Financial Stability Report

Second Half 2016

BANCO CENTRAL
DE LA REPÚBLICA ARGENTINA

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ISSN: 1668-5164
Online edition

Publication date | November 2016

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Editorial Design | Communication Senior Management

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 May 2017.

Autonomous City of Buenos Aires, November 23, 2017.

Contents

Executive Summary

The financial system continues to show the signs of strength pointed out in the previous edition of the Financial Stability Report (FSR)[1]. The intrinsic risks of the activity are limited, the liquidity and solvency levels are wide, and the supervisory and prudential regulatory framework is in line with the international standards. This setup provides the financial system with a solid starting point to face a process of sustained expansion of its intermediation activity and thus to gradually move to the depth level of the sector in neighboring and other emerging economies. In this sense, in the last few months there have been signs of rebound in the local intermediation activity, such as the moderate growth of credits and deposits in real terms during the third quarter. For this to consolidate and Argentine individuals' savings to be channeled through the financial system, it is necessary to achieve the BCRA's plan of keeping positive real interest rates for depositors in a stable environment.

The local banking system is undergoing a transition context with both opportunities and challenges. On one hand, the drop in the economic activity level seems to have moderated. Inflation expectations have decreased due to an inflation targeting regime launched by the BCRA. Nominal interest rates are declining —together with disinflation—, a yield curve in pesos is now being created —thanks to the placement of sovereign bonds in the last few months—, and savings instruments are beginning to show positive real expected yields. On the other, banks are now feeling pressures on their profitability, as they no longer earn the windfall profits derived from inflation. In particular, entities fund part of their loans —on which they charge a high nominal interest rate— with resources from demand deposits that have virtually no financial cost. In this sense, disinflation and the maintenance of positive real interest rates for savers, create downward pressures on interest margins earned by banks. This is coupled by an environment of higher competition and innovation, which also impacts the business' profitability as was carried out.

This situation entails the challenge to increase operational efficiency by improving productivity (including the incorporation of technology) as well as by benefiting from economies of scale. A comparison between local entities or between these and their counterparts in other economies shows that there is significant room for efficiency improvements. Additionally, the international experience confirms the expectation that financial intermediation levels in terms of GDP should strongly expand as a results of the disinflation process, allowing the achievement of economies of scale.

The BCRA has been matching the challenge of adapting institutions to the new context, and promoting growth with inclusion. The changes made in regulation in the last few months encourage the expansion of financial intermediation, preserving the value of credit both through lower inflation levels and through the adoption of new savings and credit instruments (adjusted by UVI and UVA[2], among other). BCRA's policies also foster cost cuts, by promoting digital technologies and the reduction of the regulatory bureaucracy. The simplification of the process

[1] Published last July.

[2] Mortgage loans in UVA are already in excess of $1 billion.

required to open subsidiaries, for instance, has made it possible to open 70 new branches in 9 months in 2016.

In the last few weeks, the results of the election in the US created a source of uncertainty in the international context. Although it is too soon to estimate the mid and long-term consequences of this new situation, financial markets show expectations of change in global growth, differentiated impacts on commodity prices, exchange rates and profitability in the different sectors, as well as newly defined outlooks on developed countries' monetary policies and movements in yield curves.

Argentina is in a relatively favorable situation as regards the two channels of potential impact — the real and the financial one. Trade is not very concentrated in terms of destinations and products, and it represents a small share of the domestic product, compared with other emerging economies. The exposure to a capital outflow scenario is also relatively low due to the moderate external debt levels of the central Government and companies, and to the very scarce portfolio positions in Argentine assets among volatile funds. Instead, the positive effect of the expected Brazilian recovery, forecast for the fourth quarter of the year, the beneficial outlooks for local activity, and the changes in policy in the last few months have created a relatively favorable framework for Argentina. Nevertheless, the news from abroad in the last few weeks will demand closer monitoring, with the possibility of a (still unlikely) negative scenario with lower risk appetite, a possible capital outflow from emerging economies' assets, and a certain tension in the international financial markets. As pointed out, Argentina would show a relatively low vulnerability position to such scenario.

To conclude, the most serious challenges for local entities are related to achieving profitability. They will be approached essentially with expected growth, as systemic vulnerability sources are still relatively limited. Interconnection among entities is limited, the concentration of risk factors is low, and there is a wide room for developing the credit market. Entities keep high liquidity levels —most liquid assets account for 47 percent of total deposits. Credit risk is limited, with a moderate exposure in bank balance sheets, a low and stable delinquency —less than 2 percent of the total— and high provisioning —above 136 percent of the nonperforming credit. Indebtedness and financial burden levels among households and firms continue to be moderate. Banks are still showing significant strength in the face of an extreme materialization of an unlikely stress scenario. Lastly, exposures to all other intrinsic risks related to the activity (currency, interest rate and market) presented low levels and no substantial changes from the previous FSR.

