Financial Stability Report June 2023



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Preface

The purpose of the Central Bank of Argentina (BCRA) "is to promote monetary stability, financial stability, employment and economic development with social equity, to the extent of its powers and within the framework of the policies established by the National Government" (Article 3 of the Charter). In general terms, there are financial stability conditions when the financial system as a whole can provide services for financial intermediation, hedging and payments in an adequate, efficient and ongoing manner, even in adverse operating contexts.

For the financial system to contribute to economic development with social equity, financial stability is a priority –by providing adequate means to save, enhancing the possibilities of production and consumption and allocating resources more efficiently—, and the system must be deep and inclusive.

In its regular transactions, the financial system is exposed to different types of risks that the system needs to manage. The interaction among exogenous risk factors, vulnerability sources and elements of resilience defines a specific level of systemic financial risk. Within the context of such interaction, an eventual materialization of the risk factors will result in some impact on the financial system and on the economy at large.

The policies of the BCRA seek to limit systemic risk, preserve stability and promote higher levels of depth and inclusion in the financial system. Thus, the BCRA implements a micro and macroprudential approach tending to limit such vulnerabilities and to enhance the resilience of the system. This includes the continuous monitoring of the financial system's soundness and the exercise of its powers as regulator, supervisor and liquidity provider of last resort.

In this context, the BCRA publishes its Financial Stability Report (IEF) every six months to inform about its assessment of the stability conditions and explain the policy measures implemented to such effect. The IEF is underpinned by the assessment of the domestic and global macroeconomic conditions made in the Monetary Policy Report (IPOM). The Financial Stability Report provides information and analysis to the different agents of the financial system and is designed to be an instrument to encourage public debate on aspects related to financial stability and, especially, on the Central Bank's actions on such matter.

The next issue of the IEF will be published in December 2023.

Autonomous City of Buenos Aires, June 28, 2023.

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About the use of inclusive language in the Spanish version of this report

The Central Bank of Argentina is committed to encouraging the use of a non-discriminatory language that promotes the acceptance of all gender identities. It should be noted that all those who have contributed to this report acknowledge that language influences on ideas, feelings, ways of thinking, as well as principles and core values.

Therefore, efforts have been made to avoid sexist and binary language.

Executive Summary

Despite a challenging context at both domestic and international levels, the Argentine financial system kept exhibiting a sizable degree of resilience during the first half of 2023. This evolution was underpinned by high liquidity and solvency levels in aggregate terms and limited risk exposures, thus facilitating the regular development of financial resources intermediation with companies and households, such as the provision of payment services.

At domestic level, after growing in 2021, 2022 and the first quarter of 2023, the Argentine economy has limited growth perspectives in the next few months. Some of the factors conditioning the economic evolution are: the draught of early 2023 (which impacted adversely on exports), the hikes of the inflation rate, the need for an intensified fiscal prudency (within the framework of the Arrangement with the IMF) and the volatility usually inherent in presidential electoral processes. In turn, domestic financial markets continue evidencing a mixed evolution. The National Treasury kept obtaining financing through the domestic market, and several debt swaps were carried out to clear up short-term maturities in pesos. As regards private sector financing through the capital market, there was a rise in amounts in real terms during the first months of the current year.

The international context continues to be complex, mainly due to the cycle of monetary policy rate rises at global level and the uncertainty about its length and intensity. After years of very low interest rates and broad liquidity in international markets, the new context entails risk factors that may combine with the various vulnerabilities that have piled up in this previous period. The episodes of bank collapses in developed economies observed in March 2023 and the global stress related to a potential perceived contagion (including assets of emerging economies) are examples of the type of challenges that may arise in the near future.

As a result, the risks associated with the external context continue to be relevant, especially if we take into account that, more recently, the expectations about the international markets have focused once again on a likely future interest rate rise in advanced economies, with a potential impact on the expected growth. This more adverse context also exerts pressures on the domestic economic perspectives. Consequently, riskier scenarios might become true and impact on the evolution of the domestic activity and/or on the performance of financial markets, thus conditioning the evolution of financial intermediation.

Since the publication of the previous Financial Stability Report (IEF), there has been some moderation in the financial intermediation activities, with a slight reduction of the bank credit stock to the private sector in real terms and with rises in funding through deposits in pesos, mainly time deposits from companies and households. It is worth stating that in order to promote monetary and financial stability conditions, the BCRA has continued implementing rises in the benchmark (reference) interest rates, managing monetary aggregates prudently and operating in the open market, in addition to improving exchange regulations to have a more efficient allocation of foreign currencies. All of the above was accompanied by a recent renewal of the currency swap with China, which facilitates the use of RMB as exchange currency for foreign trade and allows the BCRA to have more tools available to preserve financial stability.

It is estimated that the trade-off between the domestic financial system's sources of vulnerability and resilience factors (strengths) has improved slightly against the assessment provided in the previous Financial Stability Report (IEF) by late 2022. This evolution was mainly associated with the rise in aggregate hedging levels —liquidity and solvency— of the ensemble of financial institutions within a general framework of relatively limited risk exposures.

From comparatively low levels, the financial system has kept a downward pattern in terms of exposure to the private sector's credit risk. In this sense, the stock of loans to the private sector stood slightly above 27% of assets for the ensemble of financial institutions, going down against the previous IEF and standing below the average of the last 10 years. The indicator that shows the materialization of credit risk —the non-performing ratio of bank financing to the private sector—did not post significant changes in the last six months (and stood at around 3.2%). This potential vulnerability of the system would continue to be the most relevant in relative terms during the rest of 2023 if the payment capacity of debtors were affected by the materialization of any of the risk factors mentioned above. Nevertheless, the financial system exhibits high (and growing) levels of provisioning and capital. Moreover, by early 2023, the private sector kept moderate levels of indebtedness and of its debt's financial burden.

Another source of vulnerability for the system lies in the moderate performance of the domestic intermediation of funds observed in recent months. Against this backdrop, it is important to highlight the efforts made by the BCRA with its credit policy, emphasizing the supply of resources to micro, small and medium-sized enterprises (MSMEs) through the renewal of the "Credit Line for Productive Investment" (LFIP). Besides, the financial system kept positive profitability indicators in the first part of the year, underpinned by the BCRA's macroprudential policy to sustain the aggregate levels of soundness.

The financial system's funding and the exposure to liquidity risks are another potential source of vulnerability. It is worth stating that the stock of private sector deposits in pesos went up in real terms during the last six months and consolidated as the main source of funding for the sector. The performance of time deposits was behind this evolution, in line with the increases of minimum interest rates set by the BCRA. Within a context of few changes, the ratios of exposure to the aggregate liquidity risk posted mixed signs in recent months. The average volatility level of deposits in pesos was relatively stable, with a slight extension of average maturity —following the higher weight of time deposits—, while a slight increase in the concentration of deposits was observed. Eventual episodes of volatility in financial markets might impact on the demand and/or composition of deposits, posing new challenges for the sector's activity. Against this backdrop, the financial system has kept high and growing liquidity ratios, standing above the average of the last 10 years (as of March, the broad liquidity ratio totaled 77.2% of deposits, while the average of the last 10 years has been 53.7%), sizably complying with the minimum regulatory requirements for prudential purposes (including those added on the basis of the Basel Committee's international recommendations).

All in all, the BCRA will continue monitoring in the next months the evolution of the financial system from a micro and macroprudential perspective, adopting the policy measures that may be required to sustain financial stability conditions. Within the framework of a sizable soundness in the financial system, this active policy will be especially relevant to face a higher-than-expected uncertainty context at global level in the remaining months of the year.

1. International and Local Context

The global context has continued to be complex since the publication of the previous Financial Stability Report (IEF) in December 2022. This evolution resulted from the current cycle of contractionary monetary policies at international level and the related increase of uncertainty. The impact of this policy bias on global growth (with weak perspectives for the rest of 2023 and an increased risk of a lower growth rate) adds up to other conditioning factors. 1 2 In this sense, the context of higher interest rates in developed economies also led to challenging situations given their interrelation with the vulnerabilities following the international financial crisis (whose peak was in 2008-2009). Over the last few months -with a peak in March- some signs of financial stress became noticeable, mirroring the concern about a potential spillover of the collapse of medium-sized banks in the United States and of a large institution in Europe. Because of the quick response of policymakers to drive away the fears about the banking system's health in advanced economies, the impact was limited. Nevertheless, the concern about a potential contagion of developed economies' banking problems led to an increasing uncertainty about the current cycle of interest rate rises (with a changing impact on the expectations around length and intensity), within a context characterized by persistent inflationary pressures at global level.³ Since, more recently, the focus has been once again on the expected rises in interest rates in the near future, the possibility of new consequences from the interaction between current vulnerabilities and more restrictive financial conditions cannot be disregarded, considering that this would have a widespread impact on markets and affect emerging economies (see Exhibit 1).

This evolution of international financial markets has translated into changing performances in the main variables so far in 2023. There was an increase in volatility and a search for shelter in safer assets with limited impact over time (though a scenario marked by caution still prevails). The yields of US Treasuries have exhibited mixed changes so far in 2023 (hikes in the yield of 2-year Treasuries and drops in the yield of 10-year instruments) due to several factors. They include, among other, more limited rises in the interest rates of the main central banks of advanced nations (see Chart 1), the search for shelter in assets with a lower relative risk in March and, more recently, a renewed focus on potential increases in the interest rates in the near future. Nevertheless, the yield curve continues to be inverted for the US (a situation generally associated with the probability of falling into recession). So far in 2023, the dollar has accumulated a depreciation of 1% against the main currencies after exhibiting several oscillations over the

¹ Such as those related to geopolitical matters (for example, fears about an eventual worsening of the war in Ukraine).

The risk factor associated to the COVID-19 pandemic (with impacts on international supply chains) has lost momentum. China's reopening of borders contributed positively to its economic growth in 2023, though this recovery may still decelerate (for example, due to the concern about the situation of the country's real estate market).

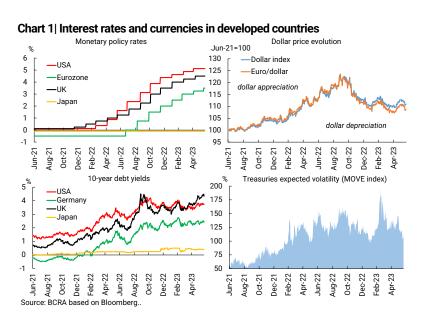
² These factors were accompanied by recent fears about the negotiations of the public debt ceiling in the United States (even though an agreement would have been reached by late May).

³ A downward trend has been observed in commodity prices in general so far in 2023 (in line with the uncertainty about growth), with drops in oil prices (almost 15% for WTI) and gas prices (60%), added to 3%-to-9% cuts in the prices of the main grains (soybean, corn and wheat). The statistical closing date of the prices mentioned in this section was June 23.

⁴ The VIX index (expected volatility for the US S&P shares of stock, usually considered a good indicator to measure risk appetite at global level) averages a lower value than the one recorded in the second half of 2022.

period. Among the assets with a higher relative risk, advanced economies' stock exchanges have recorded positive yields for the aggregate of 2023 (despite their sizable drops of mid-March).

The changing evolution in international markets also impacted on the asset prices of emerging economies, which have accumulated mixed variations in 2023. According to MSCI, emerging markets' stock exchanges have recorded a yield of almost 5% in dollars (16% in the case of Latin America) since late 2022 within a context where —on the basis of EMCI Index— emerging currencies accumulate a slight depreciation against the dollar. The exception is the Brazilian real which has appreciated over 9%. In the case of the sovereign debt, the EMBI overspread has widened almost 10 basis point (bp) so far in the first half of 2023 (even though a small drop was observed for Latin America). This occurred in a period when investment funds specializing in emerging markets posted net inflows, largely due to the flows towards variable income funds, especially between January and February. In fact, there were outflows by mid-March whereas later inflows involved more limited amounts on average than those observed in the first two months of the current year. More recently, new negative flows were temporarily recorded in May.

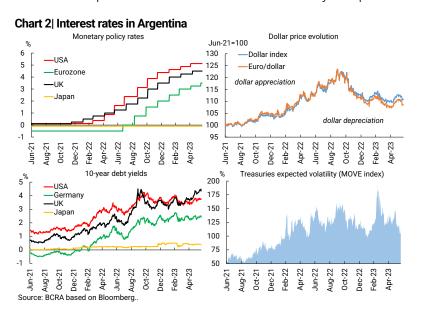


In Argentina, after the deterioration of the economic activity in the last quarter of 2022 (impacted by the direct effect of the over-40% drop in wheat harvest in the previous cycle, together with the contraction in construction, commerce and some industrial sector), activity went up 0.7% quarter-on-quarter (q.o.q.) seasonally-adjusted (s.a.) during the first quarter of 2023. In year-on-year (y.o.y.) terms, the economic activity expanded 1.3% in March 2023 and 1.5% in the first quarter, and job creation continued growing at a good pace. Nevertheless, growth expectations are currently conditioned by several factors. The higher uncertainty at global level adds up to the effects of the draught (and their incidence on the activity level, foreign trade and international reserves dynamics), the hikes observed in the inflation rates during the first months of the year, the need for an intensified fiscal prudency (within the framework of the Arrangement with the

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⁵ Fixed income funds accumulate outflows so far in 2023.

IMF) and the typical volatility inherent in presidential electoral processes.⁶ Against this backdrop and in order to preserve monetary and financial stability, the BCRA implemented additional rises to the benchmark interest rates (with various increases to the monetary policy interest rate by late March, see Chart 2) and kept managing monetary aggregates prudently. As regards the BCRA's credit policy for MSMEs, the main tool continued to be the "Credit Line for Productive Investment –LFIP" (see Box 1), which was renewed with a new basis for the calculation of the quota. In terms of the financial markets, the BCRA continued making open market transactions to promote the liquidity, depth and transparency in sovereign debt markets. Finally, in terms of the foreign exchange market, the Central Bank kept adjusting the depreciation pace of the domestic currency in order to keep the external levels of competitiveness and streamline the exchange regulations so as to achieve a more efficient allocation of foreign currencies.⁷ All of the above added to the renewal and request of an extension of the currency swap with China.⁸



During the first half of 2023, the National Treasury carried out three swaps in the capital market at domestic level (the last one in June) to reschedule the maturity profile of the debt service in pesos⁹ in order to create more certainty and contribute to strengthening financial stability. ¹⁰ As a result, so far this year, the Treasury has managed to get net positive funding through auctions at a refinancing rate (net of the effect of the swaps made) that dropped against the second half of

⁶ For further information about the evolution of the economic activity as well as a description of the policies applied in Argentina, see the <u>Monetary Policy Report</u>.

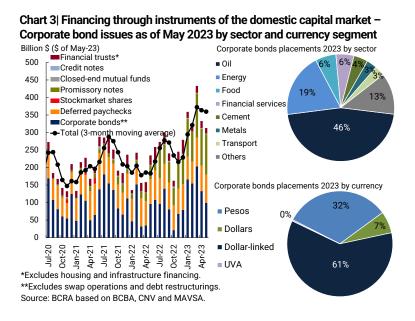
⁷ In the same line, the National Securities Commission (CNV) decided to implement new limits for the purchase-sale of Argentine sovereign bonds, denominated and payable in dollars, as from May.

⁸ The availability of the currency swap with the People's Bank of China enabled the growth of commercial transactions carried out in domestic currencies up to a payment amount equivalent to CNY 6.88 billion (equivalent to USD 966 million) over the year. The use of RMB in trade amounted to CNY 1.07 billion in May and CNY 5.28 billion up to (and including) June 23, which shows the quick acceptance by the economic agents.

⁹ Three swaps were made in January, March and June 2023 to refinance maturities of the first, second and third quarters, respectively. Consequently, there was a reduction in next maturities and an extension in the general profile of maturities (for example, through the delivery of dual bonds and CER bonds).

¹⁰ By late March, there was an announcement about the intention to make progress in the intra-public sector's reordering of maturities in foreign currency.

2022. The new financing mainly focused on bills adjusted by CER (LECER), followed by (dual) bonds and bills in nominal pesos (LEDES). The rise of rates in the issue interest rates (accompanying the increases in the benchmark rates). The rise of rates in the primary market was accompanied by higher yields in the secondary market. Instruments in nominal pesos have recorded yields' increases of nearly 40 percentage points (p.p.) so far in 2023, while there was a reversal of the curve inversion observed by late 2022 in the instruments in pesos adjusted by CER (the yields of shorter-term instruments evidenced a significant contraction and became negative). There was also an expansion of the yields for the curve in dollars (despite the price improvement observed since May), which continues posting a negative slope. ¹³



The financing amount to the private sector through the domestic capital market (including, among the main instruments, Corporate Bonds without considering swaps, deferred payment checks, promissory notes and financial trusts) grew during the first five months of 2023 (see Chart 3). This rise was observed in both the same number of months in the immediately preceding period (with a 44% increase in real terms) and in year-on-year terms (90% in real terms), even though flows so far this year still accounting for around 2% of GDP. The improvement against the same period of 2022 was mainly explained by the recovery observed in Corporate Bond transactions¹⁴ (with a 43% weight on total flows to date in 2023) and the growth of the promissory notes' segment (accounting for 31% of total amounts so far this year, see Box 2). Among Corporate Bonds, the issues of the oil & energy sectors stood out (65% of amounts issued over the period), including some transactions involving green bonds (see Exhibit 2).¹⁵ In

¹¹ Considering actions up to, and including, June 14.

