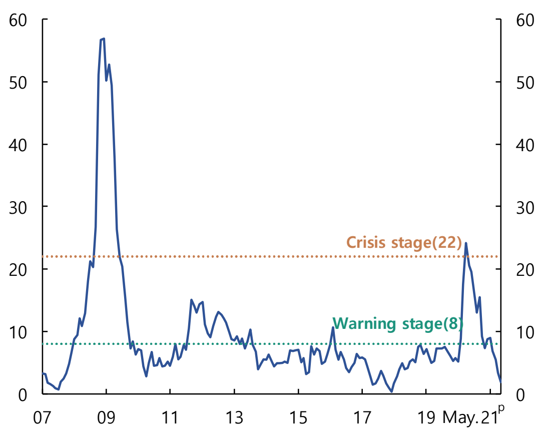
Unofficial translation

Please refer to the original report in Korean for the most accurate contents.

Overview

Since the second half of last year, Korea's financial system has remained generally stable. Despite signs of resurgence of COVID-19, the Korean financial markets remained calm due to heightened expectation for economic recovery, with the financial intermediary function working well. The Financial Stability Index (FSI), showing overall financial system conditions, reached the crisis stage temporarily in April but continually decreased thereafter to stand at 1.8 (preliminary) in May, standing below the warning stage threshold (8.0).

Financial Stability Index (FSI)[1)2)]



Notes: 1) A composite index (0-100) calculated by standardizing 20 monthly real and financial sector indicators related to financial stability. The warning and crisis stage thresholds are set at 8 and 22 respectively, using the "noise-to-signal ratio" method.
2) Preliminary figures for April and May 2021.
Source: Bank of Korea.

A look at financial stability conditions by sector shows that in the credit markets, private credit continued to grow at a fast pace as both households and firms increased borrowing, whereas the nominal GDP growth rate remained low, resulting in a steep rise in the private credit-to-nominal GDP ratio. Households' debt repayment burden worsened, due to an increase in household credit led by increased home mortgage loans and leasehold deposit(*jeonse*) loans, with the growth rate of household disposable income having been remained low. Corporate credit also showed sustained expansion, as demand for financing increased amid the prolonged pandemic. Although corporate sector's overall financial conditions have improved, the disparity among the debt servicing capacities of corporations widened. Meanwhile, delinquency rates of household and corporate loans have both continued to remain low, but insolvency risk could escalate going forward, particularly in vulnerable areas of both household and corporate sectors, should multispeed and incomplete recovery take place among sectors and industries.

In the asset markets, stock prices rose amid elevated long-term market rates, with investors' risk appetite and search for yield, while housing sales prices continued to increase rapidly. Long-term market rates have risen quite substantially driven by expectation for domestic economic recovery and by concerns over supply of Treasury bonds, whereas corporate bond credit spreads generally remained stable. Domestic stock prices have been hiked significantly by improved key economic indicators at home and abroad and by retail investors' active stock purchases. Although the increase rate of housing prices slowed modestly due to the announcement of government's housing supply policy, it continued to rise at a rapid pace. Close attention must be paid to the fact that, despite the spread of the virus, asset prices have been showing a steep increase particularly in the real estate market, driven by rising risk appetite and search for yield. Looking at the asset prices in consideration of economic fundamentals, the prices of certain assets including real estates are estimated to have been considerably overvalued. Moreover, the growing speculative demand for crypto assets and their sharp price hike, with their economic value being unclear, imply that risk appetite in asset markets are rising, increasingly disconnected from economic fundamentals.

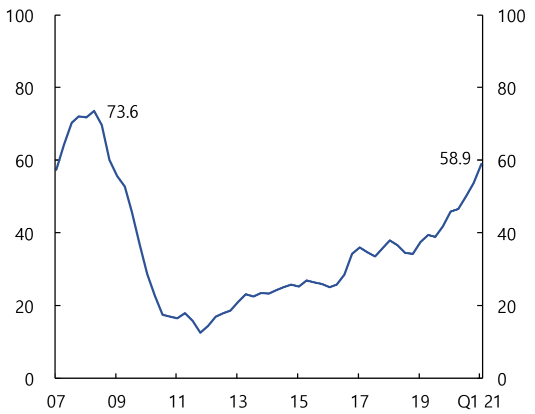
With regard to financial institutions, commercial banks' asset quality and profitability both remain solid. The asset soundness and profitability of institutions'(NBFIs) have improved amid sustained growth in assets. However, financial institutions' soundness indicators such as delinquency rates could deteriorate, should the government start to wind down their financial support.

