

Monetary and fiscal policy interactions in the wake of the pandemic in Korea

Bank of Korea

Abstract

In response to the Covid-19 crisis, Korea's monetary and fiscal policies were conducted in a coordinated manner. The Bank of Korea increased the degree of monetary policy accommodation through conventional and unconventional policies, while the government increased its fiscal expansion. The policies adopted by the Bank of Korea improved financial conditions, thereby alleviating possible adverse effects on the real economy.

To prevent any blurring of the boundary between monetary and fiscal policies, the Bank of Korea implemented policies that were deemed not to bear any risk of financial losses, so as to reduce any possible impact on market resource allocation. The expansionary fiscal policy increased the fiscal deficit and government debt, but the government debt-to-GDP ratio in Korea is still at a favourable level compared with those of other major economies.

The influence of monetary policy on the exchange rate was insignificant. Depreciation of the Korean won and inflationary pressures from it are not expected for the time being, although exchange rate volatility could conceivably increase if unexpected shocks were to hit the global economy.

JEL classification: E31, E58, E63, F31.

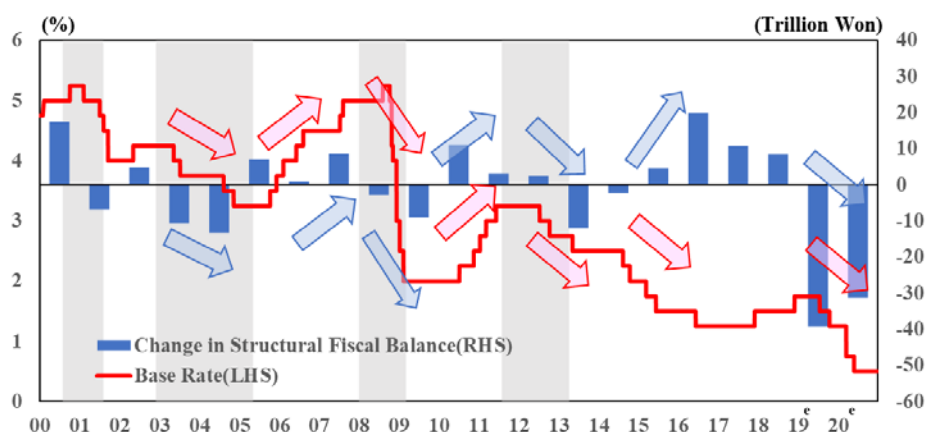
Keywords: monetary policy, policy mix, public debt, exchange rates.

1. Monetary and fiscal policy operations in Korea

Korea's monetary and fiscal policy have been implemented in a coordinated manner¹ since the start of this century. Both monetary and fiscal policies are usually implemented countercyclically. They are accommodative (expansionary) during economic downturns and tighten during economic upturns, although with one exception. Between 2015 and 2017, fiscal policy took a tightening stance to achieve a balanced budget, while monetary policy maintained an accommodative stance. In this case, the two policies worked in different directions.

Korean structural fiscal balance¹ and base rate

Graph 1



¹ Fiscal balance less changes in fiscal balance due to the business cycle. Structural fiscal balance indicates the government's discretionary fiscal policy stance. ² Shaded areas indicate recessions.

Sources: Bank of Korea; Statistics Korea; IMF.

In normal situations, monetary and fiscal policies at times take different approaches. However, in some situations, such as an economic crisis, it is necessary that the two policies are coordinated. In Korea too, coordination between the two policies strengthened during the response to the Covid-19 pandemic. The Bank of Korea significantly increased its degree of monetary policy accommodation through, for instance, Base Rate cuts, expansions of the Bank Intermediated Lending Support Facility,² and a regular full-allotment RP purchase facility.³ The government also substantially increased its degree of fiscal expansion through measures such as four rounds of supplementary budget compilations amounting to 67.7 trillion won (3.5% of GDP). In addition, the government, a state-owned bank, and the Bank of Korea together established an SPV to purchase corporate bonds, including low-credit ones, and commercial paper to support the corporate bond and commercial paper markets.

