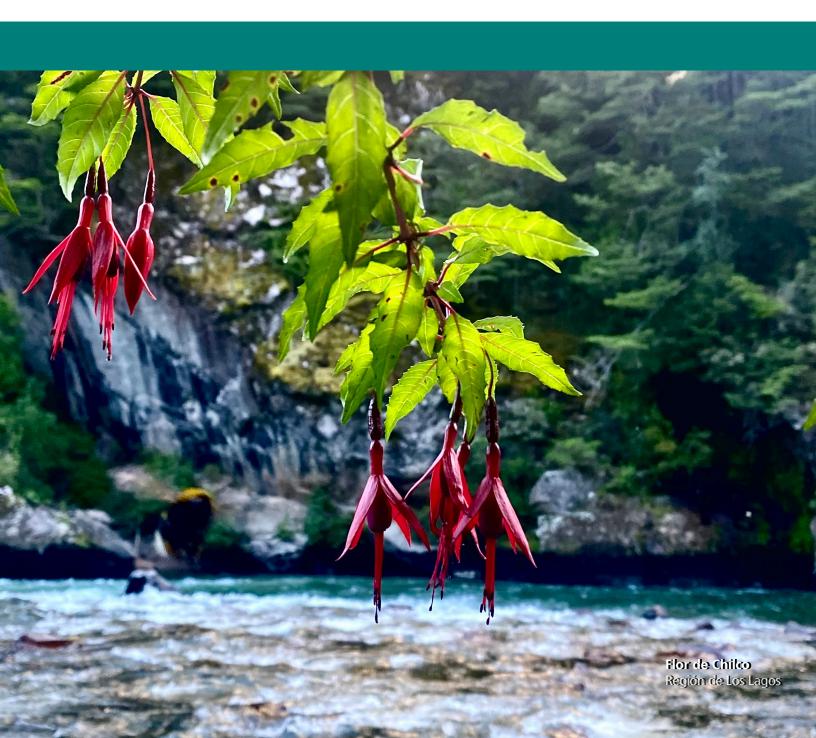


FINANCIAL STABILITY REPORT

SECOND HALF 2024





Financial Stability Reprt

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Financial policy of the Central Bank of Chile (BCCh)

The Central Bank of Chile has as its purpose to ensure the stability of the currency and the normal functioning of internal and external payments. To fulfill this second objective, it must safeguard the stability of the financial system within the perimeter of its legal powers, implemented from a macro-financial perspective. The decisions and actions derived from its powers are part of its financial policy framework. In this context, financial stability is considered to exist when the system performs its functions normally or without significant disruptions, even in the face of adverse temporary situations. Identifying potential risk events, vulnerabilities and mitigators, together with assessing their impact on the financial system, are at the core of the Central Bank of Chile's financial policy analysis.

Financial policy conduct and implementation

The BCCh conducts its financial policy seeking to contribute, within its scope of competence, to the stability of the financial system. This has been deepening and gaining stability in recent decades due, in part, to the development of financial policy tools and their adequate application, which in turn has contributed to monetary policy effectiveness and increased the economy's resilience to disruptive events.

The Bank implements its financial policy through rigorous decision-making processes, in joint and coordinated actions with the supervisor and regulator. In particular, the BCCh issues and administers financial regulations, decides on the activation and deactivation of the countercyclical capital buffer, prepares reports and issues opinions on the impact of potential legal or regulatory changes on which it is consulted. In addition to these measures, it may exercise the role of lender of last resort for banking companies and other liquidity management tools.

Information disclosure and transparency

The Financial Stability Report (FSR) is one of the BCCh's main financial policy and communication instruments. In view of its mandate, the FSR delivers the Board's view on the main risks, vulnerabilities and mitigators affecting financial stability.

The FSR is published twice a year, in May and November. In line with international best practices, it is produced by specialized professionals and is led by the Financial Policy Division. Its contents are disseminated through various channels. In this way, the Central Bank communicates its analysis and implements its financial policy in a transparent and active manner.









Cover picture: Flor de Chilco / Región de Los Lagos.

Luis Oscar Herrera Barriga / Legal Representative

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^{*/} The statistical cutoff date of this Financial Stability Report is 12 November. Financial data considers the moving average value of the last 10 days.



SUMMARY

The external scenario continues to be the main source of risks for local financial stability. Although the monetary policy normalization cycle has begun in the US, uncertainty related to global geopolitical tensions and scope and impact of potential economic and trade policies in the US has increased. Additionally, some external risk factors persist, such as the high valuation of financial assets, the persistence of high long-term interest rates, and the elevated levels of sovereign and corporate debt globally. Internally, monetary policy rate (MPR) reductions have passed through to short-term market interest rates. Long-term rates remain high, influenced by foreign market conditions and lower local capital market depthness. Normalization of financial indicators among firms have continued, with a lag in smaller firms in the real estate, construction, and trade sectors and those that obtained Fogape loans during the pandemic, these have increased their delinquency rates. Households' financial conditions have also continued to improve, although their net financial position remains below pre-pandemic levels. Local banks have enough provisions, guarantees, and capital to face adverse events. The banking system has strengthened its capital base in the process of implementing the Basel III requirements and has capital buffers that increases their resilience to maintain credit supply in the event of the systemic risks materialization. Among upcoming challenges for this industry, there is the managing of the increased credit risk in its portfolio and preparing for full convergence to Basel III. Given the complex external macro-financial environment, it is essential to have a financial market with a higher depth that allows for effective responses to adverse events.

SITUATION OF THE FINANCIAL SYSTEM

The inflation reduction at a global level has allowed the main economies to begin the monetary policy normalization cycle, which has reduced short-term interest rates. In particular, on September the Federal Reserve (Fed) began the cycle of Fed Funds Rate (FFR) cuts, accumulating reductions of 75bp, to the range of 4.5-4.75%. For the rest of the year, market expectations point to an additional reduction of 25bp. Activity data in the US have consolidated the idea of a soft landing for this economy as the central scenario. However, uncertainty remains regarding the scope and impact of potential economic and trade policies in the US and their effects on future inflation and the pace of monetary policy normalization, which has strengthened the dollar recently. In Europe, the European Central Bank reduced its reference rates by 110bp, while the Bank of England did so by 50bp since April. In this context, two-year market interest rates have decreased, since the previous FSR, by around 60bp on average for advanced economies, and by around 40bp for emerging economies.

Concerns about public and private debt at a global level continue to be present, which, combined with pressures for increased government spending, keep long-term rates at high levels. Measured as a percentage of GDP, public and private debt has continued to rise globally. In recent years, this increase has been led by the US and China. In turn, several factors, both short and medium term, will continue to put upward pressure on public spending in the coming years. In particular, geopolitical tensions, which have intensified in recent months, in part due to the evolution of the conflict in the Middle East, could trigger higher defense spending. Added to this, the need to finance structural expenses such as the required investment to face the climate transition.



The valuation of financial assets remains high globally. In this context, episodes of high volatility have been observed, reflecting that reversal risks are maintained. Since May, global stock markets have recorded gains over 10%. However, at the beginning of August, employment data in the US and the rise in interest rates in Japan triggered a temporary correction in financial prices, reflecting a high sensitivity of the markets to signs of possible changes in the global cycle. Meanwhile, other financial assets also reflect a greater risk appetite, with high-yield corporate spreads in the United States and the Eurozone falling by 87bp on average. Meanwhile, corporate spreads in emerging economies have fallen by around 20bp.

At the local level, short-term interest rates have continued to decline, while long-term rates remain high, in line with external markets. The reductions in the MPR have been passed through to short-term interest rates. Since their peak values, in the most recent monetary contraction cycle, the interest rates of commercial and consumer loans have fallen by around 700 and 600bp respectively. Since the last FSR, local risk indicators have remained without significant changes. Thus, sovereign risk remained stable; the stress indicator was reduced; and the uncertainty index and asset price volatility did not show relevant changes. Sovereign bond rates fell since the previous FSR, although they remain at high levels from a historical perspective. The same is true for corporate bond rates and spreads. The main purpose of local bond issues has been to renew and advance upcoming maturities scheduled for the year, in a market that is still seen to be weak compared to the period before the pandemic.

The evolution of financial firms indicators show heterogeneity, with a recovery among large firms, which contrasts with the lag in smaller firms and those in more vulnerable sectors. The lower rates on commercial loans have alleviated the financial burden and short-term refinancing conditions. The operating margin, indebtedness and financial burden of large firms have improved compared to the previous Report. However, the lag in the financial indicators of smaller firms, in the real estate, construction and trade sectors, and of those that obtained Fogape loans during the pandemic, persists. Firms belonging to these groups continue to concentrate the increase in delinquency rates, while banks have tended to reduce their exposure to them.

Aggregate corporate debt remains stable in the second quarter of 2024, albeit with changes in its composition. In particular, a lower dynamism of local bank credit was offset by higher external debt in larger firms, associated with FDI, new external bond issues and an increase in the valuation of their debts in foreign currency due to the peso depreciation.

The residential real estate sector continues lagged in comparison to other economic sector. Long-term financing rates remain high; sales continue at low levels; and the stock of completed homes remains high. On the other hand, housing prices have remained stable in recent quarters. In the non-residential sector, the situation for offices remains similar the previous report, with high vacancies and low prices in historical perspective. The interconnection degree of this sector with the rest of the economy and the financial sector highlights the importance of continuing to monitor it.

The financial situation of households has continued to improve, although their net financial position remains below pre-pandemic levels. Real household income has continued to rise, while consumption has shown less dynamism, which has allowed savings to increase. Interest rates on consumer loans have been reduced across the board, for different levels of credit risk and income. In mortgage loans, interest rates remain above their historical average, in line with long-term market rates. Indebtedness has remained stable, and the financial burden has decreased, especially in the lowest income quintiles and in shorter-term debts. Delinquency rates in the consumer segment has decreased, while in the mortgage segment it has increased. However, the latter remains below pre-pandemic levels.



Official projections indicate that public debt will remain below the level that the authority has defined as prudent in the period 2025-2029. In the last fifteen years, a deterioration in the fiscal position was observed, with an increase in gross debt from 6 to 40% of GDP. Going forward, the Autonomous Fiscal Council has warned that there are risks to its consolidation at the levels that the fiscal authority has declared as its objective, as it requires demanding behavior for income and expenses. Maintaining sustainable sovereign debt, increases the capacity of the economy to mitigate the impact of future shocks and improves the perception of risks on the local economy, allowing local agents to have better access to external and internal financing at a lower cost.

The banking system has adequate levels of provisions and capital to deal with higher levels of delinquency rates. The banking system has strengthened its solvency position as a result of the convergence process to Basel III, and has capital buffers, including the countercyclical capital buffer (CCyB), which contribute to strengthen the resilience to sustain the provision of credit in the event of systemic risks materializing. The profitability of the banking system remains around its historical average, with a greater incidence of interest margins that have recovered. The banking system maintains adequate levels of liquidity and stable long-term funding. Among the upcoming challenges, the banking system must continue to manage the increase in the credit risk of the portfolio and its preparation for full convergence to Basel III by the end of 2025.

FINANCIAL REGULATION DEVELOPMENTS

Both at the international and local levels, progress has continued in the implementation of policies that strengthen financial stability, mainly through the final implementation of the Basel III standards. At the local level, the entry into force of the Basel III standards follows its gradual implementation schedule. By the end of this year, most of the requirements will be in place, with full convergence being achieved in December 2025 when the systemic charges and some deductions from the capital requirements are fully applied. In the case of the CCyB and capital charges for Pillar 2, these are variable requirements subject to the implementation frameworks and decisions of the Central Bank and the Financial Market Commission (CMF), respectively. The challenges in coordinating macro and microprudential objectives linked to these variable components were analyzed in depth at the meeting of the Financial Stability Board (FSB) organized by the Central Bank in Santiago and which included the participation of international experts (Box IV.1).

Financial policy initiatives by the Central Bank and legal bodies recently approved by Congress, which seek to strengthen market development and access to and management of data for the provision of financial services, are aimed at strengthening the stability of the local financial system. Within the framework of the implementation of the Resilience Law, the Central Bank had the technical assistance of the International Monetary Fund for the development of an agenda that seeks to strengthen the liquidity management of the financial system and develop the repo market. The recent approval of the law that creates a consolidated debt registry represents a significant advance for the financial market, by allowing a better assessment of the credit capacity of individuals. This will strengthen the risk management of credit providers, the work of financial regulation and supervision, and the monitoring of indebtedness for financial stability purposes. The approval of the new Law on the protection of personal data allows closing gaps with respect to international standards in this matter, and strengthens the safeguards in the treatment of data, a central element in the provision of financial services.



MAIN RISKS

Risks from the external scenario continue to be the main concern for local financial stability. High levels of public and private debt in the world, together with high fiscal deficits, continue to be a matter of concern, and have contributed to pushing up long-term interest rates. This occurs in a context of high valuation of financial assets, which represents a vulnerability to abrupt changes in global risk appetite. Previous factors contributes to maintaining the high risk of an abrupt outflow of capital from emerging economies that would depreciate their currencies and raise financing costs. Meanwhile, at a global level, non-bank financial institutions continue to be a source of special attention, given their rapid growth in financial intermediation, while gaps remain regarding information on their interconnections with the rest of the financial system. At a local level, the financial market depth remains at low levels in historical perspective, which increases exposure to global developments, especially in the face of abrupt reversals in financial prices.

Geopolitical tensions have intensified in recent months, which could have negative effects on financial stability. An intensification of geopolitical conflicts could affect banking and non-banking institutions, mainly through the financial channel. This could occur in the face of higher prospects for public spending on defense, an increase in uncertainty or risk aversion, resulting in less favorable financial conditions (Box I.1). In addition, impacts could be observed through the real channel, for example, if protectionist trade policies are implemented that generate increased trade restrictions or disruptions in the supply chain and the commodity market. Scenarios such as these would put pressure on inflation and interest rates at a global level, with potential consequences for financial stability.

A scenario in which external financing conditions are tightened would have repercussions on local agents, increasing the risk of delinquency by firms and households, particularly by groups identified as more vulnerable. However, the stress tests for firms and households indicate that the debt at risk of credit users remains unchanged compared to the previous Report. The balance of risks for firms is similar to that of the previous Report, due to lower debt combined with greater effective delinquency. The results under the stressed scenario are also similar to those of May. The shock of higher long-term rates would have the greatest effect, reducing their future payment capacity, while the effect of a decrease in sales would be lesser. In the real estate sector, although a significant downward adjustment in the value of assets is a risk factor, prudential regulation would mitigate its effects on the financial system. In the case of individuals, the balance of risks is slightly better than a few months ago, since short-term interest rates have been falling and consumer defaults have decreased, offsetting the increase in mortgage arrears. The result of the stress test is similar to that of the previous Report, with the path of interest rates, loss of labor income and indexation being the main determinants of credit risk under the stressed scenario.

The stress tests show that local banking remains solvent in the face of a severe shock. As the Basel III implementation process has progressed, banks have strengthened their capital bases through capitalizations and perpetual bond issues. Thus, the results of the stress test show that the banking system remains with adequate levels of liquidity, provisions, and capital to remain solvent in the face of severe stress scenarios, considering the capital requirements as of December 2024. In this context, the banking system has built additional capital buffers that reinforce its shock-absorbing capacity, available to be consumed in times of financial stress. By carrying out the stress test considering a more demanding capital metric, that is, with Basic Capital (CET1), the banking system remains solvent, with some banks that would make partial use of the regulatory buffer contemplated for these purposes. As the process continues until the full implementation of Basel III, the banking system must continue to strengthen its capital bases.