As for foreigners' portfolio investment, stock investment has recorded a net outflow between January and May this year, while bond investment has posted a large net inflow. Foreigners' portfolio investment, particularly stock investment, could show escalated volatility going forward, driven by concerns over overvaluation in domestic stocks and inflation in major countries. In the meantime, residents' overseas portfolio investment increased significantly, particularly in stocks, owing to a rise in stock prices in advanced economies and in risk appetite.

The financial system's resilience, i.e. its capacity to withstand domestic and external shocks, has remained favorable, with financial institutions' capital ratio and liquidity ratio exceeding the regulatory standards. While financial system is expected to remain resilient going forward, a close attention should be paid to borrower's credit risk being affected by developments in economic recovery and market rate movements, possibly deteriorating financial institutions' resilience. The nation's external payment capacity has remained stable as official foreign reserves recorded historical high.

Looking at the situation more broadly, the Korean financial system has been stable, with prudent financial markets, resilient financial institutions and smooth financial intermediary function backed by robust external payment capacity. However, financial imbalance has been escalating driven by expanded private sector leverage, heavy flows of fund into asset markets and asset price hikes, causing a rise in potential vulnerability within the financial system in medium- to long-term horizon. The financial vulnerability index (FVI)[1), an indicator of overall financial system vulnerability, sustained its upward trend, rising from 41.9 before the outbreak of COVID-19 in the fourth quarter of 2019 to 58.9 in the first quarter of 2021. If the financial imbalance that has been building up so far further expands without being adequately managed, any external or internal shocks going forward could lead to greater financial and economic repercussions. Amid continuing uncertainties surrounding COVID-19 including emergence of variants, if the financial markets at home and abroad should face expanded volatility from, for instance, concerns about global inflation, investors' risk appetite could severely contract and cause adverse effects. Going forward, policy responses should be strengthened to target the rate of increase in private debt, financial institutions' asset quality management and asset market stability.

Financial Vulnerability Index (FVI)[1)]



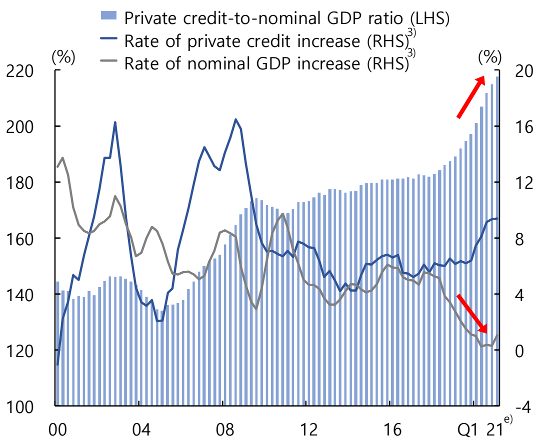
Notes: 1) A composite index (0-100) calculated by standardizing 39 indicators concerning three criteria for assessment (asset prices, credit accumulation and financial system resilience).
Source: Bank of Korea.

Financial Stability Situation by Sector

Ⅰ. Credit Markets

1 The private credit-to-nominal GDP ratio, an indicator of the level of private sector leverage, stood at 216.3% (estimated) at the end of the first quarter of 2021, showing a sharp rise of 15.9%p from the same period of last year. Private sector's demand for funds expanded owing to households' increased demand for housing-related loans and corporates' effort to secure funds in response to economic uncertainty, while nominal GDP growth rate remained weak.

Private credit[1)]-to-nominal GDP[2)] ratio



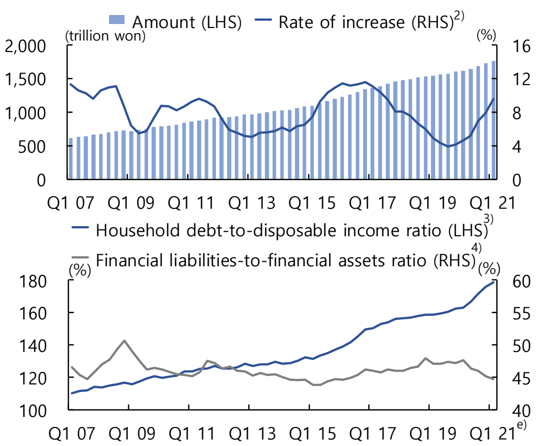
Notes: 1) Estimated figures for Q1 2021.
2) Sum of nominal GDPs in quarter concerned and immediately preceding three quarters.
3) Year on year basis.
Source: Bank of Korea.

1) For further detail regarding the FVI, please refer to Box I. Establishment of Financial Vulnerability Index (FVI) and its Implications (p.107).

