase superiority indices**



Sources: Bank of Korea, KB Kookmin Bank.

However, in view of the fact that the aggregate household debt level is already high, on top of which the slowdown in household debt growth is only modest due to loan demand driven by the increased supply of new housing, there is a need for observation to see whether this slowdown continues. It also appears necessary to monitor future trends of lending related to real estate. In view of these conditions, it is judged that continued attention to the risks of financial imbalance accumulation is called for.

<Figure III - 7> **Domestic household debt[1)]-to-nominal GDP ratio**



Notes: 1) Flow of funds basis.
2) Year-on-year.
Source: Bank of Korea.

3. Future Monetary Policy Operational Directions

Setting of Inflation Target for 2019 Onward

As the period of application of its 2016~2018 inflation target ended Bank of Korea, in consultation with the government, set the inflation target to be applied from 2019 onward at the level of a 2.0% (year-on-year) rate of consumer price inflation, the same as previously.

In order to enhance the stability of its system operation the Bank also did not specify the period of inflation target application[51)], while in a move to strengthen its communication it decided to publish an inflation assessment twice a year.

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 over a medium-term horizon, while also devoting attention to financial stability.

As it is forecast that the inflationary pressures on the demand side will not be high for the time being, while the domestic economy will sustain a rate of growth that does

51) During the 2004~2018 period the Bank explicitly stated that it had reset the target level, just before the expiration of three-year application period.

not diverge greatly from its potential level, the Bank plans to maintain its accommodative monetary policy stance. In this process it will closely examine the effects of the Base Rate hike in November of last year, the developments of external conditions and the resulting movements of growth and prices, and judge whether an additional adjustment in the degree of accommodation is called for. Since the uncertainties related to the global trade disputes, to the US Federal Reserve's monetary policy normalization, to financial and economic conditions in EMEs, and to geopolitical risks remain high, the Bank will carefully monitor their trends and impacts. Besides consumer price inflation, it will also closely review various auxiliary price indices, inflation expectations, international oil prices, global inflation, the GDP gap, and the spare capacities in employment and the manufacturing sector.

The Bank will in addition continue to operate its monetary policy with attention devoted to financial stability as well. The pace of household debt growth is slowing, but the Bank will watch to see whether this trend continues as it judges the possibility of the financial imbalances worsening.

Monetary Policy Effectiveness

The Bank of Korea will continue its efforts to strengthen its monetary policy communication and enhance its policy's effectiveness. Through a biannual report examining the inflation situation, which includes an assessment of inflation conditions and provides the inflation forecast and related risk factors as well as the future policy directions for achieving the inflation target, the Bank plans to heighten economic agents' understandings of inflation conditions. Moreover, in view of the uncertainties about policy conditions it will continue its efforts to communicate effectively about its policy, by steadily improving its monetary policy statement to ensure that its monetary policy intentions can be clearly conveyed to market participants.

Promotion of Financial and Foreign Exchange Market Stability

The Bank will also continue its efforts to promote the stability of the financial and foreign exchange markets. It will closely watch the developments of domestic and overseas risk factors such as the speed of monetary policy normalization by the US Federal Reserve, slowdowns in growth in major countries, and international financial market volatility. While continually examining and supplementing its scenario-based response plans, the Bank will also, when factors causing unrest appear, activate its emergency examination system and implement appropriate market stabilization measures as necessary. It will in addition heighten its capacities for responding to external shocks, by expanding its roles in international organizations and consultative bodies and working to strengthen the global and regional financial safety nets. It will also revitalize its channels for external exchanges and cooperation even further, so as to expand the multi-layered financial stability nets and ensure that the Korean economy can maintain its external soundness.

Maintenance of Financial System Stability

The Bank will closely examine the situation related to financial system stability and respond to any changes in financial and economic conditions at home or abroad, while also strengthening its capacities for the preemptive identification of risks. While keeping an eye out for any changes in potential risks related to the household debt buildup and its repayment and to corporations' financial soundness, it will carry out monitoring of the financial sector. It will moreover prepare for emergencies and maintain its systems for close cooperation with the related organizations in Korea and overseas.