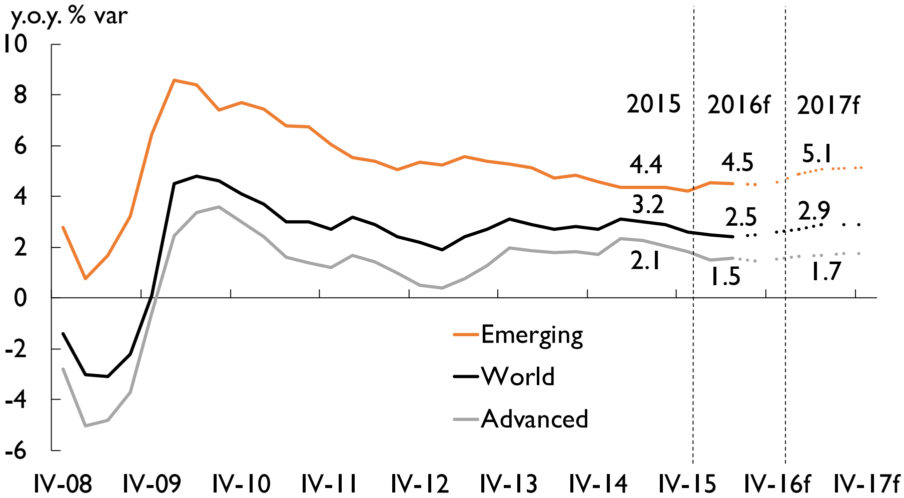
1. Context

In the last few weeks, the results of the US election have opened a source of uncertainty that enable to forecast a context of higher volatility for the next few months. Although as of the publication of this FSR it would be too soon to estimate the consequences of these election results, financial markets show a widespread appreciation of the US dollar and a widening in the yield of long-term US Treasuries. The behavior of these variables will continue to be under analysis, due to the vulnerability of emerging economies to changes in the international context. In response to eventual impacts, some of the characteristics of the Argentine economy would mitigate the adverse effects through the trade channel (diversified international trade with a relatively low weight as compared to other emerging markets) and the financial channel (still-moderate leverage). The local recession seems to be moderating, inflation expectations are more controlled (following the launch of the Inflation Targeting Regime) and nominal interest rates continue on their downward trend. The attainment of positive real returns on benchmark financial instruments and the progress made in creating a yield curve in pesos will foster saving growth and a deepening of the financial system.

1.1 International Context

As explained in the last edition of the FSR, the Argentine economy is undergoing a transition period that entails macroeconomic change and restructuring, as well as a return to international markets, within a shifting, but still favorable, international context. In the last few weeks, however, the results of the election in the US have opened new sources of uncertainty.

Figure 1.1 | Global Growth. Advanced and Emerging Economies



Source: BCRA based on IMF data, FocusEconomics and Central Bank of Brazil Focus Survey

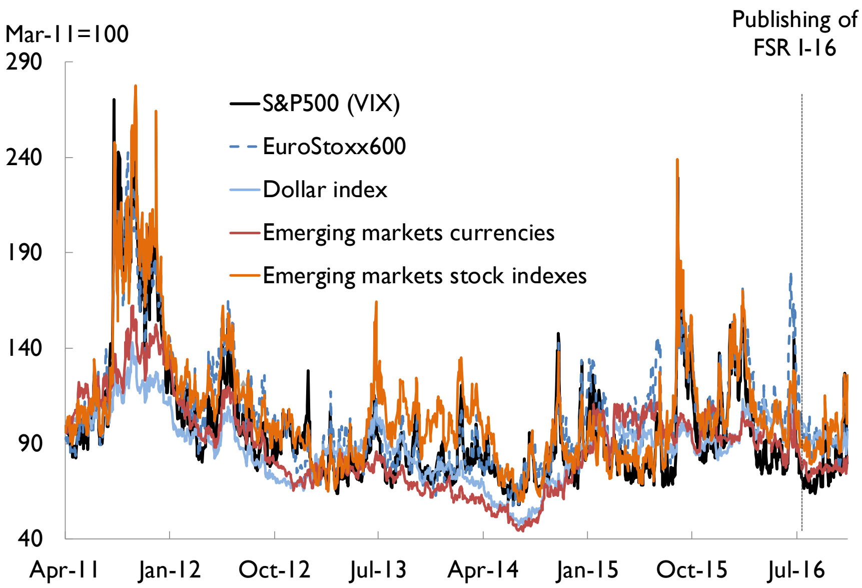
As the actual policies to be adopted by the newly elected US administration become better known, it will be possible to have a clearer image of their impact. Nevertheless, the behavior of financial instrument prices is already showing signs of change in expectations, for instance, regarding the possibility of fiscal stimuli, a reassessment of trade agreements, and regulatory amendments. If these types of measures were to materialize, they would have an impact on the US fiscal deficit, with consequences on economic activity (both overall and sectoral), interest rates, inflation levels, and the US exchange rate, among other factors.