2 Household debt (household credit statistics basis) increased by 9.5% year on year to record 1,765.0 trillion won at the end of the first quarter of 2021, showing a continued high rate of growth. The household debt-to-disposable income ratio stood at 171.5% (estimated) at the end of the first quarter of 2021, a rise of 11.4%p from the same period of last year (160.1%), indicating a significant increase in debt servicing burden for households. The financial liabilities-to-financial assets ratio (flow of funds statistics basis), however, dropped by 2.9%p to 44.7% (estimated) at the end of the first quarter of 2021 from a year earlier (47.6%), due to the rise of stock prices.

Although the delinquency rate of household loan remains low, the default risk of particularly vulnerable households may increase if the economic recovery is differentiated by sector and industry in the future.

Household credit[1)]



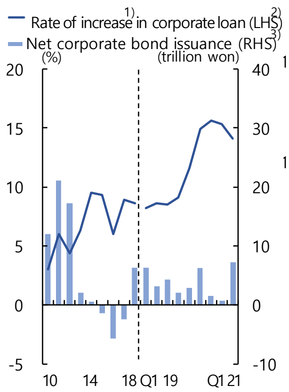
Notes: 1) Household credit statistics basis.
2) Year on year basis.
3) Disposable income for Q1 2021 is estimated using the average of the household disposable income-to-gross national income ratios for the immediately preceding three years.
4) Based on flow of funds statistics; estimated figure for Q1 2021.
Source: Bank of Korea.

3 Corporate credit has continued to increase as corporate demand for funds soared affected by prolonged COVID-19 pandemic, while net issuance of corporate bonds and CP also continued to increase. Corporate loans increased substantially by 14.1% to 1,402.2 trillion won at the end of the first quarter of 2021 from the same period last year. By company size, the growth rate of loans to small and medium-sized enterprises (SMEs) accelerated driven by demand for operating funds, while that of loans to large enterprises dampened owing to increased funding through direct financial markets as stock price rises.

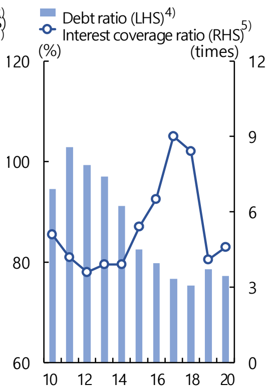
Corporate financial soundness has improved, but the debt servicing capacity differs more widely across corporations. Despite the increase in corporate borrowing, the overall corporate debt ratio (debt/equity) at end-2020 dropped to 77.2% from 81.1% in the first half of 2020, driven by corporate efforts to expand capital buffers. The interest coverage ratio (operating income / total interest expenses) rebounded in the second half of 2020 (3.4 in H1 to 5.4 in H2). However, the share of companies with debt ratio exceeding 200% increased relative to the first half, indicating that the gap in financial soundness among companies was widened.

Attention should be given to the possibility of the potential credit risk materializing particularly for vulnerable companies, should the recovery in corporate performance be delayed due to uncertainties over the pandemic situation or the escalation of US-China tensions.

Corporate credit



Corporate financial soundness



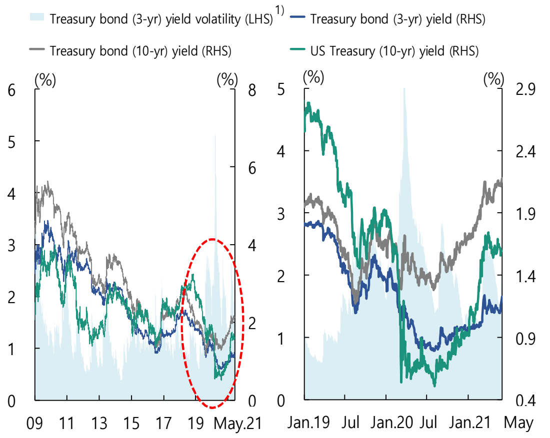
Notes: 1) Based on deposit-taking banks and non-bank financial institutions (mutual credit cooperatives, mutual savings banks, insurance companies and credit-specialized financial companies); corporate loans by NBFIs for certain periods or sectors include loans to financial or insurance businesses, due to the limited availability of data.
2) Year on year basis.
3) During the quarter (since 2019).
4) Debt / Equity; end-period basis.
5) Operating income / Total Interest expenses.

Sources: Bank of Korea, Korea Securities Depository, KIS-Value, financial institutions' business reports.

Ⅱ. Asset Markets

1 Treasury bond yields rose considerably, affected by the expectations for domestic and overseas economic recoveries and concerns about an excess Treasury bond supply.