¹ The objective of monetary policy is to ensure macro-financial and economic stability, while fiscal policy is implemented in consideration of other objectives, such as the expansion of growth potential, support for vulnerable sectors, or fiscal soundness, as well as financial and economic stability. Therefore, the question of whether the two policies are either "cooperative" or "uncooperative" tends to depend mainly on the role of fiscal policy.

² The Bank of Korea finances banks at low interest rates in accordance with their SME lending performance.

³ The facility allows for the purchasing of bonds in repo (91-day) auctions once a week. Liquidity is supplied by purchasing bonds (at a fixed interest rate) in full without any auction limit.

Policy responses to Covid-19 in Korea

Table 1

	Monetary policy	Fiscal policy
March	<ul style="list-style-type: none"> • Base Rate cut (1.25% → 0.75%) • Expansion in size and interest rate cut of the Bank Intermediated Lending Support Facility • Non-regular repo purchase • Outright purchase of Treasury bonds (March ~ November) 	<ul style="list-style-type: none"> • First supplementary budget compilation (11.7 trillion won) • Stock Market Stabilization Fund
April	<ul style="list-style-type: none"> • Full-allotment RP purchase (April ~ July) 	<ul style="list-style-type: none"> • Second supplementary budget compilation (12.2 trillion won) • Special Low-rate Loans for Small Merchants • Bond Market Stabilization Fund, P-CBO⁴
May ~ July	<ul style="list-style-type: none"> • Base Rate cut (0.75% → 0.50%) • Expansion of the Bank Intermediated Lending Support Facility • Co-established an SPV to purchase corporate bonds and commercial paper with the government 	<ul style="list-style-type: none"> • Third supplementary budget compilation (35.1 trillion won) • Emergency Disaster Relief Fund (14.2 trillion won) • Emergency Employment Stabilization Subsidy • Key Industry Stabilization Fund
August ~ September	<ul style="list-style-type: none"> • Expansion of the Bank Intermediated Lending Support Facility 	<ul style="list-style-type: none"> • Fourth supplementary budget compilation (7.8 trillion won) • New Hope Fund for Small Businesses

Sources: Bank of Korea; Ministry of Economy and Finance.

In the course of policy cooperation, however, the boundary between monetary and fiscal policies has become blurred, and there are growing concerns about monetary financing. Under these circumstances, it is important that central banks stick to their principles of not bearing the risk of financial losses, and of a neutral liquidity supply that does not affect market resource allocation excessively, while making policy cooperation efforts to overcome the current crisis. With this taken into consideration, in setting up the SPV to manage purchases of corporate bonds and commercial paper, the Korean government and the state-run bank bore the risk of losses through investment and subordinated loans. In addition, purchases of the credit securities were conducted not only for the subprime bonds and paper, but also for the prime ones to reduce their influence on resource allocation.

⁴ A measure to support the issuance of corporate bonds through primary collateralised bond obligations.

SPV to purchase corporate bonds and commercial paper

Table 2

Monetary policy	
Financing structure	<ul style="list-style-type: none"> • Korea Development Bank (KDB) invested 1 trillion won. (Government invested 1 trillion won into the KDB.) • KDB made 1 trillion won of subordinated loans. • Bank of Korea made 8 trillion won of primary loans.
Eligible securities	<ul style="list-style-type: none"> • (Credit Rating) Corporate bonds: AA~BB, Commercial paper: A1~A3 • (Eligible Issuer) Firms whose interest coverage ratio is less than 100% for two consecutive years are not eligible. • (Maturity) Less than three years
Proportion to purchase by credit rating	<ul style="list-style-type: none"> • AA (including A1): more than 25% • A (including A2): about 55% • BBB or lower (including A3): less than 20%

Source: Bank of Korea.