The external macro-financial situation highlights the importance of having a deep financial system that can cope with adverse situations. At the local level, market depth remains below its pre-pandemic level, which has reduced the economy's ability to absorb external shocks. Thus, it is important to promote initiatives that strengthen the development of the financial market.

The Board has decided to maintain the CCyB at a level of 0.5% of risk-weighted assets (RWA), as it has been in force since last May. This level is estimated to be in line with the macro-financial and risk conditions facing the financial system according to the scenario described in the November 2024 FSR. This highlights the importance of having a capital buffer previously established by the banks, which can be released when a financial stress event occurs, which would help mitigate its impact on the credit provision to households and businesses.

The Central Bank has updated its <u>CCyB</u> policy framework by reinforcing the considerations of banking system resilience for its decision-making, incorporating the definition of a positive neutral level of 1% of the RWA, which will be gradually achieved once full convergence to Basel III is completed and to the extent that macrofinancial conditions allow.



I. TRENDS IN FINANCIAL MARKETS

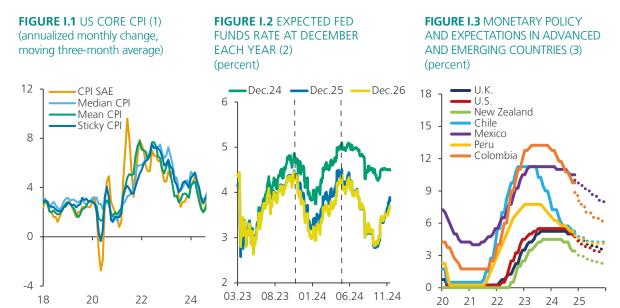
Since our last Report, allthough the normalization cycle of monetary policy in the U.S. has begun, the uncertainty associated with global geopolitical tensions and the scope and impact of potential U.S. economic and trade policies has increased. There are also some sources of external risk, such as the high valuation of financial assets, the persistence of high long-term interest rates and the massive sovereign and corporate indebtedness at a global level. At home, the Central Bank continued to lower the MPR in recent months, which has been passed on to short-term rates, while long-term interest rates have fallen, albeit still at high levels. All this has occurred in a context in which financial volatility indicators have seen no major variations since the last Report, remaining around historical averages.

All in all, the external scenario continues to pose the biggest risks to financial stability. On the one hand, abrupt changes in risk appetite and, consequently, a correction in asset prices are still latent threats, which coupled with escalating geopolitical conflicts could generate episodes of volatility worldwide. Furthermore, the prospects of higher global debt could put upward pressure on long-term rates. These risks could translate into tighter financial conditions for emerging economies and have negative repercussions in our country, in an environment in which market depth indicators remain below pre-pandemic levels, which reduces the financial market's capacity to cushion external shocks (FSR first half 2023).

INTERNATIONAL FINANCIAL SITUATION

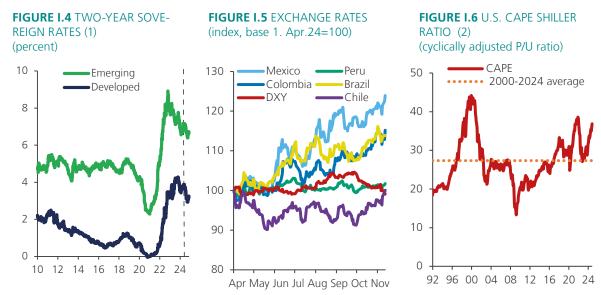
The United States launched its monetary policy normalization cycle. However, uncertainty remains regarding possible economic developments and their effects on future inflation, along with the pace of monetary policy normalization. The American labor market has gradually loosened, while the unemployment rate has risen. Inflation has also retreated in recent months, although the services component continues to show some persistence (figure I.1). Against this background, the Federal Reserve (Fed) initiated its process of lowering the interest rates in September, accumulating reductions in the fed funds rate (FFR) by 75bp up to the close of this Report, and it is expected to continue in December with a 25bp reduction. However, uncertainty regarding the scope and impact of potential economic and commercial policies in the U.S. have raised expected inflation two years out. Thus, the expected FFR for the next two years showed a reversal (figure I.2). Meanwhile, the European Central Bank cut its benchmark rates by 110bp, while the Bank of England has reduced it by 50bp since April. In Latin America, cuts of between 250bp and 50bp have been observed since the last FSR (figure I.3). Going forward, the market expects this normalization process to continue, according to the decline in inflation.





(1) CPI SAE corresponds to the CPI minus energy and foods from the US Bureau of Labor Statistics (BLS); Median CPI and mean CPI are core measurements estimated by Fed Cleveland; CPI sticky is a measure that considers a weighted-averaged basket of low variability components, estimated by Fed Atlanta (2) Vertical lines mark the statistical cutoff dates for the FSR second half 2023 and FSR first half 2024 (3) Actual monetary policy rates in monthly frequency. Dotted lines show forecasts for monetary policy rates from the fourth quarter of 2024 through the end of 2025, taken from a Bloomberg survey of financial institutions. Expected rate at the end of each quarter.

Source: Central Bank of Chile based on Bloomberg data.



(1) Vertical line shows statistical cutoff dates in previous FSR. Developed considers average of Australia, Canada, Germany, Italy, Korea, New Zealand, Norway, Singapore, Spain, Sweden, United Kingdom and United States. Emerging is average of Chile, Colombia, India, Indonesia, Mexico, Peru and Poland (2) The CAPE Shiller indicator measures the ratio of stock prices over 10-yr average of profits per share, both inflation deflated.

Source: Central Bank of Chile based on data from Bloomberg and shillerdata.com



The monetary policy rate cuts have been passed on to short-term rates worldwide. In this environment, currencies have tended to depreciate against the dollar and stock market valuations have risen since the previous Report. Two-year sovereign rates have declined across the board, although their levels remain elevated (figure I.4). In this context, emerging currencies, particularly in Latin America, have tended to depreciate (figure I.5). This situation has intensified in recent weeks, in the context of a global strengthening of the dollar. In turn, risk appetite has been maintained, which has been reflected in a reduction of corporate spreads around the world and in stock markets continuing their upward trend.

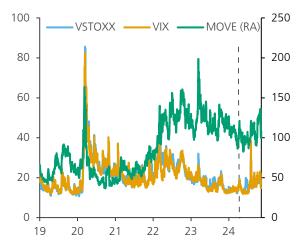
Asset valuations continue to stand high and with a risk of reversal and volatility, as reflected in the correction episode observed in early August. The performance of the U.S. stock market stands out (figure I.6), driven by an increase in the valuations of tech companies, which have increased their share in the S&P500 index in recent years. In this context, asset prices have been more reactive to macroeconomic news, resulting in corrections in the valuation of certain instruments (BIS,2024). In early August, new macroeconomic data in the United States, which raised concerns of a recession, and an investment strategy associated with Japan's carry trade, generated turbulence in the stock markets, leading to widespread corrections. The episode was short-lived and caused the VIX to reach levels close to 40 points (figure I.7), a value not seen since late October 2020, in the context of the pandemic and elections in the U.S. After the event, the stock market resumed its upward trend of previous months, reaching valuations that remain high, and this, in a context of high economic uncertainty, increases the risk of reversal.

Geopolitical tensions have intensified in recent months. The evolution of these events and their repercussions may affect both banking and non-banking institutions. An escalation of conflicts would exacerbate uncertainty and risk aversion (figure I.8). This, together with the possibility of greater financial constraints, could lead to abrupt movements of international capital flows, rapid and considerable adjustments in portfolio investments, and disruptions in bank credit, repayments and cross-border remittances, which could affect asset prices and exchange rates, and increase interest rates and spreads, thus leading to greater volatility at the global level (Box I.1). In the local market, geopolitical conflicts could have effects via the real and financial channels, especially in a context in which market depth has not recovered its levels of previous years. In turn, potential commercial tensions resulting from global economic policies that lead to greater protectionism and trade barriers could have an impact on emerging economies (WEO, October 2024).

A number of factors would contribute to long-term rates in developed and emerging markets remaining high, in a context where several economies are still highly indebted. In the last few weeks, long-term interest rates have risen sharply, placing them near its levels at the close of the previous Report. Thus, long-term rates remain high compared to the last decade (figure I.9), which is framed in a context of high public and corporate debt. In particular, growth in public debt as a percent of GDP has been led by the U.S. and China in recent years (figure I.10). Several factors could affect long-term rates in the coming years (Fiscal Monitor, April 2024). These include increased interest expenditure associated with the existing debt stock, higher disbursements to support pension and health care systems, and increases in defense-related public spending (CBO, 2024), plus the need to finance structural expenses such as investments needed to mitigate climate change, related industrial policies, and the pursuit of sustainable development goals. In the case of the biggest economies, such as the U.S. and China, recent projections show that significant efforts will be needed to achieve sustainable debt trajectories. Potential fiscal problems in these cases could generate contagion effects in the form of higher financing costs in other economies (Fiscal Monitor, October 2024).



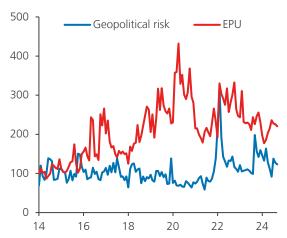
FIGURE 1.7 IMPLICIT VOLATILITY (*) (index, percent)



(*) Vertical line marks statistical close of last FSR. VSTOXX: implicit volatility in options on the EURO STOXX 50; VIX: implicit volatility in one-month options on the S&P500; MOVE: implicit volatility index in one-month options on 2-year, 5-year, 10-year and 30-year U.S. Treasury bonds.

Source: Central Bank of Chile based on Bloomberg data.

FIGURE 1.8 GLOBAL GEOPOLITICAL RISKS AND ECO-NOMIC AND POLITICAL UNCERTAINTY (*) (1985-2019 average =100, index)



(*) Monthly data from Economic and Political Uncertainty index (EPU) based on news; The geopolitical index is produced using incoming news of geopolitical risk.

Source: Central Bank of Chile based on <u>Davis (2016)</u> and <u>Caldara and Iacovello (2022).</u>

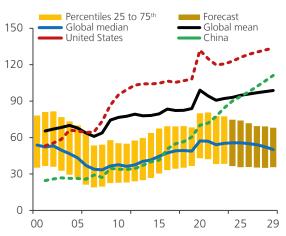
FIGURE I.9 TEN-YEAR SOVEREIGN RATES (*) (percent)



(*) Vertical line marks statistical cutoff in previous FSR. Band width is given by highest and lowest values. Develped considers: Australia, Canada, Germany, Italy, Korea, New Zealand, Norway, Singapore, Spain, Sweden, United Kingdom and United States. Emerging includes Chile, Colombia, Hungary, India, Indonesia, Mexico, Peru, Poland and South Africa.

Source: Central Bank of Chile based on Bloomberg data.

FIGURE I.10 EVOLUTION OF PUBLIC DEBT (percent of GDP)



Source: Central Bank of Chile using October 2024's Fiscal Monitor.



The Chinese economy is still weak and real estate problems linger on. Structural imbalances in the real estate sector remain in place, with no signs of a recovery anytime soon, given the excess residential stock and the still high indebtedness of developers (FSR, second half of 2023). In this context, economic activity in China remains sluggish, with consumer confidence persistently low (IPOM, September 2024). In recent months, the Chinese government announced stimulus packages in an attempt to reactivate the economy, which would include debt issuance to boost investment, strengthen the labor market and support the real estate sector. As mentioned previously, China maintains a high public debt, which reduces the fiscal room to respond to economic downturns and implement measures needed to boost growth (Fiscal Monitor, October 2024).

The outlook for regional banking and commercial real estate (CRE) in the U.S. stayed largely unchanged over recent months. On the one hand, regional banking in the U.S. has seen increases in valuations in recent months, although of a lesser magnitude than the rest of the market. According to the Federal Deposit Insurance Corporation (FDIC), unrealized losses of U.S. banks are still as high as US\$513 billion at the second quarter of 2024. These losses are not expected to ease as long as market rates remain above their average levels of recent years. Furthermore, the U.S. non-residential real estate sector continues to be challenged as it will face significant liability maturities in the coming years, while prices continue to decline, transaction volumes remain sluggish, and the cost of financing remains elevated (GFSR, October 2024).

Episodes of abrupt corrections in asset prices and high long-term rates could affect non-bank financial intermediaries (NBFIs), in a context of rapid growth and high interconnection of this sector with the financial system, on which information gaps persist. Some NBFIs, such as insurers and real estate funds, would be particularly vulnerable to solvency and liquidity risks given the current context of high funding costs (FSB, October 2024). In view of recent episodes, it has become evident that NBFIs can amplify stressful situations in financial markets in the face of high demand for liquidity —as was the case in the gilt market episode in the United Kingdom in 2022—, or by unwinding leveraged positions, as was observed last August (GFSR, October 2024). This has led international financial organizations to ratify the need to make progress in closing information gaps for monitoring these institutions, as well as the development and improvement of liquidity regulations to improve the resilience of the sector (FSB, July 2024). Likewise, it has been proposed to adapt the prudential regulatory frameworks for an adequate supervision of the risks associated with NBFIs that perform new functions leveraged on the use of technology (Fintech) and offer financial services in the non-bank retail credit area (BIS, March 2024).

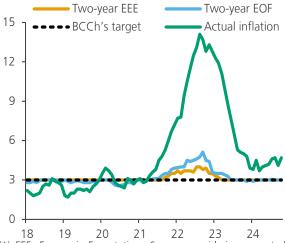
LOCAL FINANCIAL SITUATION

Short-term funding conditions have closely followed monetary policy developments. Locally, activity figures have evolved around expectations, the current account deficit decreased, and 2-year inflation expectations have remained anchored at 3% (figure I.11). Thus, the monetary policy rate (MPR) has accumulated a reduction of 125bp since the last Report, which has been passed on to short-term market rates (figure I.12).

Long rates posted declines in the last few months in line with international developments but are still high. Long-term sovereign rates have closely followed the dynamics of their international peers, posting a 40bp decrease since the last Report, although remaining above their 10-year average, in a context where volatility is still rather low (figure I.13) and where the spread against the 10-year Treasury bond is low by historical standards. A similar picture can be observed in the interest rates and long-term spreads of UF-denominated corporate bonds, whose levels are still high, despite the decreases seen since the last Report.



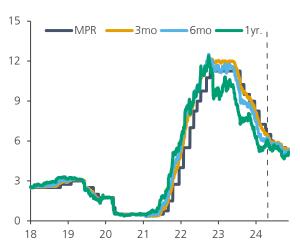
FIGURE I.11 ACTUAL INFLATION AND TWO-YEAR EXPECTATION (*) (percent)



(*) EEE: Economic Expectations Survey, considering expected inflation at 23 months (12-month change, median). EOF: Financial Traders Survey, considering the next 12 months (13th to 24th.

Source: Central Bank of Chile.

FIGURE 1.12 MONETARY POLICY RATE AND SHORT-TERM OVERNIGHT INDEX SWAP (*) (percent)



(*) Vertical line marks statistical cutoff of previous FSR. Source: Central Bank of Chile based on RiskAmerica data.

FIGURE I.13 VOLATILITY OF 10-YR SOVEREIGN INTEREST RATES IN EMERGING ECONOMIES (*) (basis points)

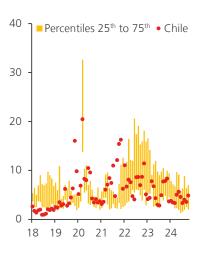


FIGURE I.14 VOLATILITY OF NOMINAL EXCHANGE RATES IN EMERGING ECONOMIES (*) (percent)

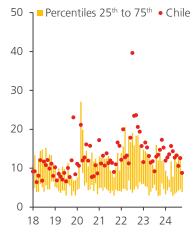
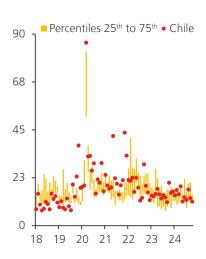


FIGURE 1.15 VOLATILITY OF LOCAL STOCK MARKETS IN EMERGING ECONOMIES (*) (percent)



(*) The bars show volatility difference between the 25th and 75th percentiles of a set of emerging economies, that include Brazil, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, Poland, Russia and Turkey. Annualized standard deviation of daily variation (figure I.13) and daily return (figures I.14 and I.15) during each month.