The question would remain as to the impact of these developments on different US agents, including households and corporations, as well as to the responses of other large economies. In the short term, a cautious context is expected to prevail at the international level, with higher volatility in financial markets.

The situation in Argentina might be affected by these events through two channels —the commercial and the financial. As to the real channel, most emerging economies are open and depend on international trade, whose behavior might be affected by an uncertainty context regarding the changes in the US policy and the Brexit. In this sense, Argentina will have to closely monitor the price of export goods (in particular: commodities), any changes in the trade policy, and the evolution of exchange rates. Our country is currently in a relatively favorable position, with little trade concentration in terms of destinations and goods, compared to other emerging economies, and with a lower exports-to-GDP ratio.

Potential changes in the US fiscal, trade, and foreign policies might affect global economic growth. This comes into play in a context of already weakened growth and stagnant global international trade volumes (see Figure 1.1). Although the direct impact of changes in the US would not be significant for Argentina (around 7 percent of the country's exports are shipped to that destination, based on the last 12 months), the effect is less clear at the global level, in particular given the situation of Argentina's main trade partners, including China, Europe (already affected by the Brexit) and Brazil (which was starting to show signs of stabilizing after the recession). Growth forecasts for Argentina's main trade partner still see expansion beginning to materialize during the last quarter of the year, which would have a positive impact on the local economy.

Figure 1.2 | Financial Markets and Expected Volatility

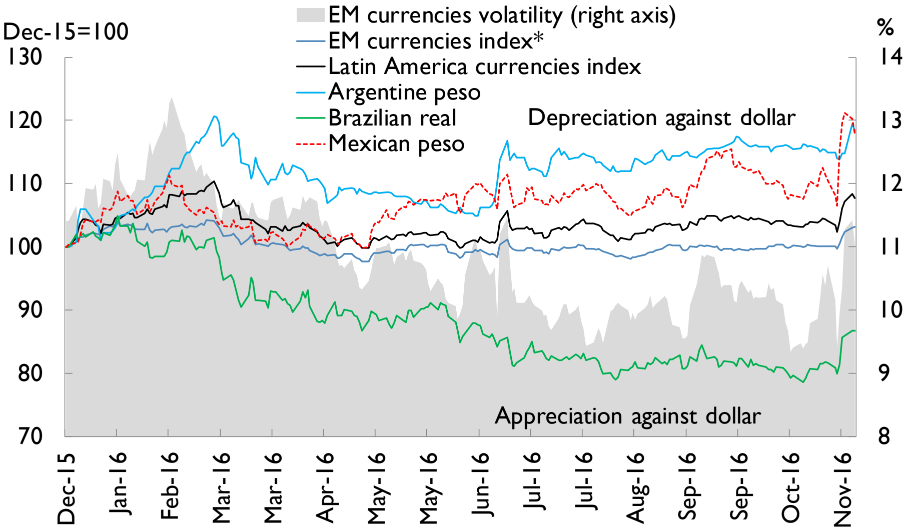


Source: Bloomberg. Options implied volatilities

Until the US election, commodity prices were expected to remain broadly unchanged, due to the abundant supply of the main primary products and the extensive idle capacity at the global level in certain sectors. However, the US election has had a differentiated impact by kind of product, strengthening basic metals (associated with infrastructure spending) and putting downward pressure on the rest (including grains and oil/gas). Potential changes in the US trade and foreign policies have also gained relevance, as well as the responses of other world powers (for instance, a shift towards higher protectionism).

The second channel through which the international context might affect the Argentine economy is the financial one. Doubts about the consequences of the US election have resulted in a re-emergence of the volatility expected for main assets, following several months of a downward trajectory (see Figure 1.2). As to prices, the US dollar has reinforced its appreciation trend against the currencies of other developed economies[3]. Also, after being relatively stable against currencies of emerging economies, it has strengthened after the US elections, subsequently showing a remarkable downturn in the Latin American currencies due to the depreciation of the Mexican Peso and, to a lesser extent, the Brazilian Real (see Figure 1.3). Exchange markets are expected to maintain a certain degree of volatility in the short term[4].