2. Asset purchase policy

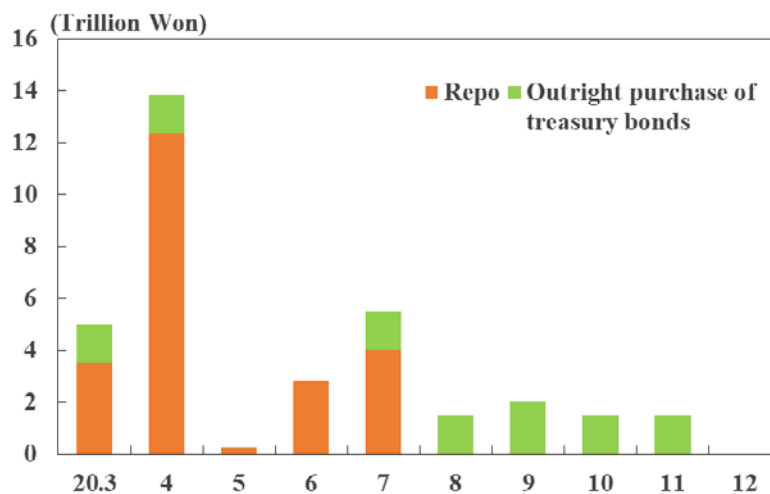
2.1 Necessity of asset purchase policy

When financial markets became unstable and the real economy contracted significantly after the outbreak of Covid-19, major central banks responded via their policy rates, and also by employing other monetary policy tools.

The Bank of Korea also made outright purchases of Treasury bonds, financing an SPV to purchase corporate bonds and commercial paper, and conducting bond purchases in a full-allotment RP purchase programme. Outright Treasury bond

BOK's treasury bond purchases and repos

Graph 2



Source: Bank of Korea.

purchases and bond purchases in repos amounted to 34 trillion won (11 trillion won and 23 trillion won, respectively) from March to December 2020, which accounted for 1.8% of Korea’s GDP. Purchases of corporate bonds and commercial paper worth 2.5 trillion won (0.4% of the outstanding amount of corporate bonds and commercial paper issuance) were made through the SPV as of end-December 2020.

The BOK’s asset purchases, however, were different from the LSAPs in major advanced countries in some respects, such as their relatively small size. Since the spread of Covid-19 and the consequent financial market unrest and real economic slump were not as serious in Korea as they were in some major economies, large-scale asset purchases were not necessary.

2.2 Effects of asset purchase programme

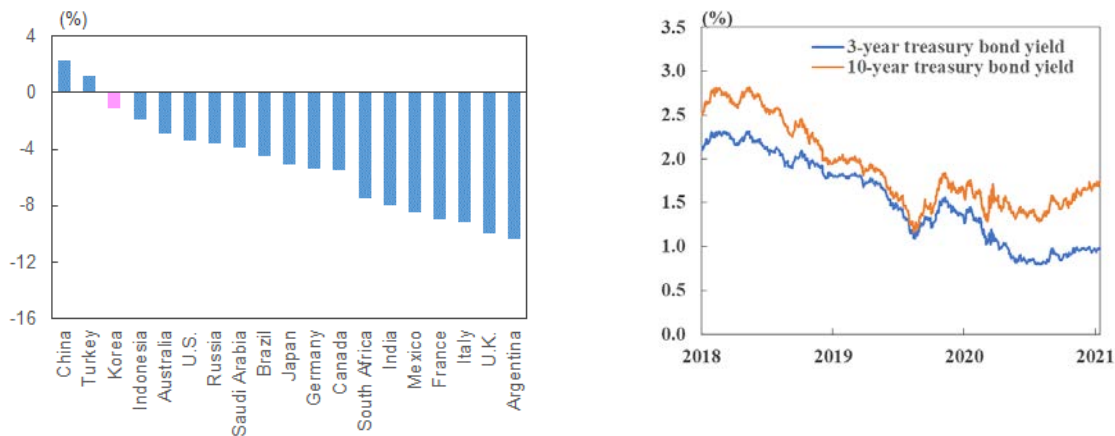
The Bank of Korea’s purchase of Treasury bonds and repos, and its introduction of a corporate bonds and commercial paper purchase programme, are assessed to have improved financial conditions, supporting the real economy. Due to the Base Rate cuts and the outright purchase of Treasury bonds, the Treasury bond yield during 2020 came down to a level below that seen in 2019. Credit spreads, which had widened sharply over a short period of time, narrowed rapidly since the Bank’s adoption of the full-allotment RP purchase programme and the corporate bonds and commercial paper purchase programme, although the spread on subprime bonds (A–corporate bonds) narrowed relatively slowly.