Source: Central Bank of Chile based on Bloomberg data.



Both the Chilean peso (C) and the stock market have coupled with the dynamics of international markets, in a context in which uncertainty and volatility indicators have had minor changes compared to the previous FSR. The Chilean peso is exchanged at the same levels as in the previous Report, i.e., around C\$960 pesos per dollar, and the local stock market has appreciated around 1%, while the volatility of these financial assets has been around its historical averages (figures I.14 and I.15), and the indicator of local political and economic uncertainty is at pre-pandemic levels.

Corporate and bank bond issuance has been concentrated in the renewal of upcoming deadlines, with longer terms and still high issuance spreads. The primary market for bank and corporate bonds has shown greater activity in recent months, mainly for term renewal purposes. This has been driven by demand from mutual funds and pension funds, although with less dynamism than in the pre-pandemic period. At the margin, these issues have been made at longer maturities (figure I.16) and at slightly lower spreads (figure I.17), reflecting slight decreases in long-term funding costs.

Pension fund and mutual fund investments have performed favorably in recent months. Pension funds have intensified their use of derivatives, particularly of interest rates. During the last six months, pension funds have increased their use of derivatives, with a notable increase in positions in long-term interest rate swaps, thus lengthening the exposure of their portfolios to interest rate risk. Although these positions have increased across the board in the different types of funds, this trend has been more pronounced in the more conservative funds. For their part, mutual fund investments have evolved favorably since the last Report (figure I.18). The funds with the highest growth have been type-2 short-term debt funds, which invest mainly in bank bonds and time deposits, and type-6 hedge funds, which in turn invest in other mutual funds and investment funds.

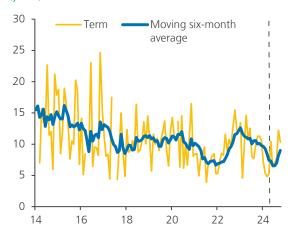
Market depth indicators are still low despite some rebound in recent months. For some quarters now, some indicators for the capital market's depth has shown some improvements, although not enough to meet their pre-pandemic levels. This continues to suggest that the local economy has lost capacity to cope with external shocks. Pension fund assets as a percent of GDP (figure I.19) stand at around 62%, while transactions in the secondary fixed-income market in real terms are at 63% of their pre-pandemic levels, considering both stock market and OTC transactions.

THREATS TO FINANCIAL STABILITY

In the current context of high asset valuation, abrupt changes in risk appetite and price corrections continue to pose the main risks to financial stability. Unanticipated changes in the macroeconomic outlook in the United States could have negative repercussions on financial markets. In particular, stronger-than-expected U.S. domestic demand coupled with a labor market showing a smaller-than-expected adjustment could lead to changes in the outlook for future U.S. monetary policy, which could generate sharp asset price corrections. These events could escalate in case geopolitical conflicts are prolonged or intensified, which, in turn, could have short-term impacts in terms of inflation and long-term interest rates at a global level, in a context in which financial volatility does not seem to be aligned with macroeconomic uncertainty (GFSR, October 2024). This scenario of financial stress could amplify and spill over to the rest of the global economy through non-bank financial institutions (NBFIs) (GFSR, October 2024), which continue to be a source of concern given the rapid growth of some of these entities, levels of leverage, liquidity mismatches and high interconnectedness with the rest of the financial system and existing information gaps (GFSR, April 2024).



FIGURE 1.16 TERMS OF ISSUED UF-DENOMINATED BAN-KING AND CORPORATE BONDS IN LOCAL MARKET (*) (years)



(*) Vertical line marks statistical cutoff of previous FSR. Data are aggregated using monthly weighted averages. Source: Central Bank of Chile based on information from the

FIGURE I.17 SPREADS OF ISSUED UF-DENOMINATED BAN-KING AND CORPORATE BONDS IN LOCAL MARKET (*) (basis points)



(*) Vertical line marks statistical cutoff of previous FSR. Data are aggregated using monthly weighted averages. Spreads calculated on overnight index swap in UF.

Source: Central Bank of Chile based on information from the Santiago Stock Exchange, DCV and RiskAmerica.

FIGURE I.18 MUTUAL FUNDS' INVESTMENTS (*) (percent of GDP)

Santiago Stock Exchange, DCV and RiskAmerica.

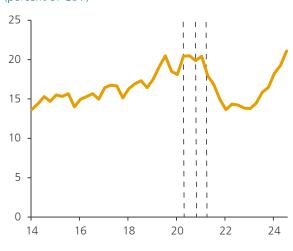
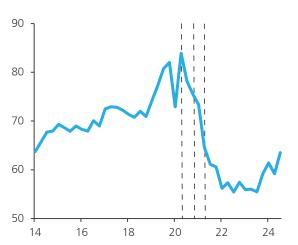


FIGURE I.19 PENSION FUNDS' ASSETS (*) (percent of GDP)



(*) Vertical lines show withdrawals from pension funds. Quarterly GDP data at current prices are used, accumulating four moving quarters. Data for 2024.Q3 estimated using October's EEE survey. Data for mutual fund investments for 2024.Q3 correspond to September closing.

Source: Central Bank of Chile based on information from FMC and Pension Superintendency.



High levels of public and private debt in the world, together with high fiscal deficits, continue to be a matter of concern, contributing to putting upward pressure on long-term interest rates. In the case of public debt, the absence of adjustment plans that allow projecting sustainable fiscal trajectories could generate increases in the cost of financing. If this occurs in the largest economies, such as the U.S. and China, rate increases could occur, affecting other economies as well (GFSR, October 2024). Additionally, the increase in public debt issuance, in a context in which several central banks are scaling down their bond-buying policies, could add volatility to fixed-income markets. This may generate particularly adverse financing conditions for emerging economies that lack strong fiscal positions (GFSR, October 2024). Finally, a high long-term rate environment could also have repercussions on the cost of long-term funding for the private sector (IMF, 2024).

A worsening of external macro-financial conditions could have significant effects in our economy, in a context of shallow markets. As mentioned in previous Reports, the low depth of the local market reduces the economy's capacity to cushion external shocks (<u>FSR second half 2023</u>), thus increasing the risk of abrupt price corrections and increases in the volatility of all asset classes. Thus, a downturn in external macro-financial conditions could generate difficulties in accessing liquidity for both businesses and individuals, along with decreases in the capacity to generate savings and investment in the economy, greater difficulties in accessing long-term financing, and increased dependence on external financing for the various sectors of the local economy (<u>FSR first half 2023</u>).



BOX 1.1:

Risks associated with geopolitical tensions

Geopolitical tensions have intensified in recent times, which may have negative effects on financial stability. Geopolitical risks can be conceptualized as threats and materialization of adverse events that affect international relations. Among others, there are wars, terrorist attacks, cyber-attacks, trade disputes, sanctions, and tensions between states and public actors, which can be a source of instability, cause disruptions in global financial markets, economic activity and policy coordination at the global level (ESRB, 2024). In the last decade, events and tensions linked to terrorist attacks in Europe in 2015, the U.S.-China trade conflict in 2018, Russia's invasion of Ukraine in 2022 and the recent escalation of conflict in the Middle East stand out. Geopolitical conflicts are difficult to anticipate and there is a high degree of uncertainty about their impacts. In turn, geopolitical tensions can affect macro-financial stability through real and financial channels (Hodula et al., 2024).

These tensions may affect banking and non-banking institutions mainly through the financial channel. In the first instance, an escalation in the conflicts would increase uncertainty and risk aversion, which, added to greater financial restrictions, may generate reversals of international capital flows and potential reallocations of investments. This would affect the dynamics of cross-border credits, payments and remittances (GFSR, April 2023), which could affect asset prices and exchange rates, increase interest rates and spreads, thus leading to greater volatility (ECB, 2024). These changes may have impacts on banks, increasing their cost of funding, pressuring their margins, and affecting their funding capacity (GFSR, April 2023, GFSR, October 2024). In turn, the lower availability of financing could negatively affect the operations of non-financial firms. Additionally, geopolitical tensions could produce corrections in the prices of financial instruments, thus affecting the value of institutional investors' portfolios (ECB, 2024).

The disconnect between market volatility and uncertainty indicators has continued in recent months.

Macroeconomic uncertainty indicators may contain complementary information to market indicators and not always fluctuate accordingly (figure I.20), because, for example, financial volatility indicators —such as the VIX for the stock market—, capture risks associated with short-term horizons, while political uncertainty measures may be relevant in medium- or long-term horizons (GFSR, 2024). This disconnection between indicators constitutes a risk, as it may lead to an abrupt adjustment in volatility in case tail scenarios —such as a larger scale war—materialize, generating disruptions in financial markets and increasing agents' risk aversion. Empirical evidence indicates that, in the presence of geopolitical conflicts, measures of volatility and uncertainty increased, although the effects have been short-lived (Hodula et al., 2024, Caldara and Iacoviello, 2022), and also depend on the magnitude of the event (Brignone et al., 2024).

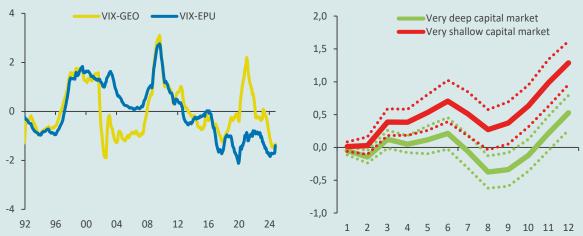


For the Chilean economy, geopolitical conflicts could have effects through the real and financial channel, especially in a context in which the depth of the local financial market has not recovered its pre-pandemic levels. In addition to the aforementioned financial channel, geopolitical tensions may produce downturns in international trade, along with disruptions in supply chains and in the functioning of commodity markets (Hodula et al., 2024). This could result in lower consumer confidence, inflationary pressures, lower economic activity and declines in investment. Although these risks are present for the Chilean economy, the impact will depend on the nature and geographic location of the conflicts, as well as Chile's commercial relations with the economies involved. It should also be noted that the depth of the local financial market has not recovered its levels of before the pandemic, which limits the capacity to cushion external shocks (Chapter I) (IEF second half 2023). This, together with a greater dependence on external financing, could amplify the effects of geopolitical tensions at the local level (Chapter II).

The magnitude of the impact of a worsening of global financial conditions derived from geopolitical conflicts on emerging economies depends on the vulnerabilities and mitigators of each country. In particular, those economies whose level of financial depth (Svirydzenka, 2016) is relatively high tend to reduce the impact of greater geopolitical risk on the cost of financing (Jara, 2024) (figure I.21). This highlights the importance of having a deep capital market and the need to prioritize measures and policies aimed at favoring stable longterm savings and avoiding those that reduce the capacity of the capital market to contribute to cushioning shocks (IEF first half of 2023). In turn, adequate levels of liquidity and capitalization of banks contribute to mitigate the negative effects of geopolitical shocks on bank credit (GFSR, 2023).

FIGURE 1.20 DIFFERENCE BETWEEN VIX WITH GEOPO-LITICAL RISK AND ECONOMIC UNCERTAINTY (difference in standardized series, moving 12-month average)

FIGURE 1.21 CUMULATIVE 12-MONTH RESPONSE OF 10-YEAR INTEREST RATES TO A GEOPOLITICAL RISK SHOCK (*) (percentage points)



(*) Estimation of local panel projections proposed by Jordà (2005), considering a sample of 36 economies, both emerging and developed. Results are shown for the period from January 2010 to December 2023. Includes market depth indicators considered in Svirydzenka (2016) for each country. High CM depth defines the country whose transmission channel is at the high end of the distribution (90th percentile), while low depth corresponds to the 10th percentile. Dotted lines show the confidence bands of the estimation.

Source: Central Bank of Chile based on data from Bloomberg, Caldara and Iacovello (2022), Davis (2016) and Jara (2024).



II. BORROWERS

The financial situation of credit users is steadily normalizing. Aggregate indebtedness has remained relatively stable for some quarters. Commercial and consumer credit rates decreased in line with the MPR, easing financial burdens and refinancing conditions in the short term. The financial indicators of large companies have improved compared to the previous Report. Meanwhile, the recovery of smaller firms in the construction, real estate and trade sectors, which obtained Fogape loans during the pandemic, continues to lag. These groups of firms have driven bank defaults, and their repayment capacity has been affected, mainly, by the weak state of their sales.

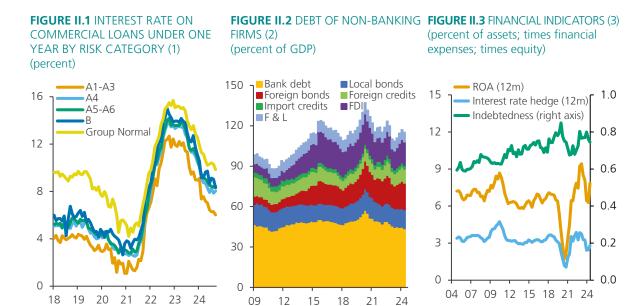
The real estate sector remains weak, with a high stock of unsold finished homes and slow sales, in the context of record high long-term financing rates. The financial situation of households has continued to recover, driven by higher real incomes. This has allowed savings to increase, although net financial wealth remains below pre-pandemic levels. Indebtedness remains stable and the financial burden has decreased, especially in the lower income quintiles. In terms of public finances, maintaining prudent fiscal accounts translates into access to low-cost credit for all agents and improves the perception of risk in the local economy.

FIRMS

Corporate sales have shown modest growth this year, while interest rates on commercial loans have fallen nearly 700 bp from their highs during this cycle. Commercial rates have fallen across the board by risk rating (Figure II.1) and by sales strata (see statistical appendix). As usual, companies with better ratings, and therefore lower risk, continue to borrow at lower rates. This reduction in short-term rates facilitates access to refinancing and eases the financial burden, especially for smaller firms, which typically bear higher borrowing costs.

Aggregate corporate borrowing has been fairly stable and reached 115% of GDP at the second quarter of 2024. As in recent figures, the increase in foreign corporate bonds, foreign direct investment (FDI) and foreign loans continues to stand out, influenced by higher issuance and the valuation effect of the exchange rate depreciation (Figure II.2). Growth in external debt has been concentrated in larger firms, including state-owned, mining and electricity, gas and water companies (EGW). As for local debt, bank lending activity remains weak, mainly due to demand-side factors (Chapter III). On the other hand, corporate bond issuance in the local market has accelerated at the margin to renew and bring forward upcoming scheduled maturities (Chapter I).



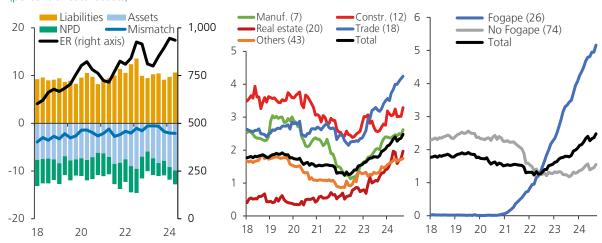


(1) Quarterly average. Each category groups transactions with different terms between three and 12 months. (2) Based on firm-level information with the exception of non-bank factoring, leasing and others, securitized bonds and bills of exchange. Bank debt corresponds to local bank debt. F & L: Factoring and leasing. Does not include college commercial debt. Quarterly data. (3) Return on assets: twelve-month cumulative profit before financial expenses and taxes on total assets. Interest hedging defined as twelve-month income before taxes and financial expenses over annualized financial expenses. Indebtedness the is debt-to net-worth ratio.

