



Financial Stability Report

First Half 2017



BANCO CENTRAL
DE LA REPÚBLICA ARGENTINA

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ISSN: 1668-5164
Online edition

Publication date | May 2017

Central Bank of Argentina

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Contents and Edition | Regulations Deputy General Management

Editorial Design | Communication Senior Management

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Foreword

As stated in its Charter, the Central Bank of the Republic of Argentina (BCRA) “has as its purpose the promotion of 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.” In general terms, financial stability exists when the financial system can provide services for funds intermediation, hedging and payments in an adequate manner, efficiently and continuously, even in stress situations.

For the financial system to contribute to economic development with social equity it is essential for there to be financial stability, as well as for the system to be deep and inclusive. These objectives guide the policies implemented by the Central Bank. If families are to entrust their funds to the financial system, it must ensure it protects the value of their savings by providing a positive real return, at the same time as the intermediation process remains sound and macroeconomic risks are adequately managed. A deep financial system allows producers and employers to obtain credit to invest, produce and hire, and families to purchase their home, a car, or finance other projects. By doing so, the financial system operates as a mechanism for promoting the welfare of economic agents and encouraging equity, providing opportunities for those with sound projects who lack the means to undertake them.

To promote the deepening of the financial system and protect its stability, the Central Bank exercises its powers as a regulator, supervisor and liquidity provider of last resort. In addition, it monitors the main developments taking place in the financial and payment systems, assessing potential risks, vulnerability factors and the strength of the sector in the face of potentially adverse scenarios.

In this context, the Financial Stability Report (FSR) is a six-monthly publication in which the Central Bank informs on its view of the state of the financial system, the initiatives adopted for its development, and assesses its stability. In the FSR the Central Bank places special emphasis on the identification and analysis of potential systemic risks and explanations of the actions taken to prevent or mitigate them. This publication is intended to assist agents in the economy to take decisions on the basis of more and better information, facilitating the appropriate management of their activity. The FSR is designed to be an instrument to stimulate debate on matters of financial stability, and in particular, on the Central Bank’s actions in that field.

The next issue of the FSR will be published in November 2017.

Autonomous City of Buenos Aires, May 17, 2017.

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Executive Summary

The financial system has remained strong since early 2017, as observed in the last issue of the Financial Stability Report (IEF)¹. Against external and domestic contexts featuring changes that tend to be favorable, this sector maintains high liquidity and solvency levels, as well as a low-to-moderate exposure to different risks inherent to this activity, showing a considerable degree of resistance to potential stress events. Within the present operative framework, the key challenge of this sector is still current in terms of keeping adequate profitability and capital levels over time, in such a way as to allow for advancement on the necessary financial deepening and a greater financial inclusion.

The international context has tended to improve over the last months (see Chapter 1). There was a lower volatility in the international financial markets—which allowed the dynamization of debt placement in foreign markets— and improvements in the economic activity of the country's main business partners. It is expected that the external context remains favorable, although it is not ruled out that abrupt changes in the risk appetite at a global level can take place, with a potential impact on the emerging countries (that could affect Argentina through the financial and trade channel). At the local level, it should be noted that a stage of gradual activity expansion is beginning (although the evolution has not been consistent among sectors), with slight improvements in the labor market. Due to the most recent evolution of the general price level, in April the BCRA had to increase the monetary policy rate, reinforcing its commitment with the disinflationary process started in 2016. The prospects are still positive, in line with what has been observed based on different leading indicators of the economy, the REM expectations and the financial markets valuations.

Against the general context of disinflation and increased competition started in 2016, banks' profitability continued to fall over the last quarters (see Chapter 2). According to expectations, the financial margin and service-focused results have decreased. In this sense, the main challenge to be faced by the local financial sector in the short and medium term is still current. In particular, with lower inflation levels—trend that is expected to strengthen over the next months—, financial institutions will continue to lose the benefit of getting funds from transaction deposits and lending at relatively high nominal rates. In order that the anticipated scenario does not impact on the solvency and intermediation activity of the sector, such institutions should develop an extensive model and business policy realignment, seeking to enhance productive efficiency and operational scale (see Exhibit 2). The BCRA is supporting this process by implementing measures to reduce operative costs and promoting a broader use of new technologies (see Chapter 5).

As regards the recent evolution of the financial intermediation levels with the private sector, it was observed that the pace of improvement was more moderate than that at the time of the publication of the last IEF. Deposits demonstrated greater dynamism (see Chapter 2), largely due to a higher fund channeling, in light of the exchange market normalization and the advancements in the Tax Amnesty Regime. On the other hand, the real terms credit increase to the private sector declined for both companies and households, in part due to seasonal factors. However, the increase of mortgage loans denominated in Purchasing Value Units (UVA) must be highlighted. It is expected that credit dynamism continues based on rebuilding credit demand, considering the

¹ Published in November 2016.

improvements made in labor conditions, real wage and economic activity. Banks' funding should strengthen during the next periods, having received the impact from factors such as the growing trend towards positive real interest rates for depositors, the creation of new UVA instruments, the development of a yield curve in local currency, and the use of mortgage lending securitization strategies.

About the last IEF issue, the general exposure levels of the financial system to the risks inherent in the activity remained low (see Chapter 3 and Exhibit 4). This sector maintains high coverage levels—in terms of liquid assets, regulatory capital and provisions—under a prudential supervision and regulation framework, in line with international standards. Moreover, the possible sources of systemic vulnerability (leveraging, interconnection, risk factor concentration, etc.) are limited. With respect to credit risk, delinquency levels remain particularly low, while different stress testing exercises show the financial system resilience to events related to the materialization of such risk (with a very low probability of occurrence). As regards system mismatches, both foreign currency exposure and inflation-adjustable instrument exposure remained at low levels, though the latter show an increase in its net position.

Therefore, the situation of banks offers a wide margin to increase loans to companies and households, while starting from debtors' relatively low leveraging levels (see Exhibit 1). Looking ahead, the intermediation scale increase process might involve some changes on the risks taken, for example, liquidity risks, credit or term/currency mismatches risks (particularly in the UVA segment). In this sense, the BCRA continues to update the regulatory framework, keeps a proper follow-up of the variables above mentioned, and fosters measures to provide banks with tools to manage their risks.

The BCRA sticks to its commitment to promote the development of the payment system, a higher bancarization level and a reduced use of cash. In particular, the new electronic means of payment released by mid 2016 started to work in several financial institutions, while it is expected that the incorporation of new alternatives continues during the next months (see Chapters 4 and 5). Moreover, measures were implemented in order to reduce the operational costs faced by users of the financial services (both economic- and time-related). The incorporation of a wider range of operative infrastructure has also been promoted to offer financial services across the country.

1. Context

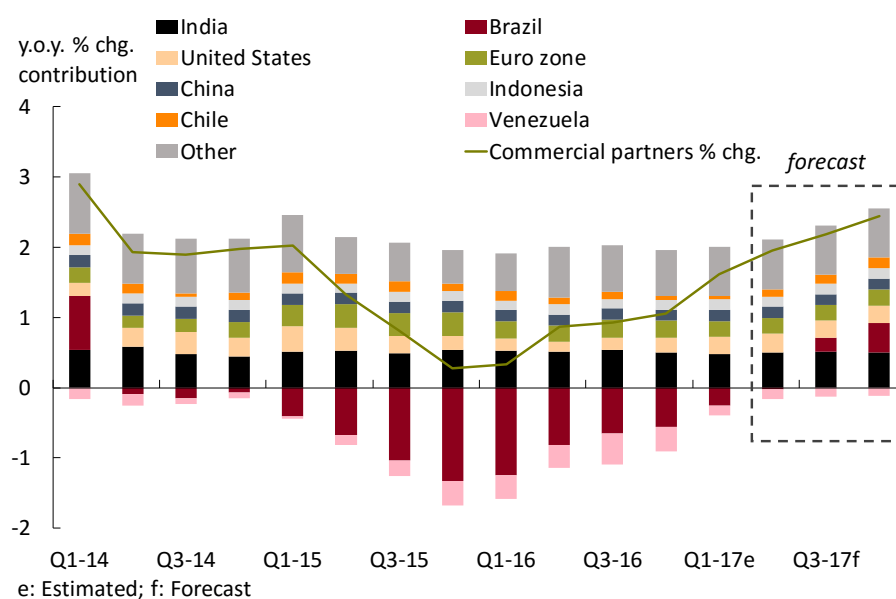
The external context has improved somewhat since the last issue of the IEF, with lower volatility in financial markets and encouraging signs for developed economies and Argentina's main trade partners. In this context, debt has been placed abroad with a renewed dynamism. With a favorable expected scenario, the main external vulnerability factor for the local financial system is a sharp turn in risk appetite for the rest of 2017, with potential effects through a reduced access to funding in international markets, and a higher exchange rate volatility. This low-probability scenario must be weighed against the low leverage levels and the relatively limited currency mismatches in the various sectors of the economy. At the local level, in the second half of 2016, the economy began a growth phase that should be strengthened in 2017. Given that, in the last few months, there were changes in the general price level above those compatible with the path foreseen by the BCRA, the monetary policy rate was increased in April, confirming the institution's commitment with the established inflation targets. Capital markets showed improvements in listings, a result of the macro-economic reforms, the higher demand of assets in pesos, the dismantling of remaining capital controls, and the implementation of the process of asset externalization. In terms of price level and activity, the expectations allow for a positive view of the evolution of the financial sector in the next few months. Given the sector's soundness, very extreme —and very unlikely— deviations should be necessary for the system's stability to be affected.

International environment

Recent evolution

During the second half of 2016, the international context has remained favorable for Argentina. Forward indicators of manufacturing activity in the main economies have showed reassuring signs. The recovery of oil prices has helped inflation rates get closer to the targets established in advanced economies, which has widened the future room for maneuver.

Figure I.1 | Growth of Argentina's Main Trading Partners

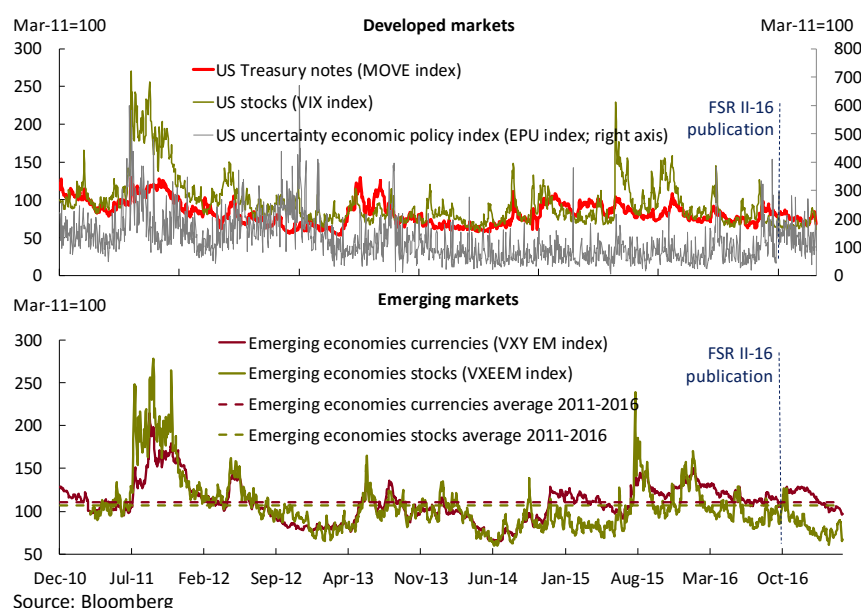


Source: IMF, FocusEconomics, Central Bank of Brazil Focus survey and INDEC

Argentina's trade partners have continued to regain momentum, particularly as regards the stabilization of Brazil's economic activity (see Figure 1.1). The terms of trade of the Argentine economy improved during most of 2016, a trend that was reverted in the last quarter but continued in the first months of 2017 (a worsening has been recorded since the previous IEF).

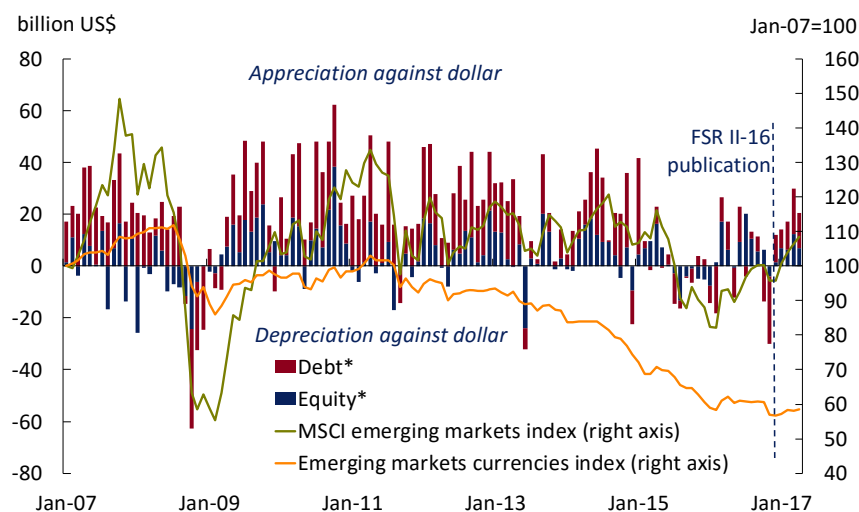
In the financial markets, after the increase in volatility after the presidential election in the US in late 2016, it stabilized in very low levels (see Figure 1.2). Meanwhile, the yields of 10-year US Treasury bonds and the dollar index, two of the variables with the most marked changes after said election, corrected part of those variations in the first few months of 2017.

Figure 1.2 | Implied volatility and uncertainty index



Lower volatility has favored emerging economies. Portfolio flows to funds specialized in emerging economy assets recovered in the first quarter of 2017, which had experienced outflows in end-2016 (see Figure 1.3). This was accompanied by a sustained increase in share listings and an appreciation of emerging market currencies against the dollar. The most significant appreciation was that of some of the Latin American currencies, which had deteriorated more than others after the US election.

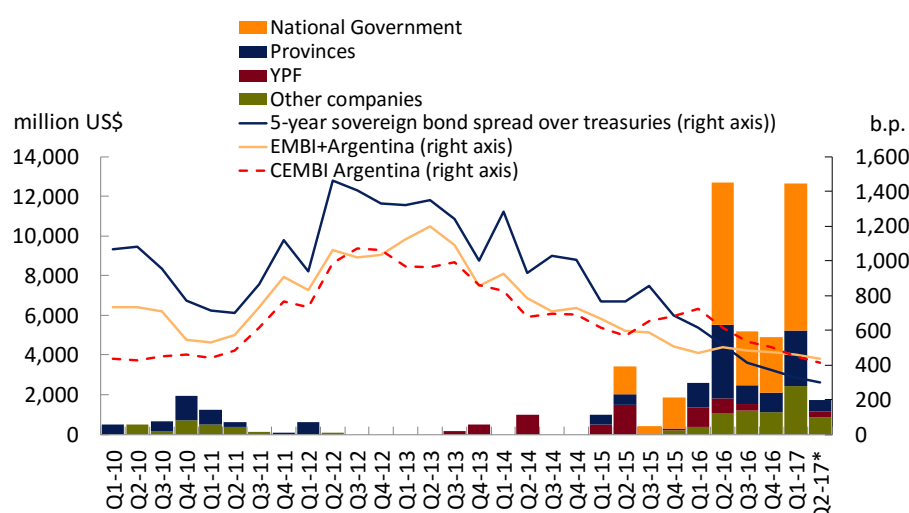
Figure 1.3 | Flows to investment funds specialized in emerging economies



* Portfolio flows to emerging markets, elaborated by the Institute of International Finance (IIF). ** Index elaborated by BCRA, simple average of 30 currencies against US dollar.
Source: BCRA from Bloomberg & IIF

A reduced risk aversion drove a compression of the various rate spreads for emerging economy debt and a renewed dynamism in debt placement in international markets. The context of decreasing margins also applied to Argentina (see Capital markets section), with a new momentum in the placement of sovereign, provincial and corporate debt in the last few months (see Figure 1.4).

Figure 1.4 | Issuance of national, provincial and corporate debt in international markets - gross flows



Note: outright debt swaps and refinancing operations of liabilities are excluded. Placements of National Government include dollar-denominated bonds under domestic law awarded on public market auctions which may have been acquired by local investors (*) updated as of May 11, 2017.

Source: BCRA from BCBA, CNV, IAMC, Ministry of Finance and Bloomberg.

The national government's operations in the external markets have sought to cover beforehand a share of the financial needs for 2017 and to continue to complete the dollar curve². For some of the provinces, these were the first operations in international markets. Corporate placements have showed a higher weight of genuine funding operations (less transactions made to finance the repurchase of existing debt), apart from new peso-linked transactions.

Main external risks for financial stability

For the next few months, perspectives continue to be positive as regards the international context. However, in line with the warnings made in the previous IEF, several vulnerability factors remain in the short and mid-term that might trigger (low-probability) episodes of sudden shifts in risk appetite at the global level, which would impact emerging countries, Argentina among them.

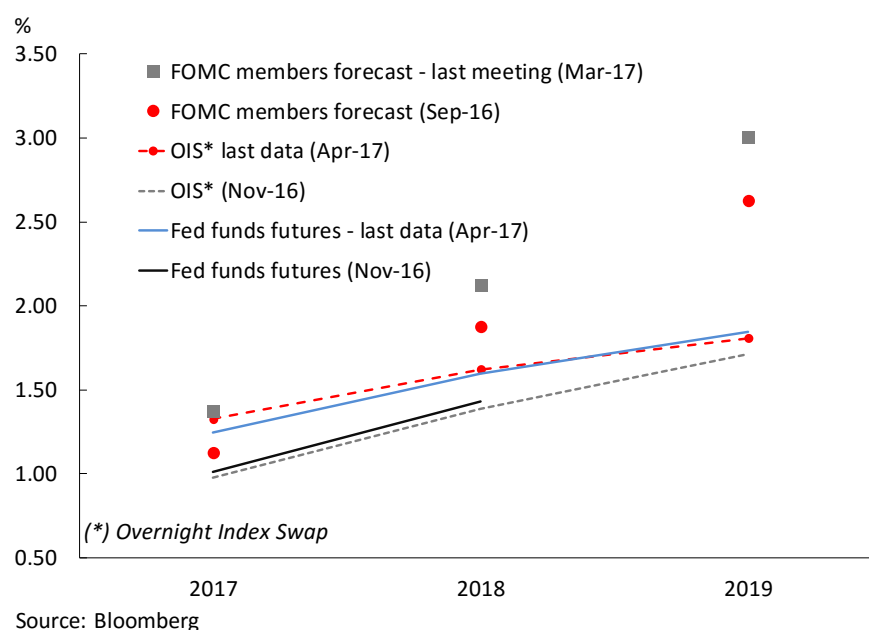
Vulnerability factors include, in the first place, potential changes in US policies that affect growth in this country and in other large economies or global trade. Another relevant source of vulnerability would be any substantial change in expectations regarding the monetary policies of the main developed economies. For instance, in US expectations remain of a gradual increase in monetary policy rates³ (see Figure 1.5). The situation in Europe may also trigger changes in risk perceptions, in a context marked by the separation of the UK from the European Union, the electoral timetable, and certain doubts as regards the state of some

² The government has also made progress in diversification in terms of issuance currencies, including operations in euros and Swiss francs (the latter was thus used once again for the first time in nearly 20 years).

³ The March policy meeting, in line with the forecasts, the FOMC decided a 25 basic points increase in the Fed funds rate (to 0.75 percent -1.0 percent) and reasserted that the economic conditions warranted very gradual increases in the immediate future. In May, in line with expectations, the Federal Reserve kept the policy rate unchanged. In Europe, however, there may be marginal changes in the short term in the monetary policy stance.

banks in specific countries. Also worth monitoring is the situation in emerging countries that directly influence the Argentine economy, like Brazil and China. Another potential source of risk is that of geopolitical factors (such as tensions in Middle East), which, aside from triggering changes in risk appetite, might create sudden shifts in commodity prices.

Figure 1.5 | Fed funds interest rate outlook



These vulnerability sources might impact emerging countries if expectations undergo changes that translate in sudden shifts in portfolio flows and listings in the financial and exchange markets, after several years of capital inflows and price improvements in the context of a search for better yields. An extended period of volatility would affect growth perspectives for emerging economies.

The effect of an adverse scenario like the one described above on the local economy and the financial system would materialize, on the one hand, through changes in the situation of the country's main trade partners. On the other, a negative scenario might also make an impact through the reduction of access to financing in the international markets and a higher volatility in the exchange rate. However, as regards the commercial channel, it should be noted that the Argentine economy has a diversified set of exports, with a relatively limited weight when compared to other emerging countries, whereas its financial system's exposure to trade partners is contained. Moreover, it should also be born in mind that the starting point of corporate leverage is relatively low (see Exhibit 1), and currency mismatches are small.

Local context

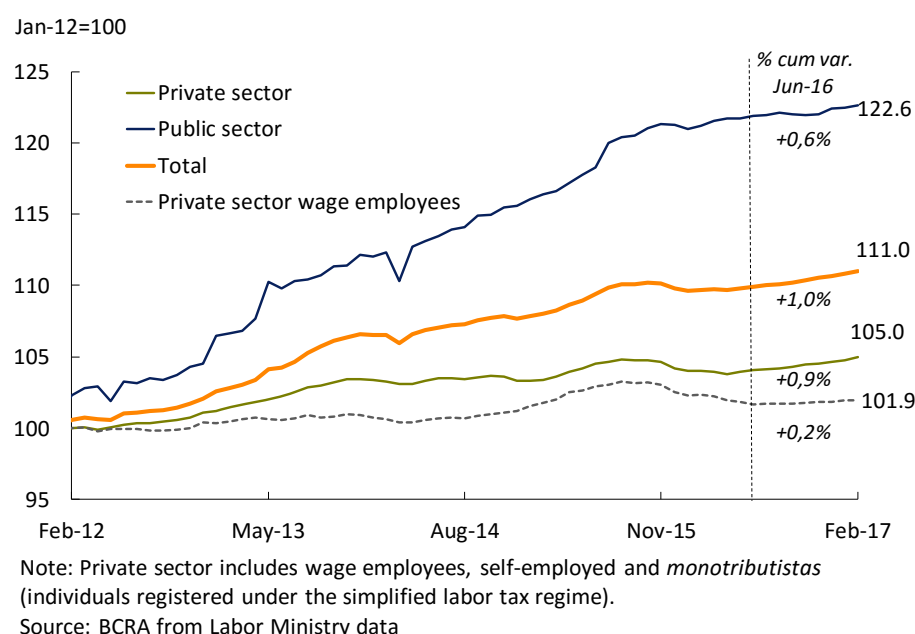
Activity

The analysis of the evolution of economic activity, sectoral income and employment at the local level is relevant due to the relationship among those variables both in the behavior of financial intermediation and in the evolution of the quality of banks' portfolios. In this regard, and in line with the expectations set forth in the previous IEF, it should be mentioned that the economy was verified to have begun an expansion phase, with a 0.1 percent and a 0.5 percent s.a. growth in the third and fourth quarters of 2016, respectively.

In the first quarter of 2017, product should increase around 0.8 percent s.a., based on the BCRA's latest contemporary forecast (PCP-BCRA), thus leaving recession behind.