Figure 1.3 | Exchange Rates against US Dollar

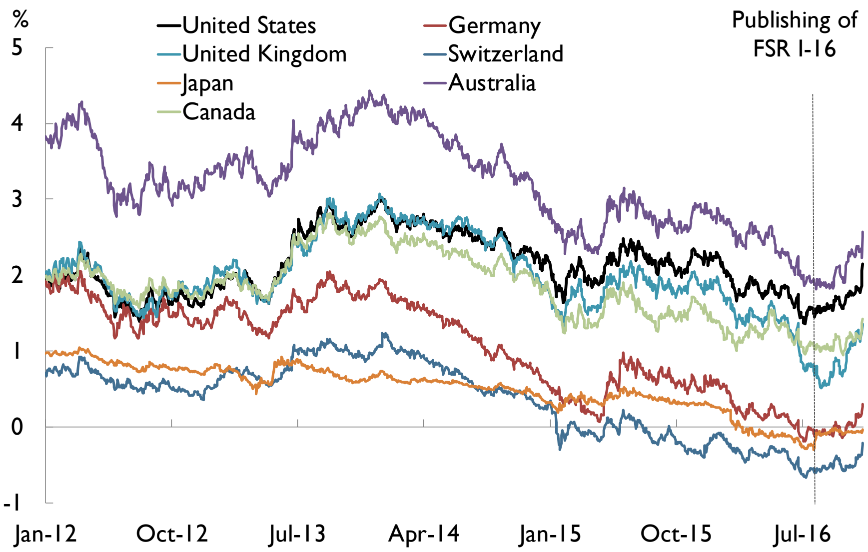


* Index elaborated by BCRA, simple average of 30 currencies against dollar
Source: BCRA based on Bloomberg.

Another main effect of the US election has been the returns' widening of long-term sovereign debt in developed economies. The yield of 10-year US Treasuries went from nearly 1.5 percent at the date of publication of the last edition of the FSR (end of July) to 1.8 percent in late October, to 2.2 percent in mid-November, following the election (see Figure 1.4)[5].

[3]Before the election, the dollar tended to appreciate against other currencies of developed economies, mainly by virtue of its revaluation against the pound due to the uncertainty regarding how and how fast the UK would exit the European Union. The concern about the situation of certain European banks also had an influence (including some German and Italian financial institutions). In broader terms, this was coupled with doubts arising from banks' low profitability in a context of virtually zero interest rates (see *Global Financial Stability Report*, IMF, October 2016).
[4]The effective exchange rate for trade might be affected by potential changes in the tariff frameworks.
[5]In terms of the potential response of other major economies to changes in the policies adopted in the US, it should be taken into account that the main international holders of Treasuries are China and Japan.

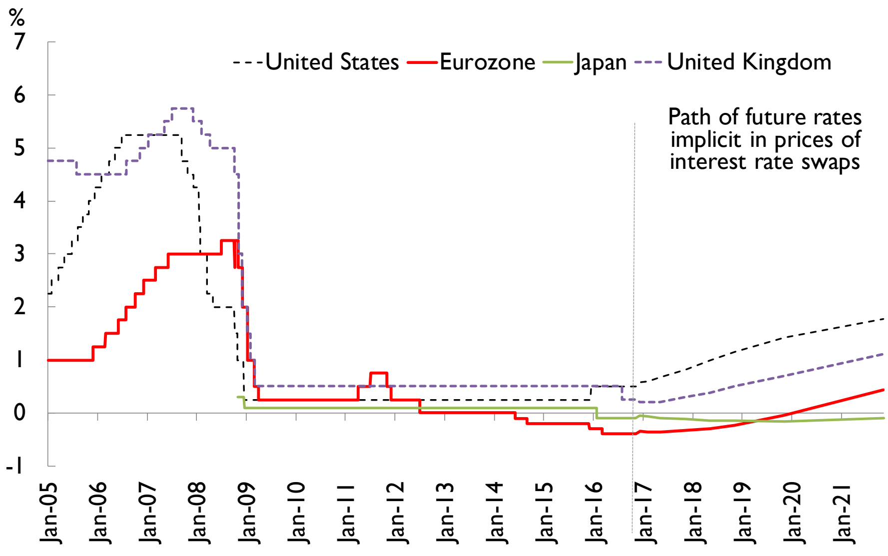
Figure 1.4 | 10-year Sovereign Debt Yields



Source: Bloomberg

Although the policy of gradual normalization of short-term interest rates is expected to continue in the US (see Figure 1.5), caution increased after the election as to when the next hike will take place and how long and intense the rising rates cycle will be[6]. In other developed economies (such as Europe and Japan), there has been a certain degree of skepticism regarding the effectiveness of monetary stimulus policies as well as the possibility of further deepening.