BOX

III-1

Details of Inflation Target for 2019 Onward

On December 26 of last year the Bank of Korea announced its「Inflation Target for 2019 Onward」, set in consultation with the government and through a resolution of the Monetary Policy Board. A review of the details involved in the setting of the inflation target follows.

With regard to the level of the inflation target for 2019 onward, the Bank of Korea took into comprehensive account the medium- to long-term inflation level appropriate to the Korean economy as well as cases in major advanced countries, and set it at 2.0% per annum as previously. This was done in consideration of the fact that Korea's inflation and its volatility have already fallen to levels that do not differ greatly from those in advanced countries, so that the need for changing the target level is not as large as in the past. Besides this, the Bank also considered the fact that a 2.0% target level is a global standard being adopted in major advanced countries that are operating inflation targeting systems.

Average and volatility of CPI in Korea

(%, %p)

Period	Average	Volatility (standard deviation)
1990~1997	6.1	1.9
2010~2018	1.9	1.1

Sources: Bank of Korea, Statistics Korea.

The Bank also set the consumer price index as the inflation target indicator, just as before. The consumer price index has a relatively broad scope of coverage and excellent levels of public awareness and timeliness, and is therefore suitable to serve as the benchmark for expected inflation. In line with this, almost all countries that have adopted inflation targeting systems are using their consumer price indices as their indicators. Other possible indicators such as the core inflation indices and the private consumption expenditure deflator have limitations in terms of the levels of general public awareness of them and their degrees of timeliness.

A notable feature of the inflation target set this time is that the period of its application is no longer specified. This means that the target level will be maintained as it is going forward, as long as no reasons necessitating its change occur. As mentioned above, Korea's inflation level and volatility have already fallen to levels that do not differ greatly from those in advanced countries, and the needs for changing the main components of the inflation target (the target level, method of target presentation and target indicator) in the future are thus not as great as in the past. Looking at international cases also, among countries that have operated inflation targeting systems for long periods of time, cases of their maintaining periods of application are rare, and with the accumulation of system operating experience most have generally changed to methods in which application periods are not specified. Among the 26 countries that have operated inflation targeting systems for 10 or more years, 17 of them are not specifying application periods while the remaining ones are either in reality operating their application periods only formally (four countries), or experiencing continuing price instabilities (five countries). The United Kingdom, Canada, New Zealand and Australia, which introduced inflation targeting systems early, have been maintaining their core components such as the target levels unchanged during the last 10 to 20 years, and it is therefore in effect just as if there are no application periods. The other five countries (Brazil, Ghana, Turkey, etc) that are maintaining application periods are all emerging market economies which are recording relatively high inflation. With the application period not specified, as in major advanced countries, it is expected that the Korean system's stability and credibility will be raised, and expected inflation will become more firmly anchored at the target level (2.0%). Ultimately, it is foreseen that a virtuous cycle of 「heightening of system stability → anchoring of expected inflation → stabilization of actual inflation → boosting of monetary policy credibility」 will take root.

Application periods of inflation targets in major countries

Country	Application period
United States	Not specified
Euro area (ECB)	
Japan	
Sweden	
Norway	
New Zealand	Irregular[1]
Australia	
Canada	Five year[2]
United Kingdom	One year[3]

Notes: 1) Inflation targets in these countries are set in consultation between the central bank and the government when the central bank Governor or Minister of Finance is inaugurated. However, there has been no cases of changing the targets since 2002 for New Zealand and 1993 for Australia.
2) Canada institutionalized a renewal of inflation target for every five years in 2001, but there has been no cases of changing the target since 1995.
3) The Treasury department has legal rights to change inflation target every year but has maintained practices of reconfirming the target every year without changing it.

One more characteristic of the recent setting of the inflation target is the fact that communication with the public has been strengthened. The previous method of explaining the Bank's inflation targeting operations to the public based on a separate explanation responsibility[1] was applied only in special conditions, and as a result the opportunities for communication were limited.[2] However, due to the expansion in oil price volatility and the possibility that the relationship between economic activities and prices has weakened, the uncertainties as to inflation conditions and the future forecasts have grown, and in consequence the need for strengthened communication with the public has risen further. In consideration of these points, the Bank will publish from this year an inflation assessment twice a year and provide explanations of the assessment to the public through various means such as the holding of press conferences with the Governor. This strengthened regular explanation responsibility involves the same details and has the same functions as the previous separate responsibility that had been implemented only under special conditions. The report also includes an assessment of inflation conditions, the inflation forecast and related risk factors, and the future policy directions for achieving the inflation target. Through the change of the separate explanation method that had been infrequently exercised, to a method of regular explanation, it is expected that the public's degree of understanding of inflation conditions will be heightened. The Bank will review any needs for improvement of the inflation targeting framework every two years, and explain the review to the public.