The income of the main debtors of the financial system has begun to recover. Households, a sector to which the financial system allocates 47 percent of total private sector credit (2 percentage points more than in the previous IEF), face a slightly improving labor market, due to the recovery of economic activity. From June 2016 until February 2017 (latest available data⁴), formal wage employment in the private sector grew 0.2 percent s.a., thus reverting the negative trend initiated in November 2015. Overall, including the public sector, wage earners, monotax payers and self-employed workers, employment rallied 1 percent s.a. (see Figure 1.6). This gradual sectoral recovery, coupled with low debt levels, housing demand, and the emergence of more appealing financing conditions (UVA), will encourage credit growth (see Chapter 2).

Figure 1.6 | Registered workers total country - seasonal-adjusted series



Goods and services exports and a higher buildup of agricultural stocks account for the GDP recovery during the second half of 2016, fueled by a record wheat harvest. Private investment and consumption, in turn, contracted during the same period. In 2017, leading indicators suggest that the external sector continued to make a positive contribution to the activity level, whereas the dynamism of public works provided new momentum for investment, and consumption improved slightly, according to the evolution of the VAT, internal car sales, and sales in shopping malls.

The economic recovery has not been homogeneous among productive sectors. The sectors leading the recovery (agriculture, construction, transport) have been joined by agro-industrial activities, commerce and real estate (the latter of which has been fueled by the Tax Disclosure System and the launch of UVA financing). For the next few months, growth is expected to be more spread among sectors. In this context, corporate debt is kept relatively moderate in broad terms.

Agricultural output (which accounts for 10.2 percent of banking credit to the private sector) has continued to show the positive effect of the economic policy measures adopted since December 2015⁵. In the second

⁴ According to seasonally adjusted data published by the Ministry of Labor, Employment and Social Security.

⁵ See a reference to the measures adopted in the previous editions of the IPOM.

half of 2016, the sector's value added grew 4.2 percent s.a. against the average of the first half of that year. According to EMAE data, agricultural output grew 6.1 percent i.a. in the first two months against the same quarter the previous year. Employment grew 2.2 percent i.a. in the sector, based on data from the Ministry of Labor, Employment and Social Security⁶.

Discounting volatility, construction should show a growing trend starting in July 2016, according to several indicators (such as cement and asphalt sales, or sector employment). The behavior of public works and the reactivation of mortgage credit suggest that this positive trend will endure.

Manufacturing production (which accounts for 20.2 percent of banking credit to the private sector, slightly below the figure from six months ago) improved somewhat in the fourth quarter of 2016 year on year⁷. In the first two months of 2017, the industry expanded 1 percent s.a. against the previous quarter, according to data from the EMAE⁸. The industrial production indices prepared by private consultancy firms should reflect a weakening of this increasing trend in the first quarter of 2017. Growth perspectives for economic activity in general, the recovery of real household income, and the improvements in Brazil⁹ predict an upturn in industrial production for the rest of the year.

During the fourth quarter of 2016, service provision (9.6 percent of banking credit to the private sector) increased 0.7 percent s.a. against the previous quarter. The expansion was widespread across the main activities (transport, financial intermediation, wholesale and retail commerce, hotels and restaurants, and real estate). The EMAE data show that, during the first two months of 2017, most service activities were above the average of the fourth quarter of the previous year, thus maintaining the growth trend in the first quarter¹⁰. The positive outlook for economic activity in general, coupled with specific policies targeted at recovering banking deposits and credits, especially the launch of UVA mortgage lines, suggest that the main service activities should continue to grow during 2017.

As regards the local non-financial public sector, income were virtually unchanged in real terms during 2016 in the 12-month aggregate up to June, partly due to the tax collection driven by the Tax Disclosure System¹¹. Primary expenditure increased 2.3 percent in real terms over that period, reflecting the effects of the gradual implementation of the Law of Historical Reparation for pensioners, the evolution of energy and transport subsidies, the higher dynamism of public works and a certain degree of expenditure anticipation¹². According to the schedule for the gradual reduction of the primary fiscal deficit, a result of -4.2 percent of GDP is expected for 2017, as well as a coordination of the rearrangement of public accounts with the sub-national districts.

The economic outlook for the rest of 2017 continues to be positive, which will favor the evolution of financial intermediation, starting from a context of limited risk. Exports should keep fueling demand, and be gradually joined by investment and consumption. The increase hoped for in the investment rate should be supported by the recovery of domestic savings—in turn, encouraged by an expected context of lower inflation and positive interest rates—, by the gradual rearrangement of public accounts, and by external financing. Consumption should benefit from the increase in households' real income and the recovery of employment, coupled with the dynamism of consumption loans and social and social security expenditure. A more widespread growth will accompany the recovery of domestic demand. According to the REM, market expectations suggest a 2.8 percent economic expansion for 2017. Although there might be deviations from the expected scenario of improved activity and rearrangement of economic variables, these

⁶ Mine and quarry exploitation and primary oil production had a negative behavior.

⁷ Although a contraction was recorded throughout the second half of 2016 2 percent s.a.

⁸ The sectorial VAB and EMAE data are published by INDEC; the seasonal adjustment has been added by the authors.

⁹ According to the Brazilian Central Bank's Market Expectations System, a year-on-year growth of 0.4% is expected for 2017, compared with the rates of -3.6 percent and -3.8 percent seen in 2016 and 2015, respectively. A faster year-on-year rate of 2.5 percent is projected for 2018.

¹⁰ Except hotels and restaurants, which fell slightly (-0.1 percent s.a.).

¹¹ With preliminary data, at the end of March 2017, the Tax Disclosure System (Law 27,260) accumulated reported assets of US\$116.8 billion, and contributed approximately ARS 148.6 billion in taxes.

¹² This should improve the tax result of the year 2017.

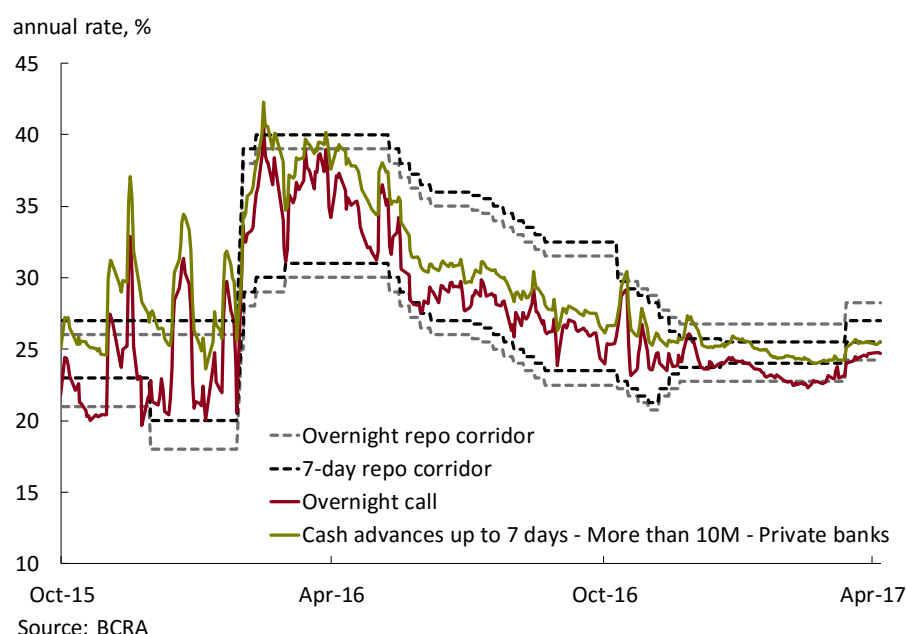
would have to be extreme (and thus, very unlikely) to pose a substantial risk for the stability of domestic financial markets.

Monetary context and prices

For financial intermediation to grow, economic activity must continue to improve, and the disinflation process initiated in 2016 must continue, with low, stable inflation levels and positive real interest rates. As from January 2017, the BCRA has formally adopted an inflation targeting regime with a gradually decreasing target range¹³.

Simultaneously, the BCRA has changed its policy rate from the 35-day LEBAC to the mid-band 7-day swap rate¹⁴. This provision, established in March 2016, significantly reduced volatility in the sector's short-term baseline interest rates (see Figure 1.7). LEBAC tenders continued to be carried out (now on a monthly basis) as part of the management of BCRA's liabilities and of market liquidity conditions.

Figure 1.7 | Repo corridor and short term interest rates



During 2016, in a context of falling inflation expectations, and in order to maintain the magnitude of the contracting bias of its monetary policy, the BCRA gradually reduced its nominal policy rate. In early 2017, the change of instrument did not entail any variations in the policy rate level, kept by the BCRA at 24.75 percent until April 11, 2017. It should be noted that, in early 2017, a set of factors¹⁵ increased liquidity conditions and favored declines in a few market interest rates. When, in early March, the BCRA noted that the disinflation process was slightly above the expected path, it started to intervene in the LEBAC secondary market to withdraw excess liquidity and strengthen the transmission of its policy rates to market interest rates.

In April, when there were signs that inflation levels might continue to be above those compatible with the path foreseen by the monetary authority (see Figure 1.8), the BCRA increased the monetary policy rate in

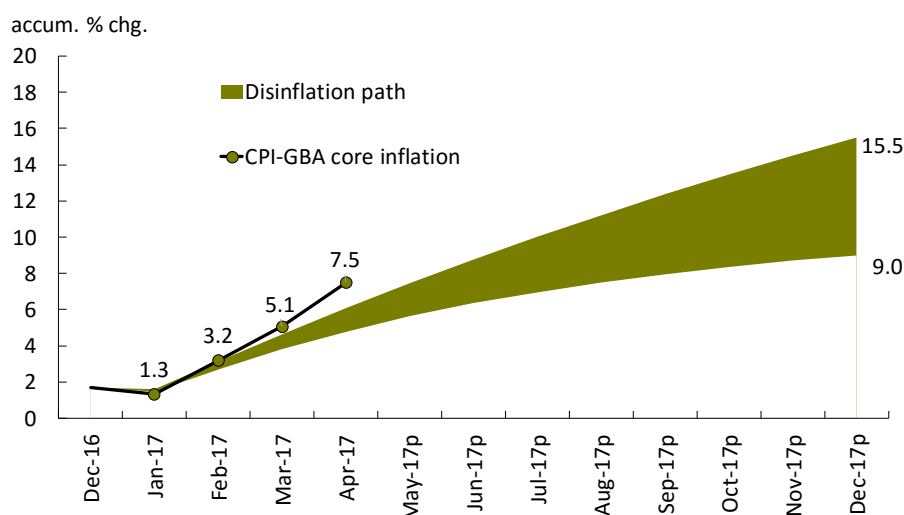
¹³ See more details on the Argentine inflation targeting regime in previous editions of the IPOM.

¹⁴ The LAF corridor bounds are the interest rates at which the BCRA is willing to provide liquidity for banks or withdraw it from them without a set ceiling.

¹⁵ Including 1) bank's management of their quarterly reserve requirement position, 2) the lowering of reserve requirements, 3) currency purchases by the BCRA, 4) BCRA's funding for the National Treasury, and 5) the changes in bank's cash management (see Chapter 5. Monetary Policy – IPOM).

150 basic points, to 26.25 percent¹⁶. Thus, the BCRA will maintain a clear anti-inflation bias so as to ensure that the disinflation process continues to its 12 percent to 17 percent target for 2017. Lastly, the Central Bank announced in April that it will seek to increase international reserves in order to bring them closer to the levels of other economies in the region.

Figure 1.8 | Disinflation path. Core CPI.



Note: The bands for the core inflation path are consistent with the compliance of 12 -17% inflation target in December 2017, assuming a year over year change of CPI GBA regulated prices at the end of 2017 of approximately 22%.

Source: BCRA from INDEC data

Capital market

Since the previous edition of the IEF, the evolution of the local capital market has benefited from factors such as the gradual improvement of macroeconomic indicators, the trend towards disinflation, and the progress made in the implementation of policy measures (like the Tax Disclosure System and the asset disclosure program, and the elimination of remaining capital controls, among other). This positive behavior is expected to continue over the next few months, although new volatility episodes could be triggered by international or local factors.

The gradual improvement of economic indicators (reflected in the ratings of Argentine debt¹⁷) and the favorable context in international markets have allowed for new reductions of sovereign debt differentials since the last edition of the IEF, which drove debt placement abroad. In late April, the Argentine EMBI was near 400 basis points, a level unseen since 2007¹⁸ (see Figure 1.9). The reduction of the risk differential was also taken advantage of in the placement of sovereign bonds in dollars in the domestic market¹⁹. This improvement in the cost of dollar-denominated financing for the Government and the possibility to place debt with longer horizons has translated into better financing conditions for firms in the international markets²⁰.

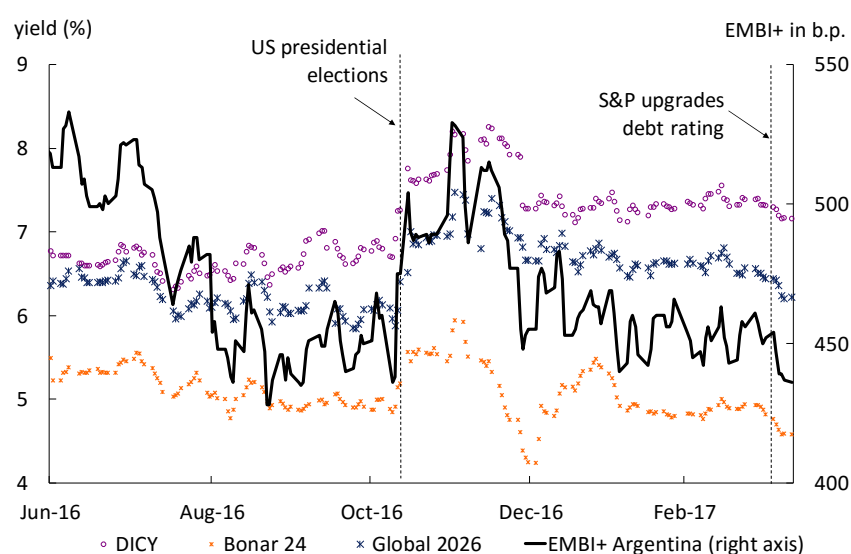
¹⁶ See Chapter 1 of the previous edition of the IPOM.

¹⁷ In early March, there was an improvement in the outlook of Moody's rating of the country's sovereign debt from stable to positive; more recently, there was an upgrade in S&P's rating, from B- to B, with stable outlook.

¹⁸ In April 2016, the differential of the Argentine EMBI reached a level below 400 basis points., although distorted at the time by the effect of pending coupons included in the listings of Argentine public securities (towards the end of that month, once an agreement was reached with the holdouts, the differential widened almost 150 basis points).

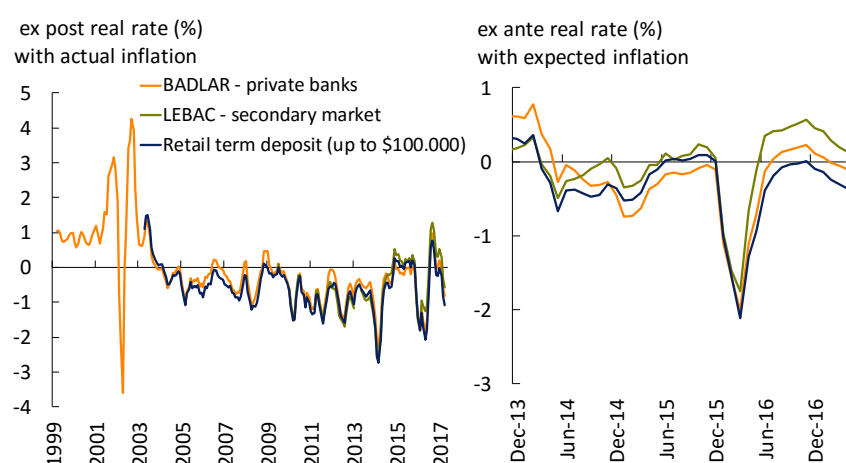
¹⁹ Partly to channel the funds made available by the maturing of bonds of close to US\$7 billion in April.

²⁰ The dynamism of these placements in external markets frees resources at the domestic level to fund other agents.

Figure I.9 | Argentine US dollar sovereign bonds yield and risk spread evolution

Source: BCRA from Bloomberg and Reuters data

The disinflation process begun in 2016 has had positive effects on the domestic market. For instance, the expected real interest rates for the most widespread financial instrument have recover somewhat, although this trend still needs to consolidate itself (see Figure 1.10)²¹. At the same time, there has been more demand of peso-denominated instruments, which has driven new advances in the construction of a local-currency curve through the placement of Treasury bonds (Bontes) at a fixed rate since September 2016²². By working as a baseline for the rest of the economy, the construction of the peso-denominated curve is expected to contribute to the appearance of longer-term funding operations for the productive sector in local currency²³.

Figure I.10 | Real interest rates evolution for 30-day placements
3 month moving average

Note: calculations using beginning-of-month rates, no annualization applied. Actual CPI (GBA CPI Dec-06, then national CPI based on own estimate). Expected inflation based on Consensus (CPI GBA from Nov-13), then REM (national CPI since Jun-16)

Source: BCRA from Consensus, INDEC, provincial statistics institutes and MAE data

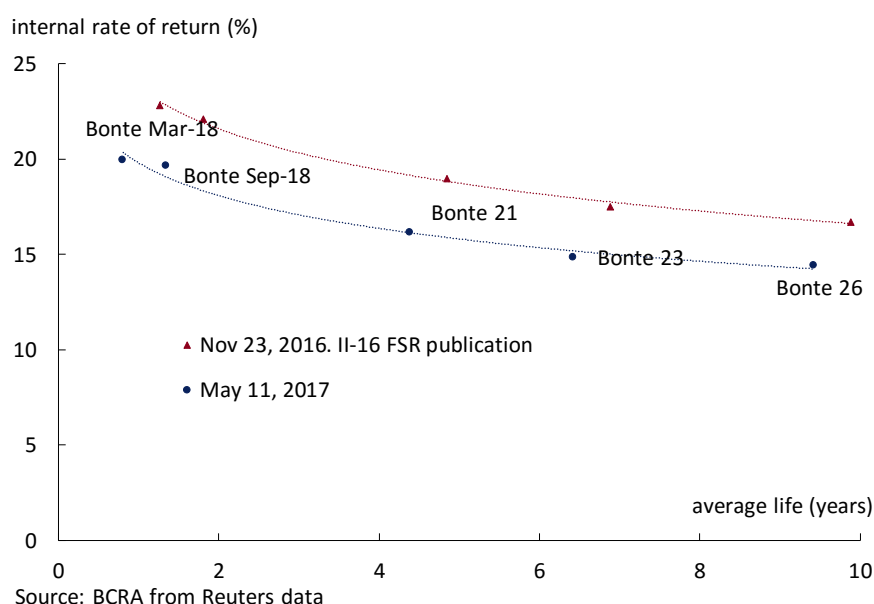
²¹ In particular, real rates for term placements (for instance, the Private Bank BADLAR and those from the secondary market of LEBACs) were positive until January 2017.

²² Additionally, in the last few months, the national government has placed new CER bonds, although no substantial increase in the operated amounts of these type of assets has been observed in secondary markets.

²³ On the other hand, it should be noted that the curve in nominal pesos maintains a negative slope, consistent with a path of downward inflation expectations and short-term interest rates.

The demand of peso-denominated assets translated into mostly downward yields in this segment and higher liquidity in the secondary market for fixed-rate public securities in local currency since the previous edition of the IEF (see Figure 1.11). Demand of peso-denominated public securities benefited also from the elimination of the minimum permanence term for short-term foreign capital, since that enabled Argentine bonds in pesos to be incorporated into fixed-rent indices used as a benchmark at the global level. As regards the international demand of domestic assets, there has been a clear increase in portfolio flows by non residents in the first quarter of 2017. The analysis of the evolution of the flows reflects that this net result is verified despite the diversity of operations (with both positive and negative flows), evidence of a wider, deeper market.

Figure 1.11 | Fixed rate sovereign bond yield curve (pesos)

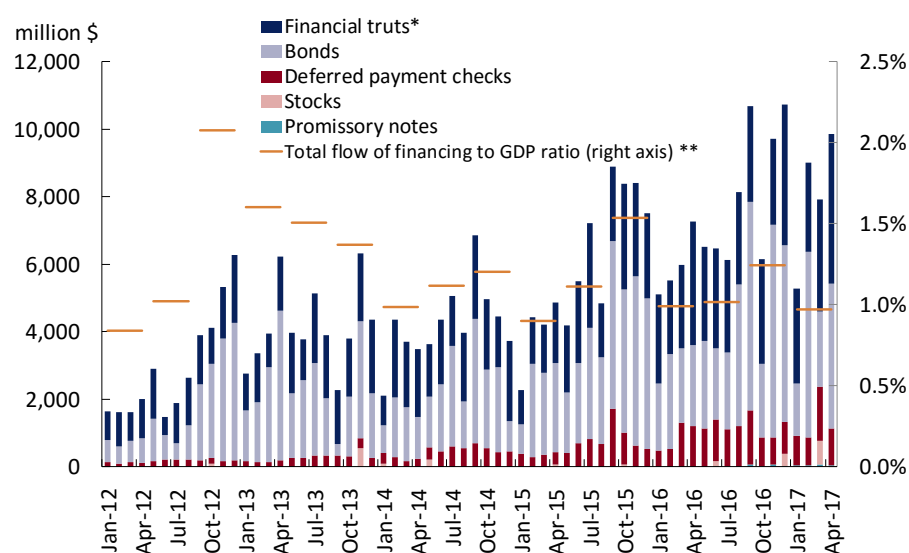


In this context, the downward trend became stronger for interest rates of private sector funding through the domestic capital market. Since the previous edition of the IEF, interest rates in the capital market fell in average around 300 basis points, a deeper reduction than that of the Private Bank BADLAR in the same period. In terms of funding volumes, however, the placement of tradable obligations lost dynamism in the domestic market, whereas the issuance of financial trusts stayed broadly unchanged²⁴ (see Figure 1.12). Corporate notes had a higher weight of financial sector operations, while financing terms stood near 28 months. Now that the placement of UVA-denominated corporate notes has been enabled, these operations should contribute to funding mortgages by banks, which would encourage this kind of credits while keeping limited mismatches. Two banks were the first to launch these bonds in April, with a 3-year horizon.

The elimination of remaining controls to short-term capital inflows also created expectations regarding the possibility that, in the next few months, Argentine shares may be included in the MSCI emerging index. Since the previous edition of the IEF, the Merval grew nearly 10 percent in real terms, with more marked increases in public utility shares. These valuations (prospective in nature, due to the improved outlook for the corporate sector and the demand of Argentine securities) are yet to be fully followed by the gains observed until the fourth quarter of 2016, thus generating a rise in price/earnings indicators. In real terms, the Merval still operates below the maximum levels it reached in September 2014, with a volume near 30 percent relative to the maximum levels of late 2007.

²⁴ While the nonperforming portfolio in its stock continues to be contained.

Figure 1.12 | Financing to the private sector (domestic capital market)
- gross flows



(*) Exclude housing and infrastructure financing.

(**) Financing flows by quarter, annualized.

Source: BCRA from IAMC, BCBA and CNV data

The asset disclosure process ended without any sudden movements in the market variables²⁵. This process implies an improvement in tax income, while part of the declared amounts should be incorporated into the domestic financing circuit. Moreover, in the framework of the asset disclosure process, several closed investment funds were created of an amount near US\$300 million, mainly related to the real estate and infrastructure sectors.