¹² LEDES have been the most representative instrument in early 2023 (even though their weight gradually went down in the total).

¹³ The expansion in the yields of shorter-term bonds was 10 p.p. (while, for the rest of the curve, the average was 2 p.p.) on the basis of the domestic market prices.

¹⁴ Against a period characterized by a low momentum.

¹⁵ Additionally, there have been redemptions of outstanding bonds for a total of nearly ARS99 billion by seven companies from different sectors (including construction, energy and food) so far in 2023.

terms of funding currency, dollar-linked transactions continue to prevail and account for over 60% of the total amount of Corporate Bonds issued so far in 2023 (28% of the total stock of Corporate Bonds as of May 2023), similar to the level recorded in the previous Financial Stability Report (IEF). During the period under analysis, dollar-linked transactions averaged 45 months, standing above the terms observed for transactions in pesos in nominal pesos (17 months). In turn, the cost of financing tended to go up for all instruments, accompanying the evolution of the benchmark rates.

Corporate Bonds maturities for the second half of the year amount to USD780 million in the case of instruments in foreign currency (88% of this amount correspond to bonds under foreign law) and to over ARS230 billion for debt payable in pesos (including bonds in nominal pesos, dollar-linked bonds and UVA bonds). These amounts account for almost 5% of the stock of Corporate Bonds in dollars and 10% of the stock of Corporate Bonds payable in domestic currency. While the main maturities in dollars correspond to the oil, energy and telecommunications sectors, maturities are not concentrated in sectoral terms in the case of the debt payable in domestic currency (even though the oil sector and, to a lesser extent, the telecommunications, energy and financial services stand out).

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¹⁶ Issues in nominal pesos accounted for 32% of the total Corporate Bonds issued between January and June (6% of Corporate Bonds total stock).

Box 1 / Credit Line for Productive Investment (LFIP)

The "Credit Line for Productive Investment (LFIP)" continued consolidating as the main instrument to boost lending to Micro, Small and Medium-Sized Enterprises (MSMEs) under special conditions. The estimated stock of the LFIP totaled ARS1.4 trillion as of March 2023, accounting for 13.4% of the total lending provided to the private sector (+1.5 p.p. y.o.y.) and almost of 25% of total lending to companies (+1.8 p.p. y.o.y.). Considering the distribution by institution of the ratio

between the LFIP estimated stock and total lending to the private sector, the number of banks with a ratio above 18% has gone up in year-on-year-terms and accounted altogether for almost half of the stock of this program (see Chart B.1.1.).

As of March 2023, around one third of the LFIP stock was provided to debtors of the industrial sector, followed by commerce (26%) and primary production (22%), without exhibiting significant changes against the previous publication of the IEF.

Chart B.1.1 | Credit Line for Productive Investment (LFIP) of MSMEs

Distribution by institutions



The non-performing ratio of the LFIP reached 0.7% by the end of the first quarter of 2023 18 pos

0.7% by the end of the first quarter of 2023,¹⁸ posting no significant changes against the previous publication of the IEF and standing well below the level of total financing to companies (3.2%) and households (3.3%).

In partiuclar, the non-performing ratio of the ensemble of debtors under the LFIP that already had bank financing before its launch (by late 2019) ¹⁹ went down from 2.1% to 0.7% in nearly three years and a half. These delinquency levels are standing well below those observed in the aggregate of companies that do not take part in the LFIP but have been operating in the financial system over the period (9.7% as of December 2019 and 6.6% as of March 2023). In turn, it is estimated that, as of March, almost 19,200 debtors without bank financing in December 2019 managed to access the LFIP program,²⁰ recording a delinquency ratio of 1.2% of the stock (+0.7 p.p. against September 2022).

According to estimates, the number of people employed by credit holders that have accessed the LFIP accounted for 22.8% of total wage-earners in the private sector, ²¹ up 2.2 p.p. against the level observed in the previous IEF. Companies receiving financing through LFIP and mainly engaged in

¹⁷ By early March, 2023, the BCRA decided to extend the LFIP until September 30, 2023. For further information, see <u>Press Release</u> of March 9, 2023 and Communication "A" <u>7720</u>.

¹⁸ According to a broken-down analysis by economic sector, in March the delinquency ratio of LFIP debtors stood at: 0.6% for debtors related to the industrial sector, 0.4% for debtors related to commerce and 0.8% for debtors related to primary production.

¹⁹ This ensemble consists in 99,577 debtors (i.e., 82% of the 120,881 debtors subject to the LFIP as of March 2023) with a stock of lending close to ARS3.1 trillion in the financial system (out of which 41% corresponds to LFIP).

²⁰ These debtors account for 6.6% of the estimated stock of LFIP as of March 2023.

²¹ Data as of February 2023 from the Ministry of Labor, Employment and Social Security.

industrial activities represented almost 37% of the workers in such sector, followed by companies belonging to the construction business (31.5%).

Box 2 / Financing in the Domestic Capital Markets with Marketable Promissory Notes

In terms of relevance, marketable promissory notes have become the second financing instrument in the domestic capital market (after Corporate Bonds) and have accounted for one third of the total so far in 2023. During the first half of the current year, these instruments continued exhibiting the positive momentum which has been specifically observed since 2021 and 2022 (see Chart B.2.1). This growth occurred within a context characterized by the authorization of a direct segment for trading²² and by the launch of various regulatory changes, among other milestones.²³

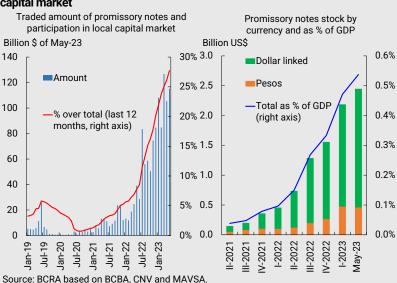


Chart B.2.1| Evolution of the stock of promissory notes and share in the domestic capital market

Together with the deferred payment checks (CPD), marketable promissory notes are one of the main financing tools used by Small and Medium-Sized Enterprises (SMEs) in the domestic capital market. In fact, the growth of promissory notes was accompanied by a reduction in the share of CPDs, which was the main tool used by SMEs.²⁴ Nevertheless, the conditions of issuance show

²² In June 2020, a direct segment for trading was authorized, which added to the already existing secured segment. Promissory notes traded in the secured segment have guarantees from reciprocal guarantee companies (SGRs), whereas those traded in the direct segment do not have such guarantees (even though there are direct promissory notes secured by means of sovereign bonds or private bonds, Mutual Funds or time deposits). So far in 2023, the direct trading segment has accounted for 90% of the total amount traded in promissory notes.

²³ For example, in 2021, <u>General Resolution (RG) 902</u> of the National Securities Commission (CNV) shortened the minimum terms of promissory notes to 15 days and reduced the minimum issuance amount to ARS5,000 (before, the term was 90 days and the amount was ARS100,000). Markets were also allowed to determine the exchange rate for promissory notes issued in foreign currency. In turn, the possibility of issuing promissory notes in favor of a third party and endorsed for their further trading in authorized markets was also included.

²⁴ In the face of the growth of the promissory note trading (in the first 5 months of the year, the share of this instrument in total financing through the domestic capital market went up 31% against the 12% recorded in the same period of 2022), in the first five months, the share of deferred payment checks (CPDs) contracted to 21% of the total against the 37% recorded in the same period of 2022.

some differences between both instruments. Against deferred payment checks, which are only issued in pesos, marketable promissory notes can be issued in pesos or denominated in dollars but payable in domestic currency at the official exchange rate at the time of maturity. This option (dollar-linked segment) has accounted for 63% of total financing through marketable promissory notes so far in 2023 and around 80% of the estimated total stock for this instrument. ²⁵ In terms of sectors, the marketable promissory notes traded are mainly issued by companies engaged in the agricultural segment, even though issues of companies involved in the energy sector are also relevant. ²⁶

Likewise, so far in 2023, there have been important differences in terms of the average amount per issue: around ARS60 million in the case of promissory notes and nearly ARS3 million for deferred payment checks (CPDs). Regarding the terms of issuance, marketable promissory notes can be issued for a maximum term of 3 years (against a maximum term of 1 year for deferred payment checks). In practice, so far in 2023, the average issuance term of promissory notes has stood at around 300 days for dollar-linked instruments whereas, in the segment in pesos, the average term has stood at 100 days (against 80 days for CPDs). On the margin, the average term has shortened in 2023 against 2022 for both promissory notes in pesos and CPDs.

Despite the growth observed, the stock of marketable promissory notes is estimated to account for a total of USD2.4 billion as of May 2023, i.e. around 0.5% of GDP (against the USD730 million of the same period of 2022 or 0.15% of GDP). In turn, over the same period of time, the stock of CPDs accounted for USD760 million (0.17% of GDP), against the USD950 million of the same period of 2022 (0.19 of GDP).

It is worth stating that the rise in the trading of marketable promissory notes occurs in a context in which these instruments exhibit a higher share in the portfolio of institutional investors. For example, in the case of Mutual Funds, promissory notes accounted for 1.8% of such investors' total assets in May (which represents 31% of the total outstanding stock of marketable promissory notes) whereas, one year ago, such share was 0.8%.²⁷ A breakdown analysis of Mutual Funds' holdings of promissory notes shows that 54% corresponds to Fixed Income Mutual Funds (promissory notes have a 3% weight in such portfolio) and 30% corresponds to SMEs Mutual Funds (accounting for 20% of the portfolio of these funds when, one year ago, the share of the SMEs Mutual Funds was 10% and, in 2021, it was only 6%).

²⁵ The data related to transactions with marketable promissory notes are calculated on the databases of the Mercado Argentino de Valores (MAVSA).

²⁶ Considering issuing companies and analyzing promissory notes with the highest amounts (to account for 90% of the total issued in 2023)

²⁷ On the other hand, the share of CPDs contracted from 1.8% to 1.3% of the total portfolio of Mutual Funds over the same period.

2. Main Strengths of the Financial System Given Current Risks

Against a challenging international and domestic context, the financial system has exhibited an important degree of resilience, keeping a regular performance in its operations in early 2023. Within the framework of the prudential regulatory system in force, the ensemble of institutions' coverage margins—in terms of liquidity, provisions and capital, for example— against the risks assumed have been relatively high if compared to the levels of previous years and to other financial systems. In fact, this is one of the main strengths of the system. Other strength factors are the ongoing moderate exposure to credit risk regarding the private sector as well as the low relative relevance of loans and deposits in foreign currency in the aggregate balance sheet. Below there is a review of these aspects while, in the following sections, some of these features will be analyzed in depth, together with other attributes to assess the potential vulnerability sources of the financial system.

Table 1 | Main indicators of the financial system's soundness

	Financial system		State-owned banks			Domestic private banks			Foreign private banks			NBFI			
	Mar-22	Sep-22	Mar-23	Mar-22	Sep-22	Mar-23	Mar-22	Sep-22	Mar-23	Mar-22	Sep-22	Mar-23	Mar-22	Sep-22	Mar-23
Liquidity															
Liquidity Coverage Ratio (1)	2.0	2.0	2.3	1.7	1.9	2.2	2.0	1.9	2.2	2.4	2.3	2.6	-	-	-
Net Stable Funding Ratio (1) (2)	1.9	2.0	2.0	1.7	1.9	1.9	2.1	2.1	2.0	1.9	1.9	2.2	-	-	-
Broad liquidity / Deposits (%)	66.7	72.3	77.2	59.4	66.1	74.0	70.4	77.9	79.6	73.2	76.0	79.5	53.6	66.1	71.5
In \$	62.5	68.6	74.6	56.7	64.2	73.5	65.7	73.3	75.6	67.8	70.7	75.2	39.7	55.9	64.9
In US\$	89.1	95.7	92.2	74.8	79.7	77.6	100.0	111.5	104.0	95.3	100.3	97.1	282.2	246.9	198.7
Solvency															
Regulatory capital / RWA (%)	27.6	28.6	31.4	26.9	25.7	29.1	30.1	32.3	34.5	26.2	29.0	31.6	21.6	20.5	21.6
Regulatory capital Tier 1 / RWA (%)	26.2	27.4	30.4	26.3	25.1	28.6	27.8	30.4	32.8	24.8	27.8	30.6	19.3	18.3	19.1
Leverage ratio (%) (1)	14.3	14.5	16.3	12.5	12.4	13.9	16.0	16.4	18.2	14.8	15.4	18.0	24.4	22.3	17.8
Capital conservation buffer (% verification)	100	100	100	100	100	100	100	100	100	100	100	100	99	90	92
Domestic systemically important banks buffers (% verification)	100	100	100	100	100	100	100	100	100	100	100	100	-	-	-
Regulatory capital / Credit to private sector net of provisions (%)	50.4	55.9	63.1	45.5	51.3	60.4	59.0	65.2	71.1	50.7	55.5	61.9	21.1	21.3	20.3
(Regulatory capital - Regulatory requirement) / Credit to private sector net of provisions (%)	35.8	40.2	47.1	32.6	35.7	44.4	42.9	48.6	54.1	34.9	39.8	45.9	13.0	12.5	12.5
Profitability															
ROE in homogeneous currency (%a.) (3)	8.3	8.9	12.7	9.4	12.6	18.3	8.5	7.3	9.2	8.2	8.3	11.5	-17.7	-30.0	-30.6
ROA in homogeneous currency (%a.) (3)	1.3	1.5	2.2	1.3	1.9	2.9	1.5	1.3	1.7	1.4	1.5	2.2	-3.3	-5.7	-5.9
Private sector credit															
Private sector exposure / Assets (%)	31.2	28.3	27.2	31.2	27.6	25.8	28.9	26.2	25.8	31.9	30.2	29.5	77.2	72.4	65.1
Non-performing loan ratio (%)	3.9	3.1	3.2	6.1	5.1	5.3	2.8	2.1	2.3	2.1	1.4	1.5	6.0	4.9	3.9
Provisions / Credit to private sector (%)	4.5	4.0	4.0	5.7	5.3	5.5	3.8	3.1	3.1	3.8	3.2	3.3	4.2	4.9	3.0
Public sector credit															
Exposure / Assets (4)	16.0	15.6	17.0	21.2	20.0	25.0	16.6	14.8	13.4	9.4	10.7	10.5	0.8	8.0	2.2
Net exposure / Assets (%) (5)	3.3	2.5	6.8	-4.6	-6.2	4.1	8.1	6.4	7.6	8.2	9.9	9.8	8.0	8.0	2.2
Currency risk															
(Assets - Liabilities + Net term purchases in foreign currency) / Regulatory capital (%)	10.0	27.4	32.2	24.9	50.5	61.5	5.6	22.5	26.4	-2.0	6.4	4.8	35.8	40.5	47.6
Deposits in US\$ / Total deposits - Private sector (%)	15.9	14.4	15.1	13.2	12.0	11.2	14.7	13.1	15.0	19.8	18.3	19.7	5.8	5.4	5.0
Loans in US\$ / Total loans - Private sector (%)	8.5	8.0	8.5	9.2	8.1	8.8	6.3	6.6	6.4	9.4	9.0	9.7	11.3	6.4	9.0
(1) Data of Mar-23 is estimated. (2) Dec-22 last available data. (3) 12-mont	n accumula	ted.													

⁽⁴⁾ Position in government securities (excluding BCRA securities) + Loans to the public sector. (5) Position in government securities (excluding BCRA securities) + Loans to the public sector RWA. Risk weighted assets
Source: BCRA

i. The aggregate ratios for the financial system exhibit a high coverage against liquidity risk (see Section 3.3). Taking into account the ratios recommended by the Basel Committee on Banking Supervision (BCBS), the ensemble of domestic institutions subject to compliance with the regulation (Group A)²⁸ continued to sizably exceed the regulatory minimum values in early 2023. The Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) posted no significant changes against the figures of the previous Financial Stability Report (IEF). In fact, the

²⁸ It includes financial institutions with assets equal to or higher than 1% of total assets of the financial system. For further detail, see the Consolidated Text on Financial Institutions' Authorities.

Liquidity Coverage Ratio (LCR) was in line with the average of a sample of medium-sized banks of other economies and continued standing sizably above the average of the largest banks in other financial systems (see Chart 4). In turn, the Net Stable Funding Ratio (NSFR) stood well above the level recorded in other countries.

By the end of the first quarter of 2023, the aggregate financial system's broad liquidity²⁹ stood at 77.2% of deposits (74.6% in the segment in pesos and 92.2% in foreign currency), going up in year-on-year terms and standing above the average of the last 10 years (53.7%). A breakdown analysis of the components shows that there has been an increase in the share of sovereign bonds admitted to satisfy the minimum cash requirement over the last six months.