Figure 1.5 | Evolution and Expectations on Policy Interest Rates

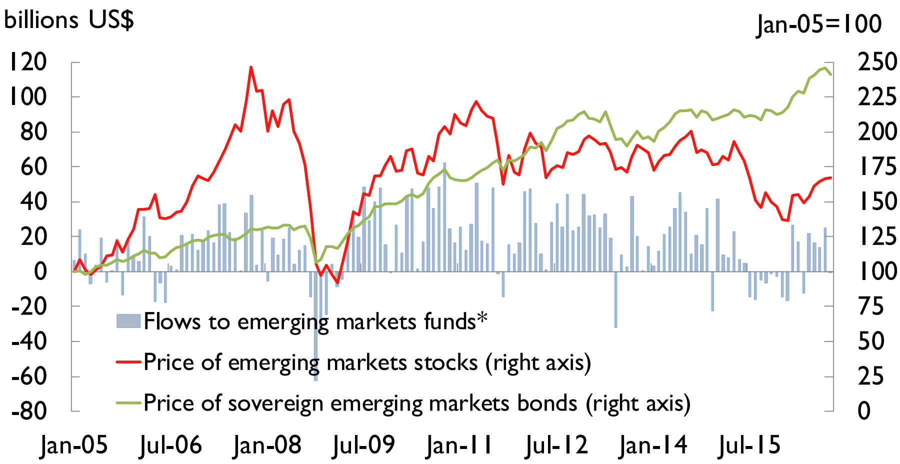


Source: Bloomberg

[6]The US election result has triggered some uncertainty regarding the future makeup of the Federal Open Market Committee of the Federal Reserve and its effect on the policy bias.

After years with historically low international interest rates, the search for better returns through assets with higher relative risk has promoted flows to emerging markets and positioning in financial instruments in those countries (with growing leverage in the corporate sector of large emerging economies). This situation has led to some vulnerability of emerging economies to a shift in global risk appetite. A framework of significant capital outflows and steep worsening of the prices of risky assets could potentially create a contagion effect, adding tension in international financial markets' stability.

Figure 1.6 | EMDEs Credit Mutual Funds and Asset Prices



* Portfolio flows to emerging markets, elaborated by the Institute of Intenational Finance (IIF).
Source: BCRA based on Bloomberg & IIF.

In this sense, whereas funds specialized in emerging economies instruments reported significant inflows from non-resident investors between August and October (see Figure 1.6), in November, they started reporting outflows. The quoted prices of shares and bonds (both sovereign and corporate) from emerging economies went from a positive trend to a widespread weakening in November, although so far this worsening is not particularly outstanding as compared to previous episodes of market volatility.

Argentina has limited exposure in terms of its financial channel, given that its levels of total and sectoral debt were moderate to begin with. However, with a worse downturn of the international context, access to international financing might become restricted, creating a stronger pressure on agents indebted in foreign currency, particularly those without adequate coverage to changes in the exchange rate.

1.2 Local Context

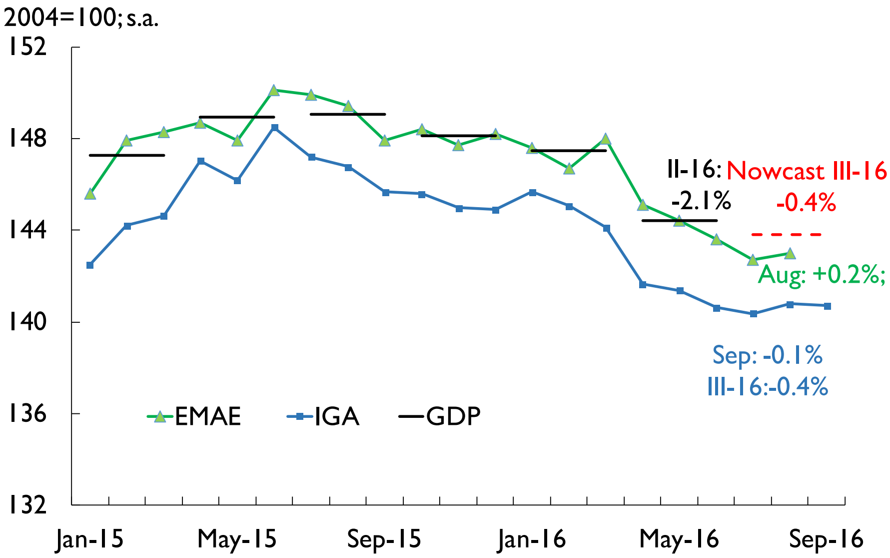
1.2.1 Activity[7]

Since the last edition of the FSR, there have been early signs that the recession which began in the second half of 2015 might be moderating. The recent evolution of the financial intermediation activity and the results of the BCRA's Survey on Credit Conditions (*Encuesta de Condiciones Crediticias, ECC*) point in the same direction (see Chapter 2).

Gross domestic product (GDP) contracted 0.5 percent s.a. in the first quarter and 2.1 percent s.a. in the second (see Figure 1.7). For the third quarter, the BCRA's Nowcast[8] expects a further drop in activity. Meanwhile, some forward indicators which had shown positive signs towards the end of the third quarter, such as the Leading Activity Index (*Índice Líder de Actividad, ILA*), developed by this institution, weakened in October.