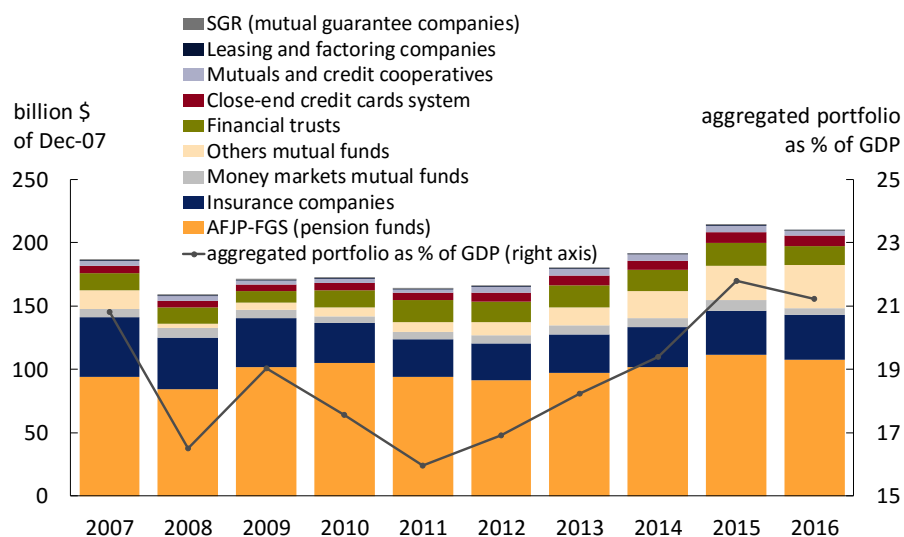
In 2016, there was a slight reduction in real terms of financing volumes at the domestic level outside the banking system (through instruments such as the FGS, insurance companies, mutual funds and financial trusts; see Figure 1.13)²⁶. In 2017, however, mutual funds portfolios were markedly dynamic, particularly in the case of fixed-income funds, which grew 47 percent in real terms in the first quarter, mainly due to an increase in underwritings in a context of higher demand of peso-denominated instruments²⁷.

²⁵ Some temporary effect was seen in the fixed-income market, in the shortest end of the dollar curve.

²⁶ For more information on the evolution of funding outside the banking system in Argentina and a comparison with global trends, see “*Global Shadow Banking Monitoring Report 2016*”, recently published by the *Financial Stability Board* (FSB).

²⁷ Also worth noting is the growth of equity mutual funds and, to a lesser extent, money market funds.

Figure I.13 | Portfolio of institutional investors and other non-bank financial agents



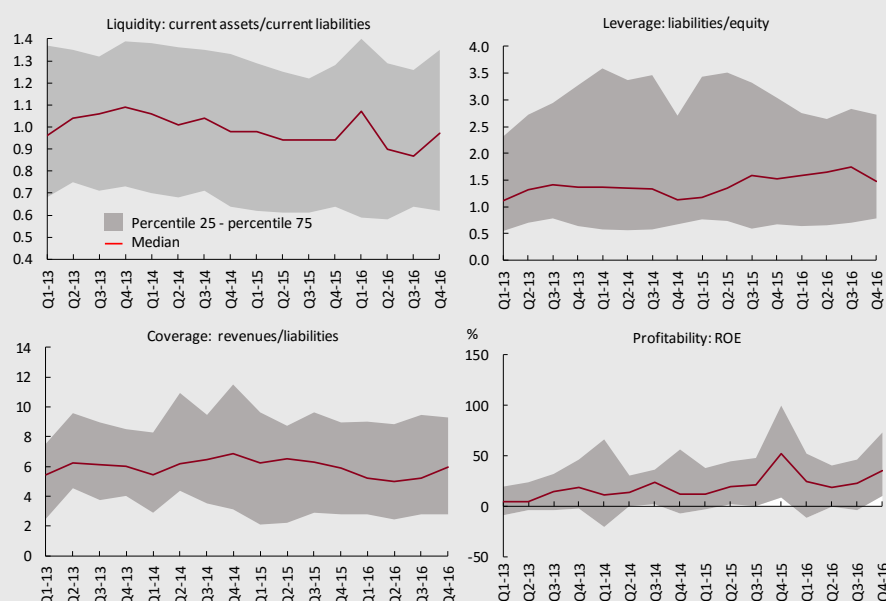
Note: the data of 2015 is repeated in 2016 for the series of mutual and cooperatives. Non-consolidated portfolio. National CPI (BCRA own estimation) is applied for deflating nominal values. Source: BCRA from FGS, SSN, CAFCI, Production Ministry, Bolsar.com, INDEC and others data

Exhibit 1 / Financial situation of the corporate sector

It is essential to monitor the risks associated to the corporate sector from a macro-prudential point of view, given that they might become systemic and cause a deterioration in financial services that may, in turn, affect economic activity. It should be noted that the process of normalization of the economy has, since last year, opened access to mid- and long-term funding sources abroad. Moreover, with a relatively clear horizon in terms of maturities of debt denominated in foreign currency, it is to be expected that the financing window continues to be tapped on a net basis.

A number of widely used financial ratios were drawn from a balanced sample of listed Argentinean companies for the last 16 quarters, with information reported to the Buenos Aires Stock Exchange and the National Securities Commission (see Chart). The gradual fall in the median level of nominal liquidity continued over the course of several months in 2016, coupled with an increase in leverage and lower coverage of total debt with generated cash flows. As regards profitability, the ROE maintained its upward trend, especially in the second half of the year, in a context of lower inflation. Towards the end of last year, however, a marginal improvement was reported: a decrease in leverage and an increase in coverage for firms' median. Liquidity levels also rose somewhat late last year.

Figure 1 | Financial ratios in listed companies



Source: BCRA from BCBA and CNV data

In assessing potential vulnerabilities of the corporate sector, it is relevant to examine their stance as regards currency mismatches. This is even more important under a floating exchange rate regime. In this context, a particularly salient risk is a potential increase in foreign currency denominated debt that exceeds by a substantial amount foreign currency inflows and stocks of assets in currencies other than pesos, and/or does not match the appropriate use of financial instruments of hedging²⁸.

²⁸ As discussed in the [IEF edition of the second half of 2016](#), debt issuance in international markets last year by a specific set of companies (accompanied by a reduction in financing costs) did not necessarily entail a proportional increase in those companies' leverage, since, in most cases, the placements were intended to improve their assets' financial profile. So far this year, however, new placements have had more diversified objectives.

Based on cross-cutting data for the companies that reported balance sheets in the last quarter of 2016 (see Table 1), firms with foreign currency denominated bonds placed in international markets are relatively larger in size. In general, they have current and potential incomes in dollars. This is due to the fact that this subset is dominated by companies that produce tradable goods, whereas some firms from non-tradable sectors (such as those in the real estate industry) have or produce goods that derive flows that are usually denominated in foreign currency (although exposed to the fluctuations in the exchange rate)²⁹. For this subset of companies, foreign denominated debt constitutes a majority position within the firms' liabilities, while the average degree of leverage is slightly above (and liquidity is below) that reported by the other sets of companies. There are no significant differences in terms of profitability.

Table 1 | Characteristics of sets of companies at Q4-16

	Firms with international bonds	Firms with other liabilities in foreign currency*	Firms with less significant liabilities in foreign currency**
Number of firms	27	55	37
Average assets (million pesos)	31,472	5,437	2,743
Leverage (liabilities/assets)***	0.72	0.66	0.64
Coverage (revenues annualized/liabilities)***	6.37	6.30	5.69
Liquidity (current assets/current liabilities)***	0.83	1.13	1.28
Profitability (Annualized net income / equity)***	25%	23%	24%
Liabilities in foreign currency/total liabilities***	61%	39%	0%
Assets in foreign currency/total assets***	6%	11%	1%

(*) Liabilities in foreign currency more than 10% of total liabilities at Q4-16.

(**) Liabilities in foreign currency less than 10% of total liabilities at Q4-16.

(***) Median.

Source: BCRA from BCBA and CNV data

In sum, the analysis of the data for Argentine listed companies offers an approximation to the financial situation of the corporate sector in the country. Data monitoring shows that, in the framework of the process of normalization of the Argentine economy and its reincorporation into international financial markets, firms have not shown significant changes in their leverage, while its level in those that have debt abroad is not markedly higher than in the rest. Given the current context, these and more data —to cover a wider range of companies— will continue to be monitored.

²⁹ Also, some companies report the use of exchange rate derivatives, although in lower amounts and with shorter maturity horizons than financial debt.

2. Situation of the financial system

So far in 2017, as of March, the financial system kept high creditworthiness and liquidity levels, while the main intrinsic risks remained limited and without significant changes since the last IEF. The re-composition of economic activity that is taking place should gradually consolidate credit expansion, coupled with the positive effects of a lower-inflation scenario, the growing appeal of channeling savings into the system and greater competition in the industry. The expected fall in profitability continues to develop. There remains a challenge for institutions as regards the maintenance of adequate creditworthiness levels, which are indispensable to sustain the projected process of system growth. A set of measures implemented by the BCRA seeks to promote and consolidate this path.

The challenge of sustaining profitability and creditworthiness

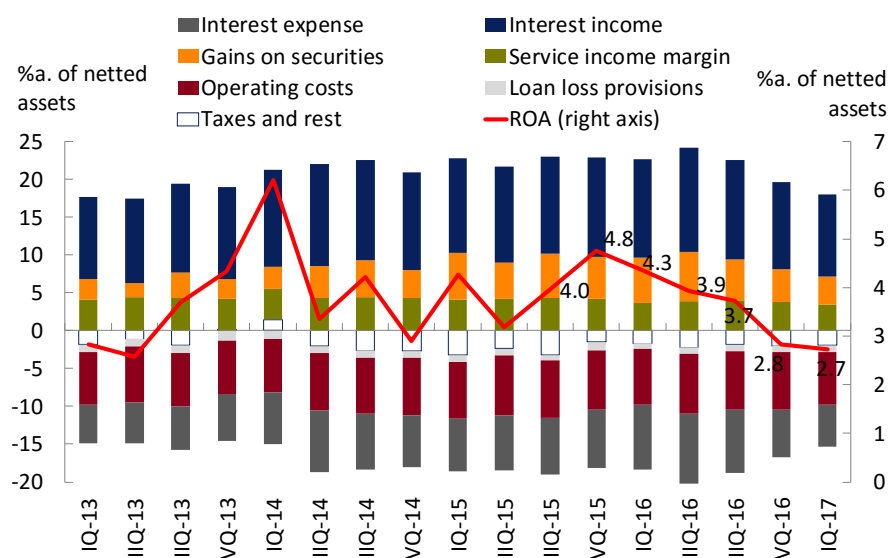
The balance sheet of the financial system at the aggregate level grew at a higher year-on-year rate than that seen in the previous IEF. As discussed below, this behavior was largely a reaction to the growth in FX deposits both of the private and the public sector. Given the moderate growth in real terms of credit to the private sector, the aforementioned performance led to some variation in the composition of the system's aggregate assets and liabilities. These changes did not affect the sector's exposure to liquidity, credit and currency risks significantly.

As discussed in the last two editions of this IEF, the interaction between the current disinflation context and the configuration of the balance sheet prevailing in the industry—particularly, its funding structure—, creates for financial entities the challenge of maintaining adequate levels of profitability and creditworthiness in the medium term. Particularly, the new context of lower inflation means that banks would benefit less from taking funds from transactional deposits and lending those funds at relatively high nominal rates. This circumstance would be coupled by the expected tendency towards consolidating a positive retribution in real terms to depositors and towards lower net incomes related to services, due to the increase in competition.

On the other hand, the financial system must expand significantly (relative to the current limited depth) and thus consolidate its contribution to economic growth. To that effect, it is also necessary to sustain relative capital levels suitable for that process. As discussed below, in order for banks to sustain their creditworthiness levels over time (given the set of relative prices, including of the resources used), significant improvements are needed in productive efficiency, as well substantially expanding the scale and range of products, among other aspects.

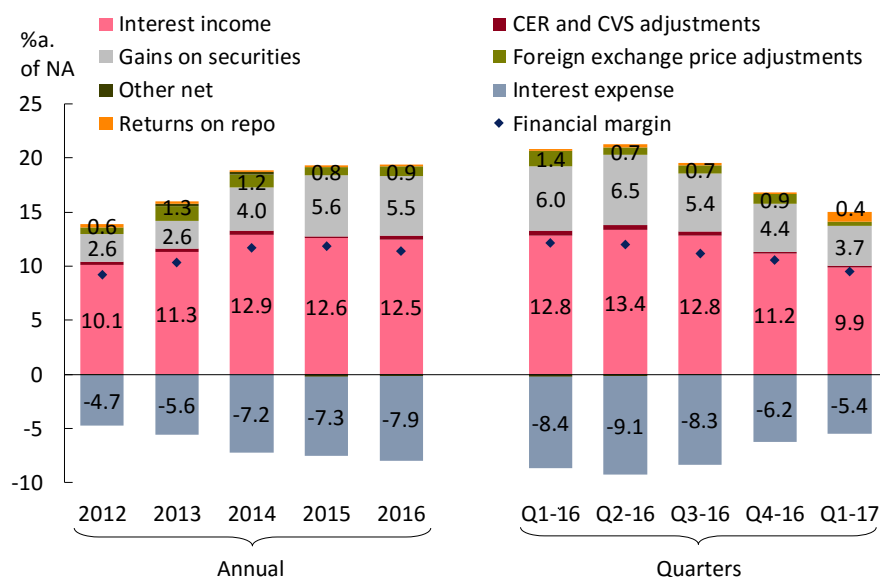
Profitability continues to decrease

In line with what was discussed in the previous IEF, the profitability of the financial system as a whole continued to decrease in the last two quarters. Return on assets (ROA) decreased to a yearly rate of 2.7 percent in the first quarter of 2017, keeping the downward trend seen since the last quarter of 2015 (when it reached a yearly rate of 4.8 percent) (see Figure 2.1). Thus, the profitability reached in 2016 (3.6 percent of the assets at system level), is lower than the profitability measured in the previous two years (-0.5 percentage points).

Figure 2.1 | Profitability of the Financial System

Source: BCRA

Once again, the fall in profitability seen since the last IEF (November, 2016) was led by a decrease in financial margins, with a fall in financial income greater than the reduction of financial outlays (see **¡Error! No se encuentra el origen de la referencia.¡Error! No se encuentra el origen de la referencia.**). The performance of the aforementioned income was linked once again to the decrease in active interest rates in the credit market (see Figure 2.9), coupled with a lower level of income from LEBAC holdings, repos with the BCRA and public securities.³⁰ Financial outlays, in turn, continued to be affected by the reductions seen in the last few months in interest rates for peso time deposits, in a context

Figure 2.2 | Components of Financial Margin

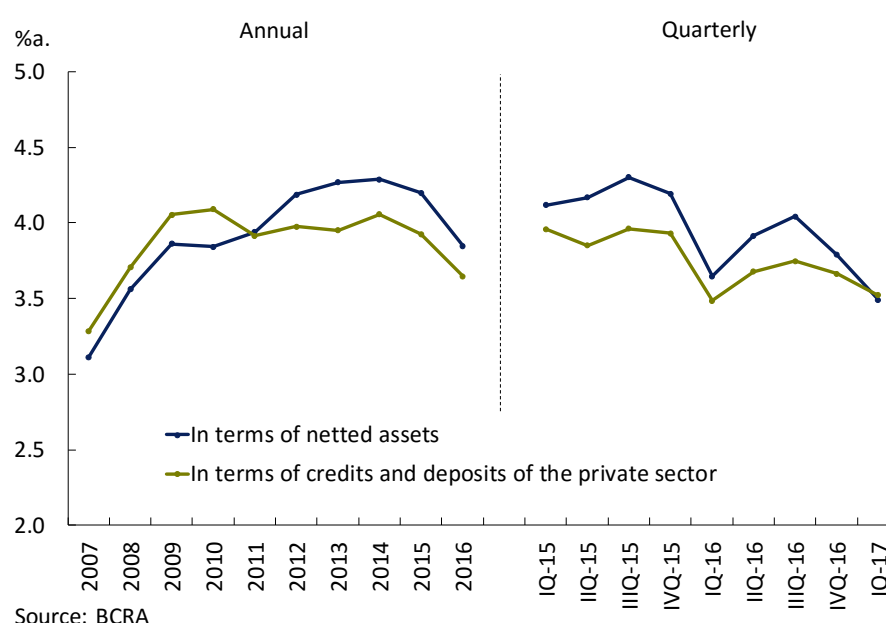
Source: BCRA

³⁰ In the first quarter, returns on LEBAC fell, and then grew again in April. Moreover, starting in the first quarter of 2017 there was an increase in the entities' repo-related income, against the backdrop of the launch by the BCRA of the fluctuation band for these instruments. See Chapter 1, Section on Monetary and Price Context, for more details.

of gradual increases of the weight of sight deposits in the total.

The entities' net incomes related to services continue to decrease; in a scenario of moderate growth in intermediation levels and greater competition in the sector (see Figure 2.3). In this sense, the policies implemented by the BCRA in the last year and a half enable greater competition among banks, together with the deregulation of the fees they can charge on the services they provide, the deepening of transparency towards customers, the reduction of credit card rates (see Chapter 4), among other actions. Net income from services in terms of assets were at a yearly rate of 3.5 percent in the first quarter of 2017, falling 0.3 percentage points and 0.6 percentage points relative to the end of the previous quarter and the end of 2016, respectively. Going forward, this segment is expected to improve, given the higher expected levels of intermediation and the offering of a broader range of services.

Figure 2.3 | Service Income Margin - Financial system



The good performance of the private sector credit portfolio (see Chapter 3), against a background of gradual economic recovery, led to a relatively favorable evolution in nonperforming loan charges. It is expected for this measure to grow in the medium term, as banks broaden their debtor base.

Need to advance with efficiency gains

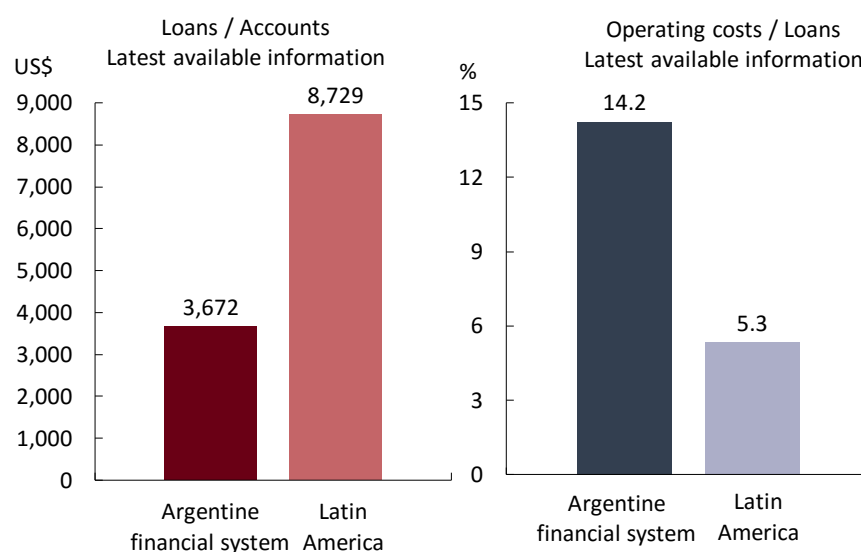
The financial system runs a high level of administrative costs relative to assets, even though they display a reduction at the margin. This holds true for all banking groups acting in the local market. This concept reached 7.7 percent of assets throughout 2016 and a slightly-lower level (7 percent yearly of assets), in the first three months of 2017. These values are high both in historical terms (approximately 5 percent in 2005 and 2006 for the system as a whole) and in terms of international comparison (approximately 2 percent-3 percent in financial systems such as those of Chile, Peru, and Colombia).³¹

Facing the challenge created by the operational context mentioned above, the financial system needs significant improvements in terms of productive efficiency as well as in terms of economies of scale (see Exhibit 2). In this scenario, the BCRA is accompanying the sector by encouraging cost reductions in entities and promoting the use of new technologies (see Chapter 5 of the current IEF and previous editions).

³¹ See Chapter 2 of the IEF II-16.

In terms of scale of operations, for instance, the average loan balance in real terms moved in a decreasing trend for Argentine banks in the last few years, which led to the current level to be significantly below that of other Latin American economies³² (see Figure 2.4). Against this background, administrative costs relative to credit increased in the local financial system, and are now significantly higher than those of other financial systems. The comparison with other financial systems suggests that local banks could benefit fundamentally from increasing economies of scale.

Figure 2.4 | Scale and Cost Indicators



Latin America: Chile, Colombia and Peru.

Source: BCRA, IMF and Central Banks of the respective countries

A way of analyzing the space for entities³³ to reduce the burden of administrative costs is to assess how that category would change, in terms of assets, with certain increases both in the scale indicator and the productivity measure, keeping everything else constant³⁴. On the one hand, the effect of achieving the average levels of the indicators for some countries in the region was analyzed. On the other hand, we also analyzed what would happen if banks eventually reached the higher levels of the local measures. This exercise shows that the notional reduction of the expenditure measure given by the leveraging of an economy of scale (Loans/Accounts) similar to the region's would significantly outperform the benefit from other exercises (reaching the region's productivity or the highest standards at the local level).

³² This refers to the average of Chile, Colombia, and Peru.

³³ At the local level, we analyzed retail private banks, in order to assess a more homogeneous set of entities in terms of business model. The sample comprises 36 banks which account for more than half of the total assets.

³⁴ In this line, the Expenditure/Asset ratio can be expressed as an inverse function of the active accounts/employee ratio (associated to productivity) and the stock of loans/active accounts (scale).

Exhibit 2 / Bank efficiency: measurement and empirical evidence

The current disinflation context, in which a prevailing of positive real interest rate is sought for savers, coupled with higher innovation and competition in the provision of financial services, entail a clear challenge for the way in which banks have operated in the last few years. As previously argued in the IEF³⁵, banks will need to rise to the occasion and achieve higher levels of operating efficiency in the next few periods in order to align themselves with the expected reduction in their financial margins, thus preventing this scenario from impacting their profitability and soundness. At the individual level, banks will need to introduce changes in their business and management models so as to improve their cost and income efficiency, while driving an expansion in their business volumes that may help them attain potential scale economies. At the systemic level, the efficiency improvements and the expansion expected from the sector should be seen as inter-related phenomena that will contribute to maintain banks' adequate creditwordiness levels and to mitigate additional risks for financial stability.

Given this diagnostic, it is key to measure the degree of efficiency of the Argentine banking system in order to establish its current state, consider measures that may help to improve it, and monitor its evolution over time. This Box offers a first step in this direction by briefly describing the most widely used methodologies internationally to estimate efficiency indicators and, subsequently, make a summary review of the relevant empirical evidence.

Efficiency may be broadly defined in a simple, intuitive way, although there is a variety of dimensions in which it may be conceptualized. Technical efficiency is attained when a firm produces the maximum amount of output for a given amount of input (or, alternatively, it minimizes available input use to attain a given output level). Allocation efficiency is about achieving the optimal input combination—consistent with their prices—to produce a given amount of output, thereby minimizing cost³⁶. Additionally, efficiency gains may be brought about by increasing the entity's scale, which enables an even larger drop in intermediate costs, as a result of the increase in the level of production; that is, it creates “scale economies”. In this regard, at the conceptual level, a productive unit might, for instance, seek to achieve scale economies through organic growth or through the consolidation with one or several productive units.