Korean and US Treasury bond yields

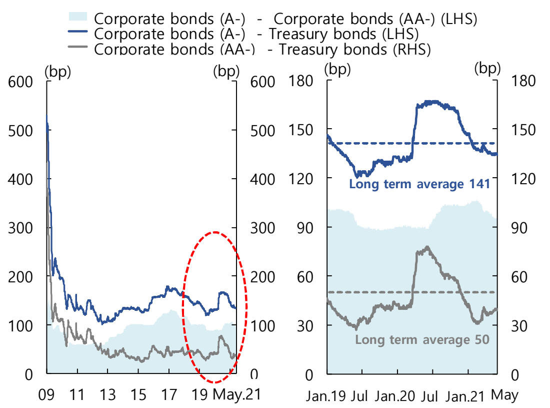


Note: 1) Daily volatility calculated using exponential weighted moving average (EWMA) method.

Sources: Korea Financial Investment Association, Bloomberg.

Corporate bond credit spreads, widened slightly in mid-March, due to the increased volatility in Treasury bond yields, but has narrowed afterwards hovering below the long-term average.

Corporate bond credit spreads[1)2)], and spread across credit ratings

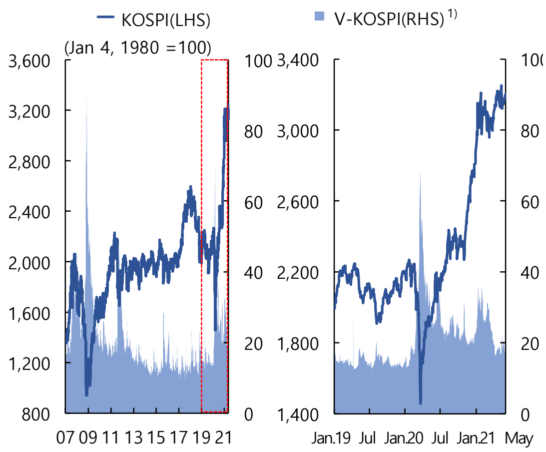


Note: 1) 3-year maturity basis.
2) The long-term average is for the period between January 2010 and May 2021.

Sources: Korea Financial Investment Association.

2 The domestic stock market underwent a correction after a steep rally earlier this year, led by caution against short-term price hikes and by the increase in the US equity price volatility. Stock prices bounced back afterwards, driven by the US additional stimulus package, and expectations for improvement in domestic and overseas economic indicators and corporate performance following the progress in COVID-19 vaccinations. The stock price volatility index (V-KOSPI) rose in line with a heightened external risk, but then stabilized gradually after March falling close to the pre-COVID-19 level of early 2020.

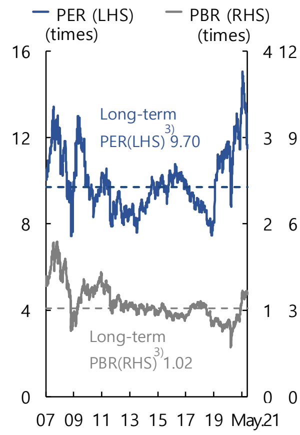
Stock price and stock price volatility indices

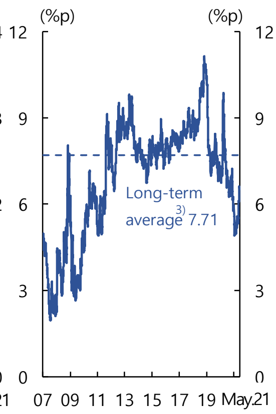


Note: 1) Volatility index calculated based on prices for options on the KOSPI200 index.
Source: KOSCOM.

The price-earnings ratio (PER), showing the level of a firm's stock price relative to its profit, stood at 11.48 as of end-May, remaining above its long-term average (9.70 since 2010). The price-to-book value ratio (PBR), indicating a firm's stock price level relative to its liquidation value, surpassed its long-term average (1.02) at 1.21. As investors' risk appetite increased in the stock market, the equity risk premium declined rapidly to 6.53%p as of end-May, remaining below the its long-term average (7.71%p).

PER[1] and PBR[2] **Stock risk premium[4]**





Notes: 1) MSCI basis (12-month forward).
2) KOSPI basis.
3) Long-term average in the January 2010-May 2021 period.
4) Earnings-price ratio (the inverse of 12-month-forward PER based on the MSCI) - Treasury bond yield (10-yr).
Sources: Bloomberg, Refinitiv.