[7]For a detailed analysis, see the *Monetary Policy Report* - October 2016.
[8]For details on methodology, see Exhibit 3 of the *Monetary Policy Report* - July 2016.

Figure 1.7 | Activity

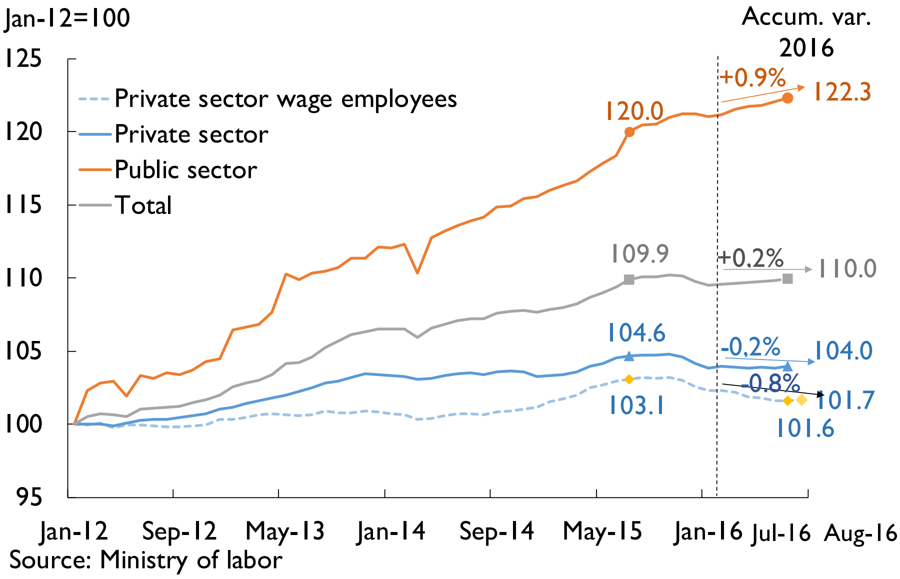


Source: INDEC, Orlando J. Ferreres and own estimates

Aggregate demand components have been behaving in a mixed manner. Exports of goods and services marginally slowed down as a result of the weakening demand from our trade partners, especially Brazil, and the drop of agricultural commodities prices.

Income levels in the major debtors in the financial system —households and the main components of the manufacturing, agricultural, and service sectors— continue to be rather uneven. On the one hand, households —which channel around 45% of banks' loan portfolio for the private sector— still face a labor market with low dynamism. Total occupation registered in the private sector remained almost unchanged in the first seven months of the year (see Figure 1.8), with part of the fall in wage employment offset by a rise in the number of self-employed workers. Wage levels registered by the AFIP, in real terms, started recovering in August, after presenting a downward trend since October 2015. Looking forward, an eventual improvement in this sector should enable an expansion in household credit demand and support the quality of the assets in the financial system in a context of low indebtedness (see Chapter 3 and Exhibit 4).

Figure 1.8 | Evolution of Registered Employment and Salaries – Seasonally Adjusted Series



Source: Ministry of labor

Manufacturing production (representing 21% of bank credit to the private sector) contracted in the first semester of 2016, but may have reached a minimum during the third quarter. In that period, the production of non-metal minerals (cement and other construction materials) showed a recovery, partly due to building activity. In the third quarter, leading indicators show some rebound in chemical, food and beverages sector and the metal-mechanical industry, due to the increase in the production of agricultural machinery. The basic metal industry continued to fall in this period, as well as the automotive sector[9] (which was impacted by the decline in exports, particularly to Brazil).

Agricultural production (10.1 percent of bank credit to the private sector) continued to reflect the positive effect of the economic policy measures implemented since December 2015, mainly the elimination of trade restrictions and distortive taxes, resulting in record crops, such as for corn. The livestock sector is in the process of recovery in terms of quantities, with a sustained decline in slaughtering and in the share of female animals slaughtered. Other activities linked to the primary sector had a varied performance, such as mining and quarrying, and primary oil production, with a marginal decrease.

Service offering (9.8 percent of bank credit to the private sector) increased 0.7 percent year-on-year in the first semester[10], with an uneven performance between the various industries. The stability in retail stores' sales surveyed by the Argentine Medium-Sized Business Confederation (*Confederación Argentina de la Mediana Empresa, CAME*) and the July-August evolution of sales in real terms of supermarket and shopping centers in GBA show a low dynamism for the sector in the second half of the year.