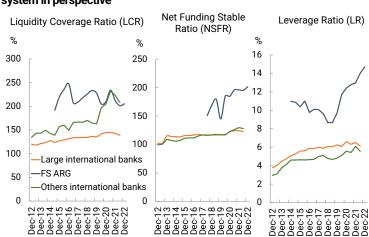


Chart 4 | Basel III ratios for liquidity and leverage – Domestic financial system in perspective

Note and Source: *According to a sample carried out by the BIS, internationally large banks are defined as those whose Tier1 capital exceeds <3 billion. ** Others international banks according to the BIS sample. Basel III Monitoring Report - February 2023 and BCRA

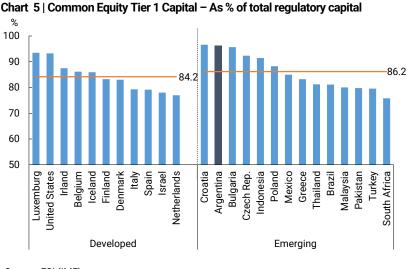
ii. Capital ratios are standing at high levels for the ensemble of financial institutions. The Regulatory Capital (RC) for the aggregate financial system has increased in terms of the risk-weighted assets (RWAs), standing at 31.4% by the end of the first quarter of 2023, going up against the previous IEF and in year-on-year terms due to a rise of the numerator in real terms and a slight drop of the denominator in real terms. In early 2023, 96.3% of the RC was mainly explained by the Common Equity Tier 1 capital, with greater capacity to absorb potential losses, standing above the average of other countries (see Chart 5). In turn, the excess of regulatory capital (RC minus the minimum capital regulatory requirement, before considering the additional capital buffers —capital conservation buffer and systemic importance buffer) accounted for 293% of the regulatory requirement (for further detail, see Section 3.1). Additionally, there was a high compliance with the additional regulatory capital buffers by the institutions.

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²⁹ Considering the stock of liquid assets, the concepts included in the compliance with the minimum cash regime and other BCRA instruments, in both domestic and foreign currency.

According to the definition of the Basel Committee's guidelines, the leverage ratio continued to stand sizably above the minimum requirements, reaching 15% for the financial system. This ratio kept exceeding —on average— the ratios observed in other countries (see Chart 4).

The aggregate financial system has managed to keep positive profitability levels in 2022 and early 2023, underpinning the abovementioned aggregate solvency indicators (see Section 3.2). In turn, the BCRA introduced changes to the macroprudential regulations which have allowed financial institutions to distribute up to 40% of their earnings.³⁰



Source: FSI (IMF)

iii. The non-performing ratio has remained unchanged whereas provisioning levels have continued to be high against a backdrop of low and decreasing aggregate exposure to private sector credit risk (see Section 3.1). Lending to the private sector accounted for 27.2% of the financial system's total assets in March 2023, going down slightly against the previous IEF and in year-on-year terms. These aggregate exposure levels to the private sector were lower than the average values of the last 10 years (40.9%). Within this framework, the non-performing ratio of loans to the private sector stood at 3.2%, without posting significant changes against September 2022 and standing at a lower level in year-on-year terms (-0.7 p.p.). Moreover, provisions of the ensemble of financial institutions accounted for 4% of lending to the private sector, i.e., they have continued exceeding 100% of the non-performing portfolio of loans.

iv. Limited relative importance of lending to the private sector and deposits denominated in foreign currency for the ensemble of financial institutions. The stock of loans to the private sector in foreign currency accounted for only 8.5% of total loans to the private sector in March 2023, without posting significant changes in year-on-year terms and standing below the average of the last 10 years (13.6%). On the basis of the macroprudential regulation, this financing is mainly allocated to debtors whose income correlates with the exchange rate. In turn, by the end of the

³⁰ Financial institutions were entitled to distribute dividends in six equal, monthly and consecutive installments as from April and until December 2023, provided they have been authorized by the BCRA.

first quarter of 2023, the stock of deposits in foreign currency totaled 15.1% of private sector deposits, going down against the value recorded one year ago and against the average of the last 10 years (19.3%).

Given the abovementioned strengths, the Argentine financial system is expected to respond with resilience if an adverse scenario held true. There follows a summary of the main potential risk factors (exogenous to the ensemble of institutions) that may be faced by the Argentine financial system in the short and medium term. It is estimated that an eventual scenario of materialization of the risk factors should be highly extreme (i.e., an event very unlikely to occur) to have a significant impact on the financial stability conditions, based on the monitoring carried out by the BCRA.

More adverse external context, given the presence of multiple risk factors that may trigger negative dynamics, which may be amplified by the vulnerabilities in place at global level. The weight of this risk factor increases considerably due to a heightened uncertainty around the potential contagion of eventual greater problems in advanced nations' financial systems. Global growth perspectives continue to be relatively weak in historical terms, on the basis of the monetary contractionary cycle in developed economies (characterized by a higher uncertainty, though more recently focused on the future interest rate rises). A lower-than-expected growth -within a context of recession in developed economies as the most extreme case— would impact negatively on emerging economies, because of its effects on foreign trade, the evolution of the dollar, commodity prices and portfolio flows, among other variables. Likewise, various factors (similar to the ones mentioned in previous publications of the IEF,³¹ compounded now by the possibility of new concerns about the financial markets of developed economies and the potential contagion) may trigger a new peak of uncertainty, with a sudden change in risk appetite, thus affecting the conditions observed in the financial markets. As it was explained in previous issues of the IEF, after a long period of interest rates standing at historically low levels and a limited expected volatility at global level, there are several vulnerabilities that would turn a negative scenario into a special challenge for international financial stability. These vulnerabilities include, for example, signs of over-appreciation in some riskier segments of the market, the boom of the Non-Bank Financial Intermediation (NBFI) with a procyclical behavior (and highly interconnected) and the growth of the debt burden recorded in recent years for both the public and private sectors.

An eventual shock related to the real sector (lower growth) would have a more direct impact on the commercial channel, thus largely affecting the level of activity in domestic terms and, consequently, the credit risk faced by banks. In turn, a more challenging scenario in international financial markets would largely affect the financial channel. Even though due to the current situation of the Argentine economy the transmission via this channel is more limited, an increasing volatility among the currencies of emerging economies would exert pressures on the exchange rate and on the

³¹ Including, for instance, sudden changes in expectations about the monetary policy bias of developed economies (with investors adjusting perspectives quickly while inflation pressures persist), concerns about non-bank financial intermediation, specific credit events in developed or emerging economies or geopolitical factors (such as an escalation in the armed conflict in Ukraine, impacting negatively on commodity prices).

domestic financial conditions and would condition the context where financial intermediation takes place (with potential consequences due to second round effects on the commercial channel).

Risk of an increasing deterioration of the domestic context due to a weaker-than-expected activity level or to a higher volatility in the domestic financial markets. Despite the growth observed in the first quarter of 2023 (0.7% quarter-on-quarter s.a.), growth expectations for 2023 for the Argentina economy have worsened on the margin since the time of publication of the previous IEF. The main factors conditioning growth in the short term are a lower exportable agricultural supply, impacting adversely on international reserves (which could be offset in part by an improvement in the energy budget after the start-up of new infrastructure and oil pipe works). Other factors include an eventual impact of more limited imports on the activity level or the effect of a greater fiscal consolidation (within the framework of the negotiations associated with the fifth review of the Arrangement with the IMF -currently under execution). With respect to financial markets and on the basis of the trends observed, a series of measures has been adopted in recent months to contain a context of heightened volatility (with interventions in the secondary market of Treasury instruments and currencies, rises of interest rates and adjustment to exchange regulations), while the BCRA continues monitoring the situation to prudently manage monetary aggregates and to consolidate financial and exchange stability. However, even if tensions in the international markets do not worsen, there are other factors that might impact on the evolution of domestic markets, including the electoral process, the dynamics of the commercial external financing and the multilateral and bilateral financial external financing, the evolution of inflation expectations or the challenges being faced by the public sector financing policy to deepen the local debt market. A lower-than-expected economic activity or any stress episode in the domestic financial markets would impact on the quality of banks' portfolio and on the context where financial intermediation takes place.

Increasing operational risks and challenges related to technological innovation and a higher use of digital tools. The boom of digital financial services (with an accelerated expansion pace during the pandemic) entails a higher exposure of the financial sector to new risks, such as frauds and/or cyberattacks. These risks may materialize as data security gaps, losses for institutions or clients and also obstacles to the regulatory operation of the market, impacting on reputational and operational risk and even causing eventual financial stability problems. In this respect and despite the absence of systemic events related to these factors, in line with the strategy adopted by the BCRA, additional efforts have been made in this strategy to update the regulations intended to mitigate these new risks. This strategy covers a large agenda in terms of risk management, awareness, prevention and surveillance of fraud and cyberattacks. The updates of these regulations include the extension of the regulatory scope related to technology risks and IT security to strengthen the institutions' cyber resilience as well as the adjustment of rules related to security and prevention of security and technology risks in the digital financial services, which now cover financial institutions and PSPS³², thus strengthening fraud prevention.

32 Communications "A" 7724, "A" 7777 and "A" 7783.

In the medium and long terms, there are additional risk factors to be taken into account. They include, for instance, the consequences of climate change (see Exhibit 3), the increasing use of crypto-assets at world level (instruments that have proved to be particularly volatile, added to the problems observed in the sector —see Exhibit 4) ³³ and structural changes to the post-pandemic context (including modifications to the business models in the financial sector).

The next section will provide a detailed description of the results of the financial stability analysis. It includes the main sources of vulnerability identified for the domestic financial system, given its level of exposure to the abovementioned risk factors. These sources of vulnerability will be contrasted with the strengths of the financial system, in order to assess its degree of resilience in the face of any eventual materialization of the risk factors.

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³³ Although the use of crypto-assets at domestic level has been limited so far, new measures continue to be adopted so that they do not endanger financial stability (see Regulatory Annex).

3. Sources of Vulnerability and Specific Resilience Factors of the Financial System

3.1. Balance Sheet Exposure to Credit Risk

Starting from moderate levels, the financial system has managed to keep a decreasing path in its exposure to the private sector. Thus, the stock of loans to the private sector stood at 27.2% of assets in the ensemble of financial institutions by the end of the first quarter of 2023 (down 1.1 p.p. and 3.9 p.p. against the previous IEF and in year-on-year terms, respectively), standing significantly below the average of the last 10 years (40.9%).³⁴ In March, the financial system's total credit exposure (including the non-financial public and the private sectors)³⁵ reached 44.3% of total assets (see Chart 6); it has stood slightly above the figure recorded in the previous IEF (+0.4 p.p.) but has gone down 3 p.p. in a year-on-year comparison. Keeping things in perspective, this record was lower than the average of the last 10 years (51.5%).

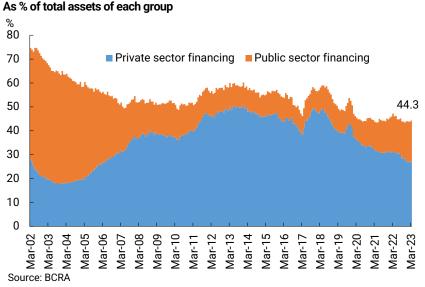


Chart 6 | Financial system's gross exposure to the private sector and the public sector As % of total assets of each group

The abovementioned decline of the financial system's aggregate exposure to the private sector was mainly driven by the segment in domestic currency (-1.2 p.p. of assets against the previous IEF, to 24.9%, see Chart 7).³⁶ Taking into account the recipients of the loans, financing to households accounted for 12.7% of total assets in March (-0.7 p.p. against the previous IEF), while loans to companies totaled 14.5% of the sector's assets (-0.4 p.p. if compared to the previous IEF).

³⁴ Financing to the private sector net of total provisions totaled 26.1% of assets, down 1.1 p.p. against the previous IEF and -3.6 p.p. v.o.v.

³⁵ In the exposure to the public sector, financing via loans and sovereign bonds is considered.

³⁶ In the last six months, loans to the private sector in foreign currency relative to total assets increased slightly to 2.3%.

In terms of bank loans to households, there has been a widespread decline in exposure across all geographical regions, from the top figure reached in mid-2018 (see Chart 8). The Central region has accounted for 72.2% of lending to households.³⁷ In turn, the exposure of the ensemble of institutions to financing to companies has also declined across all economic sectors, posting a slight reversal on the margin.³⁸

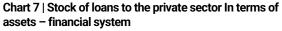
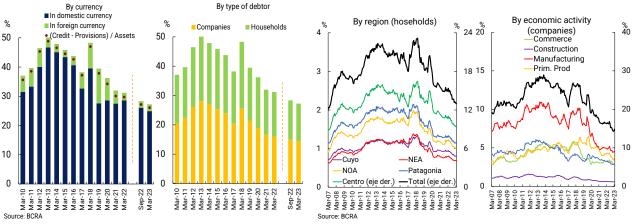
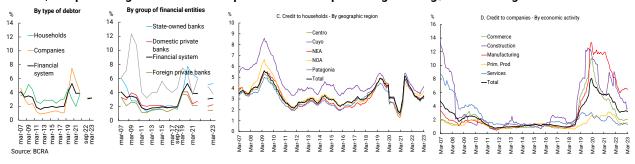


Chart 8 | Stock of loans to households by region and to companies by economic activity – In terms of assets



The non-performing ratio of loans to the private sector stood at 3.2% as of March, 2023, for the financial system, posting no significant changes against the figure recorded in the previous IEF (+0.1 p.p.) and standing 0.7 p.p. below the figure recorded one year ago (see Chart 9, panels A and B). The current level of this ratio is standing above the level observed in the most recent period of highest stability in the delinquency ratio of the private sector (1.8%, average of the 2011-2017 period) and also above the average of the last 10 years (2.7%, without considering the stage impacted by the financial relief measures adopted in the pandemic context).

Chart 9 | Non-performing ratio of loans to the private sector: non-performing financing / total financing - As %



³⁷ This is the region that contributed the most to the drop in the exposure of the financial system to households against the previous IEF, even though the Central-West region (Cuyo) and the North-West region (NOA) went down in relative terms.

³⁸ The exposure to companies engaged in commercial activities exhibited the highest relative decrease against the previous IEF. When considering the debt incurred by employees of the financial system's debtor companies (see that this stock is part of the left panel of Chart 3), the exposure would increase to 23.4%, down 16 p.p. against the period with the highest exposure (in January 2014, this ratio reached 39.4% and 28% without considering formal employees' stock of debt).

A breakdown by debtor type shows that, as of March, the delinquency ratio of financing to households accounted for 3.3% of such portfolio, up 0.2 p.p. against the figure recorded in September 2022 (-0.5 p.p. y.o.y.), mainly due to the performance of credit cards. The Central-West region (Cuyo) and the North-West region (NOA) exhibited the highest levels and increases in the non-performing ratio of loans to households against the previous IEF (see Chart 9, panel C). Regarding lending to companies, the non-performing ratio posted no significant changes against September 2022 and continued to stand at 3.2% (-0.9 p.p. y.o.y.), due in part to the significant decline in the construction business ratio and to a slight increase in the industrial activities ratio (see Chart 9, panel D).³⁹

On the other hand, the financial system's exposure to the public sector was on the rise in the last six months (+1.5 p.p. of total assets up to 17% in March, see Chart 6).⁴⁰ A breakdown of this exposure by currency shows that 7.3% of assets corresponded to securities in pesos with CER adjustment clause (+0.3 p.p. semi-annually), 4.2% to dual bonds (+1.9 p.p. semi-annually), 4% to instruments in pesos without CER adjustment clause (-0.5 p.p. semi-annually) and 1.5% to securities in foreign currency (-0.2 p.p. semi-annually).

The global and domestic context of uncertainty will have a decisive impact on the economic activity performance for the rest of the year.⁴¹ Therefore, an eventual materialization of the risk factors described in the previous Section might operate on this potential vulnerability source of the financial system because it might adversely affect debtors' payment capacity.

3.1.1. Elements of Resilience and Mitigating Measures:

The financial system continues to keep high levels of provisioning and capitalization. As of March 2023, the accounting provisions represented 4% of the total financing to the private sector and 126.1% of the non-performing portfolio. Over the period, the excess of regulatory capital of the ensemble of financial institutions (on top of the minimum required) was equivalent to 47.1% of the loans to the private sector net of provisions, up 6.9 p.p. against the previous IEF and 11.3 p.p. y.o.y. The level of this ratio largely exceeds the average of the last 10 years (18.5%).

In order to gauge the robustness of the coverage adopted by the financial system to face any eventual materialization of the credit risk, two sensitivity exercises are shown below. They analyze the hypothetical effect of extreme and very unlikely events of credit risk on the solvency of the sector (while the other aspects remain unchanged), such as the total failure to recover loans granted to a group of debtors:

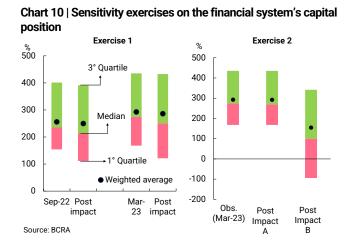
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³⁹ In line with the evolution of the non-performing ratio of financing to the private sector relative to the previous IEF, the estimated default probability (PDE) —a ratio that provides information on the transition in the credit classification of debtors—did not post significant changes (+0.1 p.p. up to 0.7%). In the segment of loans to households, there was some increase in the PDE on the margin, and it stood slightly above the average of the last 10 years.