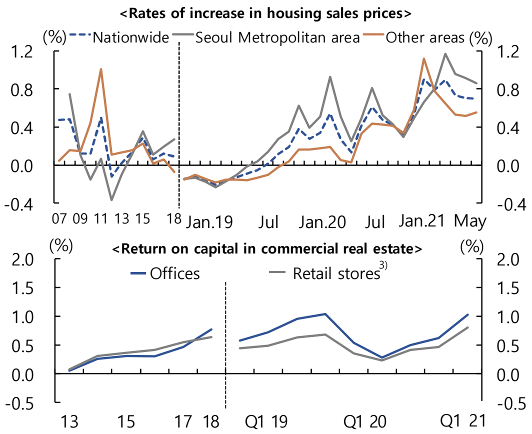
3 Housing sales prices rose at a slightly slower pace entering this year, affected mainly by the government's housing market stabilization measures. However, they continue to show an uptrend, driven by concerns about a mismatch between supply and demand and expectations for further price rises.

Leasehold deposit(*jeonse*) and monthly rental prices, which soared in the second half of 2020, slowed sharp rises due to seasonal factors. However, factors pushing up the prices still remain, such as the reduced number of new apartment units supplied and the demand for new houses in the third new town in Seoul metropolitan area.

In the commercial real estate market, the price growth accelerated led by fund inflows, and the transaction volume continued to increase, despite falling in rental income resulting from declining rental prices and increasing vacancies.

It should be noted that fund flows into the real estate market and a continued rise in real estate prices could expand financial imbalances and undermine financial stability in the event of a domestic or overseas shock.

Rates of increase in housing purchase prices[1] and rates of increase in commercial real estate price[2]



Notes: 1) For 2018 and earlier, annual average of monthly growth;
2) Quarter-on-quarter rate of increase in asset value reflecting changes in land and building prices. For 2018 and earlier, annual average of quarterly growth.
3) Medium- and large-sized property basis.

Sources: Korea Real Estate Board, Ministry of Land, Infrastructure and Transport.

Ⅲ. Financial Institutions

1 The financial soundness of commercial banks remained generally solid, in terms of both their profitability and asset soundness.

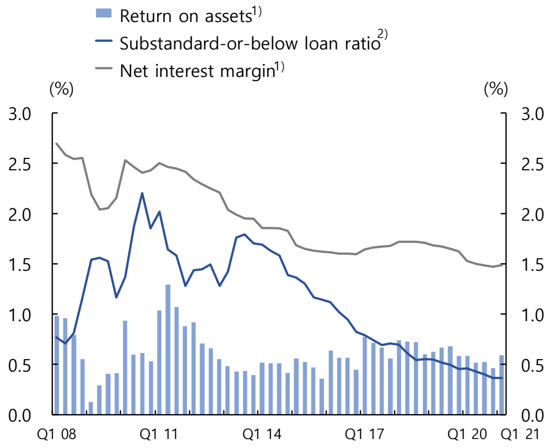
Commercial banks' total assets continued to grow rapidly to 1,989 trillion won in the first quarter of 2021, up by 8.0% year on year.

Their asset soundness continued to improve with the substandard-or-below loan ratio falling to 0.36%, due to the Base Rate cuts and financial support measures such as maturity extensions and loan the deferral of principal and interest repayment.

Commercial banks' profitability improved modestly led mainly by the increase in their interest income. In addition to the positive growth in their net income, their return on assets (ROA) was up 0.01 %p in the first quarter of 2021 from the same period of last year (0.58%) to stand at 0.59% (annualized).

There is the possibility that banks' asset soundness indicators could deteriorate as the government's financial support measures are normalized going forward.

Commercial bank asset soundness and profitability



Notes: 1) Accumulated quarterly incomes annualized.
2) End-period basis.
Sources: Commercial banks' business reports.

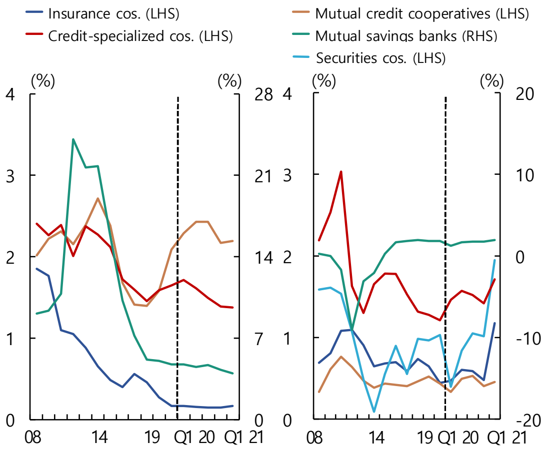
2 The financial soundness of NBFIs remained favorable as both their asset soundness and profitability improved.