Growth estimates and KRW yield curve

Graph 3

G20 countries’ real GDP growth estimates

Three- and 10-year treasury bond yields¹



¹ Final quotation yields.

Sources: IMF and Korea Financial Investment Association.

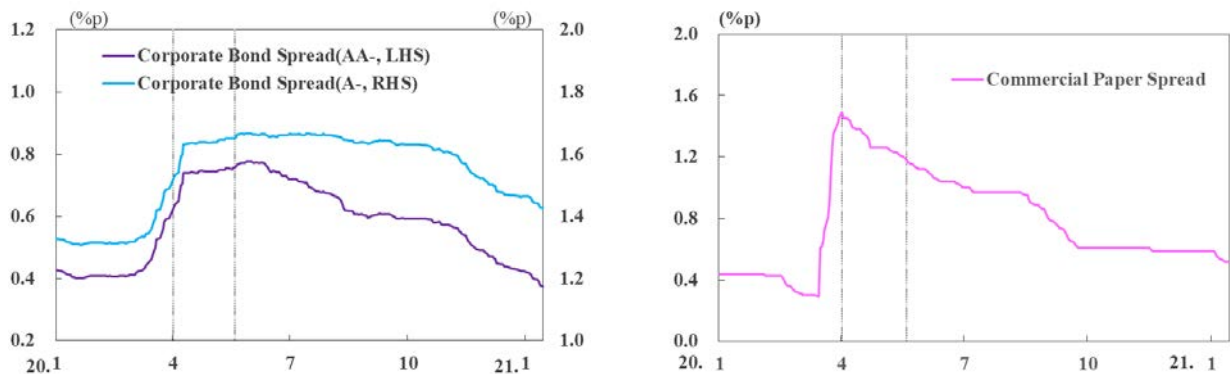
As a result, the Financial Conditions Index (FCI), indicating overall financial conditions, began to rise rapidly after hitting its lowest figure in April 2020, and has exceeded pre-Covid-19 levels since August 2020. According to a VAR analysis, the improvement in the FCI is estimated to have had a significant positive effect on the real economy, ie it reduced the negative GDP gap, which implies that if improvements in financial conditions had been delayed, Korea’s growth path would have been considerably lower than the actual outcome.

Credit spreads

Graph 4

Corporate bond spread^{1,2}

Commercial paper spread^{3,4}



¹ Corporate bond yield – treasury bond yield (three-year) ² Dotted lines indicate the start of Unlimited Liquidity Support Facility purchases (2 April) and announcement of SPV introduction (20 May). ³ Commercial paper yield (91-days) – base rate. ⁴ Dotted lines indicate the start of Unlimited Liquidity Support Facility purchases (2 April) and announcement of SPV introduction (20 May).

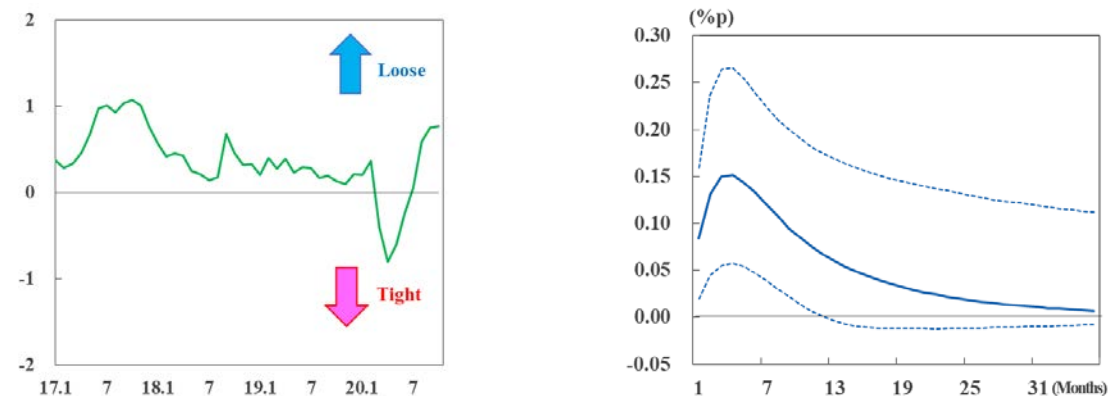
Sources: Bank of Korea; Korea Financial Investment Association.