⁴⁰ The current level is slightly higher than the average of the last 10 years (10.6%). When considering funding from the public sector (deposits in the financial system), this ratio goes down to 6.8% of assets at systemic level (assets higher than liabilities for the financial system), up 3.5 p.p. y.o.y. (conversely, the financial system had recorded a short position equivalent to 4.5% of assets for the average of the last 10 years).

⁴¹ See Monetary Policy Report (IPOM).

- Exercise 1⁴²: The impact on the financial system of an increase in the non-performing ratio of loans to the private sector in each one of the institutions up to their individual maximum value reached by each one in the last 15 years is closely monitored. It is estimated that, as of March 2023, after this shock, the median of the financial system's capital position (Regulatory Capital (RC) capital requirement; in terms of the requirement) would have gone down 23.9 p.p. to 250.7% (the results corresponding to September 2022 had shown a decrease of the capital position ratio of 20.9 p.p., down to 214.3%, see left panel of Chart 10).⁴³
- Exercise 2: It is assumed that debtors having some non-performing loans in the financial system at present stop paying their remaining (performing) financing in other institutions. Considering data of March 2023, it is estimated that, after this shock, the median of the financial system's capital position would go from 274.6% (weighted average of 292.6%) down to 269.8% (weighted average of 292.2%, see right panel of Chart 10).



The concentration of private sector debtors in the financial system is still standing at low levels, even though it has increased slightly against the previous IEF. The top 100 and top 50 debtors (taking the total stock of debt in the ensemble of institutions) accounted for 13.1% and 10.1% of the loans to the private sector, respectively, in March 2023 (+0.5 p.p. against the previous IEF, in both cases), standing at historically very low levels (the average of the last 10 years was 16% and 12.1%, respectively). 44 This situation is mainly due to the fact that the regulatory approach

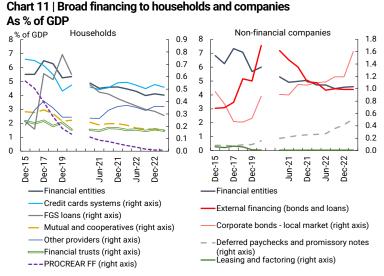
⁴² This exercise is identical to the one published in the previous IEF (Exercise 1 of Box 2).

⁴³ If the weighted average had been considered, the decrease of the capital position would have stood at 6.6 p.p. of the requirement, reaching a level of 286% (-6.2 p.p. of the requirement, to 249.7% for September 2022).

⁴⁴ Given the fact that the financial system's number of debtors went from nearly 4 million in early 2003 to over 13 million in March 2023, another way of analyzing the degree of their concentration consists in considering the relative share of a uniform fraction of the total, once organized in a descending order relative to the financial system. In this case, the first millionth part of debtors (with the highest stock of debt) currently accounts for 5.2% of the total stock (standing slightly below the historical average of 5.4%) and the first one-hundred thousandth part (with the highest stock of debt) accounts for 14.5% (below the average of 16.9%).

adopted by the el BCRA applies to large exposures to credit risk —in line with the international standards on the matter—, seeking to limit the losses that might eventually occur in the event that a large counterparty failed to pay. By the end of the first quarter of the year, large exposures of the ensemble of institutions⁴⁵ accounted for only 0.8% of the aggregate financial system's Tier 1 Capital, down 0.3 p.p. against the previous IEF.

Standards on credit origination (EOC) without significant changes on the margin. These standards remained stable against the previous quarters, in terms of both lending to companies and lending to households. 46



Source: BCRA based on INDEC, CNV, MAE, MAV, ANSES and INAES.

Limited financial indebtedness levels across companies and households in aggregate terms, with a decline against the average values observed in previous years. As of March, credit in a broad sense⁴⁷ intended for companies and households reached an amount equivalent to 11.1% and 5.5% of GDP, respectively (see Chart 11). This has resulted in an increase in the case of companies against the figures observed six months ago (standing at 10.5% of GDP), while no relevant changes were recorded in the case of lending to households.⁴⁸ It is worth underlining that March ratios entailed a decrease, in both cases, against the average level of the previous 5

⁴⁵ As a general criterion, a large exposure is defined as any exposure equivalent to 10% or more of the institution's Tier 1 capital. For further detail, see the Consolidated Text on <u>Large Exposures to Credit Risk</u>.

⁴⁶ As shown by the answers to the <u>Survey on Credit Conditions</u> prepared by the BCRA on a quarterly basis.

⁴⁷ Stocks as of March 2023 as percentage of GDP and estimated as of the first quarter of 2023, seasonally-adjusted. In addition to the loans provided by the ensemble of financial institutions regulated by the BCRA, this stock includes: financing via the credit card systems, loans granted by mutuals and cooperatives (based on the National Institute of Associations and Social Economy (INAES)), lending from other non-banking credit providers registered with the BCRA, financing held in the portfolio of financial trusts not related to infrastructure, loans from the Sustainability Guarantee Fund (FGS) (including the PRO.CRE.AR portfolio), corporate bonds issued by the non-financial private sector under domestic legislation, promissory notes (data as from the second quarter of 2021), deferred payment checks, loans related to leasing and factoring, and external financing (based on INDEC) via bonds and loans (excluding credit and commercial advances). For data about external financing (INDEC), the latest data published (December 2022) are used and an adjustment is made on the basis of the exchange rate observed as of March.

⁴⁸ This has occurred in a context where loans to companies have recorded a higher increase in nominal terms than GDP (seasonally-adjusted), while a similar variation was recorded in the case of loans to households.

years (considering the ratios observed by the end of the year). In the specific case of publicly-traded companies, with data as of March 2023, there was a slight six-month drop in the total leverage ratio, even though the financial debt burden has gone up but posting a lower short-term debt to total debt ratio (see Box 3). Regarding the changes observed in the credit stock in a broad sense, the stock for companies has remained virtually unchanged as of March 2023 against the value recorded six months ago. However, there was a mixed performance across the various components: the stock of Corporate Bonds under local legislation and the stock of promissory notes have gone up in real terms while the stocks of external financing, bank credit and deferred payment checks dropped, among the main components. In the case of loans to households, in the same period, there was a decrease in the stocks measured in real terms, which was widespread across the various credit sources⁴⁹ (except for other credit providers registered with the BCRA).

Households' debt burden in terms of their bank debt services has continued to be limited. It is estimated that the households' monthly debt service burden accounted for 10.9% of the wage bill, in line with the figure recorded in the previous IEF and down 1.1 p.p. in year-on-year terms.

Low share of financing to the private sector in foreign currency. In a context where lending to the private sector in foreign currency has increased slightly in the last six months (2.8% in currency of origin), these loans accounted for only 8.5% of total financing to the private sector, up 0.5 p.p. against the previous IEF. The credit risk being faced by the financial system due to this exposure and resulting from any eventual exchange rate fluctuations is limited because of the domestic macroprudential regulations. In this respect and in order to tackle the institutions' risk of exposure to debtors' currency mismatches, the financial institutions' lending capacity in foreign currency can only be granted to debtors involved in activities (and receiving income) related to the evolution of the exchange rate.

3.2. Evolution of the Financial Intermediation Activity

The financial intermediation activity with the private sector has exhibited a relatively weak performance since the previous IEF within a context of heightened uncertainty at both domestic and global level. The local economic activity interrupted its expansionary trend during the last quarter of 2022 and showed an incipient growth path in early 2023. Against this backdrop, the stock of loans to the private sector in domestic currency has contracted in real terms in the last six months and in year-on-year terms. In turn, the real stock of private sector deposits in pesos has not posted significant changes since the previous IEF, accumulating a slight year-on-year rise.

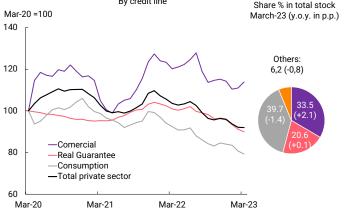
The stock of financing in pesos to the private sector has accumulated a 4.5% drop in real terms against the previous IEF (September 2022) and an 11.2% drop y.o.y. in real terms (see Chart 12).

⁴⁹ For the aggregate financial system, the six-month reduction in real terms has been mainly accounted for by bank credit and, to a lesser extent, by loans of the Sustainability Guarantee Funds (FGS).
50 For further detail, see the Consolidated Text on the <u>Credit Policy</u>.

Commercial credit lines have continued to exhibit a relatively more moderate momentum than the remaining credit segments, and their share has gone up in the total stock to 33.5%. This performance was mainly driven by the credit policy implemented by the BCRA and focused on a sustainable productive development, mainly intended for micro, small and medium-sized enterprises (MSMEs) (see Box 1).

Chart 12 | Stock of loans in pesos to the private sector in real terms* - Financial system

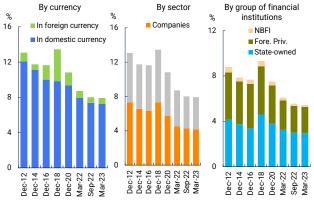
By credit line Share % in total stock



*Not seasonally adjusted. Commercial includes overdrafts, documents and leasing. Real guarantee: mortgages and pledgebacked. Consumption: Personal and credit cards. Capital adjustments are included in each segment. The total also includes accrued interest.

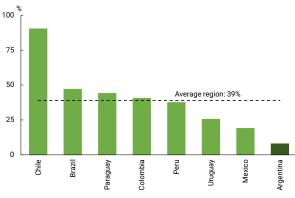
Credit depth in the economy continued to stand at relatively limited levels in early 2023. In March, 2023, it is estimated that the stock of financing to the private sector provided by the ensemble of financial institutions accounted for 7.9% of GDP (7.2% in pesos), posting no significant changes against the level recorded last September and dropping slightly (-0.8 p.p.) in a year-on-year comparison (see Chart 13). The levels of depth shown by bank loans in the economy are lower than those of the average level of the last 15 years (11.5%) and also than those of other countries of the region (39% for the average of Latin America, see Chart 14).

Chart 13 | Stock of loans to the private sector – As % of GDP



Note: Quarterly averages of both the numerator and denominator are considered. GDP for March 2023 estimated. Source: INDEC y BCRA

Chart 14 \mid Stock of loans to the private sector as % of GDP-International comparison



Note: Data as of 2022, except Argentina as of March 2023. Source: Central Banks, INDEC y BCRA

As mentioned in Section 1, the BCRA has continued raising in recent months the benchmark nominal interest rate in order to provide a positive yield in real terms on investments in pesos and

to preserve monetary and financial stability. In this context, private sector traditional time deposits (without adjustment clause) in pesos have gone up (+10.2% in real terms since the previous IEF or +19.6% y.o.y. in real terms as of March). In turn, there was a contraction in the private sector stock of sight accounts in pesos in real terms (-1.5% in the last six months and -4.9% y.o.y.).

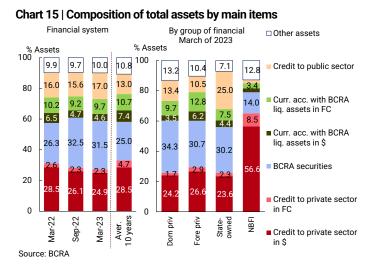
Regarding the segment in foreign currency, the stock of loans to the private sector went up slightly in the last six months (+2.9% in currency of origin), even though it continued posting a year-on-year decline (-3.1%), while deposits grew slightly against the figure recorded in the previous IEF and in year-on-year terms.

The size of the balance sheet (total assets) of the ensemble of financial institutions posted no significant changes in real terms against the previous IEF and in a year-on-year comparison. Regarding the components of assets, there has been an increase in the relative share of loans to the public sector in recent months, accompanied by a rise in the current accounts held by the institutions at the BCRA in foreign currency (see Chart 15), to the detriment of the remaining main items.

For the next few months, there is still some uncertainty related in part to an eventual volatility in the financial markets (usually evident during electoral periods). In this context, the likelihood of eventual changes in the evolution of the financial intermediation activity continues to be seen as a vulnerability factor for the sector, since it may be adversely affected if any of the risk factors mentioned above finally held true.

3.2.1. Elements of Resilience and Mitigating Measures:

The financial system has kept positive profitability levels. The ensemble of financial institutions has accrued a total comprehensive income in homogeneous currency in the aggregate of the last 12 months up to March equivalent to 2.2% of assets (ROA) and to 12.7% of equity (ROE), standing above the levels observed in September 2022 and one year ago (+0.9 p.p. y.o.y. and +4.3 p.p.



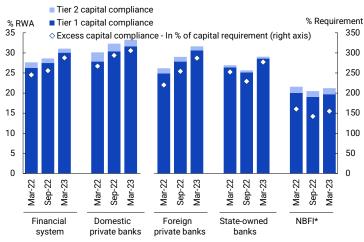
y.o.y., respectively). This increase was mainly explained by a higher financial margin (mostly because of a higher income from securities), despite the increase in losses due to exposure to monetary items (in a context of a relatively higher level of inflation) and to higher tax burdens (see Table 2). A breakdown by group of institutions shows that profitability levels continued to be mixed over the period, in a context of sizable capital positions in all groups of institutions (see Chart 16).

Table 2 - financial system's profitability chart - in homogeneous currency

Annualized (a.) - In %a. of netted assets	IQ-22	IIQ-22	IIIQ-22	IVQ-22	IQ-23	2022*	2023*
Financial margin	13.7	15.3	18.7	20.1	20.0	12.5	18.5
Interest income	8.3	8.8	9.9	10.9	10.9	7.9	10.1
CER and CVS adjustments	1.4	1.8	1.8	2.2	2.0	1.4	1.9
Foreign exchange price adjustments	0.8	0.9	1.9	3.0	3.3	0.6	2.3
Gains on securities	12.6	17.0	21.7	25.0	24.1	9.9	22.0
Returns on repo	2.3	1.1	2.7	4.0	4.9	4.2	3.2
Interest expense	-11.9	-14.3	-19.3	-25.0	-25.3	-11.5	-21.0
Other financial income	0.2	-0.1	-0.1	0.1	0.0	0.1	0.0
Service income margin	1.8	1.9	1.9	1.8	1.6	1.9	1.8
Loan loss provisions	-0.8	-0.8	-0.9	-1.0	-1.0	-1.0	-0.9
Operating costs	-6.2	-6.8	-6.7	-7.0	-6.4	-6.4	-6.8
Net Monetary Position	-6.0	-6.6	-8.3	-7.0	-9.3	-4.1	-7.8
Tax charges	-1.5	-1.3	-2.5	-3.7	-2.5	-1.5	-2.5
Results	1.1	1.7	2.2	3.1	2.3	1.4	2.3
Other Comprehensive Income (OCI)	0.0	-0.7	0.2	0.2	-0.2	-0.1	-0.1
Return on assets (ROA)	1.0	1.0	2.4	3.4	2.2	1.3	2.2
Return on equity (ROE)	6.2	5.8	13.9	19.0	11.7	8.3	12.7

^{*}Acumulated 12 months up to March. Source: BCRA

Chart 16 | Solvency ratios by groups of financial institutions



*NBFI: Non-Banking Financial Institutions. Source: BCRA

Macroprudential policy to underpin solvency levels. The BCRA decided that, from April to December 2023, financial institutions having the monetary authority's authorization may distribute earnings only up to 40% of the corresponding amount (in 6 monthly, equal and

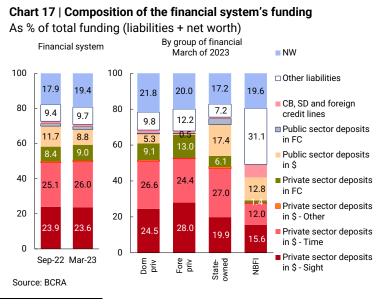
consecutive installments). Therefore, the purpose is to preserve the financial system's capacity to face any eventual shocks.

Micro and macroprudential regulation and supervision scheme. The BCRA has continued adopting micro and macroprudential policy measures and has adjusted the domestic regulation to the needs of the current context without losing sight of the international recommendations and best practices on the matter. Likewise, the Superintendence of Financial and Exchange Institutions (SEFyC) has kept on monitoring the performance of the institutions in order to anticipate and tackle any eventual vulnerability conditions.