At the microeconomic level, the most basic, traditional efficiency analysis often uses a set of indicators thought of as an industry core, to determine the relative performance of each unit of analysis. These usually include profitability relative to assets and initial investment, leverage, operational expenses, and financial margin relative to assets. This methodology requires experience or know-how in the sector under analysis, and may be limited in the dimensions that are taken into account. Moreover, it may lead to contradictory results among the different indicators, which would pose issues for establishing an order for classification, evaluation, and monitoring over time.

On the other hand, the most advanced methodologies focus on the comprehensive analysis of the diverse products and services that might be obtained from a set of inputs, using a certain technology (usually unobservable). For instance, a basic approach is to estimate an efficient frontier³⁷ by considering the entities in the market that are closest to this performance, and measure the distance between the other productive units and said baseline frontier. This leads to a numerical score for each entity that makes it possible to establish, first, an easily readable hierarchical order among entities and, second, average efficiency levels for the sector as a whole.

³⁵ See [first](#) and [second](#) edition of the 2016 IEF.

³⁶ Kumbhakar S. C., H. Jen Wang and A. P. Horncastle (2015). *A Practitioner's Guide to Stochastic Frontier Analysis Using Stata*. Cambridge University Press.

³⁷ This frontier may be established in terms of production, costs, or benefits.

There are currently two different methodologies to estimate a frontier of efficient production. On the one hand, the data envelopment analysis is a non-parametrical technique that uses linear programming. One of its main advantages is that it does not require making any assumptions regarding the functional shape of the frontier³⁸. The distance between an inefficient entity and the one posited as efficient is attributed to inefficiency in its entirety³⁹. On the other hand, the stochastic frontier analysis⁴⁰ estimates the efficiency frontier and a set of unknown parameters by applying maximum likelihood techniques. Although it requires determining an a priori functional shape, it makes it possible to more accurately identify the inefficiency component.

There are a lot of studies on banking sector efficiency analysis. For instance, using non-parametrical techniques, Wheelock (2011)⁴¹ finds evidence of significant scale economies in the US banking market in the period 1984-2006, a similar conclusion to the one made by Feng (2009)⁴² for large banks in the same country. Oberholzer (2009)⁴³ finds that, in the South African banking sector, the main banks might reduce their input use without affecting their production levels (or vice versa — they could increase their production keeping their input use stable), showing that banks were not efficient from the operational point of view. Allen (2005)⁴⁴ studied efficiency and scale economies in the banking market in Canada, and found evidence that point to fact that banks might significantly reduce their intermediate costs by increasing their production levels — that is, that banks were not working efficiently. Paula (2002)⁴⁵ states that studies made with data from the 1980s have found that efficiency gains through the consolidation of large institutions were generally low (Dymski 1999, cited in Paula 2002). However, subsequent studies using data from the 1990s suggest that important efficiency gains may be achieved through scale economies, even for large entities (Berger et al. 2000, cited in Paula 2002).

Specifically in our country, Ferro and León (2014)⁴⁶ use balance sheet data and two alternative models (constant returns and scale variables) to analyze the effects on efficiency of five bank mergers in the 2005-2011 period. The results suggest that two operations were successful in terms of creating efficiency gains, while another two operations created no efficiency gains, and the last one showed uneven results depending on the chosen technique. An application of the frontier techniques for estimating efficiency in the Argentine banking system is presented in Ferro (2013)⁴⁷. This study uses balance sheet data from 60 banks for the 2005-2011 period. The results point at intermediate efficiency levels as regards costs in local entities, although they vary according to the chosen technique.

Thus, both at the local and the international level, there are studies suggesting that there are margins to improve banking sector efficiency. In Argentina, the situation is more pressing, given the context described above. Therefore, this line of research should be furthered, and the described methodologies applied, in order to adequately assess the current state of sector efficiency and to consistently monitor its evolution over the course of the next few periods, given that they may affect financial stability

³⁸ Only a few general features are required of the functions to be used; for instance, that they are increasing and convex.

³⁹ Charnes A., W. Cooper and E. Rhodes (1978). "Measuring the Efficiency of Decision Making Units." *European Journal of Operational Research* 2, 424-444.

⁴⁰ Aigner D. J., C. A. K. Lovell, and P. Schmidt (1977). "Formulation and Estimation of Stochastic Frontier Function Models." *Journal of Econometrics* 6, 21-37.

⁴¹ Wheelock and Wilson (2009) "Do Large Banks have Lower Costs? New Estimates of Returns to Scale for U.S. Banks", Federal Reserve Bank of St Louis, *Working Paper Series*.

⁴² Feng (2009) found that large US banks operated in a context of increasing scale returns.

⁴³ Oberholzer and Westhuizen (2009) "Estimating technical and scale efficiency in banks and its relationship with economic value added: A South African study".

⁴⁴ Allen and Ying Liu (2005) "Efficiency and Economies of Scale of Large Canadian Banks".

⁴⁵ Paula, L.F. (2002). "Expansion Strategies of Banks: Does Size Matter?".

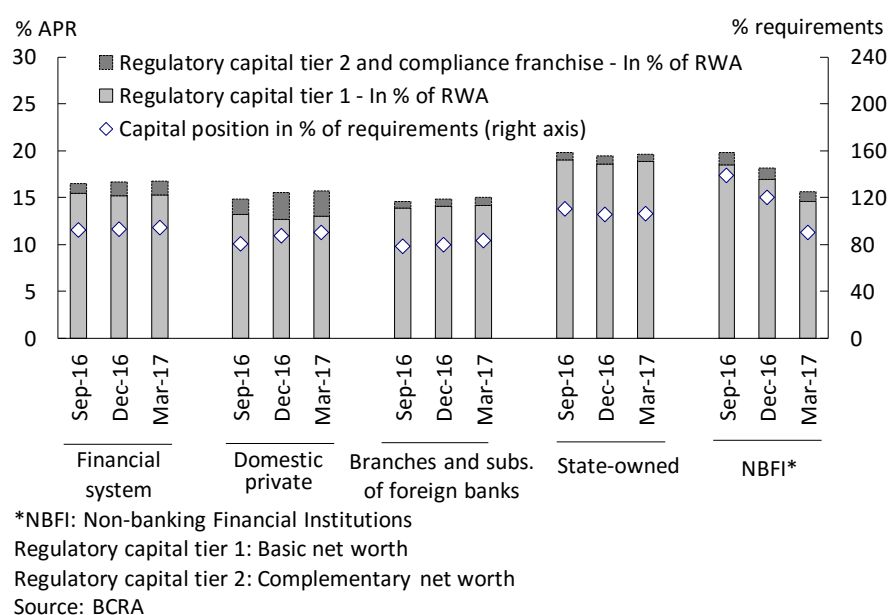
⁴⁶ Ferro G., S. León, C. A. Romero (2014) "¿Fueron Eficientes las Concentraciones de Bancos en Argentina (2005-2011)?" XLIX Annual meeting. *Asociación Argentina de Economía Política*.

⁴⁷ Ferro G., S. León, C. A. Romero and D. Wilson (2013). "Eficiencia del Sistema Bancario Argentino (2005-2011)". XLVIII Annual meeting. *Asociación Argentina de Economía Política*.

No significant changes in the sector's creditworthiness levels

Just as six months ago (publication date of IEF II-16), banks as a group have high creditworthiness levels, a fact which would enable them to increase in the short term their intermediation volumes with the private sector, without foregoing the capacity of dealing with eventual unexpected adverse scenarios. The excess of capital relative to regulatory requirements was slightly above 94% in March, amounting to an integration level of 16.8% of risk-weighted assets —RWA— (slightly above the level seen in September, 2016) (see Figure 2.5). A significant share of Tier-1 resources (basic shareholders' equity) continues to stand out in the composition of capital: it accounts for more than 91% of the total (see Exhibit 3).

Figure 2.5 | Compliance and Excess of Capital



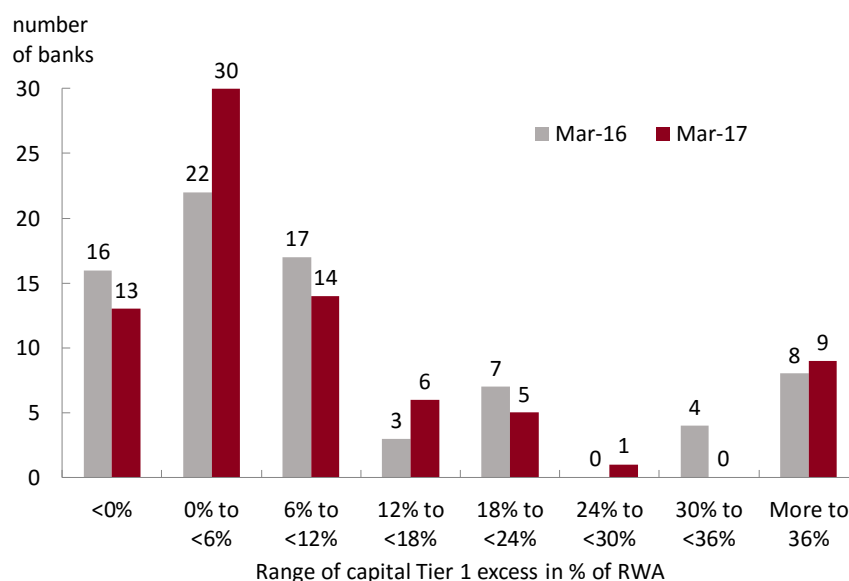
If prevailing buffers or regulatory capital margins⁴⁸—capital conservation of 2.5% of RWA, extended to 3.5% in the case of the five systemic banks identified⁴⁹— are taken into account, the group of banks shows an excess of core Tier-1 capital integration—ordinary shares and retained earnings— of 5% of RWA, similar to the level seen six months ago (and almost 1 pp above the level of March, 2016). 13 of the 78 active entities failed to fully cover the margins as of the first quarter of 2017 (see Figure 2.6), that is, 19% of the sector's assets. This situation gave rise to restriction to dividend distribution in the entities that failed to fully cover the margins.

⁴⁸ See the Order Text about Dividend distribution, for more details.

⁴⁹ Neither margins represents a demandable capital minimum, rather, not complying implies restrictions to the distribution of dividends, and are thus not considered in the analysis in the first paragraph and figure of this section. This exercise assimilates the aforementioned margins as traditional regulatory requirements.

The Leverage Coefficient⁵⁰ —based on Basel III— for the financial system decreased slightly in the last quarter of 2017 to 9.8% as of December —last available figure—, in a trend similar to that seen in previous quarters. It is worth considering that this indicator continues to widely surpass the international regulation for the issue (3%) in all groups of banks.

Figure 2.6 | Estimation: Core Capital Tier I in Excess (Considering Capital Buffers)



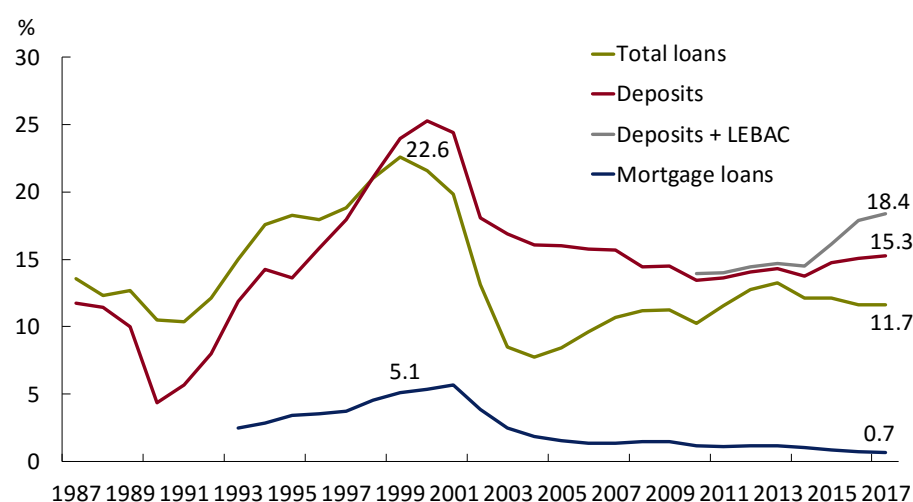
Source: BCRA

Moderate growth in financial intermediation

A gradual improvement in financial intermediation of entities with the private sector is taking place since mid-2016 (see Figure 2.7), reflected especially in savings channeled through deposits. The normalization of the exchange market, the implementation of the Tax Disclosure System and the gradual recovery in economic activity help explain this trend. Credit is yet to show clear signals of deepening in GDP terms: the ratio is well below historical local records (periods with a greater relevance of mortgage and commercial lines) and international levels⁵¹. In line with what was mentioned in Chapter 1, the credit expansion process is expected to begin in the coming months.

⁵⁰ The ratio of the capital with the greatest capacity to absorb losses and a broad measure of exposures.

⁵¹ The average in Latin America is above 50% of the GDP, and almost 150% in developed economies.

Figure 2.7 | Financial Intermediation with the Private Sector

Note: As of December of each year, except 2017 to February. Annual averages of both numerator and denominator are considered. LEBAC to the private sector (excluding banks and non-residents).

Source: BCRA, INDEC and Orlando J. Ferreres

At the ending of the first quarter of 2017 the netted asset⁵² in the financial system increased 45.8% year-on-year⁵³, or 10.5% year-on-year adjusted by inflation, above the records of six months and one year ago (real rates of -4.9% and 2.7% year-on-year, respectively). Deepening the performance observed in the IEF II-16, more liquid instruments —particularly those denominated in foreign currency— continued to increase in weight among banking assets, up to a level of 25% of the total as of March, 2017, 7.4 pp and 4.5 pp above the levels of March and September of 2016 (see Table 2.1). During the last semester, there was a slight increase in the weight of total credit to the public sector in total assets, while the weight of credit extended to households and companies fell —a reduction of 3.1 pp in the last 12 months—, though the share of dollar-denominated lines continued to increase. As regards funding, private sector deposits in foreign currency continued to gain relevance, and now account for 13% of the total funding, 3.2 pp above the level seen in September. Public sector deposits also increased their share in the last months.

⁵² The asset does not include double-counting from repurchase, term and cash agreements to be clear.

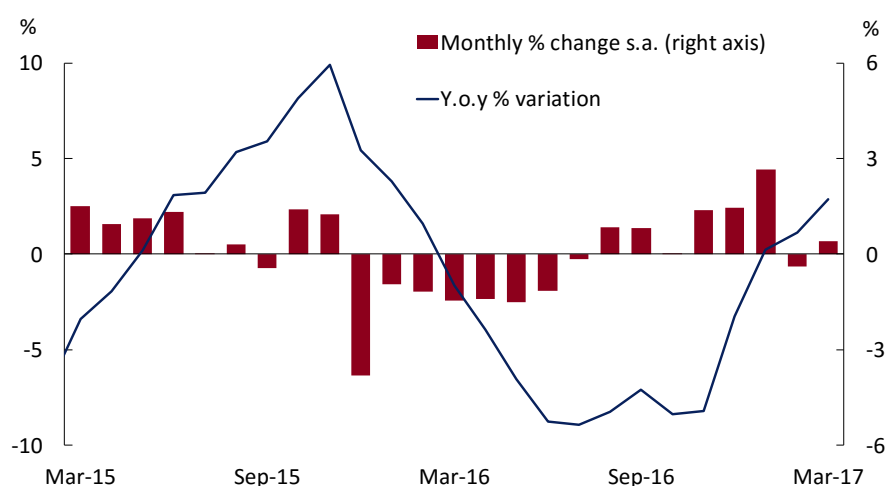
⁵³ In this Section, an adjustment is made to the aggregate balance of the financial system, due to the effects of a process of sale of the retail portfolio of a foreign entity to another foreign entity.

Table 2.1 | Balance Sheet. Financial system

							Real y.o.y. change of balance mar-17	
	Dec-15	Mar-16	Sep-16	Dec-16	Mar-17	change in p.p. mar-17 vs. sep-16	mar-17 vs. mar-16	
Netted asses								10.5
Liquid assets	21	18	20	24	25	4.5	7.4	56.8
In pesos	11	9	12	12	9	-2.4	-0.2	8.2
In foreign currency*	10	8	9	13	16	6.9	7.6	167.6
BCRA repos and LEBAC	14	17	15	13	15	0.5	-2.0	23.8
Loans to public sector	10	10	8	9	9	0.1	-1.8	-8.6
Loans to private sector	46	45	48	43	42	-5.3	-3.1	2.9
Loans in \$ to private sector	44	42	41	37	36	-5.1	-6.0	-5.1
Loans in US\$ to private sector*	2	3	6	6	6	-0.2	2.8	158.3
Other assets	9	9	9	10	9	0.3	-0.4	5.4
Netted liabilities								12.6
Deposits of the public sector	16	15	13	17	21	7.2	6.1	56.4
Deposits of the private sector	58	59	61	59	56	-4.8	-2.9	5.0
In pesos	50	50	51	45	43	-8.0	-6.8	-4.6
Sight deposits	25	24	25	25	22	-3.4	-2.2	0.2
Time deposits	24	25	25	19	20	-4.6	-4.6	-10.1
In foreign currency*	8	9	10	14	13	3.2	3.9	96.0
CB, SD y Foreign lines of credit	3	3	3	3	3	0.0	0.4	25.4
Other liabilities	11	10	9	8	9	-0.4	-1.9	-9.5
Net worth	12	13	14	12	11	-2.1	-1.7	-3.7

*Balance variation in origin currency. Source: BCRA

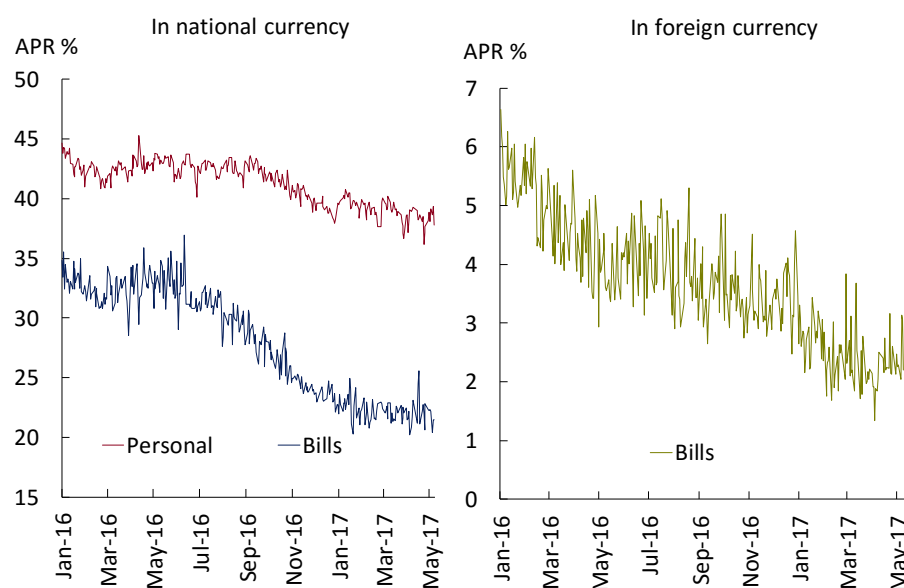
Since the third quarter of 2016, a gradual increase in total credit to the private sector in real terms is taking place (see Figure 2.8). It should be mentioned that, in the last 12 months, total financing to the private sector accumulated a real increase of 2.9%, thus reverting the negative records of the last three years, considering similar periods; this evolution was mainly explained by domestic private banks, and to a lesser degree by non-banking financial entities. Particular mention should be made to the increase in dollar-denominated lines, which increased 158% year-on-year as of march. The aforementioned behavior of credit took place in a context of decrease in nominal active interest rates, both in pesos and in dollars (see Figure 2.9). It should be mentioned that the latter are in a range of levels which is low in historical terms (an annual rate of about 2%).

Figure 2.8 | Total Credit to the Private Sector

Note: Series are deflated by the CPI for the provinces of Buenos Aires, San Luis and Córdoba, weighted based on the National Household Expenditure Survey of 2004-2005.
Source: BCRA

In early 2017, loans to companies reduced their performance, affected in part by the typical seasonal factors of the summer holidays. Thus, as of March, this segment financing accumulated a year-on-year increase of 31.6% (-0.3 % year-on-year if adjusted by inflation). It is expected for these lines to increase their relevance in the next few months, thanks of the process of economic recovery taking place (see Chapter 1), and given the expected increase in demand of financing of the banks included in the BCRA's Credit Conditions Survey⁵⁴.

Figure 2.9 | Lending Interest Rates

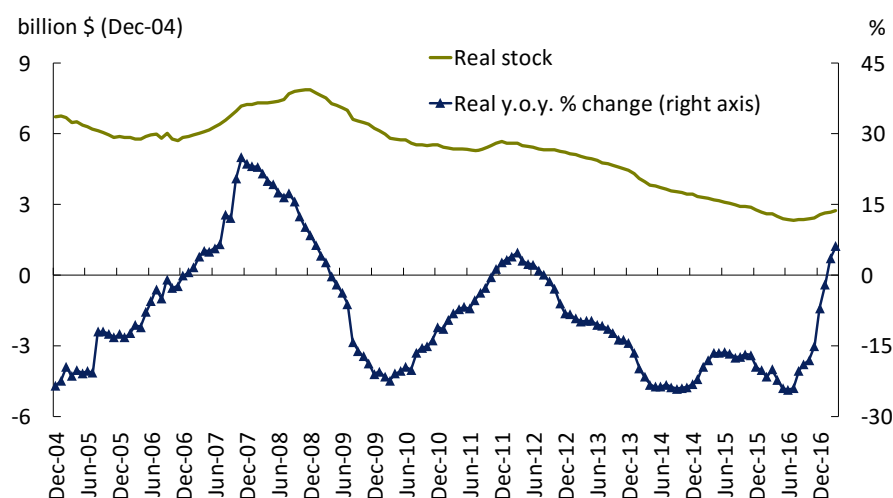


Source: BCRA

Credit to household grew less in early 2017 (after a second half of 2016 with outstanding growth in real terms), due to seasonal factors and an increase in monthly inflation levels. Thus, in March, 2017, loans to households reached a year-on-year growth of 38.7%, or 5.0% if adjusted by inflation. Starting in mid-2016, there was an improvement in the real performance of mortgage loans channeled to households, which had been falling since late 2011 (see Figure 2.10), boosted at the margin by the UVA-adjusted credit lines. It should be mentioned that these lines offer a lower initial payment (for the same borrowed amount) than that of traditional mortgage loans, enabling a greater number of people to access this financing for housing. So far, 16 financial entities are offering UVA mortgage loans, with different contractual conditions and financing terms (from 15 to 30 years). Since their debut —April, 2016— up to the end of April, 2017, \$8.373 billion worth of adjustable loans have been extended, of which \$5.814 billion were accounted for by mortgage loans. So far in 2017, \$3.718⁵⁵ billion worth of these mortgage loans were extended, with an average interest rate of 5% and with terms longer than 17 years. Entities included in the Credit Conditions Survey expect a steady increase in the demand for these lines.

⁵⁴ The Credit Conditions Survey is a quarterly survey carried out by the BCRA about the trends of the banking credit market.

⁵⁵ Expressed as the value in pesos at the time of granting (does not include adjustments by CER).