1) This ensured that the responsibility for explaining inflation targeting operations to the public was executed, through press conferences with the Governor, in cases where the consumer price inflation rate had been more than 0.5% points above or below the target level for six consecutive months, and every three months subsequently in cases where the divergence had persisted even after that.
2) There were just two instances when the conditions for exercise of the separate explanation responsibility were met and it was actually exercised in July and in October of 2016.

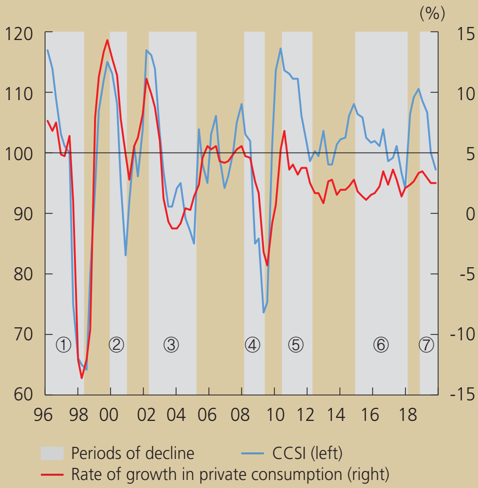
BOX

III-2

Relationship between Composite Consumer Sentiment Index and Private Consumption

The Bank of Korea's Composite Consumer Sentiment Index (CCSI),[1] announced every month, is an indicator that can capture consumers' overall perceptions of the economy and thus has a close relationship with consumption. A look at the long-term trends of the CCSI and the rate of growth (year-on-year) in private consumption finds that they generally move together.

Long-term trends of the CCSI and private consumption[1]



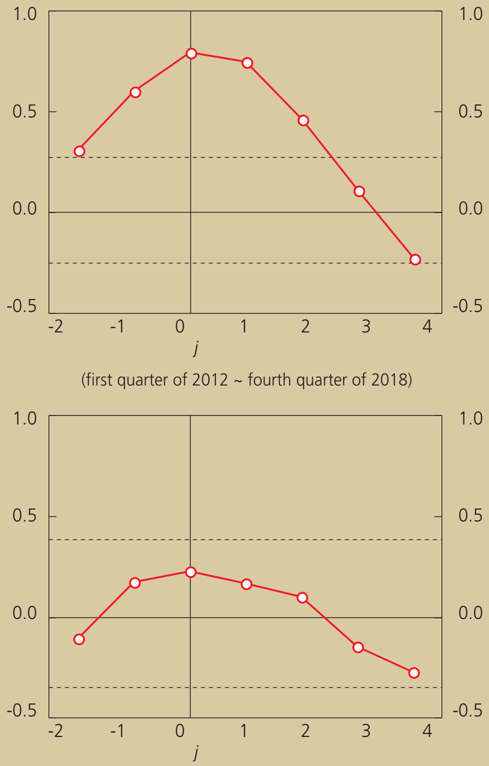
Notes: 1) Year-on-year.
2) Periods of decline refer to cases when the CCSI decreases for four quarters in a row (including the periods of temporary increase).
3) ① Asian currency crisis ② Global dot-com bubble ③ Credit card crisis ④ Global financial crisis ⑤ European debt crisis and shutdown of mutual savings banks ⑥ Sewol ferry accident and outbreak of MERs ⑦ Sluggishness in employment, drop in stock prices and US-China trade dispute.
Source: Bank of Korea.

The co-movements between the CCSI and private consumption can be confirmed through their lag correlations. Their coefficient of correlation calculated based on data from the second quarter of 1996 through the fourth quarter of 2018 is 0.75, clear evidence that the two variables move together. However, the correlation between the two has weakened somewhat since 2012, presumably as a result of the great decrease in the volatility of private consumption compared to the past, together with the decline in economic volatility.