Credit policy focused on sustaining productive financing to MSMEs. During 2022 and so far in 2023, the BCRA has continued encouraging financing to the private sector, mainly to micro, small and medium-sized enterprises (MSMEs). In particular, the monetary authority has extended the "Credit Line for Productive Investment (LFIP)" of MSMEs to September 2023 (see Box 1). Simultaneously, it has continued widening financing alternatives for this segment of companies by regulating the Open Transfer System (SCA) of MSMEs Electronic Credit Invoices through financial institutions, among other measures.⁵¹

3.3. Financial System's Funding and Liquidity

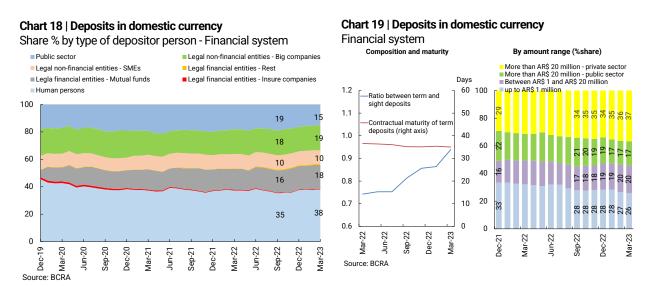
In the first part of 2023, the aggregate funding structure of the domestic financial system preserved its low complexity characteristics. By late March, private sector deposits in domestic currency were still the most relevant source of funding of the financial system (and accounted for little over a half of total funding, see Chart 17), without posting significant changes against the previous IEF and in year-on-year terms. Among private sector deposits in pesos, there was an increase in the relative share of time deposits to the detriment of the relative share of sight accounts. In addition, against September and March 2022, an increase in the relative weight of



⁵¹ See "Press Release" of May 4, 2023 and Communication "A" "7758"

net worth in the financial system's funding was observed, and it was accompanied by a lower share of public sector deposits in domestic currency.

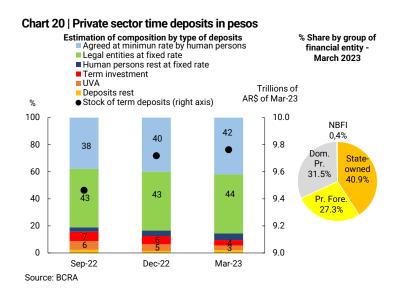
In a context of very few changes, there have been mixed signs in recent months from the ratios of exposure to the aggregate liquidity risk assumed by the institutions as a whole. On the one hand, the average volatility level of deposits in pesos remained relatively stable.⁵² In this respect, the share of retail natural persons has grown in the total during the last six months (see Chart 18), and a priori these depositors could be considered to be relatively less volatile; this volatility in terms of the performance was offset by a higher contribution from large institutional investors to



the total (such as Mutual Funds). The evolution of these deposits was in line with a slight increase in the concentration of deposits (see right panel of Chart 19), which would be signaling a higher exposure to the aggregate liquidity risk.

On the other hand, a sign of a lesser exposure to the aggregate liquidity risk derives from an extension of the maturity of the total stock of deposits in domestic currency (see left panel of Chart 19). This was in line with the positive performance exhibited by private sector time deposits in pesos in recent months, as mentioned in the previous Section and as evidenced by the higher share in the financial system's total funding (see Chart 17). This evolution resulted from the effect of the BCRA's policy to ensure a minimum interest rate on households' and companies' time deposits, seeking to foster and preserve saving in domestic currency. In this respect, it is estimated that the stock of deposits made by natural persons, as of March 2023, at the minimum guaranteed interest rate accounted for 42% of the total stock of private sector time deposits in domestic currency (the share was similar across all groups of financial institutions), up 4 p.p. against the previous IEF (see Chart 20).

⁵² It is possible to build a ratio that summarizes this aspect by weighting the coefficient of variation of each group of depositors against the relative weight of each stock (using the evolution of stocks in real terms).



In the context of the abovementioned limited changes in the ratios of exposure to the aggregate liquidity risk, the materialization of eventual changes in both the level and composition of the financial system's funding cannot be dismissed if any of the risk factors mentioned in the previous Section finally held true.

3.3.1. Elements of Resilience and Mitigating Measures:

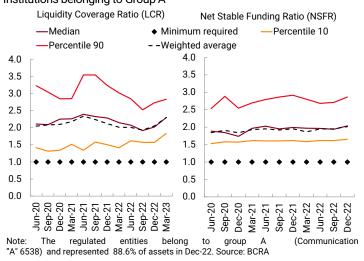
High coverage ratios in liquidity risk. In early 2023, the financial system continued keeping high ratios of liquidity in a broad sense (in both the segment in domestic currency and in foreign currency). The current liquidity level in a broad sense exceeds the average of last years,⁵³ and also the values of other economies of the region.⁵⁴ Against the previous IEF, the broad liquidity ratio went up due to the items in domestic currency, where sovereign bonds admitted for compliance with the minimum cash requirement were highly relevant.

Liquidity ratios resulting from the prudential regulatory framework, in line with the recommendations of the Basel Committee, stood at sizable levels across the ensemble of domestic financial institutions subject to compliance with such requirements (see Chart 21). In particular, the current figures of both the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) have virtually doubled the minimum values required at local level (set at 1 for both ratios). All the institutions have stood above such regulatory minimum threshold.

Funding via the capital market by means of publicly-traded Corporate Bonds has stood at relatively low levels for the aggregate financial system. As of April, publicly-traded Corporate Bonds issued by the institutions have accounted for 0.5% of the financial system's total funding,

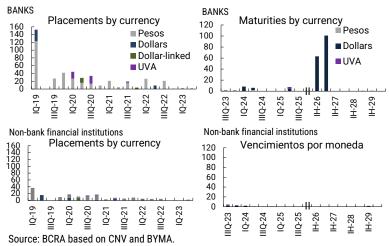
⁵³ The broad liquidity ratio stood at 53.7% in the average of the last 10 years and reached 49.7% for the median in the last 15 years. 54 The liquidity-to-deposits ratio for the average of the regional financial systems (Peru, Mexico, Brazil and Colombia) stood at around 33.8% (median of 31.1%), according to the latest information available.

Chart 21 | Basel liquidity ratios Institutions belonging to Group A



standing below the value observed in the previous IEF (0.8%). Considering only the institutions with outstanding Corporate Bonds, the share in total funding has reached 1% for banks and 12% for non-banking financial institutions (NBFI), in aggregate terms. By the time of publication of this Report, the stock of banks' and NBFI outstanding bonds was equivalent to ARS207 billion in total, 55 and 92% has been accounted for by banks. 56 In terms of currency, 91% of this stock corresponds to bonds in dollars, 57 while 6% are instruments in nominal pesos and 3% are denominated in UVA. For the last six months of the year, the estimated payments amount to ARS11.3 billion (equivalent to 5% of the total stock of bonds of the financial institutions). In turn, 57% of these payments correspond to Corporate Bonds in dollars, 33% corresponds to Corporate

Chart 22 | Genuine Corporate Bonds (domestic and foreign legislation) of Banks and NBFI – Figures in constant billion pesos as of June 2023



⁵⁵ In addition, two banks currently have Corporate Bonds in their liabilities issued privately for an amount of USD260 million.
56 Out of a total of 77 institutions, 8 NBFI and 15 banks (in general, large or medium-sized institutions) have outstanding Corporate Bonds.

⁵⁷ With maturities in 2026. These bonds correspond to transactions subject to international legislation that were carried out in 2016.

Bonds in nominal pesos and the rest corresponds to Bonds denominated in UVA. Regarding the sector's most recent issues, there were three transactions from January to June 2023, all of them in pesos and for a total of ARS6.77 billion, resulting in a decrease of over 70% in real terms if compared to the previous six months (see Chart 22). Putting things in perspective, a lower funding via the capital market by the financial institutions has been observed since 2019, with declining amounts in Corporate Bonds issues and securitization (through financial trusts).

Box 3: Financial Situation of Publicly-Traded Companies

With data as of the first quarter of 2023,⁵⁸ the main financial ratios resulting from the balance sheets of publicly-traded companies have shown a mixed performance against the evolution observed six months ago (considering the median).⁵⁹ On the one hand, the final results in terms of equity (ROE) have shown a decline, despite the fact that the profitability margin continued to improve (see Table B.3.1). This has occurred in a context where both leverage (measured as assets over equity) and asset turnover have dropped.⁶⁰ Despite a lower leverage, there was an increase in the financial debt burden (even though with a lower weight of short-term debt on the total), and interest coverage with operating results deteriorated.⁶¹ In turn, there was an improvement in the liquidity acid-test ratio (current assets net of stocks to current liabilities). Lastly, a decline has been observed in foreign currency mismatch.

Table B.3.1 | Publicly-traded companies - Selected ratios

	Quarters													
Selected indicators (median values):		I-20	II-20	III-20	IV-20	I-21	II-21	III-21	IV-21	I-22	II-22	III-22	IV-22	I-23
ROE: final results / net worth (%)	4.4	1.1	2.3	4.8	6.1	7.5	3.6	2.9	8.3	8.0	13.1	13.3	13.4	10.6
Net profits margin: final results / sales (%)	2.3	1.5	1.4	3.1	4.9	7.1	2.5	2.0	3.6	4.6	7.3	6.7	8.9	9.1
Assets turnover: sales / assets	65.3	64.5	61.2	53.2	46.6	46.3	46.2	47.5	48.6	49.2	48.7	48.4	44.5	46.2
Leverage: assets / net worth (%)	237.7	232.7	234.3	231.0	233.9	223.1	243.2	232.9	227.5	217.9	218.3	208.4	212.6	201.2
Acid test: (current assets - inventory) / current liabilities (%)	87.0	84.5	82.3	84.7	87.1	87.8	90.2	92.3	87.3	92.1	85.9	83.2	84.5	92.0
Interest coverage: operational results / paid interests	1.5	1.7	1.5	1.4	1.4	1.5	1.4	1.5	1.9	1.9	2.2	2.3	1.9	2.1
Financial debt term: short-term financial debt / total financial debt (%)	50.2	48.6	48.6	54.5	48.6	48.1	37.5	35.5	36.0	38.7	42.8	40.3	46.3	38.2
Currency mismatch: (foreign currency assets - foreign currency liabilities) / total assets (%)	-9.2	-7.2	-9.6	-8.4	-8.5	-8.3	-8.7	-8.5	-7.4	-6.2	-5.5	-5.9	-10.0	-4.8
Number of companies observed	130	129	132	129	126	125	125	124	125	124	127	125	126	125

Note: for those indicators that contain flow and stock variables, flow variables are taken with a cumulative carryforward of 4 quarters, while stock variables are taken as the average of the period considered. For the remaining indicators, the value at the end of the quarter is considered.

Source: BCRA based on CNV/BCBA.

Using the liquidity, interest coverage and leverage⁶² ratios to carry out a first proxy to firms in a potentially vulnerable situation, it is observed that the number of companies has gone up slightly against the situation recorded six months ago. However, the financial sector's exposure to these companies continues to be limited. Loans to these enterprises represented around 2% of the total portfolio of lending provided by financial institutions to companies as of the first quarter of 2023.

⁵⁸ In homogenous currency.

⁵⁹ The publicly-traded companies make up a segment of the domestic corporate sector characterized by firms of a large/medium relative size (in terms of their assets and in relative terms at domestic level). For further detail about coverage and methodology, see the sections on "Financial Situation of the Corporate Sector" in IEF I-17, and "Financial Situation of Publicly-Traded Companies" in IEF I-19.

⁶⁰ Taking into account that ROE may be analyzed on the basis of three components: profitability margin, assets turnover and leverage

⁶¹ An increasing coverage ratio implies a lower credit risk, and vice-versa.

⁶² For further detail on the methodology, see "Financial Situation of Publicly-Traded Companies" in IEF I-19.

4. Other Matters of the Financial System Stability

4.1 Domestic Systemically Important Banks (DSIBs)

In agreement with the commitments undertaken at international level and intended to strengthen the resilience of the financial systems, the BCRA released by the end of 2013 the methodology used to define domestic systemically important banks (DSIBs).⁶³ When adopting a systemic risk approach, it was decided that local DSIBs must be subject to a special regulatory treatment. Specifically, in Argentina, this group of institutions is required to keep an additional capital conservation buffer and their total ratio must be of up to 3.5% of risk-weighted assets (RWAs), while the remaining institutions must have a ratio of 2.5% of RWAs.

In terms of relevance within the financial system, financial institutions identified as DSIBs in Argentina, as of March 2023, continued accounting for a little over a half of the sector's total assets (and this share has been stable throughout the last years). This group of banks has fully complied with the additional capital requirements. DSIBs' liquidity and solvency levels have stood above the values recorded in the previous Financial Stability Report (IEF; see Table 3; standing slightly below the levels observed in the rest of the financial system). As of March 2023, profitability ratios also exceeded the ratios recorded in the previous IEF in the aggregate of 12 months (standing above the values recorded in the rest of the financial system).

Table 3 | Main ratios of DSIBs soundness

	Mar-22	Sep-22	Mar-23
Liquidity			
Broad liquidity (%)	59.6	65.9	72.3
In \$	53.7	61.4	68.6
In US\$	89.2	94.1	91.6
Liquidity Coverage Ratio (1)	2.0	1.9	2.2
Net Stable Funding Ratio (1) (2)	1.7	1.8	1.9
Solvency			
Regulatory capital / RWA (%)	27.2	27.2	30.0
Regulatory capital / Loans net of provisions (%)	48.2	54.3	61.6
Excess regulatory capital / Loans net of provisions (%)	34.3	38.6	45.5
Leverage ratio (1)	14.1	15.0	16.5
Profitability			
ROE in homogeneous currency (%a.) (3)	11.7	13.3	15.3
Private sector credit			
Exposure / Assets (%)	34.2	30.8	29.9
Non-performing loan ratio (%)	4.1	3.5	3.9
Provisions / Loans to the private sector (%)	4.9	4.6	4.9
Public sector credit			
Exposure / Assets (%) (4)	20.4	19.9	21.5
Foreign currency position			
(Assets - Liabilities + Net undelivered purchases in foreign currency) / Regulatory capital (%)	16.9	41.3	46.1
(1) Data of Mar-23 es estimated. (2) Dic-22 latest available in accumulated. (4) Position in government securities (excluding BCRA public sector.		` '	

RWA: Risk weighted assets

Source: BCRA

⁶³ This methodology evaluates the size, interconnectedness, complexity and degree of substitutability. For further detail about the methodology following the international guidelines, see here.

In turn, in the last six months, there was a decrease in the ratios of the DSIBs group associated to credit risk exposure to the private sector 64 in a context of a slight increase in the non-performing ratio. For this group of banks, the capital position (Regulatory Capital -RC- minus the minimum regulatory requirement) in terms of the loans to the private sector net of provisions posted a rise against the previous IEF and has remained within a high values range. The relevance of this ratio lies in that it exhibits the sizable coverage against this risk. 65

Lastly, in March, DSIBs posted an increase in the differential of items denominated in foreign currency in terms of the regulatory capital against the previous IEF (this performance was similar to the one observed in the remaining institutions, even though the latter started from more limited levels).

4.2 Interconnectedness in the Financial System

Regarding the interconnectedness of the financial institutions among them, one of the markets characterized by a direct interconnectedness is the unsecured inter-financial loans market (call money market). In recent months, the drop in the amounts traded in this market on a daily basis has deepened, both in real terms and relative to private sector deposits in the financial system. This evolution occured in a context of increases in the monetary policy rates and the BADLAR rate (in nominal terms), while the spread between the former and the rates arranged in the call market widened (also in nominal terms). The ratios surveyed in the framework of the network analysis suggest a lesser degree of direct interconnectedness among financial institutions in nearly all indicators, thus deepening the situation recorded in the previous sixth-month period. For example, there has been a reduction in the number of nodes (financial institutions participanting in the market) which has gone from 55 on average in the last four-month period of 2022 down to 44 in the first four-month period of 2023. The number of linkages and the density of the network have also dropped against the values recorded in the last four months of 2022 (from 945 to 590 and from 33.1% to 32.1%, respectively), while there has been an increase in reciprocity (it has gone from 5.2% to 5.7%). This same trend has also been observed in year-on-year terms.

Regarding the direct interconnectedness between the financial system and the institutional investors, the main source of interconnectedness derives from the deposits of institutional investors in banks (sight accounts and time deposits). In recent months, this interconnectedness has kept the upward trend being observed in recent years, even though at a slower pace. Institutional investors' deposits in the domestic financial system accounted for 16.6% of the total

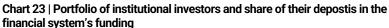
⁶⁴ In turn, the exposure to the public sector has increased slightly in the DSIBs group against the previous IEF and has remained at relatively higher levels than those recorded by the remaining group of institutions operating domestically.

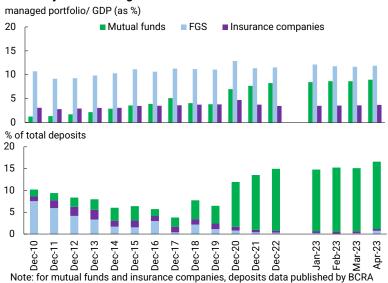
⁶⁵ When comparing DSIBs with the remaining domestically-operating institutions, by the end of the first quarter, the first group exhibited slightly higher levels of exposure to the private sector and in the non-performing ratio as well. In turn, the coverage ratio (capital position in terms of the loans to the private sector net of provisions) was relatively lower.

⁶⁶ Even though this market is small in relative terms, with an average traded amount per day equivalent to less than 1% of the private sector's stock of deposits, it is still relevant in terms of the signs it can provide because of its use by the institutions for liquidity management.