NBFI's assets continued to grow, recording 3,163 trillion won at the end of the first quarter of 2021, up by 7.5% year on year. Mutual savings banks' assets showed particularly high growth at 26.2% year on year.

In terms of the asset soundness, most sectors saw their delinquency rates and substandard-or-below loan rates decline year on year, mainly in mutual savings banks and credit-specialized financial companies.

The profitability improved significantly in all NBFI sectors including securities companies, mutual savings banks, and insurance companies. The major drivers were the increase in brokerage fees for securities companies, improved loan-to-deposit margins and the decline in loan loss provision expenses for mutual savings banks, and the decline in loss ratio and the easing of reserve requirement for insurance companies.

NBFI substandard-or-below loan ratios[1)2)] **NBFI return on assets (ROAs)**[2)3)]



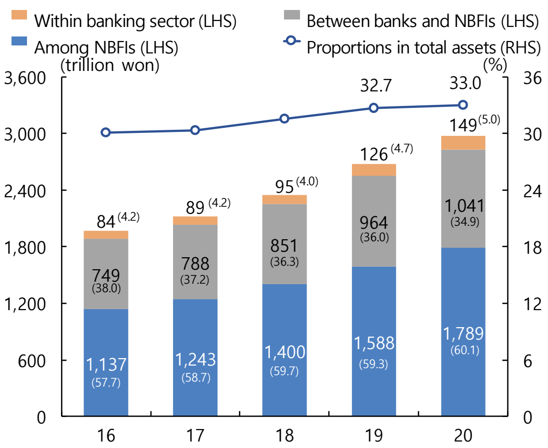
Notes: 1) End-period basis, excluding securities cos.
2) For 2019 and earlier, annual basis;
for 2020 onward, quarterly basis.
3) Accumulated quarterly incomes annualized.
Sources: Financial institutions' business reports.

3 Financial institutions' interconnectedness through their funding and operations has strengthened. Mutual transactions among financial institutions amounted to 2,979 trillion won at the end of 2020, representing an increase of 11.2% compared to the end of last year. Mutual transactions accounted for 33.0% of the total assets of the overall financial sector, up by 0.3%p from the same period of last year (32.7%).

Looking at mutual transactions across financial sectors, those among banks grew by 18.1% from the same period of last year, showing the fastest growth. Mutual transactions among NBFIs grew by 12.7%, and those between banks and NBFIs increased by 8.0%. As a result, the proportions of mutual transactions within the banking sector of total mutual transactions went up from 4.7% at the end of 2019 to 5.0% at the end of 2020, those within the NBFI sector from 59.3% to 60.1%, while those between the banking and NBFI sectors dropped from 36.0% to 34.9%.

Analyzing the default contagion and concentration risks based on the structure of mutual transactions across financial sectors, the contagion risk increased from the end of last year, while the concentration risk maintained a similar level.

Current status of mutual transactions among financial institutions and across sectors[1)2)]



Notes: 1) End-period basis (flow of funds statistics).
2) ( ) indicates proportions in total amount of mutual transactions.
Source: Bank of Korea.

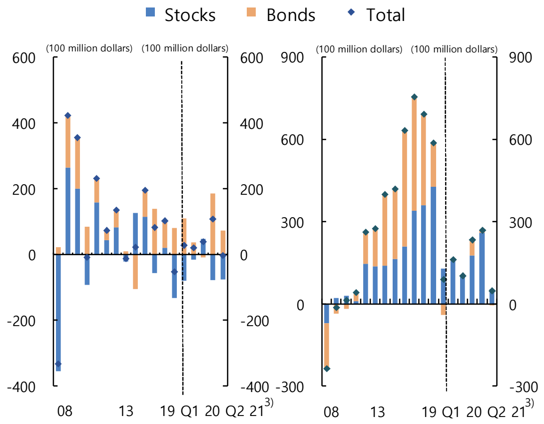
Ⅳ. Capital Flows

From January to May 2021, foreigners' domestic portfolio investment showed a net inflow of 10.5 billion dollars (-15.5 billion dollars for stocks and 26.0 billion dollars for bonds). Foreigners' stock investment recorded a net outflow as they sold stocks for a gain due to rising domestic stock prices. However, foreigners' bond investment registered net inflows on a large scale driven by public funds.

Going forward, foreigners' domestic portfolio investment is expected to record continuous inflows in terms of bond investment. However, volatility of stock investment flows could expand depending on changes in market expectations regarding the Fed's monetary policy stance.