Source: Central Bank of Chile based on Achef and FMC data.

FIGURE II.4 CURRENCY MISMATCH DECOMPOSITION (1) (percent of total assets)

FIGURE II.5 UNPAID INSTALLMENT INDEX (2) (percent of loans by group/sector)



(1) Mismatch is calculated as dollar liabilities minus dollar assets, minus net position in derivatives (NPD), over total assets. Quarterly data. Individual information of companies with accounting in pesos. Does not include state-owned, mining and financial companies. Average exchange rate (ER) of the last month of the quarter on right axis. (2) Firms with local bank financing. Does not include persons. Other is composed of other economic sectors such as: agriculture, mining, financial services, transportation and telecommunications, natural resources and unclassified. Categories are mutually exclusive. Fogape corresponds to Covid and Reactiva. In parentheses, percent share of total loans as of September 2024.

Source: Central Bank of Chile based on FMC data.



The bigger companies –that report their financial statements to the FMC– have restored their operating flows by maintaining a downward trend in their investments. According to information at the second quarter of 2024, the firms' profitability rose above their historical average, reaching 7.9% of total assets. Interest hedging is below historical values, while the companies' indebtedness is higher than their average for previous years, at 2.8 and 0.75 times, respectively (Figure II.3). On the other hand, liquidity indicators have improved and are around their all-time averages. Operating flows have been on an upward trend in recent quarters, while investment flows have remained weak. Currency mismatches remain contained (Figure II.4).

Firms that are mainly financed by local banks have also improved their financial indicators; however, certain groups identified in previous reports continued to lag behind. Companies' operating margins, indebtedness and financial burden have become more favorable with respect to the previous FSRs. However, the lag observed in smaller firms in the construction, real estate and trade sectors, and those that obtained Fogape loans, remained constant. In addition to those that reprogrammed their loans during the pandemic and that have been noted in previous reports. In these groups, the weak growth in sales was reflected in tight financial indicators that have not fully regained their pre-pandemic levels.

This group of more financially vulnerable firms has driven bank defaults and their repayment capacity has been affected mainly by poor sales. Commercial bank defaults showed further increases, deepening in the aforementioned groups of firms (Figure II.5). Along these lines, different measures of non-payment continue to show increases. In September 2024 the unpaid installment index (ICI) reached 2.5%, corresponding to 14% of firms, both record highs. Meanwhile, default (Box II.1 in FSR first half 2024) and delinquency (Chapter III) have evolved in a similar way!/. In general, those firms driving the default belong to sectors that have been affected by weak sales, which have delayed recovery in their repayment capacity²/.

STRESS TEST FOR FIRMS³/

In the stressed scenario, debt at risk is similar to that of the previous Report, due to higher effective default and lower indebtedness; under the stressed scenario the lower effect of the financing cost shock is offset by the higher impact of the sales shock in some sectors. This exercise assumes a level of actual debt at risk (DaR) similar to that of the previous FSR (1.0% of GDP), resulting from a combination of a higher default rate (number) and lower exposure (amount) of banks to the riskiest sectors (Figure II.6). If a severe scenario were to materialize, the DaR would increase marginally, from 2.7% of GDP last year to 2.8% this year (Figure II.7). The interest rate shock has a slightly lower impact due to the fall in the cost of financing, which has reduced the financial burden of firms. The impact of the activity shock is somewhat greater, explained by the weakness in sales, particularly in sectors such as retail. For reference, the DaR obtained under stress is at a level similar to the sum of the effective commercial provisions and the additional provisioning expense of the bank stress test, suggesting that banks have hedged credit risk in a manner consistent with what is implied by this type of microdata-based exercise (Chapter III). In these results under stress, where the interest rate and activity shock are very prevalent, it follows that the main impact for firms –in this scenario– is associated with an extension of the current level of long rates, or a deterioration of economic activity, which would further delay the recovery of the lagging sectors.

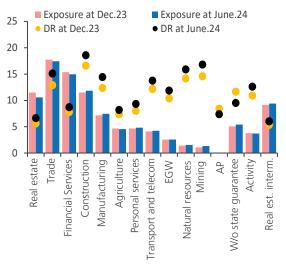
^{1/} The unpaid installment index (ICI) comes from the FMC's "Debtors System" file and is calculated as the arrears between 90 days and up to 3 years divided by the sum of current and past-due debt up to three years (Fernández and Vásquez, 2019). The Default indicator comes from the "Accounting System" file of the FMC and is one of the inputs used by banks in the calculation of provisions and includes not only non-performing loans, but also those with a low likelihood of recovery.

²/ Aggregate demand performed more poorly than expected in the second quarter of 2024, explained by private consumption, where household spending on non-durable goods and services fell, breaking the upward trend of previous quarters (<u>IPoM, September 2024</u>). Meanwhile, activity in the residential real estate sector has remained weak since late 2021.

³/Based on Córdova et al. (2021). It has a one-year horizon and assumes the occurrence of three shocks: in activity, a severe scenario of a drop in sales is assumed, consistent with the one presented in the banking stress test (Chapter III); assumptions: an increase of 600 bp in commercial interest rates and an increase of 4pp in inflation in one year.

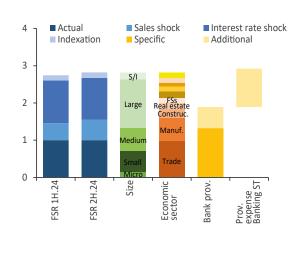


FIGURE II.6 EXPOSURE AND DEFAULT RATE BY SECTOR (*) (percent of total loans, percent of firms by



(*) Local-bank-financed firms. Does not consider persons. SII: Internal Revenue Service. Source: Central Bank of Chile based on FMC and SII data.

FIGURE II.7 COMMERCIAL DEBT AT RISK (percent of GDP, 2024)



(*) Firms with local bank financing. Last column shows the additional expense in provisions resulting from the banks stress test (Chapter III). More details in the set of figures. Source: Central Bank of Chile based on FMC and SII data.

SUPPLY (*) (thousands of units)

■ No execution Under construction ı Finishings Nationwide stock (right axis) 80 120 60 90 60 40 20 30 10 12 14 16 18 20 22 24

(*) Bars denote stock in Metropolitan Region (RM). Source: Central Bank of Chile based on from the Chilean Chamber of Construction (CChC) data.

FIGURE II.8 STOCK OF NEW HOMES FIGURE II.9 HOUSING PRICE INDEX (IPV) (index, 2015.Q1 = 100)

IPV total

160 IPV new homes PV used homes 140 120 100

Source: Central Bank of Chile based on SII data.

19

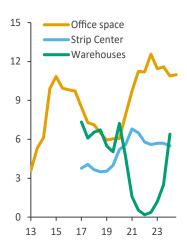
21

23

17

80 15

FIGURE II.10 VACANCIES IN NON-RESIDENTIAL MARKET (*) (percent)



(*) Half-year data. Provisory information on Office space until 2024.Q3. Source: Central Bank of Chile based on from CBRE, Colliers, GPS data.



REAL ESTATE

The real estate sector's situation continues to deteriorate, with slow sales and a high stock of finished housing. According to information from the Chilean Chamber of Construction (CChC), during the first nine months of 2024, there was a 13% drop in units sold compared to the same period in 2023. This level is 31% below the comparable average for the period 2011 to 2019. In the Metropolitan Region, the available stock of finished housing reached 52% as of the third quarter of 2024, quite the same as that at the close of 2023 (Figure II.8). This exceeds the 43% average shown between 2011 and 2019. As highlighted in previous reports, the low fraction of finished housing in the available stock allowed companies, during the pandemic, to mitigate the impact of the negative sales cycle on prices. This adjustment margin has been shrinking as sales have remained weak for several quarters and supply has been consolidating. Thus, if demand remains weak, developers may need to make further adjustments to their prices.

The cost of housing credit is still high. The interest rate on mortgage loans was 4.5% in October 2024, its lowest level in the year. However, this is still high compared to the 3.6% average seen between 2014 and 2024. As for mortgage credit lending conditions, as of the third quarter of 2024, our Bank Lending Survey indicates that strict standards are maintained, while the proportion of institutions that perceive weaker demand increases (Bank Lending Survey, ECB).

In this context, home prices have tended to stabilize in recent quarters. The national housing price index (IPV) grew nearly 1% in real terms during the first and second quarters of this year (Figure II.9). From a longer perspective, after posting hikes in 2021 and a drop in 2022, prices have stabilized near their early 2021 levels. This stabilization has also been reflected in the lease market, where rents softened their 2023 falls by the third quarter of 2024⁴/, with a real annual change of -2% in both houses and apartments.

Non-payment by real estate companies has continued to increase, reflecting the complex situation affecting the sector. The default rate of real estate companies reached 1.7% of the sector's loans, the highest in fifteen years. Construction companies have also increased their bank defaults, falling below their prepandemic levels (Figure II.5). The worsening of repayment capacity has also been reflected in the increase of other indicators, such as default and a drop in the bank's risk rating for real estate and construction company debt. Nonetheless, in the third quarter of 2024, the conditions for granting bank credit did not show significant changes for the firms in the sector (ECB).

When faced with a risk scenario, such as an abrupt adjustment in the value of mortgage collateral, banks would have sufficient mitigators based on prudential regulation. The sector's activity has remained weak for several quarters, so a significant downward adjustment in prices is a risk factor. In the event that these risks materialize, which would affect the value of the assets pledged as collateral, the background information indicates that the banking sector has sufficient mitigators in terms of the collateral to debt ratio and valuation of the latter, based on prudential regulations (Box II.1; Chapter III).

^{4/} During 2023, apartment and house rental prices fell by around 9% and 5%, respectively.



In the non-residential sector, the situation of offices remains similar to the previous report, while in warehouses there was a normalization of activity with respect to historical patterns. So far in the second half of 2024, total office vacancy has remained close to 11%, which is still high in relation to the historical average (7% between 2011 and 2019) (figure II.10). In the case of higher standard offices (class A/A+), vacancy stood at 9.5%, while in class B offices it increased to 12.5%. In this context, as of the third quarter of 2024, office rental prices fell by around 0.6% in real annual terms. In the warehouse segment, vacancy increased from 2.6% at the end of 2023 to 6.4% at the first half of 2024. In line with the above, their rental prices fell by 16% real annualized to the second half of 2024. However, both indicators are around the levels observed in the pre-pandemic period (statistical appendix).

The non-residential sector presents low direct bank financing and a relatively higher participation of institutional investors, with significant exposure from life insurance companies (LICs). Direct bank exposure to the real estate and non-residential construction segment in Chile reached close to 2% of total loans as of June 2024. Meanwhile, as of March 2024, the exposure of public investment funds (PIFs) to the local real estate sector stood at 17% of their assets, while the exposure of LICs was around 28% of their assets at the end of the first half of the year⁵/. The recent regulations published by the FMC –which amended Circular No. 1835– will improve the information available on the investments made by these institutions, which will allow for more in-depth monitoring of risks and the exposure of these agents to the real estate sector⁶/.

HOUSEHOLDS

The financial situation of households has been recovering, although their net financial wealth remained below pre-pandemic levels. In the second quarter of the year, households' gross disposable income increased by 5.6% over the same period a year earlier⁷/. This, plus a slower expansion of consumption, contributed to an increase in the level of savings with respect to the previous Report, amounting to 5% of GDP at the end of the second quarter⁸/. However, the unemployment rate has remained high, nearing 9% since mid- 2023⁹/, which poses a risk to income dynamism and families' repayment capacity. Meanwhile, households' net financial wealth stood at 120.6% of GDP at the end of the second quarter of 2024, which is below the 2013-2019 average (131% of GDP).

During the past few months, the trajectory of the MPR has been reflected in a fall in consumer rates. Mortgage rates remain above their average of the last decade, in line with their external fundamentals and our smaller local capital market. During this cycle, interest rates on consumer loans have fallen by around 600 bp from their peaks. In particular, as of October 2024, it reached an annual average of 23.6%, which compares favorably with the figures in the last Report (26% in March). This drop has been observed across the board among debtors of various income quintiles, as well as among different risk levels. The interest rate on mortgage loans has remained unchanged since the last Report, above its 10-year average, but in line with benchmark rates for longer terms.

⁵/ Exposure stands for the sum of fixed property and leased properties (17%) plus bills, bonds and mortgage mutuals (11%). It does not consider investments through financial instruments such as mutual funds or stocks (<u>Insurance Market Financial Report, June 2024</u>). ⁶/ Among other things, improvements in the reporting of insurance company investments will complement the information related to leased properties and real estate investments (<u>FMC</u>).

⁷/ Other later measures of revenue reflect this positive development. As of August 2024, the real compensation index posted an annual increase of 3.6%, while the real wage bill grew 5.2% in the same period.

⁸/ Compared to the previous quarter, the sector's savings rate remained unchanged as a percent of GDP, given the growth of disposable income together with the expansion of effective final consumption. For more information see National Accounts by Institutional Sector 2024.

⁹/ In particular, in the moving quarter July-September unemployment was 8.7% (INE).



FIGURE II.11 BANKING DEBT-TO-INCOME RATIO (*) (times monthly income, median)

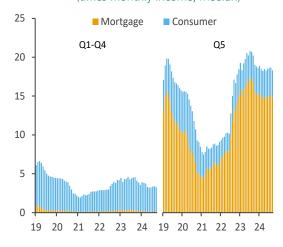


FIGURE II.12 FINANCIAL BURDEN TO INCOME RATIO (*) (percent of monthly income, median)

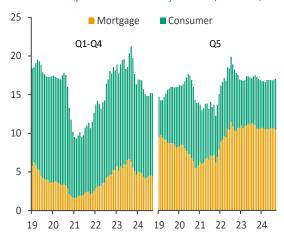


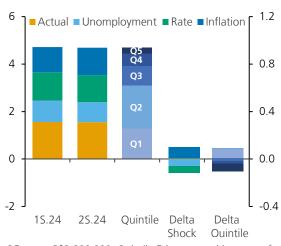
FIGURE II.13 DEFAULT RATE BY DEBTOR'S INCOME

QUINTILE (*)

(percent of debtors by group)



FIGURE II.14 DEBT AT RISK (*) (percent of GDP)



(*) Moving 3-month average. Q1-Q4 quintiles up to C\$1.365.000, Q5 up to C\$2.800.000. Quintile 5th truncated because of tax cap, which could skew the indicators for this quintile upward.

Source: Central Bank of Chile base on from FMC and Superintendency of Social Service (SUSESO) data.

Households' borrowing remained stable and their financial burden decreased, especially in the lower income quintiles that have mostly short-term obligations. Aggregate indebtedness showed a slight decrease since the previous Report, standing at 48% of GDP at the end of the second quarter (49% of GDP as of December 2023)¹⁰/. In line with the aggregate data and the trajectory of the MPR, indebtedness (RDI) and the financial burden in lower-income households decreased since the previous report, associated with the fall in debt and the lower rate in consumer loans (Figures II.11¹¹/ and II.12). As of the third quarter of 2024, credit granting standards for the consumer portfolio were similar to the previous quarter, while demand is perceived to have strengthened somewhat (ECB and Chapter III).

¹⁰/ For details, see National Accounts by Institutional Sector 2024.

¹¹/ For the median debtor, the RDI remained at 3 times income. This, because the higher stock of mortgage debts was offset by a fall in consumer debts and an increase in household income.