Figure 2.10 | Mortgage Loans to Households

Note: Series are deflated by the IPC for the provinces of Buenos Aires, San Luis and Córdoba, weighted based on the National Household Expenditure Survey of 2004 -2005.
Source: BCRA

The space currently available to the financial system to expand credit channeling to households is made clear by observing the number of debtors on some type of credit assistance (see Table 2.2). The system currently provides resources to almost 14 million individuals, approximately 550,000 more than at the end of 2015. This increase was seen particularly in credit cards and personal loans (which now have almost 12.5 and 5.4 million debtors, respectively). The number of mortgage debtors, in turn, fell to just 178,000 debtors in February, though its evolution appears to be stabilizing at the margin.

Table 2.2 | Number of Debtors in the Financial System. Natural persons - In units

Type of loan (i)	Dec-15	Jun-16	Dec-16	Feb-17	Chg. Feb-17 / Dec-15
Mortgage	194,293	185,559	178,595	178,086	-16,207
Pledge-backed	430,728	404,325	414,685	426,493	-4,235
Personal	4,982,919	5,081,148	5,280,071	5,372,623	389,704
Credit Cards (ii)	12,080,141	12,396,363	12,689,872	12,487,460	407,319
Other	3,412,649	3,588,766	3,402,932	3,252,813	-159,836
Financial system	13,426,406	13,752,340	14,096,668	13,978,550	552,144

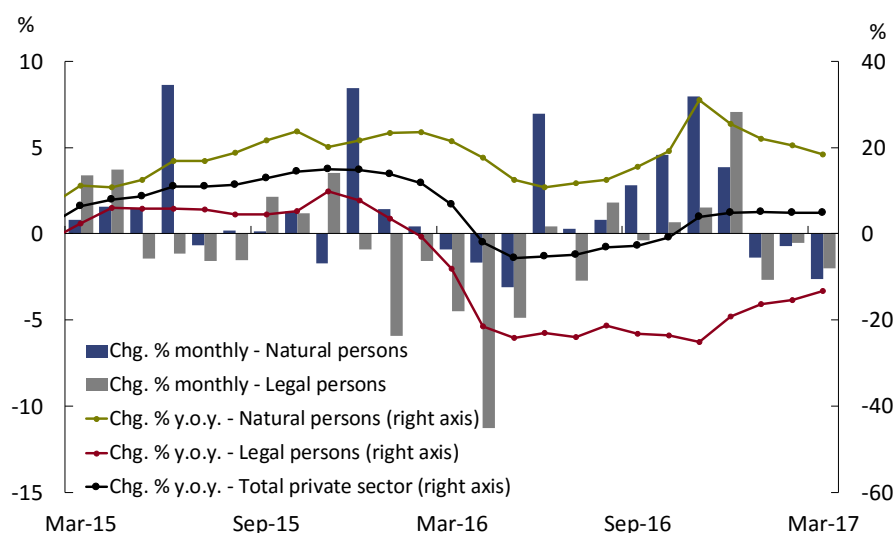
Note: i. Information is consolidated at the individual debtor level, both within a financial institution (in case a debtor raises several lines of financing) and between financial institutions (for example, an individual raises credit from different institutions at the same time); ii. Bank and non-bank credit cards

Source: BCRA

At the end of the first quarter of 2017, total deposits (both in domestic and foreign currency) of the private sector grew at a year-on-year rate of 38.6% (5% year-on-year, if adjusting for inflation), mainly driven by individuals (see Figure 2.11). Foreign-currency deposits by the private sector doubled between end-2015 and early-2017, thanks to the effects of the exchange market normalization and the Tax Amnesty Regime, with a more moderate expansionary trend in early 2017. As a result, these deposits now have more weight among total private sector deposits, accounting for 23.5% of the total as of March, 7.7 pp above the level of a year ago. Peso-denominated deposits of companies and households increased a year-on-year 25.9% in

March (a year-on-year -4.6% in real terms). In turn, UVA deposits reached little over \$1.26 billion at the end of March, 2017, that is, they more than quadrupled in the last six months.

Figure 2.11 | Total Deposits of the Private Sector. Real % change

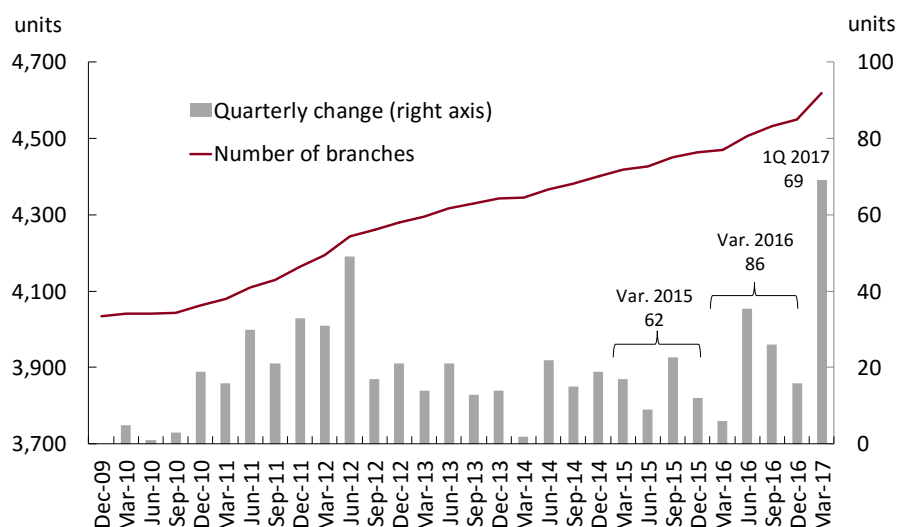


Note: Series are deflated by the IPC for the provinces of Buenos Aires, San Luis and Córdoba, weighted based on the National Household Expenditure Survey of 2004-2005.

Source: BCRA

During the last quarter of 2016, the entities continued to increase longer-term funding, placing bonds for \$18.654 billion and thus reaching \$36.197 billion so far in the year, almost thrice the level of 2015. The volume of financing based on these instruments amounted to \$11.059 billion in the first quarter of 2017, with almost 65% issued in dollars. This type of funding is still in very low levels, accounting for barely 3% of the total financial system funding as of March. In turn, in mid-April, the BAPRO issued for the first time tradable obligations UVA-denominated, for a total of \$1.032 billion, due in 36 months with a fixed rate of 2.5%. In May, the Banco Hipotecario followed suit, issuing a total of \$1.015 billion, also due in 36 months and with a fixed 2.75% rate.

Figure 2.12 | Branches - Financial System



Note: Branches include head office, headquarters, agencies and offices.

Source: BCRA

The number of subsidiaries reached 4,618 in March: a year-on-year 3.3% increase (the greatest variation in the last four years) (see Figure 2.12). The number of service units (ATM and self-service terminals) totaled 19,750. Recently, the BCRA issued a regulation which encourages the installation of non-banking ATM, in order to increase the availability of financial services in the country.

Exhibit 3 / IFRS Reconciliation Results

The application of the International Financing Reporting Standards (IFRS) in Argentina, unlike other countries, means an improved equity structure in most entities. As such criteria connect accounting with reality, it can be said that Argentinian banks are more solvent now, even more than their balance sheets reveal.

Following the recommendations from international agencies about the application of high-quality accounting standards —accepted worldwide and in line with the process carried out by other countries—, in 2014, the BCRA Board approved the roadmap aimed at aligning the Reporting and Accounting Regime with the IFRS for its subsequent application to accounting periods starting on 1 January 2018. Such decision was adopted as part of the commitment assumed by Argentina, as a member of the G20, to converge with international standards, and it was timely published through the Communication “A” 5541. This convergence plan will allow entities’ balance sheet data to integrate more smoothly with the various chapters of Basel III, thus supporting the BCRA in its efforts to adopt all international standards about regulation in due time and form.

In accordance with the tasks scheduled in the roadmap, the entities are submitting the reconciliations of their assets, liabilities and net worth to the BCRA based on the current accounting standards, compared to those that would result from applying the IFRS. Such entities have already submitted their balances at December 2015 and 2016, and balances at 30 June last year as well. This information includes quantitative data and explanatory notes, and it is supported by special reports from external auditors.

Conclusions reached based on the information obtained at 30 of June 2016:

- ✓ The full application of the IFRS to the individual accounting statements represents 10.7 percent increase⁵⁶ in the total net worth (NW) of the financial system. If the impact of provisions were left out, which is more in line with the anticipated schedule, such increase would be even higher, of 12.3 percent.
- ✓ From the point of view of significance, the major adjustment was made to Property, Plant and Equipment, which accounts for a 16.5 increase in the NW and results from entities’ reassessment of their immovable property. Such major adjustment is due to the mark-to-market valuation performed in the central and branch offices of financial institutions —which was previously estimated on an amortized-cost basis and gradually became detached from mark-to-market values. The adjustment is very significant for some small entities, where the NW more than doubles as a result of reassessment. On the other hand, the adjustment made to Miscellaneous Goods, which accounts for a 1.5 percent of the NW, originates in the reassessment of immovable property that is owned by the entity but not intended for its private use. It is clear that the reassessment more than offsets all other adjustments and explains why the application of the IFRS in Argentina brings positive results.
- ✓ The increase in assets is partially offset by an increase in liabilities within Miscellaneous Liabilities, which accounts for a 4.2 percent decrease in the NW, mainly derived from acknowledging (i) deferred tax liabilities; and (ii) employee benefit liabilities.
- ✓ Another adjustment reported, which is not very meaningful in terms of magnitude but involves complex estimations and a need to capture additional data, derives from an effective interest rate accrued in financial assets and liabilities. The application of an effective interest rate accounts for a 1 percent decrease in the balance of loans granted to the non-financial private sector, and also has a reduced impact on the NW.

⁵⁶ By December 2015, the increase was 10.3%.

- ✓ Most entities have made adjustments associated to the uncollectible accounts provisions currently recorded as per existing regulations. In general, the internal models used by entities for their annual capital self-assessment are also applied for submitting their business plans and projections. Since such models' goals are different from those sought by the method detailed in the IFRS to estimate expected credit losses (IFRS 9), the entities should make some additional adjustments in order to match results with the accounting rule. However, it was observed that in some sections (models) the IFRS criteria was not applied.

The adjustments informed regarding an increase in the current provisions equal to 1.6 percent of the present NW, but with significant variations among entities —sharp declines in some entities and significant rises in others. In some particular cases, the main impact derived from applying the IFRS 9 criteria to the financial assets transfers, which involved the reincorporation of loaned portfolio that was not eligible for derecognition and its subsequent inclusion in the estimate of provisions.

- ✓ There are many more accountant adjustments necessary to comply with the IFRS, but their net impact has little significance, at least for the financial system aggregate.

Considering the difficulties arising in the estimation of credit losses expected —also encountered in other countries where the best way to ease this transition is being evaluated—, last December⁵⁷ the BCRA provided that the current IFRS would be applicable for accounting periods starting on 1 January 2018, with a temporary exception about provisions (item 5.5. about “Value Impairment” of the IFRS 9).

In line with this regulation, the impact on the corporate NW —excluding the adjustment reported for uncollectible accounts provisions—was estimated as a 12.3 percent increase, and this is, at the moment, all the information that balance sheets would reflect as of January 2018. From the 78 entities of the financial system, 67 show increases in the NW and 11 present declines.

The BCRA will continue its efforts towards complying the commitment assumed in international forums, providing assistance to entities for convergence with the IFRS can be developed in the most orderly and affordable way possible.

⁵⁷ See [\(A- type Communication 6114\)](#).

3. Stability Analysis

Within the framework of the above mentioned changes related to the operative context of the sector, all the risks taken by the local financial system remained substantially limited at the beginning of 2017, without major alterations with respect to IEF II-16. The exposures to the main sources of risk continue to be low to moderate, and coverages remain relatively wide. Considering a low level of indebtedness and debt service burden, credit risk is still reduced, particularly in business lines. The degree of banks' resilience against a severe and unlikely materialization of credit risk stays relatively high. The remaining risks faced by the sector (liquidity, currency, interest and market rate) also continue to be limited.

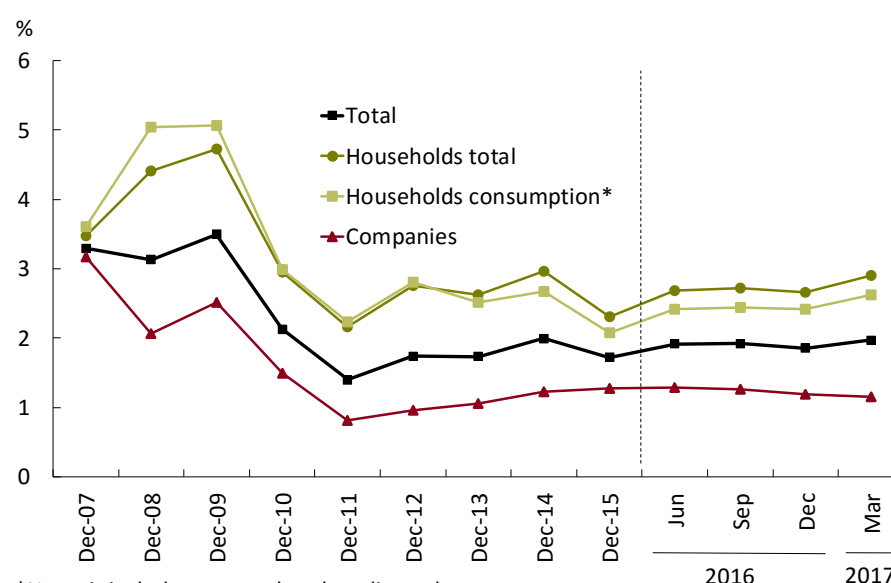
It is possible that the current scenario of gradual recovery of the economic activity tends to be reflected on a higher degree of finance intermediation from banks during the coming months, which might lead to changes in the risks faced in the margin (particularly liquidity and credit risks). As said in the latest IEFs, there is a margin in the system to expand its credit volume without increasing the sector's vulnerability (sector over indebtedness or a price bubble). From a medium-term perspective, the BCRA should continue to monitor the mismatches in UVA-adjustable instruments and loan terms, as well as the potential search of sources of profitability from institutions in order to offset the existing pressures on the financial margin.

A decrease in the private sector credit risk can be observed

Although the actual balance of loans to the private sector has been recovering, compared to the situation reflected on the last IEF, the financial system has reduced its exposure in relation to this sector (see Table 2.1 from Chapter 2). This could be verified in all bank groups.

Figure 3.1 | Private Sector Nonperforming Loans

Nonperforming Loans / Total Financing (in %)



*Note: it includes personal and credit cards.

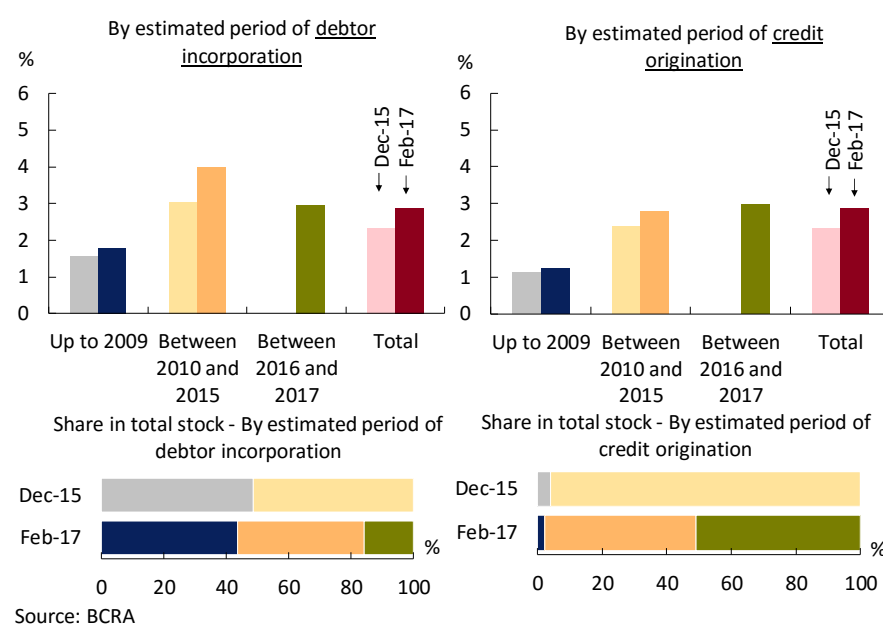
Source: BCRA

The nonperforming ratio of credits to the private sector stood at 2 percent in March 2017, without significant changes from September 2016 (see Figure 3.1)⁵⁸. Such delinquency levels are low from both historical and international perspectives. A large coverage of the irregular portfolio is maintained based on provisions⁵⁹.

Low exposure and a slight increase of nonperformance levels in consumption lines

Institutions' gross exposure to households decreased in comparison with the last IEF report. Household credits reached 19.7 percent of the financial system assets in March 2017, declining 2 percentage points against last September. Such performance took place despite an increase in real terms of the balance of household loans. The household credits' nonperformance reached 2.9 percent of the portfolio at early 2017, slightly higher (+0.2 percentage points) than that recorded in the previous IEF, which reflects the consumption lines performance. Thus, the nonperforming ratio of household loans has accumulated an increase of 0.6 percentage points since the end of 2015. It is estimated that this increase was impacted by a decline in the quality of financing granted previous to 2016 and the delinquency level of loans granted in 2016 and 2017—higher than average. Such impact is greater in the case of the debtors incorporated to the system between 2010 and 2015 (see Figure 3.2).

Figure 3.2 | Loans to Households - Nonperforming ratio



Both the indebtedness and financial burden levels faced by households remained low and did not present significant changes in comparison with the last IEF. Taking into account the anticipated scenario for the rest of the year—with economic activity growth, downward inflation and a certain recomposition of the labor market—, improvements in the household financial status are expected.

⁵⁸ Considering the five systemically important banks defined at the local level, the credit risk they face also remain moderate. The nonperforming ratio of the private sector credits for such subset has increased slightly against last September; however, it reached only 1.6 percent in March 2017, below the financial system average.

⁵⁹ Regardless the minimum provisions required to debtors in a regular situation, the balance of provisions accounts for 78 percent of the aggregated delinquent portfolio. Thus, aggregate provisions exceeded the regulatory requirement by 30 percentage points.

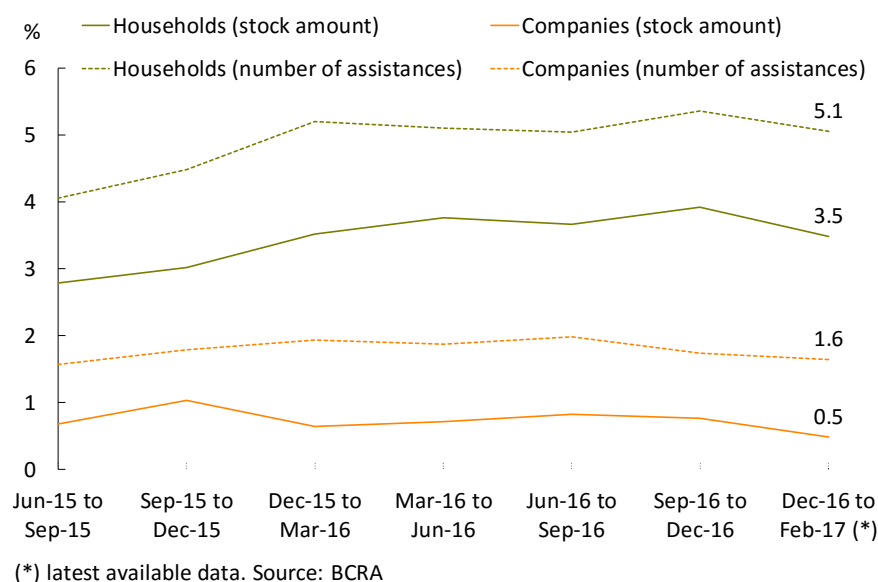
Low exposure to companies and a slight fall of nonperformance in larger financing

Banks' gross exposure to companies decreased in comparison to the last IEF, and the corresponding credit for this sector came to account for 22.6 percent of the total assets. The nonperformance of financing granted to companies stood at 1.2 percent of the balance in March 2017, slightly below last September level. The quality improvement of this portfolio was driven by loans with a higher residual balance⁶⁰, which was partially offset by an increase in the nonperforming indicator for loans with a lower residual balance. Within a context where the indebtedness ratios of most production sectors did not feature any significant changes, the nonperforming ratio of financing for all activity branches has recorded a decline.

Lower probability of erosion in the credit portfolio at the beginning of 2017

In order to analyze the evolution of credits within a macroeconomic change context, an indicator was developed to estimate the probability⁶¹ that a debtor migrates to a lower credit ranking from one quarter to another (here called IPM)⁶². Such estimation was based both on the outstanding debt and the number of assistances to a debtor⁶³. Using this methodology, it can be observed, on the one hand, that the household IPM level is significantly higher than that of companies' (nearly three times higher) and, on the other hand, that the corporate IPM level has been considerably stable since mid 2015 (see Figure 3.3). Meanwhile, in the case of household loans, an IPM decline or increase was observed until the end of last year, with a slight margin improvement (first two months of 2017). However, more than 5 percent of the credits to existing households at the end of last year, that were kept until February of the current year, have deteriorated.

Figure 3.3 | Probability of Deterioration in Debtor Situation. Companies and Households



⁶⁰ For example, those business credit lines with a residual balance higher than \$1 million featured a delinquency ratio below 1 percent in March, with a decline over the last months.

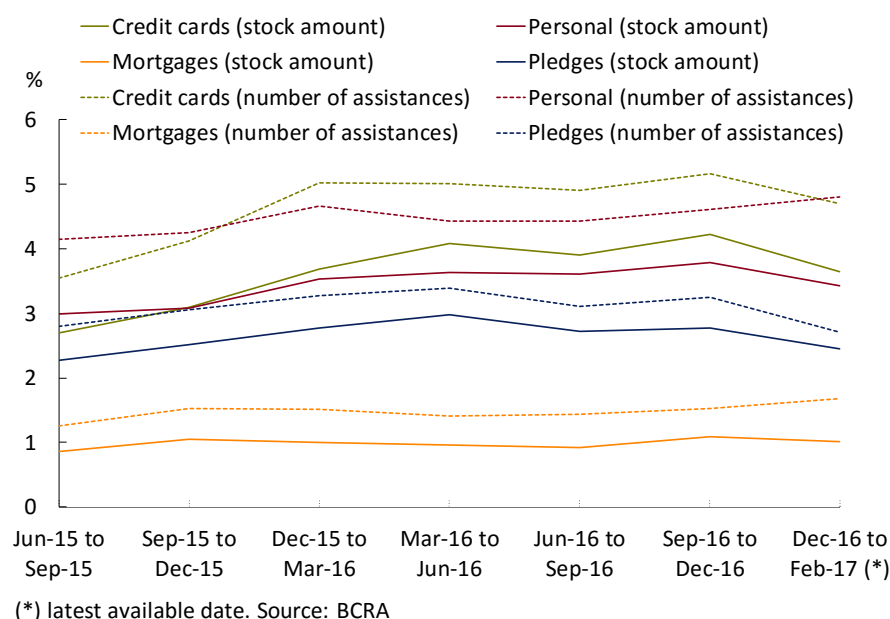
⁶¹ The probability is estimated based on a frequency (rate) of observations extracted from the Financial System Debtor Regime. A similar exercise can be found in the [Financial Stability Report - September 2016](#) of the Bank of the Republic of Colombia. When considering aggregated outstanding debt and the number of assistance cases, the implied reference in this exercise would be a hypothetical average debtor.