The increase of residents' overseas portfolio investment was led by stocks, on the back of rising stock prices in advanced economy stock markets. The amount of rise came to 31.6 billion dollars (31.3 billion dollars for stocks and 300 million dollars for bonds) between January and April 2021, representing a sharp year on year increase.

Changes in foreigners' domestic portfolio investment[1] | Changes in residents' overseas portfolio investment[2]



Notes: 1) A "+" means net inflow, and a "-" net outflow.
2) A "+" means net investment, and a "-" net withdrawal.
3) Changes in foreigners' domestic portfolio investment is based on April-May; changes in residents' overseas portfolio is based on April.
Source: Bank of Korea.

Resilience of Financial System

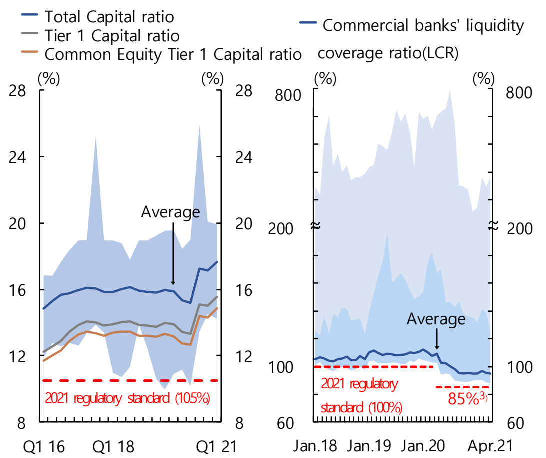
I. Financial Institutions

1 Commercial banks' resilience remained generally solid, with their capital adequacy and liquidity ratios exceeding the regulatory standards.

Commercial banks' total capital ratio and Common Equity Tier 1 Capital ratio under Basel III, indicative of their loss absorption capacities, amounted to 17.65% and 14.85% at the end of the first quarter of this year, up by 0.50%p and 0.57%p, respectively compared to the end of last year.

Commercial banks' liquidity coverage ratio (LCR), measuring the ability to respond to sudden net outflows of funds, declined slightly by 0.2%p from the end of last year to reach 94.9% at the end of April 2021. The decrease was attributable to a rise in net cash outflows affected by an increase in standby money held by corporations and other financial institutions. When the mitigation of liquidity regulations are lifted going forward, the reduction in banks' lending capacities and the rise in funding costs are likely to act as risk factors.

Commercial bank total capital ratios | Commercial bank liquidity coverage ratios (LCRs)[1)2)]



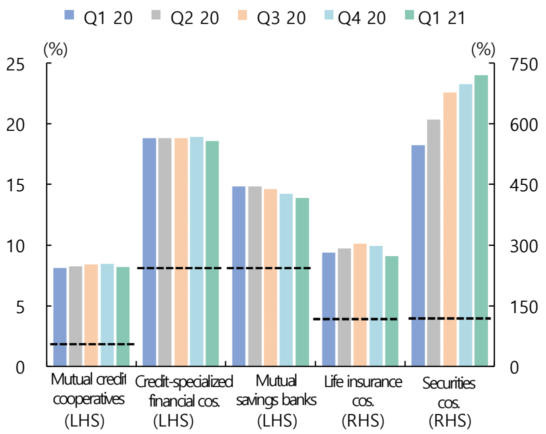
Notes: 1) The shaded area indicates the distribution of individual banks, and the deep shaded area indicates distribution with Internet-only banks excluded.
2) High-quality liquid assets / Total net cash outflows over next 30 calendar days.
3) 85% for a limited period from April 2020 to September 2021
Sources: Commercial banks' business reports.

2 The resilience of NBFIs remained favorable as well, with their capital adequacy ratio exceeding the regulatory standards in all sectors.

The net capital ratio of securities companies moved up by 21.3%p from the end of last year to reach 719.9% at the end of the first quarter of 2021. Meanwhile, capital adequacy ratios of other NBFIs fell to some extent. The risk-based capital ratio (RBC ratio) of life insurance companies declined by 24.1%p compared to the end of last year to stand at 273.2%. Mutual savings banks' equity ratio and credit-specialized financial companies' adjusted equity ratio dropped by 0.3%p from the end of last year to come to 13.9% and 18.6%, respectively. The net capital adequacy ratio of mutual credit cooperatives also fell by 0.2%p from the end of last year to reach 8.2%.

We should remain vigilant against the possibility that the expansion in financial market volatility and the deterioration in debt servicing capacities of vulnerable borrowers could undermine NBFIs' resilience.