The non-payment situation showed a slight improvement in the consumer segment, while the mortgage segment continued to increase, but remains below pre-pandemic levels. The default rate on consumer loans continued to fall, reaching pre-pandemic levels, mainly explained by the drop in default among lower-income borrowers (Figure II.13). The mortgage loan default rate continued to rise since the previous Report across all income quintiles, although still below the levels observed up to 2020. In addition, there was an increase in the default rate of those debtors with more than one loan. As noted in previous reports, retail investors could depend on leasing to meet their mortgage commitments, which represents a vulnerability in the context of falling rental prices since 2023. This situation also highlights the importance of having a consolidated debt registry –such as the one considered in the recently approved Law 21,680– that contributes to improving risk management by credit lenders (Box V.2 in FSR first half 2022).

STRESS TESTING HOUSEHOLDS¹²/

The balance of risks for households is somewhat better than a few months ago, as default has stabilized and interest rates have been declining, easing debt service. The slowdown in job creation, with the consequent loss of income and worsening capacity to pay, are identified as the main vulnerabilities. Total household debt-at-risk, under the stress scenario, is unchanged from the previous FSR (Figure II.14). In the stress scenario it would amount to 4.7% of GDP, somewhat below the peak recorded in the FSR for the second half of 2023 (4.9% of GDP). This is mainly explained by a slightly better initial situation and the lower impact of shocks under the stress scenario. The effective default was stable with respect to the previous year, as a result of a decrease in the consumer component, which was offset by a slight increase in the mortgage segment. Under the stressed scenario, unemployment and interest rate shocks have a slightly lower impact, as a result of the improvement in real income and the effect of lower interest rates on consumer loans, which has reduced debt service on these debtors. This is offset by the indexation shock, mainly related to mortgage debt, which continues to grow, albeit at a modest pace. Going forward, an unemployment rate close to 9%, along with the slowdown in job creation, maintains the risk of income loss as one of the main vulnerabilities for households.

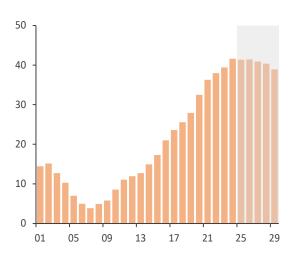
CENTRAL GOVERNMENT

Official projections suggest that the central government's gross debt would remain below the defined prudent level in the coming years. The latest Public Finance Report indicates that sovereign debt will be around 40% of GDP over the next five years, i.e. below the prudent level of 45% (CFA, 2024) (Figure II.15). During this year, local and international bonds have been issued and exchange programs have been carried out to reduce maturities for 2025 and 2026, thus alleviating the Treasury's amortization schedule. This type of operation improves deadlines management, reducing refinancing risk. This is particularly relevant in the current context of high long-term interest rates.

¹²/ Stress tests evaluate the potential effect of shocks in extreme, low probability, high impact stress scenarios. These tests are only partial by nature, as they do not model the reactions of agents and do not constitute projections. For details, see Box V.1 in FSR first half 2023 and <a href="Córdova and Toledo (2023). Three shocks are considered, in line with the severe scenario considered for the bank stress test (Chapter III). The first one consists of an unemployment rate increase of 7pp in one year. The second one assumes a 680bp increase in consumer credit interest rates and a 350bp increase in mortgage rates. Finally, an indexation shock of an additional 4pp in one year is included.



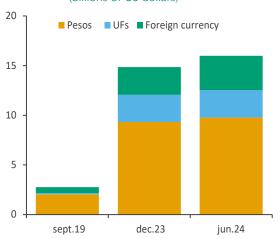
FIGURE II.15 CENTRAL GOVERNMENT GROSS DEBT (*) (percent of GDP)



(*) Gray area shows projection from the Public Finances Report, third quarter 2024, DIPRES. Gross debt 2024 as reported in the Central Government's Gross Debt Report, June 2024, DIPRES.

Source: Central Bank of Chile base on from Finance Ministry budget office (DIPRES) data.

FIGURE II.16 COST OF DEBT REFINANCING OVER NEXT 10 YEARS (*) (billions of US dollars)



(*) Scenarios generated using the cost of refinancing Treasury bonds maturing in the next 10 years, with annual renewals. Source: Central Bank of Chile based on Finance Ministry and Bloomberg data.

All in all, the growth in fiscal debt of recent years and higher long-term interest rates will imply a higher cost of refinancing over the next decade. Thus, the estimated rollover cost for a ten-year period would have increased from US\$2.76 billion in September 2019 to US\$16 billion in June 2024, mainly due to debt in pesos (Figure II.16). As usual, this estimate assumes that the composition of the public debt portfolio remains unchanged.

The Autonomous Fiscal Council (CFA) has warned that there are risks to debt consolidation at the levels that the fiscal authority has declared as a target, insofar as it requires rigorous income and spending behavior. While official projections suggest that the prudent debt level would not be exceeded in the 2025-2029 period, risk scenarios do exist. As pointed out by the CFA, such risks include a slower than estimated growth of fiscal revenues, or an increase in capital expenditure requirements such as retirement bonds or "bonos de reconocimiento", purchase of the state-guaranteed college credit portfolio (CAE), capitalization of public enterprises, among others (CFA, 2024). Externally, the uncertainty in the global macro-financial situation, particularly that originated by geopolitical tensions, could increase volatility in financial markets, affecting the value of public debt in foreign currency (Chapter I).

Maintaining prudent fiscal accounts through sustainable sovereign borrowing enhances the economy's ability to mitigate the impact of future shocks and improves the perception of risks to the local economy. In the last fifteen years, gross fiscal debt soared from 6% to 40% of GDP, very close to the maximum level defined as prudent (Figure II.15). Sustainable sovereign indebtedness boosts the economy's capacity to mitigate the impact of future shocks and improves the perception of risk in the local economy, granting local agents better access to external and domestic financing at a lower cost (Figure II.15).



BOX II.1:

Real estate, banks, and prudential regulation

Real estate activity –residential and non-residential– has a significant share of the banking portfolio. Mortgage debt represents 35% of total bank loans. Meanwhile, the share of commercial debt directly associated with real estate activity is close to 8% of total bank loans.

The situation of the real estate sector continues to deteriorate with slow sales and a stock of finished homes that remains high. In this context, housing prices have remained stable in the last year, with an average annual growth of 1.9%, after growing at an annual rate of 7% between 2010 and 2019. Evidence indicates that such movements in housing prices have been in line with the evolution of people's incomes, financing conditions, demographic variables and construction costs. However, given the difficulties currently faced by the sector, a significant adjustment in prices or an increase in non-payment of commercial loans owed by real estate companies and mortgages held by individuals constitute risk factors.

To cover possible losses due to non-payment of loans, banks use a combination of provisions and guarantees, in line with current regulations. In particular, the commercial real estate and mortgage portfolios are characterized by a high participation of guarantees mitigating credit risk. Thus, in real estate, guarantees cover nearly 90% of the exposed debt, well above the rest of the sectors, whose average is around 40% of the debt. In the mortgage sector, the vast majority of loans have a debt to collateral ratio (LTV) of less than 80%, which decreases over time as the debt is amortized. In addition, given the FMC regulations, the valuation of collateral by banks is conservative, given that the values assigned correspond to the appraisal at the time the loan was granted¹/.

Faced with a stress scenario, such as an abrupt adjustment in the value of collateral, banks have sufficient mitigators based on prudential regulation. Internal exercises indicate that a 20% drop in housing prices would increase provisioning requirements by 0.33% of the bank's risk-weighted assets (RWA). On the other hand, a 30% decrease in the value of collateral in the commercial real estate and construction portfolio would increase provisioning requirements by 0.26% of RWA^{2, 3}/. Thus, a substantial drop in the value of collateral would not compromise the solvency of the banking system, given its current capital levels and regulatory requirements. In any case, real annual drops of more than 20% at the aggregate level are considered unlikely, given international evidence, the historical evolution of local prices and market fundamentals. However, the degree of interconnection of this sector with the rest of the economy and particularly with the financial sector, together with a weakened situation that has been dragging on for several years, highlights the importance of continuing to monitor this sector. At the same time, it is important that banks maintain an appropriate balance between the different credit risk mitigators in order to be able to face stressful scenarios.

^{1/} See Chapter B-1 of the Compendium of Accounting Standards of the FMC.14.

²/The first exercise considers the value of the home recorded at the time of loan delivery. At the level of each loan, the ratio of remaining loan principal to the stressed (reduced) value of the collateral is estimated. The necessary provisions are then calculated in accordance with FMC regulations, assuming that the proportion of loans in arrears is maintained. In the second exercise, the value of the collateral is considered to be the amount of debt covered by the collateral. It focuses on the commercial portfolio with individual evaluation, differentiating between the normal, the substandard, and the nonperforming portfolio. In the latter case, an estimate of the collateral involved based on provisions is used. The necessary increase in bank provisions is then calculated, given a fall in the value of collateral. ³/Regarding the magnitude of the fall and for reference, in its stress exercise, the European Banking Authority (EBA, 2023) considers a cumulative fall over three years of 22% in housing prices and 33% in the value of commercial real estate. Meanwhile, the Bank of England (BoE, 2022/23) sees a fall of 31% and 45%, respectively, in the value of commercial real estate.



III. LENDERS

The low level of bank lending activity persists, mainly related to demand factors, in a context where interest rates have adjusted downwards, in line with the dynamics of benchmark rates. Thus, commercial and consumer loans continue to tighten, even though the flow of new loans has stabilized, while growth in housing loans continues to decelerate. Credit risk indicators remain high in the commercial and consumer portfolios, for which the stock of provisions and the higher level of guarantees would allow banks to withstand a deterioration of these portfolios. Banks maintain adequate levels of liquidity and stable long-term funding to continue granting credit; however, the cost of long-term funding remains high. Banks have strengthened their capital bases which, added to the mitigation capacity of the buffers they have built, allows them to face stress scenarios without jeopardizing their solvency. Nevertheless, banks must continue to prepare themselves to face the challenges associated with the risk of further deterioration of their portfolios and their full convergence to Basel III.

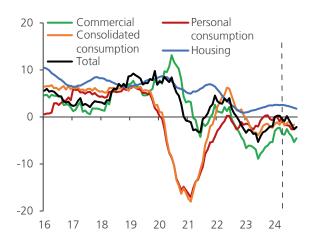
SITUATION OF CREDIT SUPPLIERS

Banks' lending activity continues to linger, mainly due to lower credit demand. The commercial portfolio has tightened further since the last Report due to a still weak demand from businesses (Chapter II; Figure III.1). According to the third quarter Bank Lending Survey (ECB), supply conditions remain unchanged and demand continues to weaken, especially in real estate and construction activity (Figure III.2 and Statistical Appendix). Commercial installment loan flows have remained stable and show no signs of accelerating, despite the fact that interest rates have been adjusting downwards (Figure III.3). In the banks' consumer portfolio, installment loans have continued to contract, although at a slower rate than in previous years¹/ The use of credit cards also shows negative growth rates, more so for cards issued by business support entities. In turn, growth in the housing portfolio has slowed down this year, in a context in which long-term interest rates remain high despite recent declines. According to the ECB's results, these less favorable interest rate conditions are one of the causes behind the lower demand for mortgage financing.

^{1/} Among the non-bank credit providers, loans granted for automobile purchases continue to show annual declines, contrasting with the dynamism of consumer loans from savings and loans cooperatives and clearing houses.

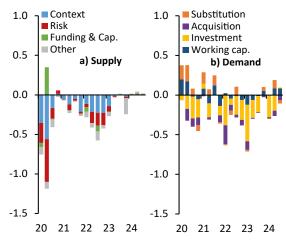


FIGURE III.1 CREDIT GROWTH (*) (real annual change, percent)



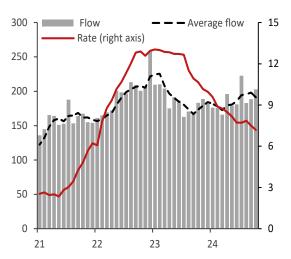
(*) Based on individual financial statements, except for local consolidated consumption, which includes loans of Business Support Companies. Figures as of October based on regulatory filess. Vertical line marks statistical close of previous FSR. Source: Central Bank of Chile based on FMC data.

FIGURE III.2 FACTORS IN CREDIT CONDITIONS FOR LARGE-SCALE COMPANIES (*) (index)



(*) The index shows net value of the responses weighted by the bank's share in the commercial portfolio. Negative (positive) values indicate greater restriction (flexibility) or weakness (strength) with respect to the previous survey. For details, see the set of figures. Source: Central Bank of Chile.

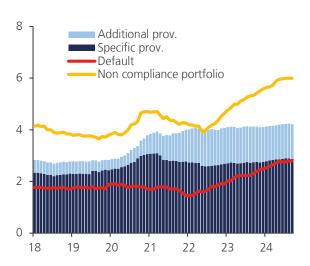
FIGURE III.3 MONTHLY FLOWS AND AVERAGE RATES ON COMMERCIAL INSTALLMENT CREDIT (*) (millions of UFs, percent)



 $(\mbox{\ensuremath{^{\prime}}})$ Flows and deseasonalized rates using CENSUS X-12 and national calendar. Dotted line shows moving 3-month average monthly flow.

Source: Central Bank of Chile based on FMC data.

FIGURE III.4 COMMERCIAL PORTFOLIO QUALITY INDICATORS (percent of commercial loans)



Source: Central Bank of Chile based on FMC data.



Delinquency indicators remain high in the commercial segment, while a downward trend is observed for the consumer portfolio. The quality of the commercial portfolio has deteriorated. Accordingly, the share of lower-quality commercial loans has increased with respect to the normal portfolio, which continues to contract. However, a significant part of the non-performing portfolio is backed by collateral and mainly by specific and additional provisions, making it possible to cover this deterioration (Figure III.4). Meanwhile, provisioning expenditure in the commercial portfolio with respect to loan flow is below its levels of previous years, and no additional provisions have been accumulated (Figure III.5). This would be a sign that new operations would have a lower risk profile than during the pandemic period. Thus, the increase in commercial portfolio delinquency would correspond to loans previously granted to riskier debtors (Chapter II). Consumer credit delinquency has fallen over the last seven months, especially for installment loans, but remains high. Housing portfolio delinquency has increased further, but not yet matching its pre-pandemic levels.

The liability structure of the banking system shows a greater share of retail deposits and funding spreads have normalized; however, the cost of long-term funding remains high. Sight deposits maintain a trend similar to that observed before the pension fund withdrawals, and the stock of time deposits has maintained its growth, despite the lower return on these instruments, in line with the cuts to the MPR. Thus, the banking system has returned to a funding composition similar to that seen before the pandemic, with the funding of institutional investors recovering, although with a low participation of pension fund deposits (Figure III.6). During the year there have been greater issues of bank bonds, mainly to meet maturities, with extended terms but with still high spreads (Chapter I).

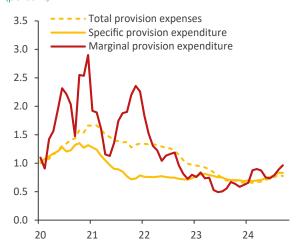
Adequate levels of liquidity and stable funding for banks are maintained. In July, the second and final payment of the bank's obligations with the Central Bank under the Credit Facility Conditional on Increased Lending (FCIC) was concluded in July. The extinguishment of approximately US\$29 billion, equivalent to 7.5% of the banking system's total liabilities, took place without major tensions in the money market, a situation that was favored by its comfortable liquidity position. The accumulation of liquid assets of more than US\$55 billion allowed all debtor banks to subsequently maintain their liquidity ratios (LCR) above the regulatory minimums. Likewise, the banks' adequate management to ensure that available stable funding remained at levels higher than funding needs allowed the bank stable funding ratio (NSFR) to remain above regulatory limits.