Financial conditions and real activity

Graph 5

Financial Conditions Index¹

Response of GDP gap to Financial Conditions Index shock²



¹ Value above/below zero (long term average) indicates loose/tight financial condition. ² Response of GDP gap to one standard deviation increase of Financial Condition Index. Dotted lines indicate 68% posterior probability confidence interval.

Source: Bank of Korea and IMF.

2.3 Central bank's asset purchase programme and fiscal policy space

The stabilisation of long-term market rates due to the Bank of Korea's purchase of Treasury bonds indirectly helped to win some manoeuvring space for fiscal policy, for example, by reducing the cost of Treasury bond issuance. However, the Bank's purpose in purchasing Treasury bonds was to respond to financial market unrest, including a supply and demand mismatch in the Treasury bond market. Fiscal policy financing conditions were not a consideration. Likewise, the government's fiscal and Treasury bond issuance plan was set up in consideration of financial market and economic conditions, as well as market funding conditions, but it did not take into account the Bank of Korea's Treasury bond purchases.

3. Public debt and monetary policy

3.1 Fiscal deficit and government debt in Korea

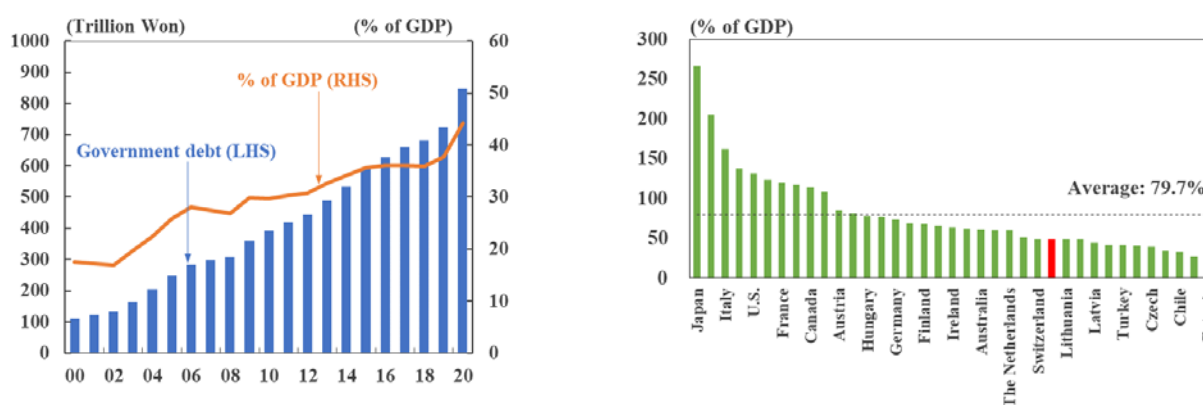
Korea's expansionary fiscal policy in response to the Covid-19 crisis greatly increased the fiscal deficit and government debt. The ratio of consolidated fiscal balance to GDP is estimated at minus 4.4% in 2020, the largest deficit ratio since 1972.⁵ Accordingly, the ratio of government debt to GDP stood at 44.2% as of the end of 2020, up by 6.5%p from the end of 2019, owing to increased issuance of government bonds. However, the expansion of the fiscal deficit and government debt last year was somewhat inevitable due to Covid-19, and the government debt ratio in Korea is still low compared with that of some major economies.⁶

Government debt

Graph 6

Korean government debt¹

OECD countries' general government debt-to-GDP ratio



Sources: Ministry of Economy and Finance and IMF (October 2020).

Meanwhile, it is necessary to manage government debt in a sustainable and stable manner from the medium- to long-term perspective, considering the need for continued fiscal support in response to the Covid-19 crisis, structural factors undermining public finance, such as the low birth rate and an ageing population, and the negative impacts of a rise in government debt. In particular, as the above-mentioned demographic factors are proceeding rapidly in Korea, concerns are growing about the increase in government debt.⁷ When government debt increases rapidly in a country heavily dependent on external trade, it could cause a downgrade in sovereign credit ratings⁸ and negative investment sentiment, thereby leading to capital outflows and to financial and FX market unrest.