⁶² Considering A as the normal risk situation, B as low risk, C as medium risk, D a high risk and E as irretrievable, the estimated probability migration –unweighted– to a lower rating is defined as: $P(At-1) * [P(Bt | At-1) + P(Ct | At-1) + P(Dt | At-1) + P(Et | At-1)] + P(Bt-1) * [P(Ct | Bt-1) + P(Dt | Bt-1) + P(Et | Bt-1)] + P(Ct-1) * [P(Dt | Ct-1) + P(Et | Ct-1)] + P(Dt-1) * [P(Et | Dt-1)]$.

⁶³ The number assistance events by institutions are considered here. It is not consolidated at the level of individual debtors.

If we look at the behavior of the lines channeled to households (see Figure 3.4), a fall in the IPM margin can be observed in all cases, except for the personal lines, as, in such cases, it is calculated in terms of the number of assistances⁶⁴. Considering a decline in the balance-based probability in the case of personal lines, this implies that those credits likely to deteriorate are those of a smaller relative size in this type of assistances.

**Figure 3.4 | Probability of Deterioration in Debtor Situation.
Households by type of credit line**



Sensibility exercises

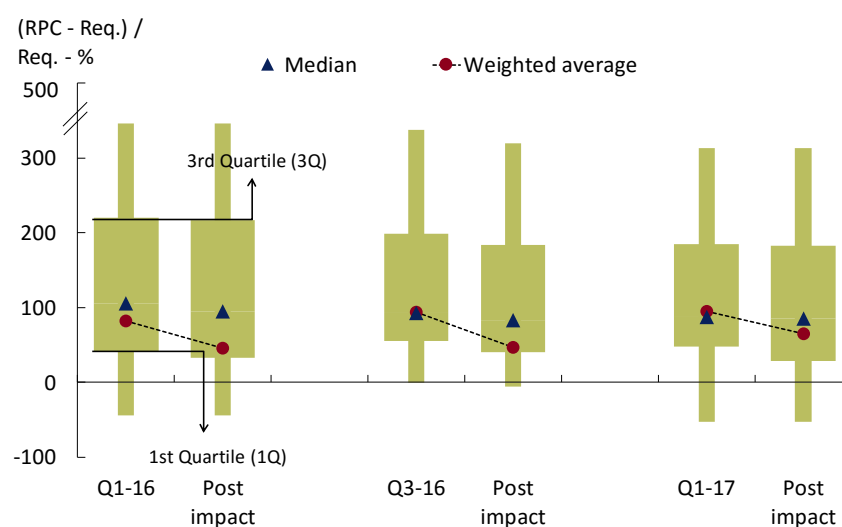
The system would remain largely resilient to credit risk materialization. In general, based on the sensibility exercises carried out, it can be observed that the institutions' regulatory capital levels are, on average, less impacted by assumptions of severe nonperformance —of a low probability of occurrence—in comparison with the last IEF records⁶⁵.

Since IEF I-16, the results from sensibility exercises are shown based on three sets of assumptions: 1) “Exercise A”, which assumes the impossibility of repayment from all debtors in an irregular situation; 2) “Exercise B”, which assumes higher nonperformance in the credit portfolio of each institution up to the maximum level reached during the international financial crisis heights (between IIS-07 and IS-10), and then taking over such bad loans; and 3) “Exercise C”, which assumes the impossibility of repayment from the ten companies with the largest debts to the financial system.

When replicating “Exercise A” and “Exercise B”, using data from early 2017, a high level of resilience of the sector was still being observed, given a low nonperformance in the portfolio combined with high levels of provision and capital. The results obtained for “Exercise C” (assessment of the potential impact on the equity based on the debtors concentration level) show an improvement against the previous IEFs (see Figure 3.5). After this exercise, only two institutions would present a regulatory capital compliance gap, accounting for a 1.9 percent of the assets and 1 percent of the capital (such figures amount 7.9 percent and 7.3 percent for IIIT-16, respectively, and 12.3 percent and 9.6 percent for IT-16).

⁶⁴ To a lesser extent and from much lower levels, such a movement can also be observed in mortgage loans.

⁶⁵ See Chapter 3 of [IEF II-16](#).

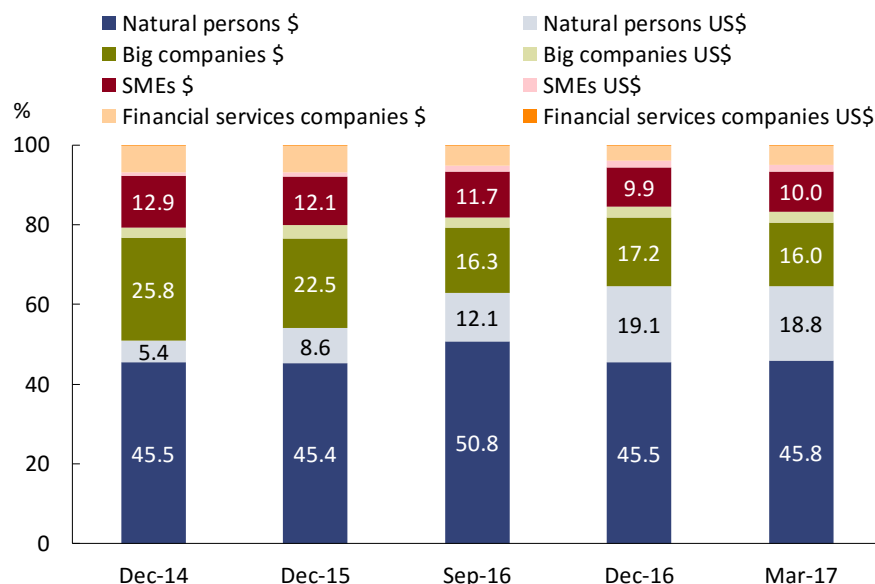
Figure 3.5 | Excess Capital Compliance Sensitivity Analysis - Exercise C

It is considered data of Mar-16 for the Q1-16, Aug-16 for Q3-16, and Feb-17 for Q1-17.
Source: BCRA

The financial system maintains a wide coverage against liquidity risk

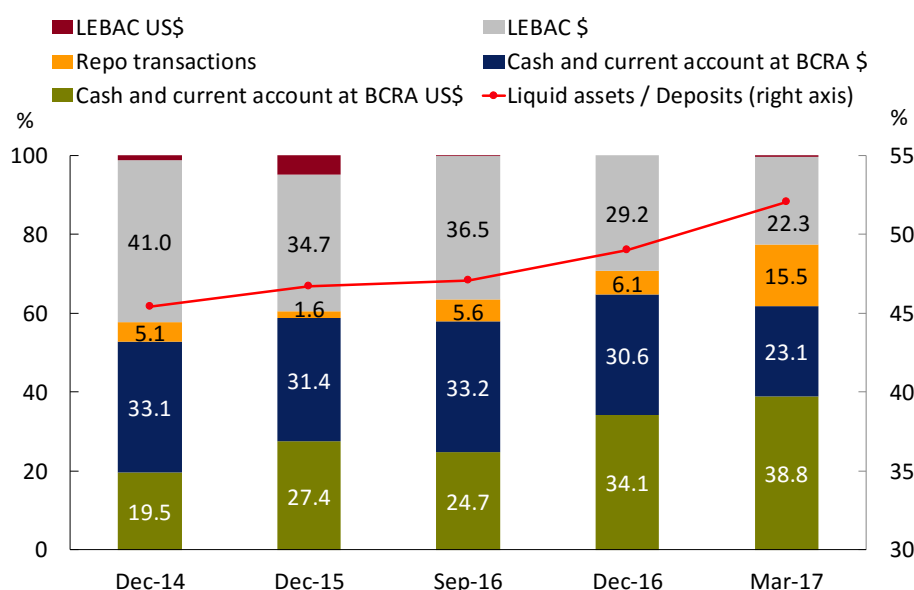
Liquidity risk exposure indicators remain at moderate levels compared to recent years. Throughout 2016, household foreign currency deposits⁶⁶ grew in importance in relation to the total amount of private sector deposits (see Figure 3.6). At an initial stage—until September—, this performance was driven by the exchange market normalization—reflected in call accounts—and, subsequently, by the Tax Disclosure System that impacted on six-month placements. By contrast, large companies' deposits gradually lost importance in relation to the total amount, due to fewer fixed-term deposits, in a context where more attractive real returns on other financial instruments were prevailing. As a result of that evolution, liquidity risk exposure indicators showed mixed changes. On the one hand, deposit concentration decreased, given household placements' higher weighting—which implies a lower exposure. On the other hand, deposits' relative maturity declined—which implies a higher exposure— due to fewer term placements for large companies.

⁶⁶ In the year-on-year comparison, peso-denominated household deposits did not feature any significant changes.

Figure 3.6 | Private Sector Deposits by Type of Depositors Financial system - Share in %

Source: BCRA

The strong dynamism of dollar-denominated household deposits, which exceeded that of private sector credits, was translated into a higher availability—liquid assets—of foreign currency (see Figure 3.7). Among liquid assets, the repos with the BCRA have increased their weighting since early 2017, when the BCRA implemented the fluctuation band of this instrument as a policy rate. The weighting of LEBAC holdings declined over this period. Thus, liquid assets came at about 52.1 percent of deposits, that is, 5 percentage points more than in September 2016, when the last IEF was released.

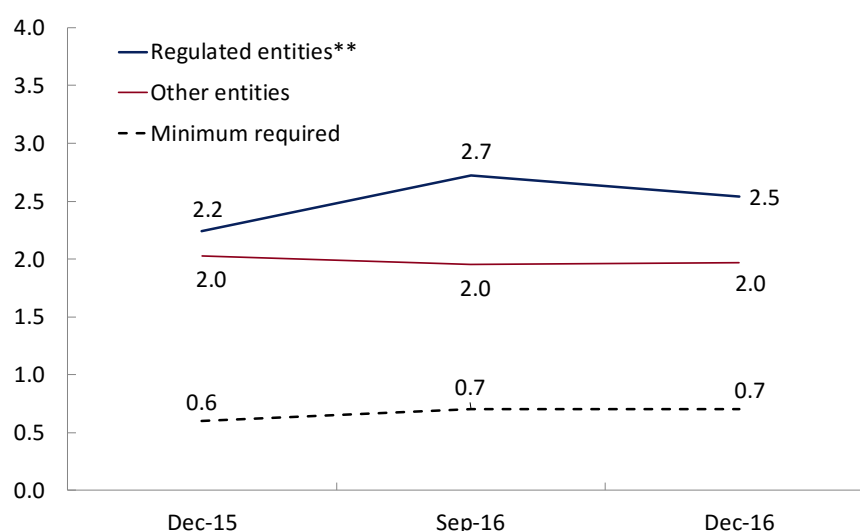
Figure 3.7 | Liquid Assets - Financial system

Source: BCRA

According to the definition of Liquidity Coverage Ratio⁶⁷, banks would present liquidity levels that would enable them to face potential net outflows in the event of a potential 30-day scenario of severe stress⁶⁸. Considering records up to December 2016 —the most recent available—, the liquidity coverage ratio calculated for the largest financial institutions remained at comfortable levels (see Figure 3.8) and showed no significant changes with respect to the value recorded in September 2016 and above that of late 2015. In the last quarter, the rise of high-quality liquid assets (37.3 percent) turned out to be slightly below the estimated increase in net cash outflows (43.9 percent, mainly accounted for by lower cash inflows). However, such liquidity coverage ratio levels observed are still well above the minimum local requirements, which fall within the international recommendations (Basel Committee).

Interfinancial liquidity markets continued to gain depth over the last months, particularly since early 2017, when the BCRA fixed repos interest rates as policy instruments. Interfinancial markets between private parties operated within a lower volatility framework, including relatively moderate volumes, which partially contributed to channel liquidity shortfalls and surpluses from financial institutions. Shorter-term interest rates, corresponding to both guaranteed markets —repos— and non-guaranteed markets —call— among banks, gradually converged into an area close to the lower limit of repos' fluctuation band.

Figure 3.8 | Liquidity Coverage Ratio. FALAC / SENT*



* FALAC=High Quality Liquid Assets Fund. SENT=Net cash outflow estimated for a 30-day period under a stress scenario. ** The regulated entities belong to group A (Communication "A" 5703) and represented 89% of assets in Dec-16. Source: BCRA

In order to significantly expand the system's funding maturity, a strengthened context of positive real returns for depositors is needed. Within such framework, some institutions have started to issue medium- and long-term UVA tradable securities (see Chapter 2), which would improve banks' capacity to manage exposure —mismatches— in such denomination. Moreover, the policies focused on promoting financial inclusion and the use of electronic means of payment could generate bank liabilities with a lower relative maturity but higher stability. Therefore, it is necessary to continue monitoring exposures and coverages in relation to liquidity risk.

A lower exposure to foreign currency risk remains

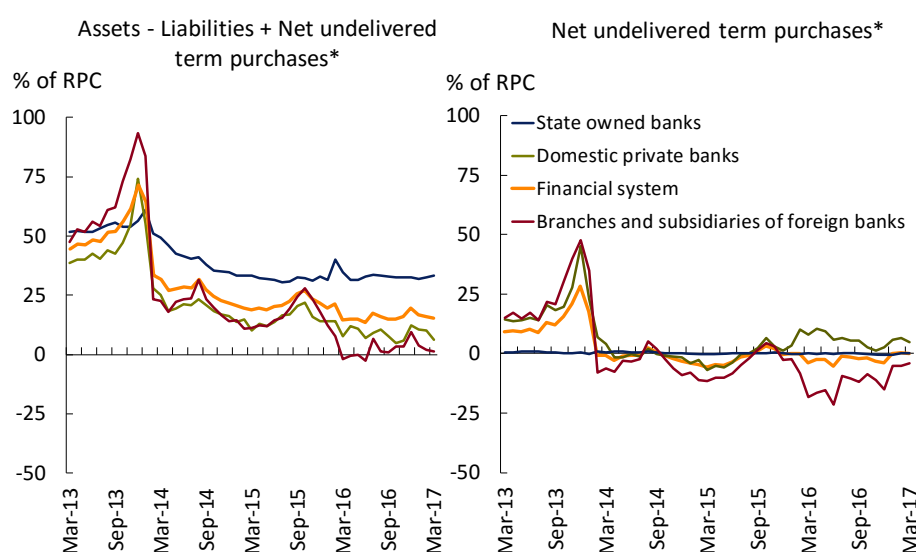
⁶⁷ For further details, see Exhibit 3 of [IEF II- 15](#) and "[Ratio de Cobertura de Liquidez](#)" (Liquidity Coverage Ratio) standards.

⁶⁸ In the local case, the main source of this risk is the non-guaranteed wholesale funding.

Since last IEF edition, no significant changes were found in the system's balance sheet exposure to currency risk (see Figure 3.9). This situation was observed within a context in which foreign currency items gained relevance in both the assets and liabilities of all banks' aggregate balance sheets (see Chapter 2). The moderate foreign currency mismatch faced by the sector, in relation with the peaks recorded four years ago, is partly due to the existing macroprudential regulation⁶⁹.

The current flexible foreign exchange policy makes it easier for economy to better tackle external shocks. This type of regime allowed the real peso-dollar exchange rate to adjust to fluctuations of other regional currencies against the dollar⁷⁰. In this context, keeping an active foreign currency mismatch for this sector will create nominal profits against a nominal peso depreciation, but a higher inflation will lead to a loss in real terms. Taking this into account, it will be important to monitor not only the development of the capital mismatch, but also the real exchange rate —nominal exchange rate and inflation— in order to assess potential capital fluctuations. In particular, capital requirements imposed to the aggregate financial system due to the foreign currency risk —which considers balance sheet exposure and exchange rate volatility— amounted 1.9 percent of the regulatory capital (RPC, its Spanish acronym) in March 2017 (only 3.5 percent of the total regulatory capital requirement), accounting for slightly lower levels than those reported in the last IEF.

Figure 3.9 | Foreign Currency Mismatch



* Off-balance accounts.
Source: BCRA

Higher adjustable items mismatch in the financial system

Starting from low levels, the capital mismatch related to inflation-adjustable items has been increasing over the last year. As regards assets, since 2016, BONCER bonds and UVA-denominated loans to the private sector —mostly housing mortgage loans— were added to adjustable instruments from the public sector⁷¹, which were already included in some banks' balance sheets. The UVA-denominated loans have been

⁶⁹ The standards to be verified by the banks include the Net Foreign Exchange Overall Position, the Overall Foreign Exchange Position, limits on the applications of the lending capacity in foreign currency and the minimum capital requirements in terms of the Market Risk sub-category.

⁷⁰ See [IPOM](#) 2016 issues.

⁷¹ Guaranteed loans, Bogar, exchange securities 2005, among others.

showing a strong dynamism over the last months, and it is expected to remain so for the rest of the year (see Chapter 2). As regards funding, the inclusion of adjustable instruments was more moderate.

The mismatch between UVA assets and liabilities has widened since the last IEF, though it remains at low levels. Considering items related to the private sector, the increase nearly amounted to \$5,000 million at an aggregated level or 1.7 percent of the RPC by March 2017, thus reaching around 9 percent of the system's RPC in total on the same date. However, its development should be further monitored. Specifically, the remarkable increase of the UVA-denominated deposits of the private sector, as well some UVA-denominated longer-term placements (corporate note) over the last months turned out to be promising (see Chapter 2).

The risk associated to UVA-denominated items mismatch can be compared to that of a currency mismatch⁷². There is exposure when the UVA-denominated balance of assets differs from UVA-denominated balance of liabilities. Based on this, a fluctuation in the restatement variable (CER) has a different impact on assets and liabilities, which is reflected on the corresponding results and, potentially, on the institutions' solvency. Furthermore, the UVA mismatch can be associated to a term mismatch (long-term assets, such as mortgage loans, funded by relatively shorter-term liabilities) and a real interest rate mismatch (as long as, for example, if said situation is checked together with active fixed-rate operations).

It is important to identify and monitor the mismatches faced by each institution in order to limit potential negative effects on equity⁷³. From a macroprudential perspective, and to complement risk management at an institutional level, it is appropriate to follow up systemic mismatches to mitigate exposures and/or encourage coverage through market instruments. It should be noted that a mortgage loan origination manual was developed over the past months, aimed at promoting the eventual securitization of such loans (thus generating better conditions to ease operative risks). Besides, the thrust given to saving —UVA deposits— and investment instruments —corporate note in UVA— can enhance institutional funding. The complementation with the capital market can also be reflected on new forms of managing interest rate risks, such as futures and swaps.

No significant changes in interest rate risks

The exposure to interest rate risk of the financial system did not present significant changes in comparison with the last IEF and remained moderate, as the sector continues to be focused on transactional activities. It is estimated that the average maturity of the peso-denominated net assets portfolio, which has no market prices from the group of banks, came at around 8.6 months in February 2017 —last information available—, without relevant change from last September. At an aggregate level, a hypothetical exercise was carried out to measure the impact on equity caused by a rise of 200 PBS in the interest rates: the economic value of the aggregate portfolio would be reduced by just 1%⁷⁴ (a fall slightly lower than expected in the simulation included in the last IEF).

According to international standards —Basel Committee—, the interest rate risk can be approached under the Pillar 2 framework, associated to the supervisor testing process. Monitoring this risk becomes particularly relevant, given the anticipated credit deepening and the gradual growth being observed in the UVA loans (at a longer term in relative terms). In this sense, it is important to strengthen the use of alternative financial instruments that allow interest rate risk management (see previous section).

Low weighting of market risk

The impact on equity that adverse fluctuations in assets carried at a fair value would cause is still marginal at an aggregate level. For example, in terms of regulatory capital requirements, this risk accounted for only

⁷² For further details, see [IEF II-16](#).

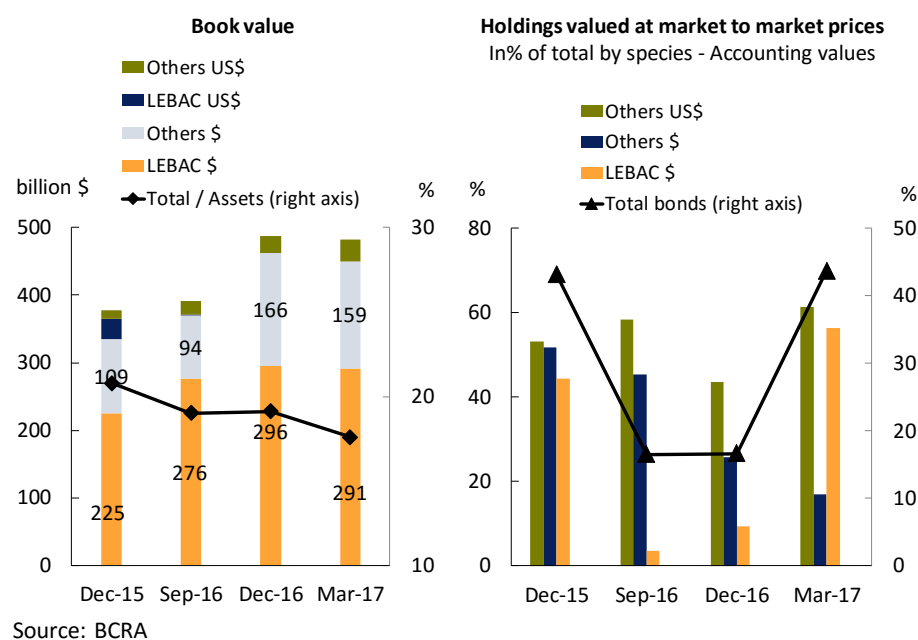
⁷³ The BCRA timely issued "[Lineamientos para la Gestión de Riesgos de las Entidades Financieras](#)" (Guidelines for Risk Management in Financial Institutions) and updates it regularly.

⁷⁴ According to the methodology included in Communication "A" [5398](#). Another criterion established by the BCRA (Pillar 2) is focused on the annual change in interest rates observed in the percentile 99 of the mobile distribution over the past five years. Based on such criterion, the loss in the economic value of the financial system portfolio would be 4.53 percent.

0.9 percent of the RPC and 1.6 percent of the total capital requirements by March. Debt securities accounted for nearly 73 percent of the market risk requirements at the beginning of the year. Although the holding of public securities, in terms of assets, declined over the last six months —LEBACs in particular— up to a 17.6 percent, the share of securities valued at market price rose by 27 percentage points, reaching 43.7 percent of the total securities portfolio (see Figure 3.10).

Under the present framework, with more placements of public and private debt (see Chapter 1), it is only to be expected that banks will gradually increase their exposure to such risk. Faced with this situation, there are several macroprudential regulations⁷⁵ that would allow a correct approach to this new scenario.

Figure 3.10 | Holdings of Government and BCRA Securities



⁷⁵ For further details, see page 50 of [IEF II-16](#).

Exhibit 4 / Stress tests carried out by financial entities

In the context of its oversight and monitoring powers, the BCRA requires financial entities to carry out stress tests every year (with a two-year horizon), in order for them to assess the risks they may face should the macroeconomic context worsen. These tests, which are reviewed by the Superintendence of Financial and Foreign Exchange Entities⁷⁶ (SEFyC), are very useful for entities, as it requires them to perform an in-depth analysis of the details of their business models and of which developments of the economic context could have an impact on their results and their creditworthiness.

In the case of the scenarios of stress specific to the entities, macroeconomic assumptions are defined by each entity, based on their own evaluation of which macroeconomic disturbances could have the greatest impact on their business models, in all cases with unlikely, albeit possible, scenarios. For instance, an entity whose business focus is on household loans would be more exposed to an increase in credit risk and, thus, will try to stress the macroeconomic variables which increase that risk, such as a sharp drop in economic activity. The macroeconomic assumptions defined by the entities are in no case estimations of what they consider more likely for the coming years (what we could define as their “baseline scenarios”, rather, they are stress scenario which actually deviate from the baseline scenario.