1) The CCSI is composed of six individual consumer survey indices (CSIs), showing consumer sentiments regarding current living standards, prospective living standards, prospective household income, prospective household spending, current domestic economic conditions, and prospective domestic economic conditions.

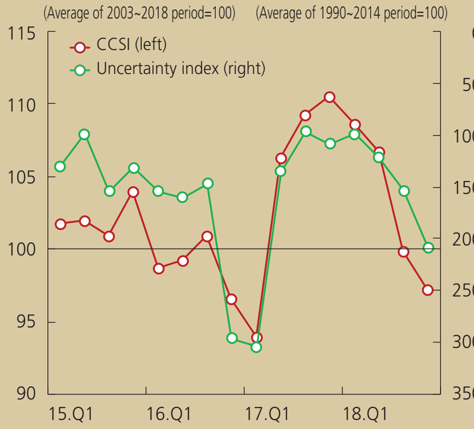
Lag correlations between the CCSI and rate of growth in private consumption[1)2)]

(second quarter of 1996 ~ fourth quarter of 2011)



Notes: 1) Correlation coefficients of the CCSI at period t and the growth rate of private consumption at period t+j.
2) Doted lines indicate upper and lower limits of the two-standard errors.
Source: Bank of Korea estimates.

CCSI[1)] and uncertainty index



Note:1) The consumer sentiment is optimistic compared to the long-term average if it exceeds 100, and negative otherwise.
Sources: Bank of Korea, Economic Policy Uncertainty.

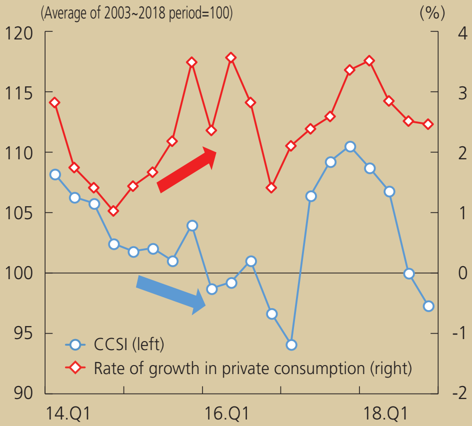
Meanwhile, differences in the directions and the extents of changes in the consumer sentiment and actual consumption trends can temporarily occur. Private consumption is directly affected by other economic variables besides consumer sentiment, including household income and employment conditions, while the sentiment index tends to react sensitively to negative news related to declines in stock prices, concerns about economic slowdown, and natural disasters. A look at Korea's economic policy uncertainty index, measuring the degree of uncertainty as reflected in news articles, shows that it moves in a way opposite to the CCSI.

Past instances of temporary discrepancies between consumer sentiment and private consumption have also been observed. While the CCSI showed a trend of decline during the period from the first quarter of 2015 to the second quarter of 2016, affected by the Sewol Ferry accident and by the outbreak of MERS, private consumption improved. In the case of the US also, after the occurrences of the stock market crash (1987 Black Monday) and Hurricane Katrina (2005), the sentiment indicators fell greatly for certain periods, but the extents of changes in real indicators were only limited.[2)]

Looking at the recent movements of consumer sentiment and private consumption, the two variables are showing similar movements in terms of their overall trends, but differences in their degrees of volatility. The CCSI, having fallen after rising greatly in 2017, has been generally below its long-term average (100) since August last year. In contrast, the rate of private consumption growth (year-on-year) fell gradually last year, owing to base effects, but the extent of its slowdown has been limited compared to that of consumer sentiment as it has generally remained at the mid-2% level or above.

2) We have referred to Consumer Sentiment and Consumer Spending, from 「Federal Reserve Bank Tealbook A」 (October 2011).

Current trends of CCSI and private consumption[1]



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

Given that the CCSI has fluctuated relatively substantially compared to real indicators since 2017, the possibility of private consumption slowing greatly in a short span of time seems less likely. Moreover, it is forecast that the government's expansion of transfer payments and policies to revitalize domestic demand will support a modest rise in consumption. There is also a need to closely examine the possibility of the slump in consumer sentiment having negative effects on private consumption, if it is prolonged due to the delayed improvement of employment conditions, the slump in business conditions of self-employed business operators, and the concerns about economic slowdowns in Korea and abroad due to the US-China trade dispute.