⁵ The ratio of managed fiscal balance in 2020 recorded the largest deficit since the beginning of statistics publication in 1990, at minus 6.1%. (The previous lowest figure was minus 4.6% in 1998.)

⁶ The ratio of government debt to GDP in Korea is 48.4%, far below the OECD average of 79.7%.

⁷ Fiscal revenue is limited by the low birth rate, while fiscal spending, such as pensions and medical expenses, is increasing rapidly due to the ageing population.

⁸ Factors determining sovereign credit rating (Moody's): economic power, quality of institutions and governance, fiscal soundness, vulnerability to risks etc.

3.2 Impacts of fiscal policy operation on monetary policy

Korea's government debt is expected to expand this year too,⁹ due to a large amount of deficit financing. The expansionary fiscal budget is expected to work together with the accommodative monetary policy to support the economic recovery. As the volume of government bonds to be issued this year stands at 176.4 trillion won, similar to that of last year (174.5 trillion), and as the ratio of public debt to GDP in reflection of this volume still remains low compared with that in major economies, the adverse effects resulting from the issuance are relatively low. If unexpected shocks are encountered, however, causing a surge in the outstanding volume of government bonds and a rise in public debt, this could destabilise supply and demand in the government bond market and increase long-term market rates, thus limiting the effects of an accommodative monetary policy.

Meanwhile, concerning any threat of fiscal dominance,¹⁰ as Korea is fiscally sound, the Bank of Korea is not in a position to take the issue into account when conducting monetary policy. However, as mentioned earlier, there are medium- to long-term risk factors that could erode Korea's fiscal soundness, including low fertility and an ageing population. Therefore, it is necessary to keep managing government debt in a stable manner so as to prevent fiscal dominance from occurring.

4. Asset purchasing programme and the exchange rate

4.1 Effect on the exchange rate

Given the small size of the BOK's asset purchases such as the outright purchase of Treasury bonds, it is difficult to assess the precise impact of the programme on the exchange rate.¹¹ Looking at the relationship between policy rate operations and the exchange rate, however, the impact of the Bank of Korea's monetary policy on the won/dollar exchange rate has been found to be not so significant. The movements of the Base Rate and the won/dollar exchange rate over the past decade show that the relationship between the two variables is unclear, and that the correlation coefficient is low. The impact of monetary policy on the exchange rate as analysed in previous research was also found to be unclear.¹² This reflects the characteristics of small, open economies that are greatly affected by external factors, and shows that the exchange rate was affected substantially by factors other than the BOK's monetary policy, such as monetary policy in other major countries, domestic and global economic developments, and foreign exchange market soundness.

⁹ Ratio of consolidated fiscal balance relative to GDP: -4.4%e) in 2020 → -3.7% e) in 2021. Ratio of national debt to GDP: 44.2% e) at end-2020 → 47.8% e) at end-2021.

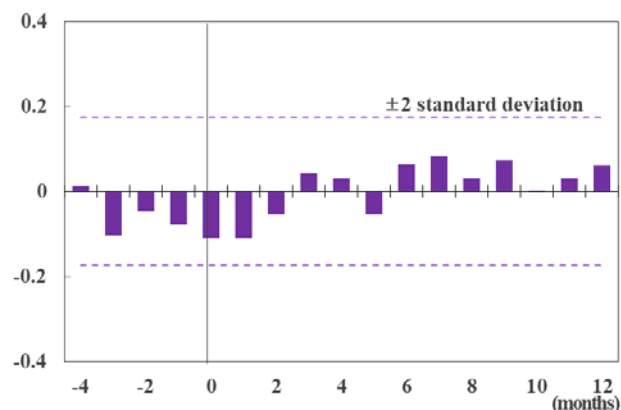
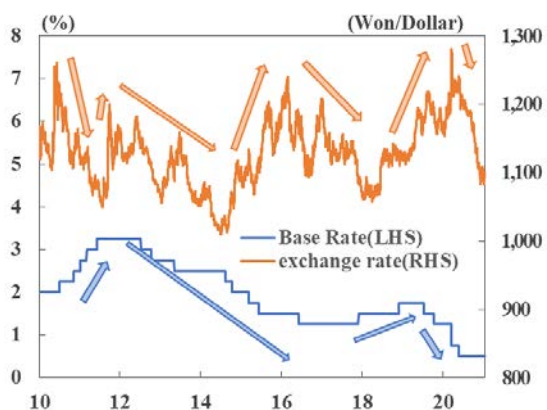
¹⁰ This is a situation where monetary policy must be kept accommodative (asset purchases and persistently low interest rates) due to the excessively elevated level of public debt (Turner (2011)).