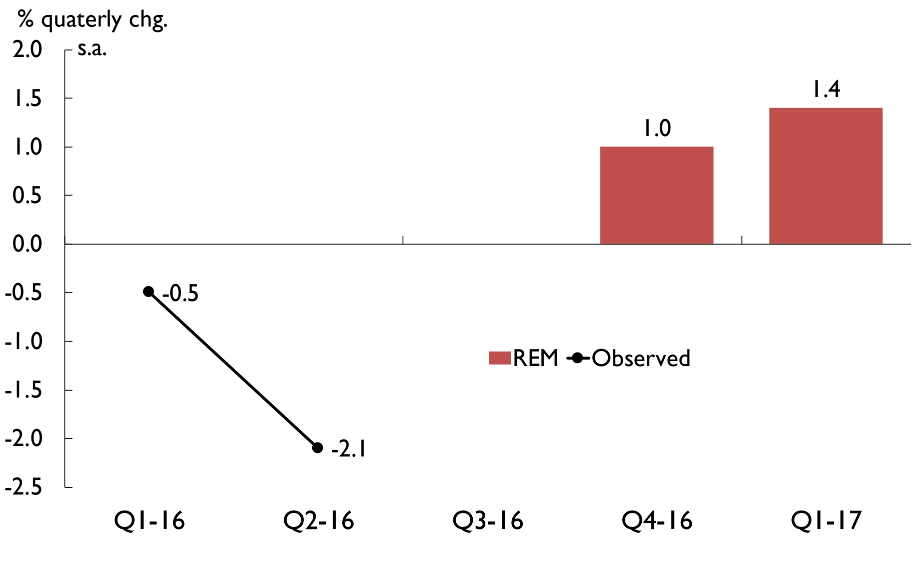
Construction[11] dropped in the last few months, after the recovery of the activity levels in the third quarter, according to partial leading indicators. Based on the Summarized Construction Activity Indicator (*Indicador Sintético de Actividad de la Construcción, ISAC*), activity in the sector decreased 12.4 percent year-on-year in the first semester (accumulating a 12.8 percent year-on-year decline by September). Meanwhile, partial indicators such as the "Construya" Index[12] and cement orders fell 0.8 percent and 4.3 percent in October, respectively, after having increased around 6.5 percent s.a. in the third quarter

[9] Resources channeled to the automotive sector represent approximately 1.2% of the financing from the financial system to the private sector.
[10] Information of National Accounts.
[11] This sector only accounts for 2.3% of bank financing to firms and households.
[12] Activity index of leading construction companies. Construya Group.

relative to the second. Public works appear to have stimulated the activity in the sector in the third quarter, as suggested by cement and asphalt orders.

Regarding the non-financial public sector, after a first semester in which primary income and expense grew at a similar rate (27 percent year-on-year), in the third quarter, expenditure showed a higher dynamism. This is mainly the consequence of the National Programme for the Historic Reparation to Retirees and Pensioners (*Ley de reparación histórica a jubilados*), the extension of the benefits of family allowances, and the establishment of a slower path for the update of energy fees. Income growth moderated due to measures aimed at reducing tax pressure and to agreements with the provinces over the distribution of national resources. The low level of public sector debt, together with the restoration of access to markets, enables a gradual approximation of the fiscal rebalancing announced by the National Government to ensure public finance sustainability. In this sense, since the last publication of the FSR, there have been new debt placements with significant improvements in financial conditions[13].

Figure 1.9 | Economic Growth Expectations



Source: Markets Expectation Survey (REM)- BCRA (Oct-16) and INDEC.

The expected higher demand both internal and external (from a recovery of trade partners) would stimulate productive sectors. The consolidation of the disinflation process initiated with the formal adoption of an Inflation Targeting Regime will strengthen the economic recovery, with a positive impact on income distribution[14]. The BCRA expects that the recovery foreseen for the economic activity will not compromise the disinflation process through demand pressures, given the still high idle capacity and unemployment levels. Growth expectations are shared by the market (see Figure 1.9).

The financial system should benefit from the cyclical recovery of activity and the sustained economic growth expected subsequently to expand its resource intermediation volumes with corporations and households, and thus, be able to face the structural challenges in terms of profitability and capital generation in the next periods (see Chapter 2).