Contributing Departments & Authors by Section

Section	Author	
Planning & Coordinating	Monetary Policy Dept.	Chang, Cheong Soo & Choi, Yeon-Kyo Lee, Seung Han & Kim, Ji Hoon Kim, Young Woong & Oh, Jiwon (Monetary Policy Communication Team)
I. Monetary Policy Operating Conditions		
1. Global Economy	Research Dept.	Bahk, Byeong-geol & Choi, Kisan Cha, Junyeul & Kim, Soo Han (Global Economy Analysis Team)
	International Dept.	Kim, Jayoung (International Planning & Coordinating Team)
2. Real Economy	Research Dept.	Choi, In Hyup (Overall Research & Forecasting Team)
3. Prices	Research Dept.	Lim, Choon Sung & Kim, Mi Ju (Inflation Monitoring & Forecasting Team)
4. Financial and Foreign Exchange Markets	Financial Markets Dept.	Han, Jae Chan (Financial Markets Affairs Team) Jung, Woojae (Fixed Income Markets Analysis Team) Yun, Seung Wan (Equity Markets & Corporate Finance Team)
	International Dept.	Cho, Nam Hyun (Foreign Exchange Market Team)
II. Conduct of Monetary Policy		
1. Base Rate	Monetary Policy Dept.	Jo, Sungmin & Won, Young Jin (Monetary Policy Planning & Coordination Team)
	Financial Markets Dept.	Jo, Se Hyung (Market Operations Team)
2. Bank Intermediated Lending Support Facility	Monetary Policy Dept.	Park, Tongmin (Credit & Reserves Policy Team)
3. Financial Stability	Financial Markets Dept.	Han, Jae Chan (Financial Markets Affairs Team)
	International Dept.	Kim, Jayoung (International Planning & Coordinating Team)
	International Affairs Dept.	Kang, Ji Yeon (International Affairs Strategy & Coordination Team) & Choi, Mun Seong (Financial Cooperation Team)
	Payment & Settlement Systems Department	Oh, Suk-Eun (Payment Systems Policy Team)
	Financial Stability Dept.	Park, Jungmin (Financial Stability Planning & Coordination Team)
	Office of Bank Examination	Cha, Jeon Yeong (Examination Planning Team)
III. Future Monetary Policy Directions		
1. Growth and Price Forecasts	Research Dept.	Choi, In Hyup (Overall Research & Forecasting Team) Lim, Choon Sung & Kim, Mi Ju (Inflation Monitoring & Forecasting Team)
2. Major Consideration	Monetary Policy Dept.	Choi, Yeon-Kyo & Kim, Ji Hoon (Monetary Policy Communication Team)
3. Future Monetary Policy Operational Directions	Monetary Policy Dept.	Jo, Sungmin & Won, Young Jin (Monetary Policy Planning & Coordination Team)
[Box Ⅲ-1] Details of Inflation Target for 2019 Onward	Research Dept.	Jang, Hee Chang & Bang, Jun Ho (Inflation Analysis Team)
[Box Ⅲ-2] Relationship between Composite Consumer Sentiment Index and Private Consumption	Research Dept.	Lee, Jungick & Baik, Jaemin & Yoon, Hyoung Geun (Economic Activities Analysis Team)

Monetary Policy Report

Publisher Lee, Juyeol

Editor Park, Jong Seok

Published by Bank of Korea

67, Sejong-daero, Jung-Gu, Seoul, 04514, Korea

www.bok.or.kr/eng

Published on April 8, 2019

Printed by Jeil Printech Co., Ltd.

■ This material is posted on the web-site of the Bank of Korea (http://www.bok.or.kr/eng > Monetary Policy > Monetary Policy Reports)

■ Please contact Monetary Policy Communication Team, Monetary Policy Department, the Bank of Korea (Tel: +82-2-759-4676, Fax: +82-2-759-4500, Email: bokmpcm@bok.or.kr)

ISSN 2005-2707