¹¹ According to BIS (2019) and Arslan et al (2020), large-scale asset purchase programmes generally push the exchange rate down, and have a greater exchange rate impact in countries with a higher proportion of foreign investors in their bond markets.

¹² According to Aum (2013), and Shin (2019), the impact of short-term interest rate differentials on the exchange rate was estimated to be either insignificant or contrary to the theory.

Base rate and won/dollar exchange rate

Cross correlation between base rate and won/dollar exchange rate¹



¹ Cross correlation between Δ base rate and Δ won/dollar exchange rate.

Source: Bank of Korea.

4.2 Exchange rate and inflation risk

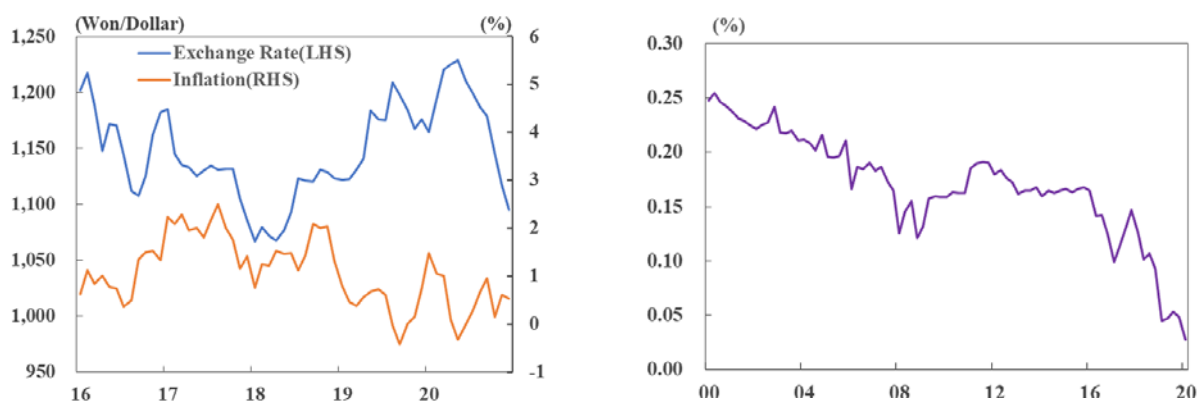
In the BOK’s view, a won depreciation is not likely to lead to domestic inflationary pressures for the time being. First, the won/dollar exchange rate soared in the early days of the Covid-19 pandemic (in March 2020), but then fell back rapidly afterward, to remain below the pre-Covid level recently. In the current year, the exchange rate is still unlikely to rise sharply, as major central banks will maintain their accommodative monetary policies, and as the current account surplus and foreigners’ domestic investments are expected to continue in line with an economic recovery. The exchange rate pass-through to inflation is also assessed to be far lower than in the past, due to stronger global competition and continued low inflation.

Table 3

	21.1Q	21.2Q	21.3Q	21.4Q
Investment banks’ won/dollar exchange rate projections (median of 35 IBs’)	1,080	1,078	1,064	1,050

However, it needs to be noted that exchange rate volatility could increase, should the global economy fall back into recession if vaccines turn out to be less effective than expected, or if the Federal Reserve changes its monetary policy stance earlier due to a faster-than-expected recovery in the US economy.

Won/dollar exchange rate and inflation rate

Exchange rate pass-through to inflation¹

¹ Long-term pass-through.

Sources: Bank of Korea; Statistics Korea.

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