Against this backdrop, this exhibit analyzes the information submitted by the entities in the context of their tests, in order to identify potential stress sources detected by them. Thus, the analysis begins with a set of variables (GDP, CPI, BADLAR, exchange rate), taking a sample of financial entities as benchmark⁷⁷.

Second, a series of profitability indicators was constructed in terms of assets (ROA, interest, profits from government securities, bad debt charges, service income, and administrative expenses) in order to include information on the main risks estimated by the entities in their stress test, and use them as the basis to identify the scenarios with the greatest potential impact on results⁷⁸. In all cases, the assumptions and methodologies were respected, as submitted to the BCRA.

The analysis of the variables shows that the entities consider scenarios with wide range of real GDP variation (from -6 percent to +5 percent), with medians in -1.0 percent for the first year, and 0.0 percent in the second year. The entities which forecast a growth in the economy above 5 percent in the second year in their stress tests are the same that assume a sharp drop in the first year, i. e., they expect a V-shaped path of economic recovery.

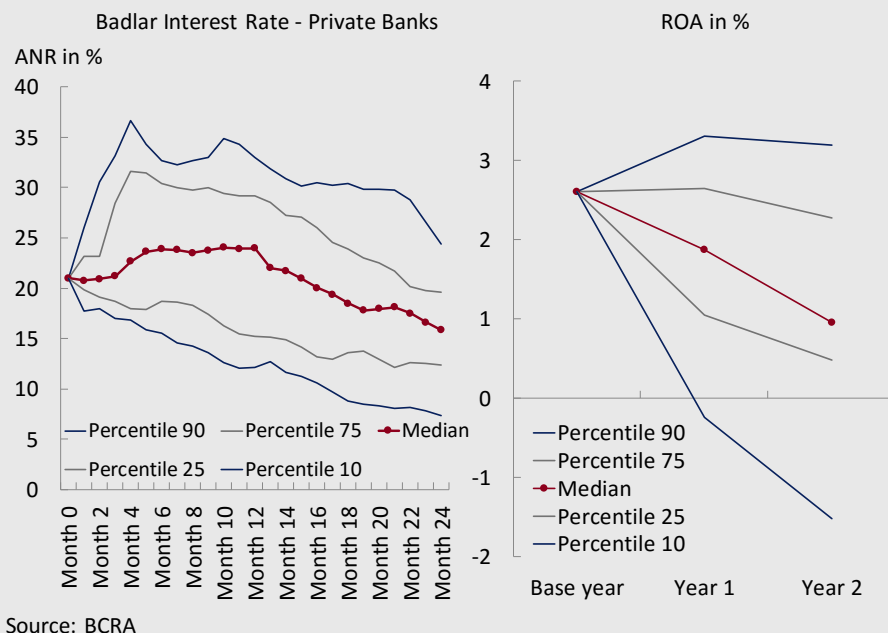
The entities also assume scenarios with a wide range of variation in CPI (increases ranging from 5 percent to approximately 55 percent in both years), with a decreasing trend —and less variation— in the second year, in which the median falls to 16.2 percent (from 22.7 percent in the first year). For the exchange rate, the variations considered are aligned with the values of the CPI medians: 20 percent in the first year and 12 percent in the second. Lastly, the BADLAR rate also shows a decreasing trend in the second year for the set of financial entities under discussion; with some scenarios showing strong increases in the first year (see Figure 1).

The analysis of profitability measures shows that the results estimated by entities in their stress scenarios show an overall downward trend in the test period. In fact, the implicit ROA median in the results charts falls from 2.6 percent (the last observed 2016 value) to 1.9 percent in the first year of the test and 1 percent in the second year, where there is an increase in variation as well (see Figure 1).

⁷⁶ Through [Com. “A” 6133](#) and [6179](#), against the background of the RI-Business Plan and Projections in Exhibit IV — Stress tests, entities are required to submit the documentation related to comprehensive stress tests prepared internally.

⁷⁷ With the information available as of May 2, 28 scenarios prepared by the 10 largest private entities, based on the value of their assets as of December, 2016, were considered.

⁷⁸ It should be mentioned that impacts on capital adequacy or liquidity were not considered. I. e., only effects on results were taken into account.

Figure I | Interest Rates and ROA

Source: BCRA

Analyzing the ROA composition by the main items in the results charts (taking the median in all scenarios⁷⁹), shows that the entities bear the main negative impacts as regards administrative expenses, which would increase —relative to assets— in both years. Profits from government securities fall year-on-year, while credit risk (reflected in bad debt charges) is seen by the entities as the variable with the lowest negative impact. Having said that, the entities consider that service income would increase slightly in their stress scenarios, and that interest-related results would pick up the effect of an increase of the implicit spread in terms of assets.

The stress tests carried out by banks show an uneven assessment of the macroeconomic developments which could impact their results, taking into account their specific business models and the different assessment methodologies used. The BCRA uses these scenarios as an additional analysis tool. However, it should be mentioned that, in the exercise of its oversight capacity, the BCRA carries out its own stress tests of entities —based on internally-developed macroeconomic assumptions—, which include not only credit risk, but also liquidity, market and business risks.

⁷⁹ Should averages be used, the analyses do not differ substantially.

4. Payment System

The BCRA continues to work towards its goal of increasing the bancarization levels among the population, which goes hand in hand with achieving a higher use of the electronic means of payment and a reduced use of cash for day-to-day transactions in the private sector. Thus, more agile, secure and efficient corporate and household operations are sought, promoting higher financial inclusion. In addition to further encouraging the traditional electronic means of payment, new payment channels to replace cash are being promoted. The widespread use of mobile telephony in our society is an incentive for upgrading the means of payment in the economy. In this respect, the first course of action consisted in introducing and promoting new electronic means of payment, some of which are already in operation. The second course of action was to discourage the use of cash, while seeking to reduce its high usage costs (security and logistics). The prevalence of electronic means of payment among the general population will allow the promotion of bank intermediation and the formalization of the economy.

Upgrading the Payment System

The Communications “A” 5982 and 6043 from June and August 2016 set the ground for establishing the new electronic means of payment, called Immediate Electronic Payment (PEI, its Spanish acronym). Basically, such means are: (i) the Electronic Wallet, a mobile telephony app that allows linking bank accounts and making transfers between them; (ii) the Mobile Point of Sale (“Mobile POS”), which allows making card payments from a cell phone through a security device to validate transactions (“dongle”); and (iii) the Payment Button, which enables buyers to operate in virtual points of sale through debits in their call accounts. For the issuer of the transaction, these instruments of payment are cost-free up to an initial daily limit equal to the adjustable minimum living salary (\$8,060). On the other hand, the credits in the receiver’s account as payments for sales of goods and services are currently cost-free up to \$292,000, this being equal to one-twelfth of the maximum annual sales stated for small companies.

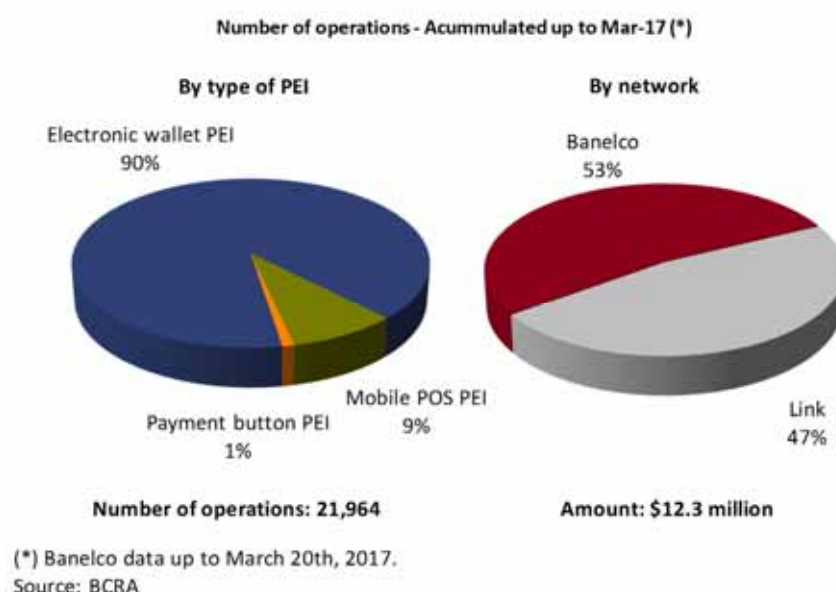
The above electronic means of payment have been in operation in a large number of financial institutions over the last few months of the previous year. Thus, almost 22,000 transactions had been carried out up to the end of March 2017, 90 percent of which corresponded to Electronic Wallet, 9 percent to Mobile POS and 1 percent to Payment Button (see Figure 4.1)⁸⁰. As regards banking networks, 53 percent of the operations were performed from banks belonging to Red Banelco and 47 percent from those belonging to Red Link.

Expected growth for the next few periods in terms of use of new means of payment will go hand-in-hand with the evolution of the measures taken by the BCRA in this regard, and with the gradual cultural shift of the population towards technologies of this type. In this sense, the BCRA’s promotion of the creation of a banking “alias”, which replaces in practice the 22-digit-long “uniform banking code”, makes it easier and faster to make transfers electronically⁸¹. This line also includes the implementation of “Immediate debits” (DEBIN), which will enable different payments to be charged “online” in the customer’s banking account⁸².

⁸⁰ In terms of participation amounts, they are similar to those previously mentioned (94 percent corresponded to Electronic Wallet, 6 percent to Mobile POS and 1 percent to Payment Button).

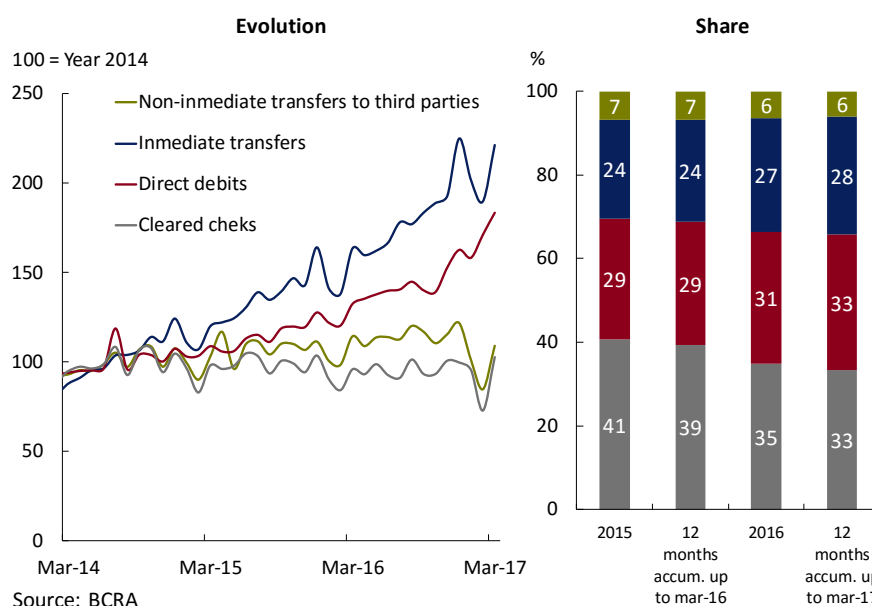
⁸¹ See Communication “A” 6044 and [Press release of 03/04/17](#).

⁸² See Communication “A” 6099 and [6203](#).

Figure 4.1 | Use of Different Means of Payment

National Payment System Statistics

While cash money continues to be extensively used by the population, the electronic instruments promoted by the BCRA are gradually gaining ground. Within those, immediate transfers⁸³ are evolving faster than the rest of the payment means alternative to cash (see Figure 4.2), both in terms in number of operations and volumes. It should be mentioned that the BCRA established in 2016 that all immediate transfers by users of financial services are free of charge.

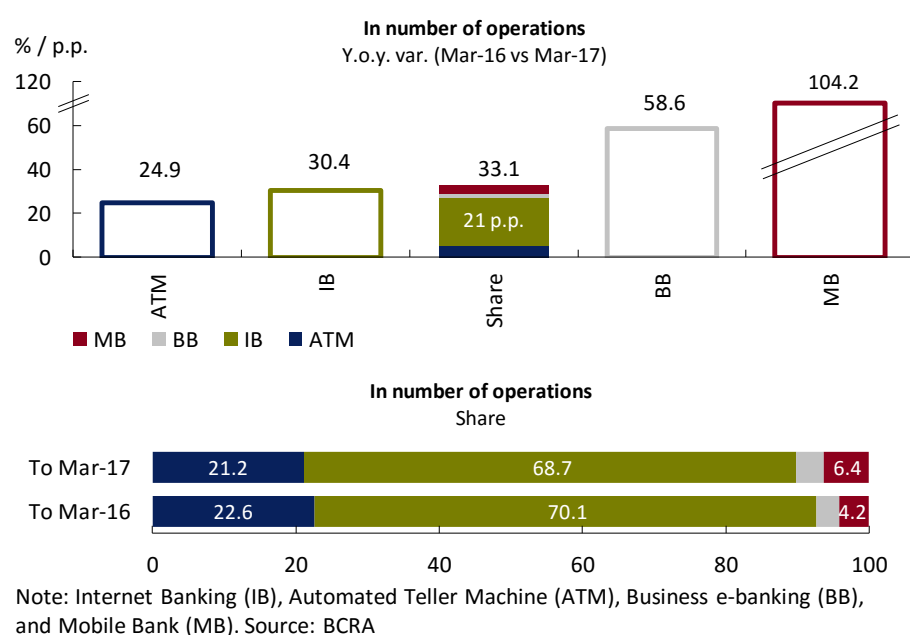
Figure 4.2 | Use of Different Means of Payment - In number of transactions

⁸³ This refers to transfers credited online carried out through the following channels: online banking, ATM and self-service terminals, corporate electronic banking and mobile banking.

As a result, immediate transfers continue to increase their share in these payment alternatives (+4 pp in the last 12 months relative to the cumulative value as of March, 2016), while checks continue to lose ground (-6 pp relative to the same period)⁸⁴.

Within immediate transfers, online banking continues to account for more than two thirds of total operations (see Figure 4.3), through mobile banking is growing fast, and now has a 6.4 percent share.

Figure 4.3 | Immediate Transfers by Channel



In the last few months, the costs of operating credit and debit cards began a downward trend. In this sense, there was a recent reduction in the interchange fee (the fee charged by credit card issuing banks to stores for each transaction). The BCRA took this step following a trend seen in other parts of the world⁸⁵. Starting in April, the maximum fee for credit cards payments went from 3 percent to 2 percent, and in the case of payments with debit cards, from 1.5 percent to 1 percent. After a gradual decrease, starting in 2021, these fees will be of 1.3 percent and 0.6 percent, respectively, near the values seen in the other countries of the region. This reduction in the interchange fee aims at creating incentives for new agents to enter the merchant acquiring market, that is, the search for stores using these means of payment. These new scheme of greater competition will make possible for a single acquirer to offer stores the possibility of charging with different card brands simultaneously. Besides, it will make it possible to revert the market's lack of technological sophistication and reduce the prices ultimately paid by consumers.

As regards debit card purchases, it is worth mentioning the AFIP resolution⁸⁶ which establishes a schedule, which goes from April, 2017, to March, 2018, in which this instrument has to be accepted as a means of payment, based on invoiced amounts and the store's segment⁸⁷. This measure will result in an increase in the bancarization of payments, as cash use would be more linked to a supply issue, rather to a demand issue, that is, more related to the vendor's decision than to the purchaser's. As regards debit card transactions, in

⁸⁴ In line with what was discussed in the IEF's last edition, check clearing continues to decrease in terms of number of documents.

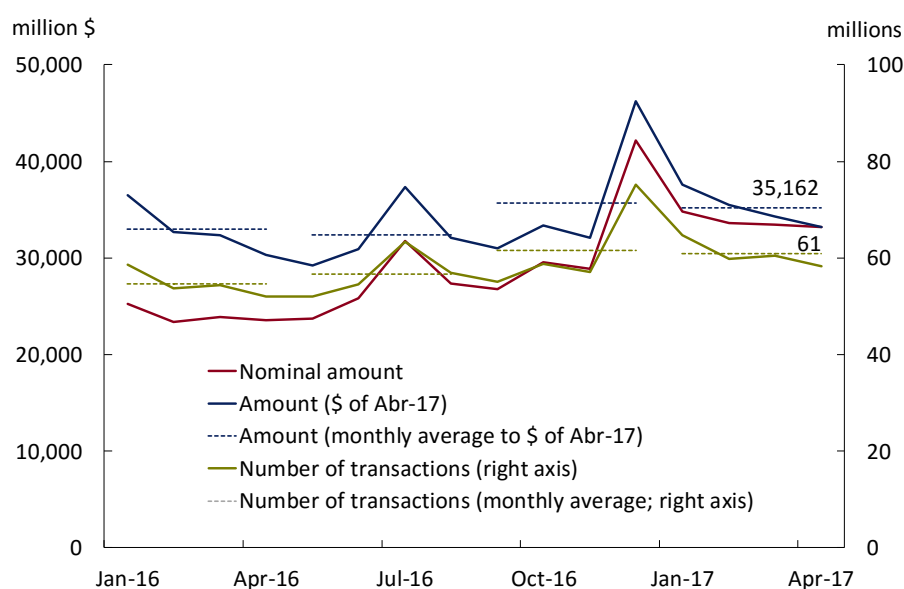
⁸⁵ See [Press release of 30/03/17, Communication "A" 6212](#) and [February, 2017, Bank Report](#).

⁸⁶ See <http://www.afip.gov.ar/noticias/20170223TarjetasdeDebito.asp>.

⁸⁷ The mandatory adoption schedule begins on 30/04/17 for stores belonging to sections G (wholesale and retail stores; repair of cars and motorcycles) and I (Lodgings and catering services) with a turnover of more than \$4 million in fiscal year 2015. Finally, after some intermediate stages, it is established that by 31/03/2018 all remaining stores must adapt to the regulation.

the first few months of 2017, approximately 61 million of monthly purchases were observed (11.3 percent more than the first third of last year, and in line with the volume of the previous four-month period). In terms of volume, they amounted to little over \$35 billion per month (a year-on-year 40.6 percent nominal variation, and 6.7 percent in real terms) (see Figure 4.4).

Figure 4.4 | Purchases Using Debit Cards in POS



Source: BCRA

Towards December, 2016 —last available data—there was a year-on-year growth of 8 percent in the number of credit cards (an increase which was of 9.5 percent as of September), and of 8.6 percent in the number of debit cards (6.9 percent as of September, 2016). In consolidated terms, the year-on-year variation amounts to 8.3 percent, which implies a slight improvement relative to September (8.1 percent), which shows a deepening of financial inclusion and the population's bancarization level.

Last, special mention should be made of the creation of the new electronic platform for the exchange of banknotes between banks, which make it possible for entities which tend to “receive” to exchange notes with those which tend to “pay” (see Exhibit 5).

Exhibit 5 / Cash management challenges

In the last year and a half, the BCRA has embarked on a clear effort to bring technological change to the transactions of households and companies, trying to effect a greater substitution of the use of cash money by more efficient and safe alternatives, such as electronic payment channels⁸⁸. The deepening of the use of these channels by the population is necessarily gradual, involving both a cultural shift and a greater formalization of transactions. Facing this path of gradual substitution of instruments, it is necessary to perform an adequate management of banknotes, bearing in mind the application of efficiency criteria which reduce costs for the economy as a whole and, in particular, for the banking sector. This last factor particularly important, given the need of reducing the overall operating expenses faced by banks (see Chapter 2).

Currently, the cash demand can be satisfied both by the BCRA and financial entities, given their stocks of bank notes⁸⁹. To that effect, the BCRA has a central treasury and 22 regional agencies in various provinces. This network contributes to the operation of the note supply system, through cash storage and management. In some agencies, the BCRA receives more notes than it provides (cash collecting function), while in others, the situation is the opposite (cash paying function). In most jurisdictions, agencies have worked as a place for banks to temporarily deposit notes.

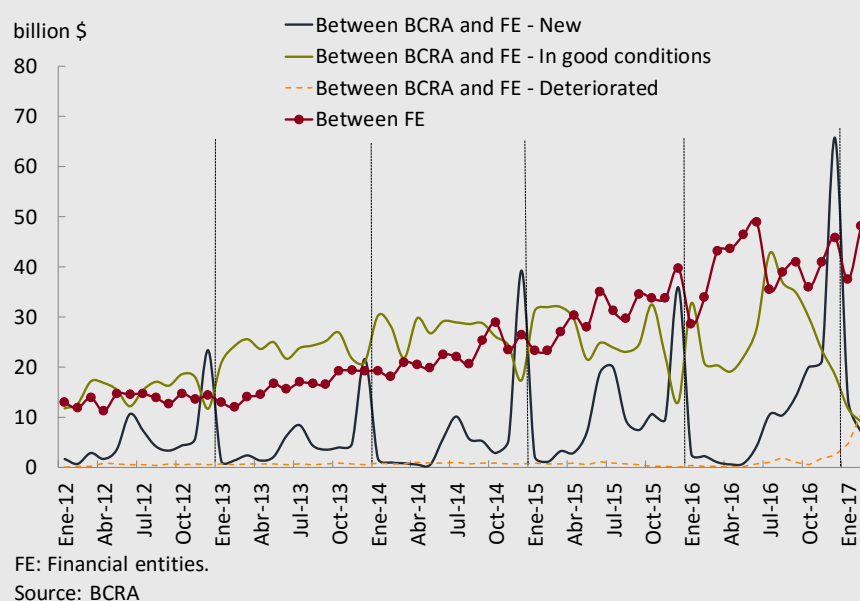
This operation related to the availability of bank notes implies significant costs in terms of transportation, preservation of physical integrity, and security. These outlays, which are currently borne by the BCRA, are ultimately paid for by Argentine society as a whole. Thus, while keeping ample stocks of notes is useful to deal with increases in demand by the population, it creates challenges in terms of management efficiency. As a result, the BCRA has recently started coordinating actions in the payment system in order to promote a more efficient use of notes, and thus reduce unproductive costs for society.

In the last few years, the whole of the BCRA's operating infrastructure has been devoted to the exchange of circulation-worthy notes, and, to the lesser degree, of those which have to be replaced due to deterioration (see Chart 1). This can be seen in the poor quality of the notes being used: according to the BCRA's own estimations, seven out of every ten notes in circulation are damaged, which hinders the logistics of the supply of money to the public and makes it easier for counterfeit money to be used. The major role adopted by the BCRA in the exchange of circulation-worthy notes gave rise to an unnecessary duplication of expenses related to cash conditioning, transportation and control, a source of inefficiency in the payment system.

This scenario began to change in the last quarter of 2016, when the BCRA modified the notes' management strategy. The main axis of the new policy is the BCRA's role in the provision of new notes and the removal of damaged notes. This aims at creating savings in storage and distribution costs of the money in circulation, which can be used in the everyday transactions of households and companies. Thus, Chart 1 also shows the effects of the change in the operation seen in the last few months: a lesser degree of exchange of notes with the BCRA, and a greater degree of exchange between entities. In this new scenario, it is necessary for entities in the financial system to assume a greater commitment to the management of cash based on their needs, considering their business models and regional distribution. In order to encourage that behavior, the BCRA promoted the exchange of notes from collecting entities to paying entities, without the need of passing through the BCRA. The idea is for entities, working in a de-centralized fashion, to cover their needs without bearing the costs of transportations to and from BCRA agencies.