NBFI capital adequacy ratios[1)2)]



Notes: 1) Mutual credit cooperatives' net capital ratio (supervisory standard 2%; 4% for MG community credit cooperatives and 5% for NongHyup), credit-specialized financial companies' adjusted capital ratio (7%; 8% for credit card companies), mutual savings banks' BIS capital ratio(7%; 8% for banks with total assets of 1 trillion won or more), insurance companies' risk-based capital ratio(100%), securities companies' net capital ratio (100%).
2) The dotted lines show the supervisory standards.
Sources: Financial institutions' business reports.

II. External Payment Capacity

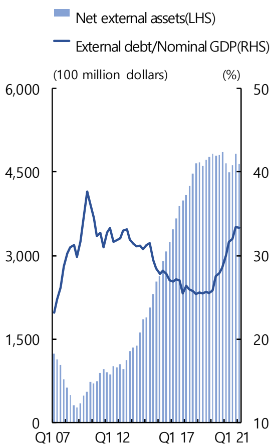
Korea's external payment capacity stayed generally favorable.

Official foreign reserves recorded an all-time high at 456.5 billion dollars, while net external assets fell modestly year on year (-1.0 billion dollars).

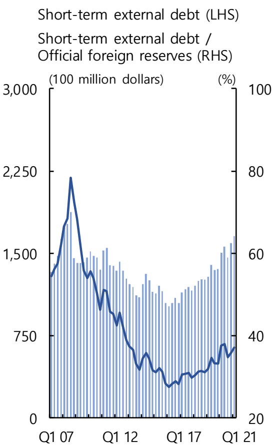
The ratio of external liabilities relative to nominal GDP rose year on year. As this is due mainly to the growth in foreigners' domestic bond investment, the soundness of our external debt is regarded as solid overall. The ratio of short-term external debt to official foreign reserves decreased slightly year on year from 37.6% to reach 37.1% at the end of the first quarter of 2021.

Meanwhile, although Korea's short-term external debt has been on the rise, it is not judged to be a concerned situation in terms of external debt soundness. However, as the external debt could increase further in the future, it is necessary to carry out continuous monitoring of related developments.

External debt-to-nominal GDP ratio[1)]



Short-term external debt-to-official foreign reserves ratio[1)]



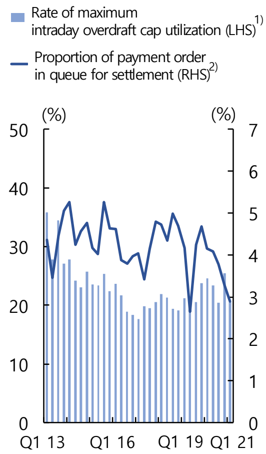
Note: 1) End-quarter basis.
Source: Bank of Korea.

III. Financial Market Infrastructures

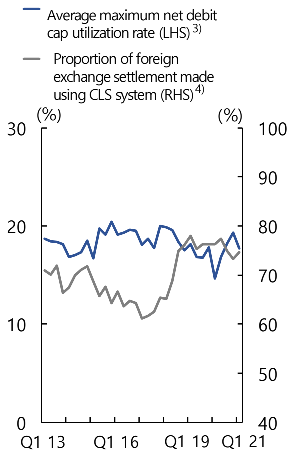
Despite the prolonged COVID-19 pandemic, the major payment and settlement systems including BOK-Wire+ have been operated smoothly, with settlement risks managed stably amid a steady increase in the amount of settlement, driven mainly by securities settlements by financial institutions and electronic funds transfers by general customers and companies.

The rate of maximum intraday overdraft cap utilization and the proportion of payment orders in queue for settlement, both of which are monitored as indicators of the settlement liquidity of BOK-Wire+ participants in the nation’s large-value settlement system, remained generally stable to stand at 20.5% and 2.9%, respectively, during the first quarter of 2021. The net debit cap utilization rate, showing settlement risks related to the retail payment systems operated by Korea Financial Telecommunications & Clearing Institute, was also favorable at 17.7%. Meanwhile, the share of settlements handled by the CLS payment-versus-payment system, which reduces settlement risk effectively through the settlement of foreign exchange transactions without any time lag, maintained a high level of 74.7% in the first quarter of 2021.

Large-value payment system



Retail payment and foreign exchange settlement systems



Notes: 1) Average of daily maximum intraday overdraft cap utilization rates of participants.
2) Average ratio of the amount of payment orders in queue for settlement / Total settlement amount of participants. (excluding payment orders in queue for liquidity savings).
3) Simple average of daily maximum net debit cap utilization rates (unsettled net debits / net debit caps) of participants during the quarter.
4) Proportions in total CLS eligible FX transactions of those settled through CLS system, transactions made by domestic banks and foreign bank branches.
Source: Bank of Korea.