⁶⁷ In the first four months of 2022, the number of nodes was 62, linkages amounted to 1163, the average degree was 2.5 and reciprocity stood at 3.9% (on average per month in all cases). For the definition of these concepts and the main terminology used for the network analysis, see Exhibit 3 of IEF II-18 and Section 4 of IEF I-19.

as of April 2023, up 1.6 p.p. in four months (see Chart 23).⁶⁸ Considering the three main investors as a whole, this weight has doubled the value recorded 10 years ago. This evolution has been mainly explained by the growth of the Mutual Funds portfolio since 2020, especially with reference to Money Market Mutual Funds,⁶⁹ given that this type of Funds have a significant share of deposits in banks (see Box 4).





are used. Source: BCRA based on FGS, SSN and CAFCI.

68 This has occurred in a context where Mutual Funds portfolio has shown a 0.7 p.p. growth relative to GDP (to 9%) so far this year, while the growth of the portfolio of the Sustainability Guarantee Fund (FGS) and of the insurance companies has been lower (around 0.3 and 0.2 p.p.). Based on the comparison as of April 2023, on the basis of the latest information available (data about 2023 GDP and about Insurance Companies portfolio as of April 2023 are estimations).

⁶⁹ See "Exhibit 5 / Evolution of the Mutual Funds (FCI) Industry and its Interconnectedness with the Financial System" in IEF I-21.

Box 4 / Recent Evolution of Money Market Mutual Funds

The net worth of the aggregate Mutual Funds has accumulated a 6.4% growth in real terms (3.9% y.o.y. in real terms) so far in 2023 until early June. Over a half of this growth is attributable to Money Market Mutual Funds (FCI MM). The net worth of these FCI MMs grew 7% in real terms over the same period (27% y.o.y. in real terms). 70 Money Market Mutual Funds are the main component of the various types of funds, with a stable share of 53% on average in the industry's total portfolio during the last six months (see Chart B.4.1).

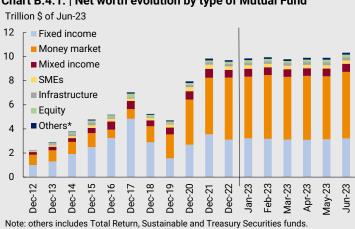


Chart B.4.1. | Net worth evolution by type of Mutual Fund

Regarding the components of the portfolio and due to context-related factors in place in recent months, there has been a higher share of liquid assets in Money Market Mutual Funds to the detriment of time deposits. Liquid assets -including investments in sight accounts largely made up by remunerated current accounts (in addition to non-remunerated current accounts and saving accounts)— went from 51% of the total in December 2022 up to 59% in June 2023 (see Chart B.4.2). This higher share was mainly due to the increase in remunerated current accounts. On a comparison basis, terms have contracted from 37% to 34%, respectively. The relative share of securities-guaranteed loans and repo transactions⁷¹ has posted no significant changes.

In terms of the direct interconnectedness between the financial system and Mutual Funds, it is worth mentioning that, in recent years, these Funds have been making deposits in banks for an amount equivalent to 13.8% of the financial system's total funding (as of April 2023). Nearly all these deposits are accounted for by Money Market Mutual Funds (98% as of June 2023). The deposits made by these investors (sight accounts and time deposits) are distributed among 38 financial institutions (41 in December 2022).

⁷⁰ Net underwritings were positive during the first six months of 2023 (information as of April) and January was the only month were net redemptions were observed. In April, despite the end of their positive net underwritings, there were redemptions during the first part of the month, which were offset by new underwritings as from the beginning of the "Export Increase Program". In turn, the monthly average yield of the portfolio stood above 5% per month (nominal).

⁷¹ In August last year, by means of Communication "A" 7579 and in order to optimize the transmission mechanism of the monetary policy rate to the various segments of the financial system and of the capital market, the BCRA reintroduced the possibility of allowing Mutual Funds to make repo transactions with the BCRA. The interest rate for Mutual Funds is currently equivalent to 75% of the rate of reverse repo transactions for financial institutions. Debt securities, financial trusts, etc. are included in "Other".

Using network analysis metrics with granular information as to liquid assets and time deposits of

fixed term deposits 37% liquid assets 59% guaranteed securities and repo transactions 4%

Chart B.4.2. | Composition of the Money Market Mutual Funds portfolio

Nota: liquid assets include saving account, current account and interest-bearing current account. Source: BCRA based on CAFCI.

the Money Market Mutual Funds —grouped at management company level—, a slight increase in the degree of interconnectedness has been observed in recent months. For example, even though there is a rise in the number of management companies and of the financial institutions they operate with, an increase in density has been observed, measured as the number of linkages found against the number of potential linkages (financial institutions with deposits from at least one management company). Density was standing at 39% in June 2023 and at 37% six months before (35% in December 2019). On the other hand, the median of the number of financial institutions with which each management company operates was 16 in June 2023 and 15 in December 2022 (9 in December 2019). The share of the deposits from the management companies for each financial institution relative to deposits of the Non-Financial Private Sector (NFPS) available to them exhibited a median of 25% in June 2023, exceeding by 4 p.p. the value recorded in December 2022.

⁷² In terms of network analysis, this is a two-mode network where linkages have one possible direction. See <u>Borgatti, P. and Everett M. "Network analysis of 2-mode data", Elsevier (1997).</u>

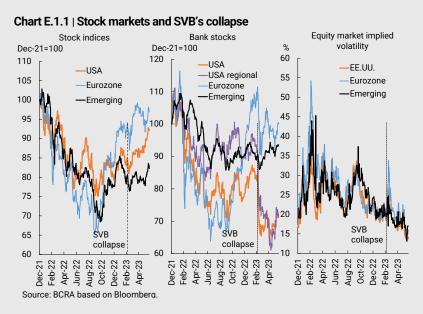
5. Main Macroprudential Policy Measures

Since the publication of the previous Financial Stability report (IEF), the BCRA has continued implementing macroprudential policy measures aimed at strengthening the domestic conditions of financial stability. During the first part of 2023 and on the basis of the monitoring of the financial system's risk factors and potential vulnerabilities, the measures have focused on:

- i. Keeping on encouraging bank financing to the private sector, mainly intended for the development of the Micro, Small and Medium-Sized Enterprises (MSMEs). The BCRA implemented a new quota of the "Credit Line for Productive Investment (LFIP) of MSMEs" (2023 Quota), with conditions similar to those applied to the 2022/2023 Quota. In addition, the monetary authority regulated the Open Transfer System (SCA) of MSMEs Electronic Credit Invoices (FCEM) through financial institutions (see Regulatory Annex). Likewise, the situation of mortgage credit lines continued to be monitored (see Exhibit 5).
- ii. Sustaining the incentive for saving in pesos in the financial system. In recent months, the minimum guaranteed nominal interest rates for time deposits in domestic currency were gradually raised. In addition, the amount up to which financial institutions are required to apply such rate for deposits from natural persons was also raised (from ARS10 million to ARS30 million). Simultaneously, the coefficient used to determine the early-payment fixed interest rate for time deposits with early cancellation option denominated in Units of Purchasing Power ("UVA") was also adjusted.
- iii. Given the weak performance of financial intermediation (see Section 3), the Countercyclical Capital Buffer of the financial institutions was kept unchanged (at 0%).
- iv. Sustaining adequate solvency levels in the ensemble of financial institutions. The BCRA established that, during 2023, the financial institutions being authorized by this monetary authority may distribute dividends in six equal, monthly and consecutive installments for up to 40% of the corresponding amount.
- v. Gauging the exchange policy contributing to reduce to a minimum any pressures on the foreign exchange market and the temporary imbalances that may affect the position of international reserves.
- vi. Fostering measures to mitigate the risks related to transactions with crypto-assets. In May, in line with the regulations applied by the financial institutions, the BCRA established that Payment Service Providers Offering Payment Accounts (PSPOCP) can neither make nor authorize their clients to make transactions with digital assets if not authorized by a national competent regulatory authority or by the BCRA.
- vii. By mid-2023, practices and requirements to strengthen prevention and security against fraud in financial services were updated.

Exhibit 1 / Emerging Economies' Financial Instruments and Potential Contagion Effect of Problems in Banks of Developed Economies

In a context still characterized by the contractionary bias of the monetary policies at global level (especially noticeable in the main developed economies), there has been an increasing concern in recent months about some segments of the banking system in the United States and Europe, given their potential contagion to the remaining financial markets. In the United States, especially remarkable was the collapse of the Silicon Valley Bank (SVB) in March, very close in time to the collapse of two other medium-sized institutions (Signature Bank and Silvergate, which were involved in sectors related to the crypto-assets market). More recently, in early May, part of the assets and deposits of another regional bank (First Republic) were finally purchased by JP Morgan. In turn, in Europe, the Credit Suisse (a systemic institution at global level that had already caught the attention of the markets for some time) was finally acquired by UBS in mid-March, in a transaction supported by the Swiss authorities. These events have heightened uncertainty at global level, especially during March, even though the response by policy-makers contributed to prevent any worsening of the situation in the short term.



Even though a systemic risk event did not hold true, there is still a context of uncertainty that has given rise to a constant monitoring of the situation of the banking sector in general and its interconnectedness with the remaining sectors.⁷⁵ The fact that other institutions in a relatively more vulnerable situation may also have problems cannot be dismissed. Even though the

⁷³ In the case of the Silicon Valley Bank (SVB), its position was especially vulnerable given its investment portfolio with a high share of long-term bonds (with prices that are more sensitive to interest rate rises) and its funding structure, characterized by a relevant share of wholesale deposits (not covered by the deposit insurance scheme).

⁷⁴ Including, in the United States, the intervention of the Federal Deposit Insurance Corporation (FDIC, covering all the deposits of the banks involved) and liquidity pumping by the Federal Reserve (by means of traditional lines and the introduction of the Bank Term Funding Program), in addition to extending the swap lines in dollars by the US Federal Reserve with other central banks. See, for example, the section on the "Failure of the Silicon Valley Bank (SVB) and financial turbulences" in the Monetary Policy Report (IPOM) of April 2023.

⁷⁵ See, for example, the financial stability reports of the Federal Reserve and the ECB.

condition of each of the abovementioned institutions had its own characteristics, some elements may be representative for other banks. These factors include, among other: the impact of the interest rate rises on the investment portfolio (possibility of still unrealized losses),⁷⁶ the reliance on a potentially more volatile funding (short-term funding or funding from investors not covered by the deposit insurance scheme), linkages with technological companies and financial innovation sectors (still not duly tested in more challenging contexts) and the impact of social media on the quickness with which concerns about specific institutions spread among investors.

The abovementioned events resulted in a lesser appetite for risk assets: there was an increase in the expected volatility of stock markets in the United States and Europe, accompanied by a rising pressure on the prices of equity markets, which was more intense in the case of the financial sector's shares (see Chart E.1.1).⁷⁷ Especially relevant was the remarkable impact on the expected paths of the monetary policy interest rates, despite the signs of persistence of inflationary pressures. As a result, in the United States, the analysts' expectations started to consider the possibility of an early-than-expected reduction in the interest rates by the Federal Reserve (this was in fact a temporary effect since, more recently, there would be once again a focus on the expected interest rate rises).⁷⁸ This context, added to a search for shelter in assets deemed to be safer, resulted in a change of trend in the various variables that were directly affected by the interest rate rise cycle. There was a strong increase in expected volatility in the Treasuries market (which operates as benchmark for funding in dollars at global level), while the yields of instruments started to decline in March (even though they went up again in May-June).

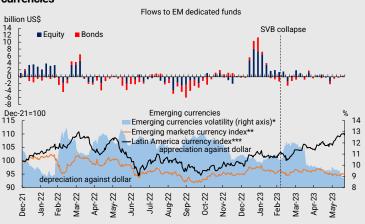


Chart E.1.2 | Emerging economies: flows to specialized funds and currencies

^{*} J.P. Morgan Emerging Market Volatilty Index. ** J.P. Morgan Emerging Market Currency Index (EMCI). ***Own elaboration index based on Brasil, Chile, Colombia, Mexico and Peru currencies.

⁷⁶ Considering, for example, the impact on longer-term instruments (including low-risk instruments in relative terms) or on more vulnerable segments in contexts of an increasing cost of financing (effect on fundamentals for agents with a higher leverage, in especially sensitive areas such as the real estate sector, or in more opaque areas such as the private credit sector).

⁷⁷ In the United States, the sharper and more sustained declines occurred in the shares of regional banks, which have contracted over 20% along the year, compared to a 3% decline in the financial sector (with statistical closing as of June 23).

⁷⁸ Thus, before the SVB's collapse, in the futures market, it was expected that the first reduction of the monetary policy rate would occur in December; one week after the event, the market was expecting that the first reduction of the benchmark rate would occur in June. Even the forecasts of the Federal Reserve' FOMC members showed more limited changes.

In the same direction, the dollar started to depreciate in March, following its appreciation of February against the main currencies. Later on, the US dollar posted a mixed performance (since it re-appreciated in May and then depreciated in June).

Given the abovementioned trends, the emerging economies' financial assets have shown a limited impact so far. By mid-March, there were outflows from funds specializing in emerging markets (see Chart E.1.2), but they were limited in time and the amounts were not significant (if compared, for example, with the outflows recorded from April to mid-November 2022). In the same line, there was a decrease in the price of emerging countries' shares in dollars (according to the MSCI) by mid-March, which partially recovered later on (despite the fact that in May a negative performance was observed once again). A similar pattern was evident in the emerging markets' exchange rates against the US dollar, according to the EMCI Index. In the case of the EMBI (sovereign debt) spread and the CEMBI (corporate debt) spread, the widening observed in March only started to partially correct as from June (see Chart E.1.3), while the higher cost of financing in dollars would especially affect economies with a lesser degree of development among emerging economies.

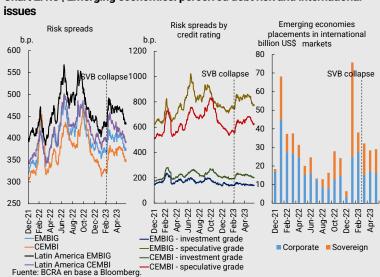


Chart E.1.3 | Emerging economies: perceived debt risk and international

The situation of banks in developed economies and its potential contagion to emerging economies continues to be monitored. As mentioned in previous IEF reports, the intensity of this potential contagion might be worsened by the various sources of vulnerability at global level,

⁷⁹ In turn, these outflows were lower than the outflows from funds specializing in emerging economies' assets observed in previous episodes of sharp withdrawals of funds (as it occurred during the COVID shock in 2020 or in the face of the so-called taper tantrum in 2013). See Exhibit on "Monetary Policy Interest Rate Rises in Developed Economies and the Impact on Financial Markets of Emerging Economies" in IEF II-22.

⁸⁰ Investors are closely following the negotiation around the debt ceiling in the United States. In May, there were outflows from funds specializing in emerging countries once again.

⁸¹ Debt issues by emerging economies' agents in international markets contracted 15% in March against February, mainly due to the reduction in corporate issues. The widening of the EMBI spread was especially remarkable in countries with the lowest credit rating (resulting in an increase in the number of countries with a spread over 700 basis points (bp). According to IMF, this level marks the threshold as from which access to international markets is more difficult). In this context, so far this year, sovereign issues are mainly accounted for (77%) by issues from investment-grade countries, against an average of 68% in the last five years.

resulting from a long period of low interest rates and broad liquidity which has led to riskier investment strategies intended to improve portfolio yields. This combination of vulnerability factors may result in a sharp and disorderly reaction in the face of a change in risk perception, whose effect on prices and portfolio flows might intensify. Among other, these vulnerabilities include the following:

- Existence of market segments (characterized, in general, by a higher relative risk) with over-appreciation signs. These segments include, for example, some stock markets or more innovative products (such as crypto-assets), which have shown consistent price increases in recent months. 82 Given a sudden change in the confidence of investors at global level, these sectors would be prone to quick price corrections, resulting in reallocations of portfolios (emergency sales and search for shelter in assets with a lesser relative risk) and impacting with a potentially stronger and long-lasting effect on international market conditions than the one observed so far, thus damaging emerging economies' assets considered as a specific class.
- Growth of non-banking financial intermediation (NBFI) at global level, led by the evolution being followed by investment funds. NBFI includes agents with heterogeneous characteristics, whose activity may entail term and/or liquidity mismatches (rendering market liquidity more crucial), the use of leverage (more vulnerable in the face of interest rate rises), positioning in more opaque or relatively riskier sectors and an increased interconnectedness (between sectors and between jurisdictions). As a result of these characteristics, the non-banking financial intermediation segment exhibits an especially procyclical behavior. In turn, changes in risk perception worldwide may entail, for example, a quick unwinding of positions in emerging countries' assets, with an impact on exchange rates and interest rates (for both assets in foreign currency and in domestic currency), which would be more intense in shallow markets.
- Increase of the debt burden for both the public and the private sector at global level. This trend was noticeable in both developed and emerging economies, even though there was a mixed performance. In some cases, the capacity to comply with payments of these debt levels may be especially affected in a context of a widespread rise of interest rates combined with expectations of a reduced activity level worldwide (and this situation might be even worse if the stress in the banking sector of the developed economies were to be more intense). Thus, depending on the intensity and length of the interest rate rise cycle, the emergence of signs pointing to an increase in counterparty risk cannot be disregarded, added to fears about the sustainability of some specific sectors' debts, simpacting directly on risk aversion in international markets. In the specific case of emerging economies, this situation might be worsened by the existence of more marked currency mismatches (largely due to external financing in foreign currency), which may turn out to be troublesome in more volatile financial markets (including exchange rates)

events among large-size agents) or significant increases in the non-performing portfolio of banks.