Banking profitability stabilized somewhat above its historical average. Interest spreads have recovered, returning to pre-pandemic levels. Credit risk provisions and operating support expenses also recorded an increase, although somewhat more moderate than net interest income. Thus, at September, the annualized return on equity and return on assets reached 15.0% and 1.3%, respectively, somewhat higher than the average of the last decade (Statistical Appendix).

Banks' solvency indicators have risen as the Basel III implementation process has progressed. Since the last FSR, capital adequacy indicators have continued to strengthen. Between February and August of this year, the system's capital adequacy ratio (CAR), or effective net worth to risk-weighted assets (RWA), grew from 16.1% to 16.7%, while the indicators measured on the most stringent core capital metric (CET1) increased from 11.8% to 12.1%. This improvement is partly explained by the issuance of perpetual bonds and capital increases. In addition, at the close of this Report, there are registration processes for perpetual bond lines amounting roughly to US\$ 675 million which, if materialized, would strengthen the capital position and, thus, reduce the deficits of AT1 that today must be covered with core capital. Given the higher capital requirements in the process of converging towards Basel III, it is important that banks continue to improve their capacity to deal with potential risks and support normal credit provisioning.



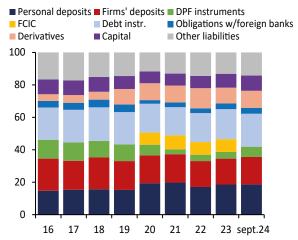
FIGURE III.5 EXPENDITURE IN COMMERCIAL PORTFO-LIO PROVISIONS (*) (percent)



(*) Total provisioning expense includes additional provisioning expense. Marginal provisioning expenditure is calculated as the ratio of monthly total provisioning expenditure over the monthly flow of new loans.

Source: Central Bank of Chile based on FMC data.

FIGURE III.6 COMPOSITION OF BANKING ASSETS (*) (percent of liabilities)



Source: Central Bank of Chile based on FMC and Pension Superintendency data.

EVALUATION OF STRESS SCENARIOS²/

The stress tests show that, in the event of severe macro-financial shocks, the banking system would maintain sufficient solvency and liquidity levels to face the occurrence of risks. This analytical tool uses accounting data for the banking system and exchange rates as of June 2024, while interest rates refer to September of this year, considering an adverse and a severe stress scenario (see statistical appendix). The adverse scenario assumes a slow and persistent slowdown, while the severe scenario represents an abrupt contraction of economic activity, accompanied by an increase in funding costs and a decline in investment. In both scenarios, the fall in external demand and the deterioration of financial conditions have an effect on the cost of funding and the exchange rate. Given the recent development of external factors (Chapter I), as in the previous Report's exercise, a stronger shock than in previous exercises is considered on interest rates, of 200bp for long-term and 300bp for short-term interest rates, an exchange rate volatility of 16% and a depreciation of 20%, bringing it back to its usual value.

Losses on credit risk decreased compared to the previous year, mainly due to a lower exposure of banks to the commercial and consumer portfolios. The contraction in lending has mitigated the impact of stress scenarios on the banks' results. In addition, provisioning expenses have tended to decrease and additional provisions have ceased to accumulate. Thus, in the severe scenario, it is estimated to lead to a potential loss of 15.8% of the system's capital and of 13.3% in the adverse scenario, both of which are lower than in the previous Report (Figure III.7).

Market risks remain stable and at limited levels. Asset valuation and currency risks have been stable from the previous Report. Meanwhile, the banking system maintains a low maturity mismatch, which keeps its exposure to repricing risk lower than before the pandemic (Figure III.7). Meanwhile, liquidity exercises indicate that the banking system would have appropriate levels to address deposit outflows, currency depreciations, and interest rate hikes.

²/ Based on the methodology described in the <u>FSR for the second half of 2013</u> and in <u>Martínez et al. (2017)</u>. Both the analysis and its results are routinely reported to the FMC. Given their nature, they should not be considered as forecasting exercises.



Bank solvency is preserved under the severe stress scenario. The initial solvency of the banks considered in the exercise showed some improvement with respect to the previous IEF, with a Capital Adequacy Ratio (CAR) that went from 16.2 to 16.6. In the severe scenario, the difference between initial and final capital reached 2.7pp, slightly less than in the previous Report (Figure III.8). Thus, the stress tests show that the current level of capital, measured through the CAR, allows banks to face severe stress scenarios without risk to their solvency and to cover the new requirements in the process of converging towards Basel III³/ (Figure III.9).

Furthermore, the currently higher quality capital level (CET1) of the banking system, including the capital buffers that have been built up, would allow it to absorb losses caused by severe macro-financial shocks. Basel III regulations impose requirements on banks (Pillar I, systemic charges, capital conservation and countercyclical buffers, and a portion of Pillar II charges) that can only be met with core capital (CET1). In a scenario of stress, the banking system has core capital buffers that provide additional capacity to cushion the effect of shocks. Thus, the results of stress tests measured on CET1 show that the banking system would be above the minimum regulatory requirements in such stressful events, considering a release of the CCyB by the authority and the availability of the conservation buffer, both of which are intended to be used in this kind of circumstances (Figure III.10). However, the narrowing of the gap with respect to the minimum requirements in the face of the use of the conservation buffer by some banks could generate an additional effect on credit under the stress scenario, which needs to be monitored.

RISK FACTORS

A deterioration in the payment capacity of some segments, particularly highly leveraged firms with a more limited sales recovery, would increase default. A slow economic recovery, with high financing costs and sluggish company sales, would reduce the repayment capacity of the debtors, especially for those sectors linked to the weaker segments of aggregate demand. In the event of such a scenario, banks have provisions and guarantees that permit them to cover a significant fraction of the current non-performing portfolio.

An abrupt adjustment in property prices would affect the collateral coverage of bank loans (Box II.1). An important fraction of the non-performing commercial portfolio is covered by collateral, especially from debtor companies whose repayment capacity has deteriorated and which, more often than not, belong to the most vulnerable economic sectors. An abrupt adjustment in the prices of assets that guarantee commitments to banks, resulting from a further deterioration of the sector, would reduce collateral coverage. Faced with possible scenarios such as this, it is important for banks to maintain an appropriate balance between different credit risk mitigators to withstand stress scenarios.

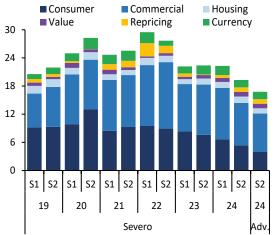
The persistence of high long rates will continue to affect the cost of bank financing. A substantial share of bank financing is long-term, through the issuance of debt instruments, such as current bonds, subordinated and perpetual bonds, and equity instruments. If the high levels of long-term interest rates persist or deepen, credit conditions would become more unfavorable and, consequently, long-term credit intermediation would be affected, such as mortgage financing for housing and investment needs for the corporate sector. It would also be unfavorable for perpetual bond issuance, which could tighten capital buffers and, therefore, affect the capacity of banks to sustain credit dynamics and absorb risks.

³/The traditional objective of stress tests has been to analyze the evolution of risks and assess the capacity and solvency position of banks in the face of a severe scenario. To deal with such conditions, banks have at their disposal both their core or better quality capital –or better loss absorption capacity– and other instruments included in the CAR, which play a role in the event that the bank goes into resolution (e.g. subordinated bonds).



FIGURE III.7 CREDIT AND MARKET RISK OF THE SYSTEM (*) (percent of core capital)

■Consumer ■Commercial ■ I

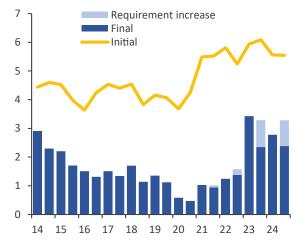


(*) As from 2021, consumer SAGs are considered in credit risk. Only the results under the adverse scenario of the last fiscal year are shown.

Source: Central Bank of Chile based on FMC data.

FIGURE III.9 CAPITAL BUFFERS UNDER SEVERE STRESS SCENARIO (*)

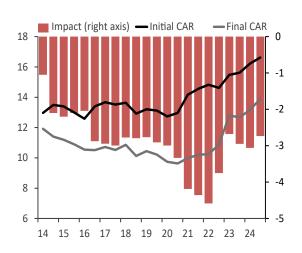
(percent of risk-weighted assets)



(*) Excess effective net worth over the regulatory minimum, which includes Pillar 2, and buffers. Does not include CCyB in stressed buffer (final CAR). Considers the particular requirements of each bank. For the tests in FSRs of the second half of 2021, 2022, 2023 and 2024, the blue bars show the final buffer with the limits in effect as of December of each year, according to the Basel III phase-in schedule, while the light blue bars use the limits in effect in June.

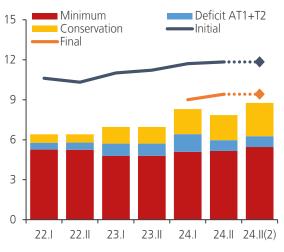
Source: Central Bank of Chile based on FMC data.

FIGURE III.8 IMPACT OF STRESS SCENARIO ON CAPITAL ADEQUACY RATIO (*) (percent of risk-weighted assets)



(*) Considers reinvested profits. Source: Central Bank of Chile based on FMC data.

FIGURE III.10 CET1 UNDER SEVERE STRESS SCENARIO (1) (percent of risk-weighted assets)



(1) Capital requirements are calculated as the weighted average of the particular limits of each bank. The deficit of AT1 and T2 is calculated as the portion of the requirement that is not covered by the respective capital level and that must be covered with CET1. Under a stress scenario a release of CCyB is assumed at each moment. (2) Considers December 2024 limits.

Source: Central Bank of Chile based on FMC data.



IV. FINANCIAL POLICY DEVELOPMENTS

At the Financial Policy Meeting of the second half of 2024, the CBCh Board decided to maintain the Countercyclical Capital Buffer (CCyB) at 0.5% of risk-weighted assets (RWAs), considering that the current risk scenario does not differ substantially from the previous period. Additionally, the CBCh has reviewed and updated its CCyB policy framework, reinforcing the considerations of the banking system's resilience for the purposes of the Bank's decision-making and setting a positive neutral level of 1% of RWAs. Meanwhile, the main regulatory developments at the international level remain focused on capital buffers for banking in the United States and liquidity risks based on the situation of global banking in March 2023. At home, progress is being made on financial stability policies, continuing the schedule for the gradual application of Basel III capital and liquidity standards, with some specific requirements still in transition. In addition to these processes, the CBCh organized the meeting of the Financial Stability Board (FSB) region, to discuss the relevance of coordinating macro and micro-prudential objectives in view of the application of the CCyB, and progress was made in developing and strengthening the frameworks for providing systemic liquidity at the local level with the support of technical assistance from the International Monetary Fund. In other financial regulation developments, following the approval of the Resilience Law, the CBCh is advancing its agenda for the development of the repo market, which will allow the recognition of Framework Agreements for carrying out these operations through its regulation. In legislative matters, progress is being made in the new Law that creates a consolidated debt registry, which will provide a better visualization of the global behavior of credit subjects over time, which together with the Law on the protection of personal data will advance in closing gaps and increasing convergence with international standards. Finally, the legal framework on fraud in means of payment was modified last May, which yielded a reduction in the number of fraud-related complaints and amounts.

COUNTERCYCLICAL CAPITAL BUFFER

At the Financial Policy Meeting of the second half of 2024, the Board of the Central Bank of Chile decided to maintain the Countercyclical Capital Buffer (CCyB) at 0.5% of risk-weighted assets. Considering the balance of risks resulting from the assessment and analysis explained in the previous chapters, the Board has decided to maintain the CCyB at 0.5% of RWAs. It was estimated that this level of CCyB was in line with the macro-financial and risk conditions facing the financial system as described in this Report, seeking to reconcile the objectives of resilience and compliance with the gradual increase in Basel III standards towards 2025.



The CBCh updated its CCyB policy framework, perfecting its implementation strategy, reinforcing the precautionary approach and resilience criteria. In accordance with the November 2023 FSR, during 2024 the CBCh reviewed its CCyB policy framework. The objective of this process was to maintain a framework in line with international best practices, adapted to the reality of the Chilean economy, its financial system, and the progress status of the Basel III implementation. As part of this process, the Bank organized workshops on macroprudential policy and financial stability during 2024 with the purpose, among other objectives, of learning about the experiences and applications of this tool in other economies, and maintaining direct interaction with renowned experts in the field¹/. International experience has demonstrated the importance of having flexible and effective macroprudential tools that allow reducing the procyclicality of bank credit in adverse economic periods. During the pandemic, countries that had accumulated countercyclical capital buffers—and released them quickly—exhibited a more stable flow of credit. This has led a growing number of jurisdictions to adopt a positive neutral CCyB level, which allows for a capital buffer that can be released in episodes of severe financial stress (table IV.1). The analysis of the CBCh confirms the advantages of adopting this approach. Under this framework, the release or reduction of the CCyB is a decision of the CBCh Board in the face of scenarios of severe financial stress or the materialization of systemic risks, with the aim of mitigating their possible amplification in terms of credit flow or other financial services essential for the proper functioning of the economy.

Based on this analysis, the CBCh Board defines that the neutral level of the CCyB will be positive, understanding neutral level as the level at which the Board expects this buffer to be most of the time, and sets it at 1% of RWAs. The CBCh Board has defined this level for the CCyB as the one expected to be maintained most of the time, when the risk conditions for the financial system are considered standard or normal. Maintaining this requirement, which will be established gradually once the initial implementation of the Basel III capital buffers is completed, and to the extent that macro-financial conditions and the functioning of the credit market allow, will contribute to further strengthening the resilience of the banking system. Under the approach adopted, the Board could exceptionally raise the CCyB above its neutral level in circumstances of significant or accelerated increase in systemic risk, in the scenarios detailed in the policy document. In turn, during periods of financial stress or when a systemic risk materializes, its total or partial release will be evaluated, communicating the length of time it will remain deactivated, and its subsequent gradual reconstruction, in accordance with the provisions in the policy document.

RECENT DEVELOPMENTS IN BASEL III IMPLEMENTATION IN THE UNITED STATES

The discussion goes on about strengthening capital and liquidity requirements for banks, based on lessons learned from events in the US banking system in 2023²/. Analysis of the disruptions in the US banking system has prompted an intense debate, which has identified regulatory and supervisory challenges³/. Regarding the lessons learned in relation to regulatory standards, a public proposal to strengthen bank capital requirements is currently being discussed, and progress has been made on an analysis —still at a theoretical level in global regulatory forums— on liquidity standards. Overall, these are adjustments to the margin with respect to Basel III standards.

¹/ Workshop on macroprudential policy and the countercyclical capital buffer, in January 2024; and Workshop on banking and financial stability, in September 2024.

²/ BIS (2024). "The 2023 banking turmoil and liquidity risk: a progress report. A report to G20 Finance Ministers and Central Bank Governors". BCBS, October 2024.

³/ FSB (2024). "Depositor Behavior and Interest Rate and Liquidity Risks in the Financial System: Lessons from the March 2023 banking turmoil".