⁸⁸ For a detail of these measures, see [IEF I-16](#) and [IEF II-16](#).

⁸⁹ This includes the stock of new notes in the BCRA, as well as notes appropriate for circulation in the BCRA and in banks. Synthetically, notes and coins are classified into three large groups: 1) new, available in the BCRA and still not in circulation, 2) appropriate for use, both in the BCRA and in financial entities or in the hands of the public, which are being used and still have the physical features needed for them to continue to be used, and 3) damaged, which should be removed from circulation and destroyed, given their physical status.

Figure I | Exchange of Banknotes - Traded Amounts

Thus, in February, a space for the voluntary trading of cash was created⁹⁰, in which banks can operate on an electronic platform on the Electronic Open Market (*Mercado Abierto Electrónico* – MAE-). This platform, in which the BCRA oversees the transparency of the operations, provides an effective solution to the exchange of notes, as it brings into contact all the demand and supply parties in the country. This facilitates the movement of cash between entities and regions, offsetting situations in which there is an overabundance of cash in one location and simultaneous lack of cash in other. The following are the major features of the operations in this market: i. As of early May, 828 operations were carried out, amounting to \$27.170 billion, ii. Most operations were carried out in large-denomination notes (\$500 and \$200), with 30 purchasing entities (of which 11 were public, and the rest were private) and 11 selling entities (all of them private)⁹¹, and iii. Of the total operation value, almost 54 percent of purchases were carried out by public banks, and 43 percent by national private banks. On the selling side, the BCRA had a significant participation in this market. That role is expected to change as the operations between entities based on this electronic platform gains traction.

It should be pointed out that in the last few months there was a greater degree of exchange of new notes with the BCRA, not only aimed at the removal of damaged notes, but also at reducing the costs of handling, storing and transporting. In this sense, the former maximum denomination of \$100 had become a problem for the transactions carried out by society: In December, 2015, 70 percent of the notes in circulation were \$100 notes, which represented almost all of the money in circulation (93 percent, compared to the share of 80 percent seen ten years before). The inflationary scenario of 2005–2015 caused the purchasing power of that note to fall to just 13 percent of what it was at the beginning of the period. In order to address this issue, \$200 and \$500 notes were launched in 2016, soon to be followed by \$1000 notes. These higher denominations accounted for almost 6 percent of the number of notes being used in March, 2017: over 27 percent of the value of the money in circulation.

The efficient management of payment system that is more socially inclusive, that facilitates trading and production and marketing processes, that provides alternatives to those wishing to carry out financial transactions, that reduces the duplication of costs to the society, and that is transparent and efficient in terms of costs, will be achieved through sustained work, and that includes the commitment of all economic agents in the financial system. The BCRA, in its capacity as regulator, overseer and provider of institutional and operational infrastructure, will contribute to this process.

⁹⁰ [Communication "A" 6177.](#)

⁹¹ Excluding the BCRA.

5. Financial regulation⁹²

This chapter presents recent developments in the regulation of the country's financial system, from the point of view of two major objectives: (i) sector development and (ii) financial stability. The list includes the most relevant measures adopted from the release of the previous IEF to the closing of the present edition (November 2016 – May 2017).

System development, efficiency, competition, banking access and transparency

Instruments for long-term saving and credit promotion

In early 2017, the BCRA continued to advance the **CER-indexed mortgage loans in Acquisition Value Units (UVA)**. In particular, it established that indexed deposits made within the framework of an upfront savings mechanism for the underwriting of UVA loans may be canceled early at the date of credit underwriting⁹³.

In March 2017, the national government determined⁹⁴ that mortgage-backed loans, tradable securities and construction contracts, or contracts for activities related to real estate property construction, marketing or financing, infrastructure works and real estate development —with timeframes of two years or more—, might be denominated in UVA or UVI. In this context, the BCRA established that financial institutions might issue **securities in UVI or UVA denominated instruments**⁹⁵ (with a minimum two-year maturity).

In order to keep fostering funding through longer-term deposits, in early 2017, the **minimum cash requirements** for open-end mutual funds were assimilated to those for other depositors⁹⁶. Additionally, as from March 2017, the BCRA ruled a 2 percentage points reduction in the minimum cash requirements for deposits denominated in local currency⁹⁷, which allowed entities to rely on a wider array of resources to grant financing.

In late January 2017, the BCRA enabled the remote opening of **special investment accounts**⁹⁸ for resident and nonresident investors who wish to grow their operations in the country, based on special customer identification due diligence measures established by the Financial Information Unit.

In April, the maximum assistance limits⁹⁹ were eased through small loans, using **screening and credit scoring** approaches.

In mid-May, the BCRA simplified the procedure for **mortgage credits** and increase the number of options of financial entities to value the property backing the loan¹⁰⁰.

Financial inclusion and increased banking access through means of payment modernization

To stimulate financial education and foster banking access through the use of electronic means of payment, in November 2016, the BCRA enabled the opening of **savings accounts for minors with a relevant**

⁹² See the Communications for a thorough interpretation of the regulation referred to in this chapter.

⁹³ Communication "A" [6171](#).

⁹⁴ Through [Decree N°146/2017](#).

⁹⁵ Communication "A" [6204](#).

⁹⁶ Communication "A" [6148](#).

⁹⁷ Communication "A" [6195](#) and [Press Release](#), March 2, 2017.

⁹⁸ Communication "A" [6165](#), according to Financial Information Unit Resolution [N°4/17](#) and General AFIP Resolution [3986 - E](#).

⁹⁹ Communication "A" [6221](#).

¹⁰⁰ Communication "A" [6239](#) and [Press Release](#), May 11, 2017.

authorization¹⁰¹. This allows eligible persons to open free of charge savings accounts in pesos that may be also used by a minor. With this account and the accompanying debit card, the authorized minor will be able to make all transactions offered by traditional savings accounts and debit cards (e.g., withdrawing cash from ATMs, making purchases at stores and making cash transfers). In March 2017, the BCRA determined that there will be no limitations on the daily amounts that may be debited from this kind of accounts¹⁰².

In September 2016, so as to continue encouraging banking access and financial inclusion, the BCRA allowed the **opening of savings accounts through electronic means** for natural persons, thereby eliminating the need to go to the bank branch. In April 2017, this feature was expanded to include the opening of all kinds of call accounts by natural and legal persons¹⁰³.

To further enhance the operation of electronic means of payment and provide users with more information, it was established that, as from June 2017, entities must **include data on the issuers of cash transfers received by their clients through electronic channels** (homebanking, ATMs and mobile banking)¹⁰⁴. Banks must now include in their statements at least the name of the issuer of each transfer and their CUIT, CUIL or AFIP identification key). Also, in April 2017, the BCRA eliminated the limits on banking transfers (both in local and foreign currency) upon clients' requests to make a specific transaction¹⁰⁵ (transfers continue to be free of charge).

In November 2016, in order to broaden the set of electronic means of payment for goods and services, the BCRA launched the **immediate debit means of payment (DEBIN)**¹⁰⁶, an online debit from the purchaser's bank account —after the appropriate authorization— and online credit in the vendor's bank account. In March 2017, it became compulsory for banking entities to make this payment facility available for their clients within 30 calendar days after the Electronic Clearing House for Small Amounts has complied with the relevant requirements¹⁰⁷. In May, it was established that DEBIN debits from bank accounts will be permanently free of charge¹⁰⁸. Banks must inform beneficiaries of accreditation costs.

In early April 2017, the BCRA ruled that, as from the middle of this year, **all bank accounts must have an "alias"**¹⁰⁹. Clients who have not chosen one before the deadline will be assigned one by default. Clients will be able to change their alias at any point.

In mid-April, electronic transactions were authorized for **exchange houses and offices**, as long as certain controls for technological risks are in place¹¹⁰.

In May 2017, to continue to foster a wider offering of financial services, the BCRA authorized the installation of **ATMs** by nonbanking institutions¹¹¹. Clients must be informed of the set of operations enabled by the terminals and their price.

Encouraging systemic competition and efficiency

In January 2017, in order to keep promoting competition among banks, the BCRA authorized banks to **pay interest for deposits in current accounts**¹¹² (which had been banned since 2010) and to freely negotiate rates between parties. Additionally, unimpeded access was given for information on normal and

¹⁰¹ Communication "A" [6103](#) and [Press Release](#), November 24, 2016.

¹⁰² Communication "A" [6205](#).

¹⁰³ Communication "A" [6223](#).

¹⁰⁴ Communication "A" [6200](#) and [Press Release](#), March 9, 2017.

¹⁰⁵ Communication "A" [6235](#) and [Press Release](#), April 27, 2017.

¹⁰⁶ Communication "A" [6099](#).

¹⁰⁷ Communication "A" [6203](#).

¹⁰⁸ Communication "A" [6234](#).

¹⁰⁹ Communication "A" [6215](#).

¹¹⁰ Communication "A" [6220](#).

¹¹¹ Communication "A" [6236](#) and [Press Release](#), May 4, 2017.

¹¹² Communication "A" [6148](#) and [Press Release](#), January 5, 2017.

low-risk debtors in the consumption portfolio included in the **Debtor Database of the Financial System**¹¹³.

In March 2017, seeking to increase competition in the card acquisition market, the BCRA put an upper limit on interchange fees, the main component in bank commissions faced by stores for each sale¹¹⁴ made with debit and credit cards. The reduction of fees will progress from 2 percent of the transaction amount with credit cards (1 percent with debit cards) to 1.3 percent in 2021 (0.6 percent).

In early 2017, the BCRA authorized **new complementary services for financial operations**¹¹⁵. Banks may now maintain equity holdings in companies aimed at developing and providing technology-based services for financial operations. Payment services providers¹¹⁶ were included within the set of newly authorized complementary services.

To contribute to cost reduction, the BCRA has allowed local branches or subsidiaries of foreign banks to decentralize the activities that are unrelated to clients (management, IT center, etc.) in the parent company's facilities and subsidiaries¹¹⁷.

In order to foster **protection of financial services users** and enhance transaction digitalization, it was established that, starting in April 2017¹¹⁸, financial institutions and nonfinancial issuers of credit and/or purchasing cards that use electronic means of communication must offer their clients the possibility to revoke certain contractual relations (such as credit cards, purchasing cards, pre-paid cards and non-accessory insurance).

In 2017, the BCRA continued to adjust the **minimum security measures for institutions**¹¹⁹. In April this year, it was established that, for ATMs away from the bank that are open 24 hours, banks may adopt the security measures they deem necessary based on their analysis of inherent risk. ATMs located in third parties' facilities may be refilled by staff from the financial institution, the transportation company, and/or the hosting facility, using cash collected at the facility, as long as the refill is carried out outside of opening hours and in the presence of security staff.

In early February 2017, seeking to increase efficiency in the use of bills, the BCRA approved the creation of an **electronic platform for negotiating cash on line**¹²⁰. Two voluntary negotiation rounds were established, in which the Central Bank will be able to take part.

Savings channeling towards productive activities

In the last few months, the BCRA has made changes in the **Financing Line for Production and Financial Inclusion**. In late 2016¹²¹, loans for nonfinancial credit card issuers were included as eligible financing with a 0 percent interest rate (17 percent as from April 2017), as long as they have participated in the "AHORA 12" program. It was established that, for natural persons, the mortgage interest rate expressed in UVAs or UVIs computable in this line may be negotiated freely. In April, financing through credit cards in 3 and 6 interest-free payments ("AHORA 12" program) were included within the authorized financing methods.

¹¹³ Communication "A" [6141](#).

¹¹⁴ Communication "A" [6212](#) and [Press Release](#), March 30, 2017.

¹¹⁵ Communication "A" [6154](#).

¹¹⁶ Legal persons who provide services related to payment and/or collection processing through debit cards, credit cards and/or pre-paid cards, mobile payment platforms (PPM), or other electronic means of payment.

¹¹⁷ Communication "A" [6126](#).

¹¹⁸ Communication "A" [6188](#).

¹¹⁹ Communication "A" [6219](#).

¹²⁰ Communication "A" [6177](#).

¹²¹ Comunicaciones "A" [6120](#) and [6217](#).

The authorized **uses of the foreign-currency deposit loan facility**¹²² were expanded. Last November, the possibility was incorporated to offer funding for goods and/or services providers who were part of the productive process of expendable merchandise listed in foreign currency, as long as providers have standing sales contracts for those goods and/or services in foreign currency and/or in those merchandises. Banks were allowed to allocate foreign-currency deposits to the underwriting of debt instruments in the same currency with the Treasury (up to a third of allocations). In January 2017, the range of authorized funding operations included financing for investment projects aimed at bovine breeding. In late April 2017, the BCRA established that institutions may allocate a share of dollar-denominated deposits to funding importers of Argentine products or services¹²³. In early 2017, **‘B’ preferred guarantees**¹²⁴ were **broadened** to include fixed pledges on bovine cattle, and floating pledges on motor vehicles and agricultural, road construction and industrial machinery, and bovine cattle.

In February, it was established that public guarantee funds aimed exclusively at granting guarantees for micro SMEs or SGRs or for public guarantee funds enrolled in the open registries at the SEFyC that wish for their guarantees for financial institution funding to have preferred guarantee status must request so at the BCRA¹²⁵.

Transparency and protection of financial services users

In early 2017, so as to continue to provide financial services users with clear, detailed information, the BCRA ruled that the **total financing cost** of credit operations must be expressed as the **effective annual rate**¹²⁶, rather than as the nominal annual rate¹²⁷.

In March, it was decided that, when clients receive a response they deem unsatisfactory or they do not receive an answer within 20 working days after making an **individual complaint** to an entity, they may report the fact to the BCRA through relevant electronic means¹²⁸ at the institutional website. Additionally, in December 2016, UVI deposits were included in the **deposit insurance system**¹²⁹.

Regulations for financial stability

Exposure to foreign currency in financial institutions

Between late 2016 and April 2017, there was an increase of up to 30 percent of Adjusted Stockholders' Equity (RPC) in both the positive and negative limits of the **Net Foreign Exchange Overall Position**¹³⁰. Also, in early May, it was decided that institutions will now be allowed to freely determine the level and use of their general exchange position¹³¹, which enables them to make arbitrage operations and swaps abroad, with certain restrictions for the counterpart.

Adjustments in the Basel standards for certain capital rules

In line with the recommendations made by the Basel Committee on Banking Supervision (BCBS) in late November 2016, changes were made in the minimum capital rules¹³² for financial institutions as regards the treatment of asset portfolio positions from the banking book, including out-of-balance exposures. In early 2017, capital requirements were adjusted for counterpart credit risk in exposures to central

¹²² Communication "A" [6105](#).

¹²³ Communication "A" [6231](#) and [Press Release](#), April 27, 2017.

¹²⁴ Communication "A" [6162](#).

¹²⁵ Communication "A" [6183](#).

¹²⁶ Communication "A" [6173](#).

¹²⁷ In line with [Resolution N° 51-E/2017](#) of the Secretary of Commerce of the Ministry of Production / Transparent Prices.

¹²⁸ Communication "A" [6199](#).

¹²⁹ Communication "A" [6125](#).

¹³⁰ Comunicaciones "A" [6128](#) and [6233](#).

¹³¹ Communication "A" [6237](#).

¹³² Communication "A" [6108](#).

counterpart institutions¹³³ and operations with OTC derivatives¹³⁴. Some of the minimum disclosure requirements were modified as well¹³⁵.

Other adjustments for local convergence to international recommendations¹³⁶

In late 2016, the BCRA incorporated several definitions included in the BCBS's Monitoring Tools for Intraday Liquidity Management, on intraday liquidity risk management. Additionally, the criteria were disseminated for institutions to comply with in the framework of the **convergence to the International Financial Reporting Standards (IFRS)**. Around the same time, the BCRA approved the risk management standards for risks associated to the settlement of exchange operations in order to regulate the management of risks faced by institutions. In order to improve risk management and decision making processes at **systemically important institutions at the local level**, standards were approved on risk data aggregation and reporting.

¹³³ Communication "A" [6147](#).

¹³⁴ Communication "A" [6146](#).

¹³⁵ Communication "A" [6143](#).

¹³⁶ Communications "A" [6107](#), [6114](#), [6131](#) and [6132](#).

Abbreviations and Acronyms

AEIRR: Annual Effective Internal Rate of Return

AFJP: *Administradora de Fondos de Jubilaciones y Pensiones.*

ANSES: *Administración Nacional de Seguridad Social.* National Social Security Administration.

APE: *Acuerdos Preventivos Extra-judiciales.* Preliminary out-of-court agreements.

APR: Annual Percentage Rate.

b.p.: basis 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 Exchange.

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

BIS: Bank of International Settlements.

BM: Monetary Base. Defined as money in circulation plus current account deposits in pesos by financial institutions in the BCRA.

Boden: *Bonos del Estado Nacional.* Federal Bonds.

Bogar: *Bonos Garantizados.* Guaranteed Bonds.

BoJ: Bank of Japan.

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

BOVESPA: São Paulo Stock Exchange.

CAMEL: Capital, Assets, Management, Earnings and Liquidity.

Cdad. de Bs. As.: *Ciudad de Buenos Aires.* Buenos Aires City.

CDS: Credit Default Swaps

CEC: *Cámaras Electrónicas de Compensación.* Electronic Clearing Houses.

CEDEM: *Centro de Estudios para el Desarrollo Económico Metropolitano.* Study Center for Metropolitan Economic Development.

CEDRO: *Certificado de Depósito Reprogramado.* Rescheduled Deposit Certificate.

CER: *Coeficiente de Estabilización de Referencia.* Reference Stabilization Coefficient.

CIMPRA: *Comisión Interbancaria para Medios de Pago de la República Argentina.*

CNV: *Comisión Nacional de Valores.* National Securities Commission

CPI: Consumer Price Index.

CPI Others: CPI excluded goods and services with high seasonal and irregular components, regulated prices or high tax components

Credit to the public sector: includes the position in government securities (excluding LEBAC and

NOBAC), loans to the public sector and compensation receivable.

CVS: *Coeficiente de Variación Salarial.* Wage variation coefficient.

DGF: Deposit Guarantee Fund.

Disc: Discount bond.

EB: Executive Branch.

ECB: European Central Bank.

EMBI: Emerging Markets Bond Index.

EMI: *Estimador Mensual Industrial.* Monthly Industrial Indicator

EPH: *Encuesta Permanente de Hogares.* Permanent Household Survey.

Fed: Federal Reserve of US.

FOMC: Federal Open Market Committee (US).

FS: Financial Stability.

FSR: Financial Stability Report.

FT: Financial trust.

FUCO: *Fondo Unificado de Cuentas Corrientes Oficiales.* Unified Official Current Account Fund.

FV: Face value.

GDP: Gross Domestic Product.

HHI: Herfindahl-Hirschman Index.

IADB: Inter-American Development Bank.

IAMC: *Instituto Argentino de Mercado de Capitales.*

ICs: Insurance Companies.

IDCCB: *Impuesto a los Débitos y Créditos en Cuentas Bancarias.* Tax on Current Account Debits and Credits.

IFI: International Financial Institutions: IMF, IADB and WB.

IFS: International Financial Statistics.

IMF: International Monetary Fund.

INDEC: *Instituto Nacional de Estadísticas y Censos.* National Institute of Statistics and Censuses.

IndeR: *Instituto Nacional de Reaseguros.* National Institute of Reinsurance.

IPMP: *Índice de Precios de las Materias Primas.* Central Bank Commodities Price Index.

IPSA: *Índice de Precios Selectivo de Acciones.* Chile Stock Exchange Index.

IRR: Internal Rate of Return.

ISAC: *Índice Sintético de Actividad de la Construcción.* Construction Activity Index.

ISDA: International Swaps and Derivates Association.

ISSP: *Índice Sintético de Servicios Públicos.* Synthetic Indicator of Public Services.

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

LIBOR: London Interbank Offered Rate.

m.a.: Moving average.

M2: Currency held by public + quasi-monies + \$ saving and current accounts.

M3: Currency held by public + quasi-monies + \$ total deposits.

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

MAS: Mutual Assurance Societies.

MC: Minimum cash.

MEC: Electronic Open Market.

MECON: Ministerio de Economía y Producción. Ministry of Economy and Production.

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 and guarantees security trades at the BCBA.

MEXBOL: *Índice de la Bolsa Mexicana de Valores*. México Stock Exchange Index.

MF: Mutual Funds.

MIPyME: *Micro, Pequeñas y Medianas Empresas*. Micro, Small and Medium Sized Enterprises.

MOA: *Manufacturas de Origen Agropecuario*. Manufactures of Agricultural Origin.

MOI: *Manufacturas de Origen Industrial*. Manufactures of Industrial Origin.

MP: Monetary Program.

MR: Market rate.

MRO: *Main refinancing operations*.

MSCI: Morgan Stanley Capital International.

NA: Netted assets.

NACHA: National Automated Clearinghouse Association.

NBFI: Non-Bank Financial Institutions (under Central Bank scope)

NBFI: Non-Bank Financial Intermediaries (out of Central Bank scope)

NDP: National public debt.

NFPS: Non-financial national public sector's.

Nobac: *Notas del Banco Central*. BCRA notes.

NPS: National Payments System.

NW: Net worth.

O/N: Overnight rate.

OCT: *Operaciones Compensadas a Término*. Futures Settlement Round.

OECD: Organization for Economic Co-operation and Development.

ON: *Obligaciones Negociables*. Corporate bonds.

ONCCA: *Oficina Nacional de Control Comercial Agropecuario*

OS: *Obligaciones Subordinadas*. Subordinated debt.

P / BV: Price over book value.

p.p.: Percentage point.

Par: Par bond.

PGN: *Préstamos Garantizados Nacionales*. National Guaranteed Loans.

PF: Pension Funds.

PPP: Purchasing power parity.

PPS: Provincial public sector.

PS: Price Stability.

PV: Par Value.

q.o.q: quarter-on-quarter % change.

REM: BCRA Market expectation survey.

ROA: Return on Assets.

ROE: Return on Equity.

Rofex: Rosario Futures Exchange.

RPC: *Responsabilidad Patrimonial Computable*. Adjusted stockholder's equity, calculated towards meeting capital regulations.

RTGS: Real-Time Gross Settlement.

s.a.: Seasonally adjusted.

SAFJP: *Superintendencia de Administradoras de Fondos de Jubilaciones y Pensiones*. Superintendence of Retirement and Pension Funds Administrations.

SAGPyA: *Secretaría de Agricultura, Ganadería, Pesca y Alimentos*. Secretariat for agriculture, livestock, fisheries, and food.

SEDESA: *Seguro de Depósitos Sociedad Anónima*.

SEFyC: Superintendence of Financial and Exchange Institutions.

SME: Small and Medium Enterprises.

SSN: *Superintendencia de Seguros de la Nación*.

TA: *Adelantos transitorios del BCRA al Tesoro*. Temporary advances.

TFC: Total financial cost.

TGN: *Tesorería General de la Nación*. National Treasury

UFC: Uniform Federal Clearing.

UIC: Use of Installed Capacity.

UK: United Kingdom.

US\$: United States dollar.

US: United States of America.

UTDT: Universidad Torcuato Di Tella.

VaR: Value at Risk.

VAT: Value added Tax.

WB: World Bank.

WPI: Wholesale Price Index.

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