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⁸² For example, the stock exchanges in the United States and Europe have recorded expansions in dollars close to 15% so far in 2023 (with levels in the prices-to-profits ratio above their historical averages). In the case of the main crypto-assets, an improvement of around 55-85% has been observed to date in 2023, after recording significant losses from April to June last year (in a context of concern about interest rates rises by the Federal Reserve) and declines in November (after the collapse of a large platform).

83 For example, widespread reductions in the credit ratings of issuers, episodes of default or bankruptcies (including specific credit

and a more limited access to external markets (hindering the chance of a rollover for the shorter-term residual debt). Another worsening factor for emerging economies would lie in the ongoing volatility of commodity prices.

Exhibit 2 / Sustainable Finance and Bond Issuance in Emerging Economies and in Argentina

In recent years, the supervision of the various risks associated with climate change and the debate about the policies to apply in order to deal with them (for the sake of sustainable development) have gained increasing relevance in terms of the economic and financial agenda at international level⁸⁴ and at domestic level as well (based on the joint work of the BCRA and several domestic regulators, see Exhibit 3). In this context, the development of sustainable finance —which includes the financing of projects with social impact— is one of the main pillars to boost investments that may facilitate the transition towards an economy with reduced carbon emissions (mitigation) and towards a higher resilience in the face of climate change effects (adaptation) in the various jurisdictions. This development is especially challenging for emerging economies, characterized by more limited financial markets.

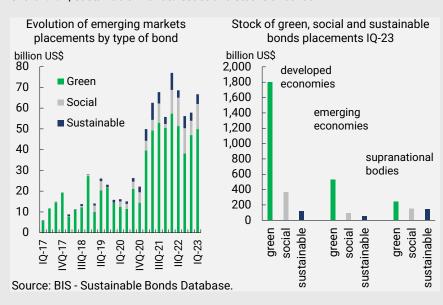


Chart E.2.1 | Sustainable finance: issues and stocks of bonds

Even though there have been green, social and sustainability bonds⁸⁵ for over a decade, according to data from the Bank for International Settlements (BIS), the activity for emerging economies has invigorated remarkably since 2021 (see Chart E.2.1), accompanying the behavior adopted by developed economies⁸⁶ and supranational organizations. Another relevant factor (also in line with what was observed, in this case, in developed economies) lies in the preeminence of green issues

⁸⁴ Taking into account the objectives defined by the Paris Agreement and the United Nations' 2030 Agenda for Sustainable Development (2015). See, for example, "Environmental, Social and Governance Factors: Measures Adopted by Latin American Financial Regulators" in <u>IEF I-22</u>.

⁸⁵ Green bonds provide funds to projects benefiting the environment. Social bonds are used to finance projects seeking to prevent socio-economic disruptions (such as projects related to access to food, health care and housing). Sustainability bonds entail financing for projects that combine green and social characteristics.

⁸⁶ Related, in part, to the activity of sovereign bond issues and supranational organizations' issues. Despite this, according to BIS, only in the case of supranational organizations green, social and sustainability bonds have a relevant weight (close to 1/3) on the flows of issues (in recent years, they would account for less than 10% of sovereign and corporate debt issues). See "Sovereign and sustainable bonds: challenges and new options", from BIS.

(73% of the stock of green, social and sustainability bonds of emerging countries in early 2023), on top of social bonds (17%) and sustainability bonds (9%). According to data from the IMF, Asian issues stand out among emerging countries' issues and, at the same time, around 75% of emerging markets' issues are denominated in foreign currency, with the exception of China.⁸⁷ Given this momentum in the issues, the stock of green, social and sustainability bonds exceeded USD681 billion for emerging nations as of the first quarter of 2023, against a total of USD2.28 trillion for advanced economies and almost USD548 billion for supranational organizations.⁸⁸

Regarding Argentina, the National Securities Commission adopted in 2019 (by <u>General Resolution 788</u>) the "Guidelines for Issuance of Social, Green and Sustainable Securities (SVS)". These guidelines were supplemented in July 2021 by guidelines on good practices for the issuance of SVS bonds (General Resolution <u>896</u>). ⁸⁹, ⁹⁰ More recently, in 2023 (<u>General Resolution 963</u>), the "Guidelines for Issuance of Thematic Marketable Securities" were released in order to update the labels of marketable securities (in addition to expressly include bonds related to sustainability – VS—, they have introduced new labels). ⁹¹

In this context, since late 2017 to, and including, the first half of 2023 (with data as of mid-June), around 50 transactions were carried out by 22 issuers in the Argentine market, 92 for an amount equivalent to over USD1.1 billion. The Corporate Bonds related to Social, Green and Sustainable Securities (SVS) and to Sustainability Bonds (VS) placed by Argentine issuers account for nearly 5% of the total stock of Corporate Bonds as of May 2023. 93 Just as it occurs in most emerging countries, green issues stand out in Argentina (over 70% of the total amount issued in recent years). A large part of the SVS and VS Corporate Bonds correspond to companies engaged in the energy sector (including issues of a large size in relative terms) and related to renewable energies projects (wind and solar farms), even though some activity is also observed in other sectors (such as food, oil & gas, finance, real estate and commerce related to agriculture, see Chart

foster the development of sustainable finance in the country.

⁸⁷ The figures related to the BIS' Sustainable Bonds Database coincide, in general, with the data monitored by the IMF (with a focus on emerging economies), which analyzes a wider scope of transactions (bonds and loans, even though loans have a more limited weight on the total). See "Scaling up private climate finance in emerging markets and developing economies", GFSR of October 2022. 88 In line with this structure of stocks, around 75% of the stock in green, social and sustainability bonds at global level are accounted for by bonds in euros and dollars (followed, with a lower weight, by bonds in yuan, yens, British pounds, and other currencies). 89 In 2020, the Technical Group for Sustainable Finance was created and then, in September 2021, an agreement was signed between the Ministry of Economy, the BCRA, the National Securities Commission (CNV) and the National Insurance Superintendency (SSN) to

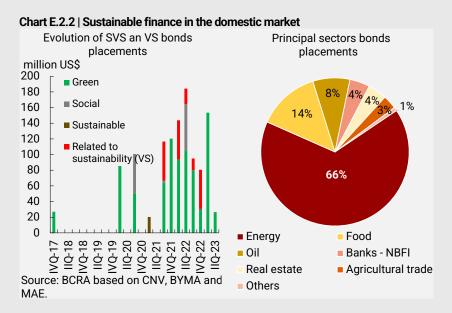
⁹⁰ In August 2022, a "Simplified and Guaranteed Regime for Issuance of Corporate Bonds with Social Impact" (General Resolution 940) was created. For further information see "Sustainable Debt Market in Argentina: 2022 Report", published by the CNV.

⁹¹ VS bonds do not necessarily finance specific projects but are intended to improve the ESG metrics of issuers (the financial characteristics depend on compliance with pre-determined sustainability objectives). In turn, gender bonds, blue bonds (water ecosystems), orange bonds (cultural activities) and transition bonds (issuer's reduction of emissions) are also incorporated. In 2023, the "Guide for voluntary reporting and disclosing of information on ESG factors", of non-binding nature, was also published.

⁹² These bonds have been listed in the <u>SVS bond panel</u> and the <u>SV bond panel</u> of BYMA since 2019 and 2022, respectively (see "<u>Sustainable Finance in 2022</u>"). The issue made in December 2017 is also included, which was later subject to the guidelines of the CNV about SVSs. The issue of a 5-year bond for USD30 million, made in 2018 by a domestic development bank (100% underwritten by an international organization) has not been included. The same applies to a transaction of an Argentine company in international markets made in 2021 (USD366 million, from an energy company). It is worth mentioning here that there were also three green transactions made by municipalities and provinces (one in 2022 and two in 2023), all of them in pesos.

⁹³ Taking into account the transactions made until, and including, June 2023.

E.2.2). ⁹⁴ In turn, in terms of currency, the issue of dollar-linked bonds (74% of the amount issued), followed by issues in dollars (12%), in nominal pesos (8%) and in UVA stand out among SVS and VS Corporate Bonds transactions. Regarding terms, in the transactions involving dollar-linked and dollar bonds, the weighted average of transactions has been arranged for a term over 5 years.



Since 2021⁹⁵ and accompanying these issues, there has been a sustained growth of the Sustainable Mutual Funds' net worth (ESG), even though their weight on the aggregate Mutual Funds is still marginal. The stock of these Mutual Funds (7 Funds) amounted to a total of ARS2.39 billion as of April 2023, and Corporate Bonds have accounted for 85% of their investments.

⁹⁴ The five companies with the highest amounts issued account for over 65% of the total amount issued for this type of bonds in recent years. Out of these five companies, four belong to the energy sector and one belongs to the food industry. Generally speaking, even though the largest part of the amounts issued in SVS and VS bonds correspond to large or medium-sized companies, 13 bonds with SME characteristics were issued in recent years (corresponding to 8 issuers, including 2 civil associations). SME issues were almost entirely denominated in nominal pesos.

⁹⁵ In 2021 (General Resolution 885), a new regime was adopted in relation with Sustainable Collective Investment Products (including ESG Open Mutual Funds —marketable securities with Environmental, Social and Governance Impact—, sustainable closed Mutual Funds and sustainable financial trusts). The first funds were approved in June 2021.

Exhibit 3 / Sustainable Finance: Recent Actions Pursued in Argentina

In line with the domestic regulatory framework related to environmental protection and to the Sustainable Development Goals (SDGs) deriving from the Paris Agreement, significant progress has been gradually made in recent years in Argentina in terms of sustainability. Thus, taking into account the set of initiatives led by the public sector with the aggregate financial system (banks, insurance and investment companies), the most outstanding actions have been pursued by the Technical Group for Sustainable Finance (*Mesa Técnica de Finanzas Sostenibles* - MTFS), which was created in mid-2020. Fe he MTFS gathers all regulators of the financial sector and the Ministry of Economy, for the purpose of developing sustainable finance in Argentina in a coordinated manner and with a comprehensive vision, acknowledging the need to manage the opportunities and risks associated with climate change and resulting from the excessive Greenhouse Gasses (GHG) emissions, mainly originated in advanced countries' industrialization process.

Within the framework provided by this Technical Group, the BCRA, the National Securities Commission (CNV) and the National Insurance Superintendence (SSN) executed a Joint Statement by the end of 2021 intended to encourage the development of sustainable finance locally, ⁹⁷ and they undertook a set of short- and medium-term commitments. One of the first steps in this direction was to launch a sectoral survey aimed at obtaining a diagnosis on the institutions' approach towards sustainable finance. Against this backdrop, by the end of 2022, the BCRA set in motion this survey and included all institutions which are an integral part of the Argentine financial system. That survey was carried out jointly with the Ministry of Economy, the CNV and the SSN, also with the technical aid provided by the Inter-American Development Bank (IDB), and it opened the door to the possibility of making progress in the design and future implementation of a system for the monitoring and management of the financial risks associated with climate change.

In terms of the institutions regulated by the BCRA, the survey provided answers from a group of them amounting to 97% of the loans granted by banks to the private sector. The initiative was voluntary and confidential in nature, and the aggregate results were published in early May 2023. 98 In general, the main findings are the following:

- Institutions show widespread interest in aspects related to environmental, including climate change, social and governance (ESG) factors.
- This interest is mainly motivated by the potential effects through financial risks —both physical and transition risks— as well as reputational risks, which might eventually impact on

⁹⁶ For further detail on the MTFS, see Box 1 of IEF II-21.

⁹⁷ BCRA News – September 7, 2021, "The Ministry of Economy, the BCRA, the CNV and the SSN signed an Agreement to Boost Sustainable Finance Development in Argentina".

⁹⁸ BCRA News - May 11, 2023, "First Sustainable Finance Survey Highlights Financial Institution's Interest".

- the institutions (for example, solvency of individual banks). Some institutions even identify potential impacts on financial stability.
- Banks identify the relevant role they play when channeling financial resources which may help to foster the transition towards a carbon neutral economy.
- Some of the institutions are still at a very early stage of implementation, or have not implemented yet, measures regarding institutional arrangements, policies, information systems and tools suitable for identification and management of risks associated with these ESG factors. For instance:
 - Only one third of institutions have an ESG policy approved and in effect, whereas other institutions anticipate to implement such a policy in the next months.
 - Less than half of banks have a responsible party (officer, area or committee) in charge of the specific role of managing ESG factors. In general, this responsibility is undertaken by different areas of the institution.
 - The most frequent role of the Board of Directors as to ESG factors is to monitor the institution's performance vis-à-vis the goals associated with such factors, even though one third of them fail to consider or address any ESG-related risks and opportunities.
- Most banks believe that climate change has still no impact on their solvency and/or on their results, even though some of them identify certain effects in relation to their operational performance, among other areas.
- Relatively few institutions currently have technical capabilities, including appropriate metrics and data, to assess climate change scenarios and their potential effects. A similar situation is observed in terms of the availability of criteria to identify and classify credit transactions that may generate environmental benefits. Hence:
 - o In general, financial institutions show low technical capacity to introduce climate change variables and scenarios into their risk analysis and management, and only a few of them have such technical capacity. The main obstacles identified by them are as follows: lack of technical information, which is up to date and accessible, additional costs entailed in implementing this capacity, no priority given by the Board of Directors or steering bodies.
 - The portfolio decarbonization strategy is not a widespread practice and is used only by a reduced number of financial entities. Neither is it frequent for financial institutions to measure the risks associated with climate change in the management of their portfolios and only a few of them have business goals and indicators for financing projects with environmental or social benefits, and assess the results from time to time.
- The practice of drafting and publishing sustainability reports in the domestic market is at an
 incipient stage, and relatively few banks are taking part (one third of the surveyed institutions);
 at the same time there is limited knowledge and adoption of international principles for the
 appropriate management of climate-related risks.
 - Nevertheless, most financial institutions are aware of the practice of drafting reports for the disclosure of relevant information on ESG factors and they acknowledge that it

- may be useful to disclose this information, since it contributes to corporate transparency and reputation.
- The BIS guidelines recently published by the Basel Committee on Banking Supervision (BCBS) for the management of these risks are unknown to a large portion of institutions and only a few of them have made the decision to adopt them.

Following the execution of the diagnosis survey, and in line with the commitments undertaken by regulators in the Joint Statement, the MTFS designed and prepared a proposal for a National Strategy for Sustainable Finance (*Estrategia Nacional de Finanzas Sostenibles -* ENFS) for Argentina. This Strategy has been recently approved and published by the authorities of the various regulators which take part in the MTFS. ⁹⁹ The ENFS seeks to create an ecosystem enabling to identify the alternatives to move and escalate public and private resources towards economic and social objectives, including the goals of climate change mitigation and adaptation. This Strategy is inspired by the analysis and lessons learned from other similar initiatives worldwide, taking into account the features inherent in the Argentine financial system and productive sector, as well as the local context. It is worth considering that this Strategy seeks to keep on fostering the process for identification of climate change-related risks faced by the various participants of the financial sector, as well as to strengthen the capabilities of both the public and the private sectors to manage them. The ENFS presents five main strategic pillars, as well as specific courses of action, including both financial and non-financial aspects:

- 1. <u>Regulatory framework</u>. This pillar is intended to deepen the task related to the order and design of domestic rules and regulations aimed at developing sustainable finance in Argentina, adapting it to the needs and level of development of the local market.
- 2. <u>Common language: Taxonomy</u>. This pillar seeks to provide foundations for language and methods for assessment and reporting in common, as a step required for the local consolidation of the sustainable finance market. It is sought that taxonomy be a temporarily gradual process.
- 3. <u>Creation of information, transparency, reporting, indicators and data analysis</u>. Intended to develop assessment methods, analysis, indicators and reports in common, as well as to count on reliable sources of ESG data, which may serve as the basis for decision-making and for setting goals and actions on this matter.
- 4. <u>Incentives</u>. Creation of proper incentives to act as a catalyst for the sustainable finance market locally.
- 5. <u>Sustainable financial instruments</u>. To keep on deepening the tasks for design and development of financial instruments / innovative projects that may channel capital flows towards sectors and activities with environmental and social benefits, and which support compliance with the SDGs.

As to the BCRA, the ENFS defines a framework of guidelines for action both in terms of measures seeking to reduce its own carbon footprint as well as in relation with the task of accompanying

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⁹⁹ BCRA News - June 5, 2023, "The BCRA Has Approved the National Strategy for Sustainable Finance".

and guiding institutions when introducing climate change-related risks into their risk management. These tasks will gradually progress in the next months, in line with the commitments undertaken by the Central Bank as regards sustainable finance.