TABLE IV.1 INTERNATIONAL EVIDENCE OF CCYB WITH A RESILIENCE FOCUS

Implementation strategy	2022	2024	Detail
Defined positive neutral level (PNL) that have established CCyB levels greater	Defined to positive neutral level 9 17 (PNL)		Jurisdictions that have formally adopted a Positive Neutral Level for CCyB in their policy frameworks, PNL 2% (Sweden, the Netherlands and the U.K.). PNL 1.5% (Armenia, Ireland and New Zealand). PNL 1% (Czech Republic, Estonia, Latvia, Lithuania, Slovenia, Australia, Georgia, Hong Kong, South Africa, Spain). PNL 0.5% (Cyprus). Variable periods of transition to neutral level are defined.
than zero PNL not defined	11	18	Jurisdicciones que utilizan y comunican activamente RCC y que han definido en algún momento cargos mayores a cero. La mayoría de las jurisdicciones activas aplican frecuencia trimestral.
Active jurisdictions, but maintain zero CCyB	9	6	Jurisdictions that communicate decisions with a frequency of less than one year, but have never defined a charge greater than zero. The original Basel approach, which considers application only during the credit expansion cycle, still dominates.
Inactive Jurisdictions(*)	20	11	"Jurisdictions that declare to consider CCyB among their macroprudential tools, but communicate decisions with a frequency greater than one year or irregularly. They all maintain CCyB = 0."
Total	49	52	

^(*) This group includes Canada and Switzerland, which use other macro-prudential tools. Source: Central Bank of Chile based on information from BCBS, ESRB, FMIs and websites of the relevant financial authority of each jurisdiction.



The US Federal Reserve (Fed) has continued to evaluate during 2024 its proposal to increase banking capital buffers, published for consultation in 2023. According to US banking regulation, banks are traditionally classified into four categories based on the volume and complexity of their assets⁴/. The proposal published in 2023 establishes for these four categories of banks a more granular and sensitive measurement of various risks to determine risk-weighted assets, on which the level of required capital is established⁵/. Among the new aspects to be addressed, the recalibration of credit risk weights affecting residential and retail mortgage financing stands out, as do higher requirements for banks with less than US\$250 billion in total assets (categories III and IV). According to the initial proposal, the final increase in capital buffers for the US banking system should be approximately US\$300 billion, however, this amount is reportedly being revised downwards according to recent statements by Fed representatives.

The particular situation of the Silicon Valley Bank raises challenges for the proper supervision and containment of banking liquidity risks. The speed and volume of deposit outflows influenced by the role of social networks and digital means of access to financial services, changes in the financing structure of banks, and adequate supervision and operational preparation are presented as important elements to be addressed by regulators and supervisors. In particular, improvements in supervision and regulation in the medium term are evaluated, including aspects of the design and calibration of tools such as the LCR and liquidity requirements. Regarding the frequency and quality of the information received, in normal and stressful times, with the objective of promoting adequate monitoring of the liquidity situation. For example, the deposit outflow factors and weights associated with the LCR (Liquidity Coverage Ratio) and NSFR (Net Stable Funding Ratio) indicators could be recalibrated to adjust to current conditions, as well as the frequency in which they are reported. Likewise, the treatment of high-quality liquid assets and their eligibility as such if they are recorded as "at maturity" by financial institutions is an open debate, considering the implications that this may have on the banks' assets through unrealized losses.

RECENT DEVELOPMENTS IN THE IMPLEMENTATION OF BASEL III IN CHILE

The process of gradual convergence towards Basel III has been appropriately managed by the local banking system. Leverage ratios, measured as levels of common equity Tier 1 (CET1) over total assets of the banking sector, have increased, recovering the values that were present until 2018 (figure IV.1). This recovery is the result of the capitalization process managed by the banking sector, to adapt to the requirements defined by the gradual adoption program of Basel III in Chile (Box IV.1, IEF first half 2024). This process has in turn allowed the banking sector to recover its relative solvency position in the world (Figure IV.2)⁶/.

⁴/ Categories (from highest to lowest): Category I, global systemically important banks; Category II, banks with US\$700 trillion or more in total assets, or more than US\$75 trillion in multi-jurisdictional activities; Category III, banks with US\$250 billion or more in total assets, or more than US\$75 billion in non-bank, off-balance sheet or interbank funding; and Category IV, banks with US\$100 billion or more in total assets.

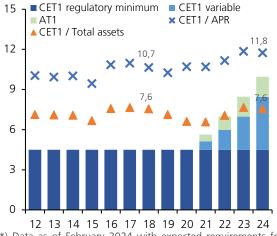
⁵/ In accordance with Basel III, the proposal mandates banks in the four largest bank categories to recognize certain unrecognized income and expense items in the income statement, the computation of operational risk and derivatives credit valuation adjustments (CVA) due to deterioration in the counterparty's solvency (CVA), In addition to incorporating a new expanded risk-based (ERB) approach, based on the current Basel standardized method, which includes greater detail of credit risk weightings, which must be used by banks in the four categories, and whose result will serve as a floor (72.5%), with respect to that computed by applying internal models.

⁶/The capital over assets (leverage) ratio is used because the capital over RWA measures may imply an underestimation when applied to banks in Chile, considering that internal models for credit risk have not yet been implemented locally.



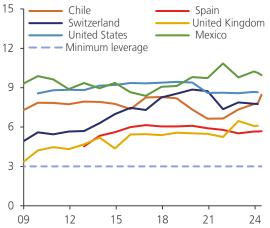
FIGURE IV.1 EVOLUTION OF BANKING CAPITAL COM-POSITION AND MINIMUM REQUIREMENTS FOR BASEL III IMPLEMENTATION (percent)

FIGURE IV.2 EVOLUTION OF T1 CAPITAL TO TOTAL ASSETS RATIO (*) (percent)



(*) Data as of February 2024 with expected requirements for December 2024 composed of AT1 1.5%; minimum CET1 of 4.5% APR and variable CET1 composed of 0.06% Pillar 2; 0.89% systemic (75%); 2.5% CCOB; and 0.5% CCyB. Source: Central Bank of Chile based on data from the Financial

Market Commission (FMC).



(*) Latest information available for Chile, Mexico and Spain, June 2024. For Switzerland, the U.K. and the U.S., March 2024. Source: Central Bank of Chile based on Financial Stability Institute (FSI) and Financial Market Commission (FMC) data.

Establishing capital levels that converge to Basel III standards helps to increase the resilience of the banking sector. Basel III is the prudential standard for bank capital suggested by the BCBS, which represents the international consensus in this area. The adoption of this international standard in Chile is accompanied by exhaustive supervision, which represents a commitment by both the financial system and the authorities to maintain such standards over time. In this sense, the comprehensive adoption of Basel III improves the international assessment prospects of the local financial system, which has relevant positive consequences, for example, by improving the conditions for access to international financing.

The incorporation of Basel III buffers into the local banking capital framework is considered especially relevant. These are macroprudential tools that aim to strengthen the resilience of banks by allowing the flexibility inherent in capital buffers (instead of rigid regulatory limits) in the face of individual conservation buffer or systemic (CCyB) stresses. When banks activate these buffers, a transition process is activated in which the distribution of dividends is restricted, facilitating the recovery of capital and avoiding the initiation of regularization processes that present the risk of amplifying the problems that each entity in particular may experience. The greater possibility of the CCyB, to allow the management of systemic stress situations, comes from the possibility of the CBCh to release its requirement for all banks in these cases.

Most of the Basel III capital buffers will be in place by the end of this year, completing the process of full convergence in December 2025. Although the regulatory framework that introduces the Basel III standards on capital, liquidity and information requirements for local banks has been in force since December 2021, the gradual implementation established by the same regulation has meant that the effective requirements have progressively increased⁷/. As of December of this year, in terms of effective charges, approximately 90% of the Basel III incorporation program will be implemented, with the full incorporation of systemic charges and capital discounts pending until December 2025.

⁷/ See Basel III implementation timeline.



Among the elements in the implementation stage of the Basel III standard are the Pillar 2 requirements, for which the FMC has designed a progressive entry into force of the capital charges. As of June 2024, the FMC defined specific bank capital charges as a result of the supervisory review process that includes the evaluation of each banking entity's business models, their respective risks and ability to face severe stress scenarios. These requirements, which represent approximately 0.4% of the system's RWAs, must be gradually completed over the next four years. Recently, the FMC published for consultation changes to the Pillar 2 regulations (Chapter 21-13, of its Updated Compilation of Standards) with the aim of facilitating the supervisory process and clarifying and improving some aspects of capital assessment and risk determination. The proposal highlights adjustments to the regulation that aim to cover market risk more fully in the banking book, expanding the criteria under which an entity can be considered "atypical," which makes it subject to possible additional capital requirements, and eliminating the threshold for the maximum requirement to be charged under this concept.

The incorporation of the CCyB poses challenges in the coordination of macro- and micro-prudential objectives, a discussion addressed in depth during the RCGA meeting of the FSB held in Santiago (Box IV.1). While the objectives of micro-prudential policies focus on the resilience of each of the financial institutions, macroprudential policies are oriented towards containing risks for the banking system as a whole (systemic risks). Although these objectives are clearly distinguished, coordination challenges arise in the use of tools –variable and subject to the decision of the authorities— that coincide in being based on Capital Buffers for the banking system, as occurs, for example, with the implementation of Pillar 2 and the CCyB, incorporated by Basel II and Basel III, respectively. In Chile, both tools are incorporated in the latest reform to the LGB in 2019. In this sense, consideration of aggregate bank capital levels is essential, for which the approximations with which the stress tests are applied can play a relevant role. During the recent meeting of the Financial Stability Board's Advisory Group for the Americas, held in Santiago, the experience in coordinating these tools by the different participating jurisdictions was discussed.

For its part, the entry into force of the liquidity standards of the Basel framework follows the gradual implementation schedule defined in the CBCh regulation⁸/ The requirements for the net stable funding ratio (NSFR) consider January 2026 as the date of 100% application of the requirement, with which the liquidity standards established by Basel III will be in full force. Additionally, the FMC will incorporate, starting in 2025, a process for evaluating the internal liquidity adequacy of banks (ILAAP), similar to that currently established for capital (ICAAP, according to which their capital adequacy and risk management are evaluated). Likewise, the 30-day mismatches in foreign currency and, for information purposes, the 30- and 90-day mismatches in local currency are maintained within the liquidity requirements. These elements, in addition to those established in the Basel framework, provide the supervisor with tools that allow him to urge banks to better manage liquidity in order to better face stress situations.

Beyond this convergence process towards Basel III, it is estimated that the ability of banks to access various sources of liquidity in an expeditious manner is essential to respond to systemic liquidity stress situations. The possibility for financial institutions to quickly access financing channels that allow them to use their assets as adequate collateral is crucial to be able to contain temporary liquidity stress situations that could lead to more complex situations. In these situations, a deep and active Repo market could facilitate access to liquidity for institutions that have acceptable instruments as collateral. Likewise, the operational capacity of banks to access ordinary and extraordinary facilities from central banks must be appropriate, so that they can be activated in the adverse scenarios for which they are designed. To this end, the CBCh recently coordinated technical assistance with the International Monetary Fund on this matter, with the aim of advancing the development and strengthening of systemic liquidity provision frameworks at the local level.

⁸/ Chapter III.B.2.1 of the Central Bank of Chile Compendium of Financial Regulations.



DEVELOPMENT OF THE REPO MARKET

The development of the Repo market in Chile lags behind in comparison to markets in both advanced and emerging countries. As the CBCh has previously noted, the Chilean repo market is still underdeveloped, which does not correspond to that of the local financial market in general terms, both in size and depth. Additionally, this market is rather limited to broker-dealers, while the interbank market is dominated by deposits and certificates of deposit transactions. This situation limits the access of money market participants to shortterm financing alternatives at low cost and, therefore, to the diversification of their funding (Box IV.2 FSR first half 2023).

To address this gap, during August of this year the CBCh managed Technical Assistance from the International Monetary Fund, an instance that adds to previous tasks. The objective of the CBCh was to deepen the analysis of possibilities to advance in the development of this market. In these initiatives, the CBCh has gathered information from the private sector and financial authorities to fine-tune the diagnosis and take policy actions, within the scope of its powers, in order to facilitate the development of the repo market in Chile. In this regard, various regulatory aspects are observed that could facilitate repo transactions, among which the adoption of framework agreements and implementation of Netting stands out, a possibility that can be materialized with the powers conferred to the CBCh by the Resilience Law, also identifying the need to advance in the regulatory definitions regarding counterparty risk weights and provisions for these operations, and aspects of tax certainty and clarity in the accounting treatment of this type of operations by banks.

Repo operations will be facilitated by an upcoming CBCh regulation for the recognition of Framework Agreements and for transactions to be eligible for special compensation mechanisms in the event of default by one of the parties. In a repo contract, the guarantee is established by transferring ownership of the asset used as collateral. Therefore, to ensure the creditor's right to liquidate said collateral, the usual practice in developed markets is to document the contracts through local and cross-border framework agreements that establish the general terms and conditions in a standardized manner, including the treatment of default events, under which individual transactions are agreed. The regulation that the CBCh will implement for repos will be analogous to that established in 2018 for OTC derivatives and which has contributed to the growth of said market. Although the degree of development of the derivatives market was bigger, a positive effect could be expected from providing greater legal certainty to the repo market.

INFORMATION SECURITY, FINANCIAL STABILITY AND DEVELOPMENT

The new Law that creates a consolidated debt registry is a step forward for the local financial market.

There is international consensus on the importance of debtor information systems as key elements for the functioning of credit markets, as they contribute to reducing information asymmetries. Indeed, economic literature recognizes that information asymmetries amplify problems of moral hazard and adverse selection in credit markets. These problems can produce distortions in the allocation of credit that hinder the functioning of the credit market. A debt registry, such as the one created by this Law, and whose importance has been highlighted by the CBCh on repeated occasions, will allow credit providers to perform a better analysis of the payment behavior of debtors, thus reducing information asymmetries, which will strengthen their risk management, improve the conditions of access to credit, and should contribute to reducing the risk of excessive indebtedness. The registry will also promote better financial regulation and supervision and facilitate debt monitoring for financial stability purposes.



This law will allow access to positive information for those who have debts with non-bank credit providers, which are relevant in the consumer and mortgage credit segments. Traditionally, there has been a credit registry with positive and negative information, managed by the FMC, with information on credits granted by banks, larger cooperatives and some credit card issuers, from which said entity delivers debt certificates to the public. In addition, there are private entities that perform credit bureau functions, for which they collect negative credit information from various sources, and which can be accessed by different credit providers. The consolidated debt registry created by this Law will incorporate information on current and overdue credit obligations of individuals and companies with respect to a broader set of financial creditors, including banks, insurance companies, mutual funds, credit card issuers, Savings and Loans Cooperatives, Clearing Funds and other credit providers determined by the FMC through a general rule, such as car-purchase credit providers. By consolidating said debt information, the new registry will allow a better view of the overall behavior of credit subjects over time.

The Consolidated Debt Registry will be managed by the FMC and involves important operational challenges. Pursuant to the Law, the FMC must publish the implementation rules and have the Registry enabled in December 2025, so that it is in operation by April 2026.

Meanwhile, the approval in October of the new Personal Data Protection Act closes gaps and increases convergence with international standards in this area. Based on the experience of the European Union, this new legal body improves the rules relating to the processing of personal data of natural persons, with emphasis on aspects relating to the consent of the owner of said data and their rights of access, rectification, cancellation and opposition, as well as the duties required of the entities responsible for data processing. To ensure compliance with this law, the Personal Data Protection Agency is created, which will be the public body in charge of ensuring the protection of this data, which highlights the importance of coordinated action with other authorities in order to strengthen the protection of data processing, a central element in the provision of financial services.

For the financial industry, these legal developments, plus the implementation of the Open Finance System (SFA), imply relevant changes in the way they manage their clients' information. While the Consolidated Debt Law requires financial institutions to report information and provide it to debtors upon request, the SFA contained in the Fintec Law allows data holders to request financial institutions to access their financial data and share it securely with a third party through digital means or systems, such as remote and automated access interfaces. This will present challenges for financial institutions, which will have to review their data processing processes and the systems on which they are based, along with the need to correctly understand and apply consent and data protection standards. This will require allocating resources to update or implement their operational infrastructure, including training for staff. Also related to the implementation of the Fintec Law, non-banking factoring would be incorporated into the scope of the FMC as long as the requirements corresponding to Alternative Transaction Systems (SAT) apply to invoice intermediation (Box IV.2).