Exhibit 4 / Crypto-assets. Some Macrofinancial Implications in Emerging Economies

In recent years, crypto-assets have gained momentum worldwide as an alternative to perform some daily transactions in economies, and also as an investment instrument. 100 Nevertheless, some of their features may translate into vulnerabilities that, at least in part, have gradually materialized in episodes of stress throughout 2022.

In May last year, the crypto-assets market witnessed a drastic drop in the price of Terra (LUNA), a stablecoin which showed the lack of actual support for the parity against the US dollar. 101 This situation highlighted the deficiencies in the design and operation of Terra, which led to a sudden and significant loss of confidence by investors and market players. The issues identified include, among other, the lack of transparency in the management of reserves and inadequate mechanisms to keep the parity against the US dollar upon any stress episode in the market. This situation raised concerns as to the stability and reliability of stablecoins in general, and marked the beginning of the so-called crypto winter, a period characterized by several failures in companies involved in the crypto industry. In this scenario, other stress episodes were observed, such as the freezing of withdrawals in Celsius Network and orders to liquidate for 3AC, the filing for bankruptcy protection in the United Stated by FTX, Vauld, Celsius Network and Genesis, among other players in the sector. These events highlighted the vulnerability of the crypto-assets ecosystem and the implications they may have for investors and financial stability in general. As a result of these events which started upon the Terra-Luna's crisis in 2022, the bitcoin experienced high volatility as to the prices, and mirrored the context of uncertainty, as well as the drastic changes in the market sentiment towards this type of instrument. 102 Any eventual episodes of these characteristics in the future pose several risks on the financial stability conditions of economies, especially for emerging countries.

It is worth mentioning that the level of development of the domestic crypto-assets market is rather limited. This condition is evidenced, for instance, by the remarkable price dispersion among the various bitcoin operators, with high spreads between their several buying and selling rates (bid/ask spread) (See Chart E.4.1). 103

In the context of an eventual growth in the various jurisdictions as to the degree of adoption and use of crypto-assets, they might gradually be perceived as substitutes of the domestic currency and of the global reserve currency, a phenomenon which might be even more marked in relatively more vulnerable economies. This substitution would depend both on the expected future value of fiat currencies in each country and on the anticipated price of the crypto-asset. It is worth noting

¹⁰⁰ In general, crypto-assets are defined as private issued representations of value that are cryptographically protected and deployed using distributed ledger technology (DLT) or similar technologies (see, for example, <u>IMF 2023</u>).

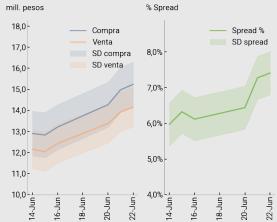
¹⁰¹ For further detail on the collapse of Terra (Luna), see, for instance, BIS 2023.

¹⁰² For further analysis on bitcoin volatility against other assets, see, for example, IEF I-22.

¹⁰³ And this would indicate a deficiency in price formation.

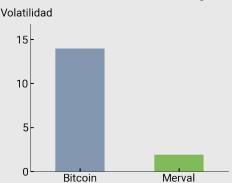
that the price of crypto-assets is determined by the global demand and supply forces. ¹⁰⁴ In case that any global events may affect the volatility of the expected prices of crypto-assets, it is possible that such situation may result in a more volatile demand in the local market. In a hypothetical scenario of high adoption, the volatility in the local demand of crypto-assets might intensify the existing volatility in the demand for other monetary assets. ¹⁰⁵ This increased volatility in the demand for assets denominated in domestic currency or global reserve currency might eventually trigger a higher instability of the exchange rate or instability in the demand for bank deposits, with implications for financial stability. ¹⁰⁶ To illustrate this volatility and due to the lack of information, a proxy is made through the variability observed in searches of associated terms in GoogleTrends. ¹⁰⁷ Thus, an estimate is made of the volatility of interest in the bitcoin in Argentina against the Merval index between June 2022 and June 2023 (see Chart E.4.2), and it is observed that the volatility in the searches of bitcoin is noticeably higher. ¹⁰⁸

Chart E.4.1 Daily averages and deviations of BTC/ARS Buy and Sell Prices and Spread, domestic operators



Note: Own elaboration based on data obtained from the Cryptoya API and other local operators.

Chart E.4.2 | Google search volatility of selected terms between Jun-22 and Jun-23 in Argentina



Source: own elaboration based on GoogleTrends data. Volatility is calculated as the standard deviation of Google Trends data for the search terms 'Bitcoin' and 'Merval' over the last year.elaboración propia en base a datos de GoogleTrends.

104 In the case of bitcoin, the supply is limited to a maximum amount, previously defined in the protocol, of 21 million bitcoin (Nakamoto 2008). The pace of creation of new units is determined by the difficulty of mining, which is adjusted from time to time to maintain a predictable issue and to follow a well-known production curve. Such curve assures that bitcoin supply is kept within the limits set forth in the protocol throughout time. In this context, the price is set by the demand for such assets (Ali & Barrdear, 2014; European Central Bank, 2012, 2015). In the case of a stablecoin with centralized issue, the price will depend on the issuer's capacity to defend the parity and on the confidence of potential purchasers about compliance with the convertibility commitment.

105 Currency substitution is a well-known situation in emerging economies (see, for example, <u>Vegh and Calvo 1992</u>), in terms of both payments and reserve value (see the <u>IEF I-22</u>). Crypto-assets may be assessed as an asset additional to the decision of keeping assets denominated in domestic currency or in global reserve currency.

106 See, for instance, Giupponi, E. (2022). Activos digitales y estabilidad financiera. Riesgos de un incremento en la demanda de bitcoin sobre la volatilidad del tipo de cambio en Argentina, UCEMA.

107 Data are obtained from Google Trends and are processed through Python in Kaggle. The information corresponds to an index of the number of searches of a key word, "query index" (Choi and Varian 2009, 2011) rather than to search volumes per se. This index of relative intensity of a search is built as follows. First, it is standardized upon dividing the number of searches of a key word or phrase by the total number of Google searches (controlling by geographical area, date and category selected). Second, the index is reescalated: index from 0 to 100, where 100 is the highest number of searches for the period under analysis. A decreasing trend does not mean that the total number of searches for such term is decreasing, but that its popularity is decreasing if compared to other searches (see, for example, Blanco, 2014, XLIX AAEP Annual Meeting).

108 In addition to the volatility of demand and the risk associated with the exchange rate, it is important to bear in mind the environmental risks inherent in the mining of crypto-assets which base the system for validation of transactions on consensus methods such as proof of work.

The responses through public policies have been largely varied as to scope and manner among different jurisdictions, including approaches based on prohibition, containment of risks and regulation of the activity. This diversity as to responses reflects the challenges faced by the authorities globally, the heterogeneous effects, to a certain extent, of crypto-assets among economies and the dissimilar policy goals in each jurisdiction.

In this regard, it should be highlighted that the BCRA has adopted several measures to address risks associated with crypto-assets, thus protecting users and the financial system as a whole. In particular, the Central Bank is currently conducting monitoring activities in order to make progress in the understanding of use cases which involve crypto-assets at domestic level, with special emphasis on the implications and risks inherent in them. In May 2023, the BCRA established that payment service providers offering payment accounts (PSPOCP) may neither perform nor facilitate for their clients transactions with crypto-assets. This measure is supplementary to that adopted in May 2022, when the BCRA established that regulated financial institutions may not take part (either directly or indirectly) in the supply of crypto-assets for their clients. This scheme is intended to mitigate the risks involved in activities with crypto-assets.

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¹⁰⁹ For a detail on policy actions by the BCRA see, for instance, A Warning about Crypto-Assets available on the BCRA's Web page.

Exhibit 5 / UVA-Adjusted Mortgage Loans to Natural Persons¹¹⁰: Financial System Exposure and Credit Condition

As of March 2023, the ensemble of financial institutions had a total of 95,000 natural person debtors with UVA-adjusted mortgage loans, accounting for around 0.7% of the natural persons with active loans. The share of the stock of these mortgage loans in the total stock of loans to natural person debtors has remained relatively stable at 22% (3.2% of total assets of the financial system), standing slightly below the maximum share reached in April 2020 (23.3% of loans to natural person debtors and 3.9% of total assets). The non-performing ratio of this financing has gradually fallen to 1.2% by the end of the first quarter of 2023 (see Chart E.5.1)—from the maximum value recorded in December 2021, 1.5%—, and the reason behind this drop is that there are less than 1,400 natural persons with non-performing loans—against almost 1,700 in December 2021. The total delinquency ratio for this type of lending is considerably lower than the delinquency ratio posted by loans in the aggregate of financial aids (3.3% as of March this year).

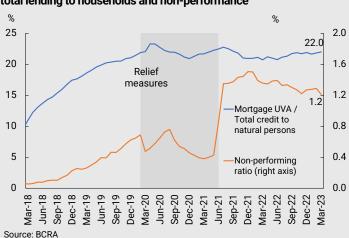


Chart E.5.1 | Share of the stock of UVA-adjusted mortgage loans in total lending to households and non-performance

As may be seen in Chart E.5.1, the financial aid relief measures adopted in the context of the COVID-19 pandemic partly mitigated the evolution of the financial system's exposure to UVA-adjusted mortgage loan debts of natural persons. Exhibit 2 of IEF II-22 presents a detail of the relief measures that have been adopted in this scenario since the end of 2019, jointly with the National Executive Branch (PEN), in order to mitigate the financial burden originated by UVA-adjusted mortgage loans. The above-stated measures include, among other, one specific measure which enabled clients to submit applications to financial institutions, for the purpose of addressing some critical credit conditions of the installment-to- income ratio in relation to their

¹¹⁰ The analysis in this Exhibit does not include UVA-adjusted mortgage loans granted to natural persons for commercial purposes.

¹¹¹ The number of household in debt with UVA-adjusted mortgage loans has posted no significant changes since the slowdown in the granting of these loans as from the episodes of financial stress observed as from the second half of 2018 and throughout 2019. It is worth considering that, by the end of 2018, there were more than 95,000 household debtors with this type of financial aid. Household debtors with UVA-adjusted mortgage loans are distributed among state-owned banks (74.5%), domestic private banks (15.2%) and foreign private banks (10.3%).

¹¹² The ratio of UVA-adjusted mortgage loans-to-total loans provided to households reached 44.8% in state-owned banks, 12% in domestic private banks, and 7.7% in foreign private banks.

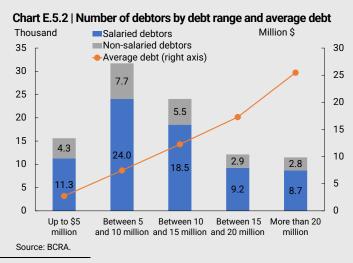
loans (Executive Order 767/20, article 4). 113 Against this backdrop, 1,576 debtors submitted applications and, in aggregate, they accounted for for less than 2% of the total of debtors with UVA-adjusted mortgage loans; the results obtained are shown in Table E.5.1.

Table E.5.1 | Applications by UVA-adjusted mortgage clients under the provisions of Executive Order 767/20

Latest information available	1,576.00
0	
Currents status of requests	
1. Rejected	1,091
2. Approved	323
3. In process of analysis	116
4. Finalized	40
5. Resigned	6
Type of assistance granted above the 35% cap	
(For those requests 2. Approved / 4. Finalized)	
1. Bonus	150
2. Refinancing	209
3. Bonus + Refinancing	4
Reasons for rejection	
(For those requests 1. Rejected)	
1. Not correctly complying with the presentation of income	788
2. Owns more than one home	14
3. Have a quota-revenue ratio of less than 35%	150
4. Other	139

Source: BCRA

At present, almost 50% of debtors who have taken UVA-adjusted mortgage loans to purchase a house have remaining debts below ARS10 million (see Chart E.5.2) (approximately equivalent to 23 average formal private sector wage units of the economy¹¹⁴), whereas 75% stands below ARS15 million (31 units). Moreover, 75% of debtors are workers under contract of employment, when taking into account both the first half of debtors and the three quarters of them



¹¹³ Specifically, it was established that "... until July 31, 2022, financial institutions shall enable an instance to consider the condition of clients comprised within this Executive Order who prove that the installment exceeds THIRTY-FIVE PER CENT (35%) of their current income ... and they should take into account special situations duly proved which may derive from a change of the debtors/co-debtors considered when the loan was granted." For further detail, see the Official Gazette, 114 Source: SIPA.

Abreviations and Acronyms

€: Euro

a · Annualized

AEIRR: Annual Effective Internal Rate of Return.

AFIP: Administración Federal de Ingresos Públicos. Argentina's Federal Tax Authority.

ANSES: Administración Nacional de Seguridad Social. Social

Security Administration. APR: Annual Percentage Rate.

ATM: Automated teller machine.

b.p.: basics points.

BADLAR: Interest rate for time deposits over one million pesos between 30 and 35 days for the average of financial institutions. BCBA: Bolsa de Comercio de Buenos Aires. Buenos Aires Stock and guarantees security trades at the BCBA. Exchange.

BCBS: Basel Committee on Banking Supervision.

BCRA: Banco Central de la República Argentina. Central Bank of

BIS: Bank of International Settlements.

BoE: Bank of England

Bonar: Bonos de la Nación Argentina. Argentine National Bonds.

CABA: Ciudad Autónoma de Buenos Aires. Autonomous city of

Buenos Aires.

CCP: Central counterparty.

CDS: Credit Default Swaps.

CEMBI: Corporate Emerging Markets Bond Index

CER: Coeficiente de Estabilización de Referencia. Reference

Stabilization Coefficient.

CNV: Comisión Nacional de Valores. National Securities

Commission.

CPI: Consumer Price Index.

CVS: Coeficiente de Variación Salarial. Wage variation coefficient.

D-SIBs: Domestic systemically important banks.

DEBIN: Débito Inmediato. Immediate Debit.

ECAI: External Credit Assessment Institution.

ECB: European Central Bank.

ECC: Encuesta de Condiciones Crediticias. Lending standards

EMBI: Emerging Markets Bond Index.

EPH: Encuesta Permanente de Hogares. Permanent Household

EU: European Union.

Fed: Federal Reserve of US.

FGS: Fondo de Garantía de Sustentabilidad. Sustainability

Guaranty Fund.

FSB: Financial Stability Board.

GDP: Gross Domestic Product.

IADB: Inter-American Development Bank.

IAMC: Instituto Argentino de Mercado de Capitales. Argentine

Capital Markets Institute.

IBIF: Inversión Bruta Interna Fija. Gross domestic fixed investment.

IMF: International Monetary Fund.

INDEC: Instituto Nacional de Estadísticas y Censos. National

Institute of Statistics and Censuses.

IPMP: Índice de Precios de las Materias Primas. Central Bank

Commodities Price Index.

IPOM: Informe de Política Monetaria. Monetary Policy Report.

IRR: Internal Rate of Return.

LCR: Liquidity Coverage Ratio.

Lebac: Letras del Banco Central de la República Argentina. BCRA

Bills

LETES: Letras del Tesoro en dólares estadounidenses. US\$

Treasury Bills.

LIBOR: London Interbank Offered Rate.

LR: Leverage Ratio.

MAE: Mercado Abierto Electrónico. Electronic over-the-counter

MEP: Medio Electrónico de Pagos. Electronic Means of Payment.

MERCOSUR: Mercado Común del Sur. Southern Common Market. MERVAL: Mercado de Valores de Buenos Aires. Executes, settles

MF: Mutual Funds.

MoT: Ministry of Treasury.

MSCI: Morgan Stanley Capital International.

MULC: Mercado Único y Libre de Cambios. Single free exchange

market.

NBFI: Non-Bank Financial.

NPD: National public debt.

NFPS: Non-financial national public sector's.

NW: Net worth.

OB: Obligaciones Negociables. Corporate bonds.

OECD: Organization for Economic Cooperation and Development.

OPEP: Organization of the Petroleum Exporting Countries.

PEN: Poder Ejecutivo Nacional. Executive Branch.

PGNME: Posición Global Neta de Moneda Extranjera. Net Global

Position in Foreign Currency.

p.p.: Percentage point.

PPM: Plataforma de Pagos Móviles. Mobile Payment Platform.

REM: Relevamiento de Expectativas de Mercado. BCRA Market

expectation survey.

ROA: Return on Assets.

ROE: Return on Equity.

Rofex: Rosario Futures Exchange.

RC: Regulatory capital

RWAs: Risk Weighted Assets.

S&P: Standard and Poors.

s.a.: Seasonally adjusted.

SEFyC: Superintendence of Financial and Exchange Institutions.

SME: Small and Medium Enterprises.

TCR: Tipo de cambio real. Real Exchange rate.

TN: Tesoro Nacional. National Treasury.

USS: United States dollar.

US: United States of America.

UTDT: Universidad Torcuato Di Tella. Torcuato

Di Tella University.

UVA: Unidad de Valor Adquisitivo. Acquisition Value Unit.

UVI: Unidad de Vivienda. Dwellings Unit.

VAT: Value Added Tax.

WB: World Bank.

WPI: Wholesale Price Index.y.o.y.: year-on-year.