The greater availability of data and its possible exchange among financial institutions can be beneficial for individuals and the system as a whole, being important to have safeguards and high security standards for adequate management of potential risks. Both for the operation of the consolidated debt registry and the SFA, the exchange of financial services client data is critical. This can be virtuous in that the greater information available allows for better credit risk management or increased competition through the provision of more personalized products. However, the implementation of security and safeguard mechanisms in terms of authentication and verification of clients and consent, as well as solid risk management and internal control systems by the entities involved in the areas of information security, cybersecurity and business continuity, among others, play a key role in the successful implementation of these initiatives. This prevents the risk of information leaks resulting, for example, from cyber-attacks or the unauthorized use of information that may have harmful effects, affecting the trust of users and exposing institutions to severe sanctions, with data protection and information security being of the utmost importance. In order for the greater availability of data to be beneficial for the system, it is important that the different regulatory frameworks involving the processing of information interact harmoniously and that financial institutions continue to strengthen their cybersecurity, information security and business continuity measures.

REGULATION AGENDA OF THE CENTRAL BANK OF CHILE

The CBCh incorporates new initiatives that are expected to be published within the next 12 months for consultation. As shown in table IV.2, the Bank will promote a set of new initiatives to its financial regulation agenda, highlighting the recognition of Framework Agreements for repo transactions, the implementation of the Resilience Law regarding access to payment systems and CBCh liquidity facilities⁹/, and those relating to Payment Systems and Market Infrastructures, such as the updating of the framework applicable to Low Value Payment Clearing Houses¹⁰/, requirements for Payment Initiators and recognition of digital assets that represent electronic money¹¹/.

OTHER INITIATIVES OF FINANCIAL LEGISLATION AND REGULATION

The legal framework on payment fraud was amended in May of this year¹²/. Although its full implementation is still in progress, there has been a decline in the number of fraud-related complaints and amounts. Last March there were 128 thousand complaints of fraud and operations unknown to users, for a total amount of C\$85,934 million, while in June there were 25 thousand complaints for C\$10,185 million (figure IV.3). The decrease is especially noticeable in BancoEstado products, particularly in ATM transfers, but not in other banks and means of payment, where there were even occasional increases (figure IV.4), which have modified the distribution of the amounts defrauded. Going forward, consolidating the reduction of fraud figures calls for action and the adoption of care measures by issuers of means of payment and their users, as well as the implementation of legal changes both by the Ministry of Finance, which must publish a regulation that can set lower thresholds differentiated by type of means of payment, for the immediate restitution of claimed transactions, in the absence of fraud or gross negligence on the part of the user; and by the FMC, which must issue rules on minimum security, registration and authentication standards and requirements and conditions to be observed by issuers in order to comply with security and oversight duties. It is necessary to continue monitoring the evolution of fraud in means of payment, for the benefit of a more efficient development of the payment system and greater financial inclusion.

^{9/} See Payment Systems Report 2023, Box III.2.

¹⁰/ See Payment Systems Report 2024, Chapter II.

¹¹/ See Payment Systems Report 2023, Chapter III.

¹²/ See Payment Systems Report 2024, Box I.1.



TABLE IV.2 FINANCIAL POLICY INITIATIVES OF THE CBCH

New initiatives Regulation of final report released		
Initiative	2024	2025
Banking and financial market regulation		
Netting treatment and recognition of Master Agreements for Repo transactions (*)		
Enabling of withheld securitization transactions		
Modernization of FX Reporting Systems		
New investment limits in AA for pension funds and severance insurance		
Prior report to PS for investing in new instruments: Scale X and MHE securities		
Preliminary report to the CMF for appointment of systemic banks and capital charges		
Payment Systems and Market Infrastructures		
Implementation of current regulations for Low Value Payment Clearing Houses (LVPC).		
Phase two of the Low Value Payments Clearing House (LVPC) regulation		
New conditions for access to settlement in the RTGS System and BCCh facilities for non-bank participants (*)		
Definition of requirements for Payment Initiators		
Recognition of digital assets representing electronic money (stablecoins)		
Payment card regulatory update: Recognition of entities performing cross-border payment cards acquisition and closed models		
Clearing House for High Value Foreign Currency Payments (HVC FX)		

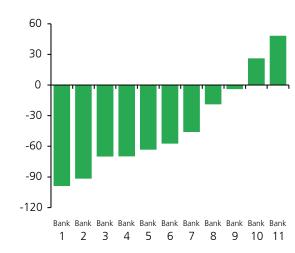
(*) Initiatives originated by the implementation Resiliency Law. PS: Pension Superintendency. Source: Central Bank of Chile.

FIGURE IV.3 EVOLUTION OF AMOUNTS AND COMP-LAINTS ASSOCIATED WITH EXTERNAL FRAUD (million pesos, thousands)

100,000 -150 Amount Numver of complaints (RA) 80,000 120 60,000 90 40,000 60 20,000 30 05.23 09.23 01.24 05.24 01.23

Source: Central Bank of Chile based on FMC data.

FIGURE IV.4 CHANGE IN CLAIMED AMOUNTS BY BANK FROM MARCH TO JUNE 2024 (percent)



Source: Central Bank of Chile based on FMC data.



BOX IV.1:

Workshop on coordination and interaction of macro and microprudential tools

The CBCh organized a workshop on macroprudential policy frameworks, in the context of the meeting of the Regional Consultative Group for the Americas (RCGA) of the Financial Stability Board (FSB), which was held in Santiago on 7-8 October 2024. The discussion and analysis focused on the main challenges for the implementation of macro- and micro-prudential policies. The meeting was attended by representatives of the jurisdictions RCGA1/ member jurisdictions. The meeting was hosted by the Central Bank of Chile (CBCh) and the Financial Market Commission (FMC). The FSB Chairman joined the RCGA members for the meeting.

The opening remarks, delivered by CBCh Governor Rosanna Costa, emphasized the importance of macroprudential policies²/. These tools allow to comprehensively address the systemic risks that can affect the financial system and how they can respective authorities should move towards a coordinated usage of the tools at their disposal to minimize these risks at the lowest possible cost in order to avoid affecting the normal operation of the financial industry.

Institutional coordination of macro- and micro-prudential tools has gained particular importance after the Global Financial Crisis. Basel III incorporated macroprudential tools into its standards in order to address systemic risks more comprehensively, complementing its traditional micro-prudential approach for institutions. In particular, it provides regulators with tools such as the capital conservation buffer (CCoB), the countercyclical capital buffer (CCyB) and the liquidity coverage ratios (LCR and NSFR) that are liquidity coverage ratios that aim to increase the resilience of the financial system in times of stress.

The Covid-19 experience demonstrated the importance of the joint application of these tools in moderating the impact of risks affecting the stability of the financial system. With respect to the Global Financial Crisis, the financial system faced the shock caused by the sanitary crisis with higher levels of capitalization and loss-absorption capacity, thanks in part to the requirements and joint actions implemented by micro- and macro-prudential authorities. In particular, macro-prudential tools played an important role as a complement to monetary and fiscal measures, helping to preserve financial stability and supporting the economy during a period of unprecedented uncertainty.

Workshop participants addressed the challenges of meeting the specific regulatory objectives of microprudential policies, in coordination with the strengthening of the stability of the financial system as a whole, usually assigned to macro-prudential policies. To provide his perspective on this topic, the workshop was attended by the Head of Policy Benchmarking of the Financial Stability Institute (FSI) Rodrigo Coelho, who shared the main findings of his latest work (Coelho and Restoy, 2024). He spoke of the importance of coordinated implementation of micro- and macro-prudential policies to contribute to financial stability, avoiding distortions in the aggregate capital structure of banks. In this regard, he emphasized that coordination reduces possible frictions that may arise between different policy frameworks when they seek different objectives using similar tools such as, for example, through bank capital requirements. In this scenario, he presented as a viable alternative the integration of macro- and micro-prudential perspectives in bank stress tests, which can help reduce such frictions and facilitate a common understanding of capital requirements without compromising the mandate and objectives sought by each authority.

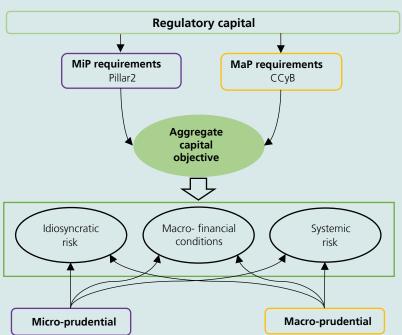
¹/ Click here.

²/ Click here.



The day concluded with a panel discussion that incorporated the views and experiences of several of the jurisdictions present on policy coordination and aggregate capital objectives. Participants highlighted the importance of coordination and collaboration among financial authorities to respond to financial risks in a comprehensive manner. The existence of formal cooperation agreements becomes a relevant element to integrate macro and micro perspectives in the application of tools in a coordinated manner, which should incorporate quantitative, qualitative and expert judgment elements. In that sense, the implementation of macroprudential policies such as the CCyB should incorporate not only a comprehensive assessment of the outlook for financial stability and the potential risks to it, but also take into consideration a thorough evaluation of the level and composition of the banking industry's regulatory capital, as well as the capital requirements and other prudential measures implemented by the micro-prudential authority. This assessment should carefully consider the potential impact of these requirements on banks' aggregate cost of capital and the broader economic implications, as well as provide a level of predictability with respect to charges to facilitate the industry's medium-term capital planning (Illustration IV.1).

ILLUSTRATION IV.1 COORDINATION AND OBJECTIVES OF MIP AND MAP



Source: Central Bank of Chile.



BOX IV.2:

Regulation of the factoring industry

In recent years, the factoring industry has grown steadily, providing a relevant source of financing for businesses. The objective of this Box is to characterize and dimension the factoring industry in Chile, distinguishing the legislation and regulation regimes applicable specifically to invoices as a financial instrument, with respect to the various types of firms that participate in this industry.

Factoring operations are regulated by Law No. 19,983, which grants legal certainty to these operations, reinforcing the quality of the invoice as a collection instrument. Factoring is a type of financing through which a firm (issuer) sells its documented accounts receivable to another company (payer) or to a third institution (financial institution, bank, factor) at a discount in exchange for immediate liquidity¹/. Law No. 19,983, enacted in 2005, strengthened this financing mechanism by defining the regulatory framework for the assignment of invoices, granting executive merit to the invoice and regulating its transfer²/. Thus, the factoring industry has grown significantly, becoming a relevant financing and liquidity mechanism, especially for smaller companies.

The factoring industry is made up of firms subject to heterogeneous regulatory regimes, depending on the different legal assets that it is important to protect. Banks that may perform factoring activities and factoring companies that issue publicly offered securities are subject to regulation and oversight by the FMC focused on safeguarding depositors and investors, respectively. In addition, if the invoices are traded on commodities exchanges governed by Law No. 19,220, the firm providing the infrastructure to carry out transactions by public auction, as well as the intermediaries that operate in said exchange, must comply with the demands defined by the FMC, with a focus on information and transparency with respect to the transactions. More recently, the Fintec Law incorporated into the regulatory perimeter the Alternative Transaction Systems (SAT) in which financial instruments such as invoices are traded, which will allow for a better standard of information for the intermediation of invoices on such platforms. Finally, there is a segment of firms that perform factoring operations for which there is no specialized regulation.

This industry has grown significantly, with a majority share of banking companies (74%, figure IV.5). Between 2009 and 2024 factoring grew from 1.5% (US\$ 4.1 billion) to roughly 2.7% of GDP (US\$5.8 billion at June 2024)³/. The banking factoring segment includes banks and their subsidiaries, which offer factoring to their clients as one of their products through their commercial platforms. These operations are assimilated to commercial loans, and the banks and banking subsidiaries must evaluate the entity obliged to pay the invoice, determine its credit risk and set up the corresponding provisions. This segment is the most significant, with a stock of US\$ 4.3 billion at June 2024. The banks are overseen by the FMC, both in terms of prudential banking regulation and market conduct.

^{1/} Factoring operations can be performed with or without legal liability. Operations with liability allow the financial institution to claim payment of the documents from the seller in case of any collection problem with the buyer, i.e., there are two sources of payment, and the credit risk is shared by both parties.

²/ In addition, Law No. 19,913 requires all factoring companies to register with the Financial Analysis Unit (UAF) in order to prevent the use of the financial system to commit money laundering crimes and financing of terrorism. As of June 2023, according to the UAF's report, there are 153 factoring companies subject to its supervision.

³/ For a detailed description of the factoring industry, focusing on the banking segment, see Fernández and Vásquez (2022). See also Box IV.1 "Evolution of bank factoring in Chile," FSR second half 2019.



The share of companies issuing publicly traded securities in the factoring industry is 23%. All these companies are subject to the FMC's oversight on transparency and market conduct⁴/, including continuous reporting requirements such as the presentation of financial statements. This group of firms provide SMEs with a comprehensive range of financial products and services, incorporating factoring and other lending operations against their own balance sheets, and have a high degree of formalization: they maintain risk ratings and are partially financed by the placement of bonds and bills of exchange, registered in the Securities Registry of the FMC. In the securities regulation area, companies that offer factoring operations through the Chilean Commodities Exchange, governed by Law No. 19,220, supervised by the FMC, which allows issuers to sell their invoices directly to investors, and can subsequently be traded in the secondary market.

Finally, there is a group of non-regulated companies that perform factoring operations, with moderate participation. These companies, due to their characteristics and insufficient information, are not easily sized. Their level of activity and degree of formalization is very diverse. It is estimated that these firms' market share is nearly 2% (figures IV.5 and IV.6). In this sense, and although the aforementioned legal assets are not involved in this segment, expanding the availability of information on this type of company would be beneficial insofar as problems in them may affect the reputation of the rest of the industry.

The Fintec Law, currently in its implementation process, allows the FMC to incorporate into its regulatory perimeter a broader spectrum of firms performing factoring operations provided that they are conducted via Alternative Transaction Systems. According to this new legislation, invoices qualify as financial instruments and the activities of intermediation, custody and alternative transaction systems are incorporated into the regulatory and supervisory perimeter. In the context of implementation of this Law, the FMC issued the norms that will govern the registration, authorization and obligations of providers of financial services under the Fintec Law (NCG No. 502) applicable to entities that perform intermediation, custody and SAT provision of financial instruments, such as invoices.

FIGURE IV.5 FACTORING INDUSTRY ESTIMATION (*) (percent)

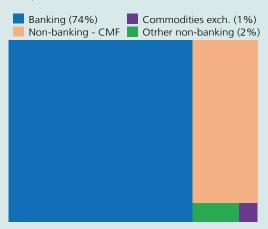
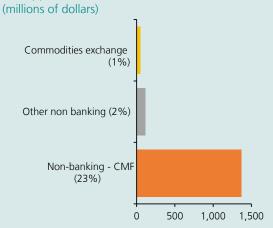


FIGURE IV.6 COMPOSITION OF NON-BANKING FACTO-RING (*)



(*) Information as of June 2024. Bank factoring considers operations granted through banks and banking subsidiaries. The "Other non-banking" category includes four entities; the figures for three of them correspond to December 2023. Source: Central Bank of Chile based on information from the FMC, EE. FF. and available companes' annual reports, and web page of the Commodities Exchange. The information refers to stocks of gross loans outstanding; in the case of the Commodities Exchange, it is proxied by the monthly flows and a reference period of 30 days.

4/NCG No. 492, which amended NCG No. 30, establishes that as from February 2023, only publicly offered securities will be required to be registered in the Securities Registry, and no longer the issuers. However, the issuer's information shall be submitted at the time of requesting the registration of a security in the aforementioned registry.