1.2.2 Monetary Context and Prices

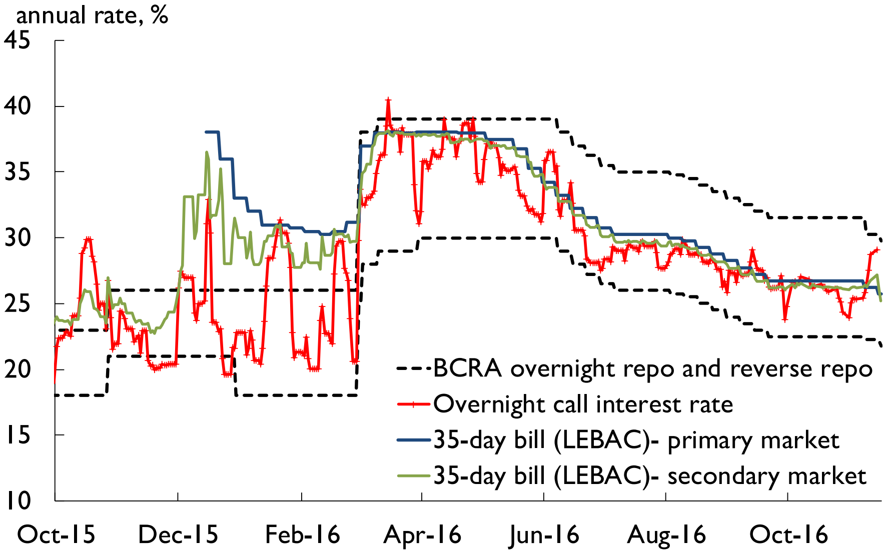
[13] Provinces have also gained access to external financing with improved terms.
[14] The inflationary tax accounts for a fifth of a family's income in the lower-income decile. See Capello, M., Grión, N. and Degiovanni, P. (2015): "The inflationary tax offsets the benefit that families receive for the expenditure in economic subsidies". *Monitor Fiscal*, year 10, N° 25, Fundación Mediterránea.

The BCRA has recently announced the adoption of an Inflation Targeting Regime, and begun a transition towards its formal adoption in 2017[15]. In September, the BCRA disclosed its decreasing inflation target range, with targets of 12 percent to 17 percent for 2017, 8 percent to 12 percent for 2018, and 5 percent for 2019 onward. This Regime implies that the BCRA will use all the monetary policy instruments available to achieve its goals.

During the transition to the new Regime, the BCRA has migrated from a scheme based on the control of monetary aggregates to the adoption of an interest rate as the main policy instrument. Starting from March 2016, it was temporarily established that the monetary policy rate would be the 35-day LEBAC, which bids on a weekly basis. In order to manage liquidity conditions and mitigate interest rate volatility, the BCRA started the purchase and sale transaction of securities in the secondary market. Moreover, the BCRA interest rates for the repo and the reverse repo were realigned, establishing a fluctuation band around which inter-financial market interest rates fluctuate, reducing their volatility. This fluctuation band for repurchase and reverse repurchase rates has been modified in line with the changes in the monetary policy rate observed in the last few months (see Figure 1.10), when the first signs of decreasing inflation pressures started to appear. As from January 2017, the monetary policy rate will be the mean of its 7-day operations.

Figure 1.10 | Policy, Call-Money and BCRA's REPO Interest Rates

Weighted Average Rate by Amounts



Source: BCRA

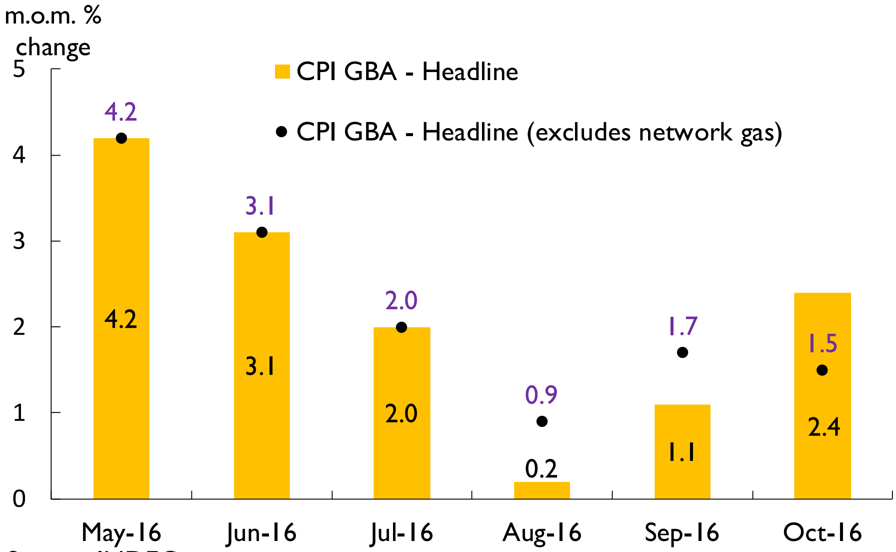
The third quarter showed the beginning of a disinflation process as a proof of the effectiveness of the monetary policy to limit the effects of the elimination of the distortions that affected the economy. From July to October, inflation measured by the INDEC's Consumer Price Index (CPI) GBA slowed to a 1.4 percent monthly average, 2.2 percentage points less than in May-June (see Figure 1.11). Although the general price level was considerably volatile in this period due to the measures adopted regarding gas fees[16], core inflation (which excludes the inherent volatility of regulated and seasonal prices) slowed as well[17].

[15] For a detailed analysis see the *Monetary Policy Report* - October 2016.

[16] In August and September, the CPI declined due to a ruling of the National Supreme Court Justice declaring null the resolutions that had modified the fee structure in last April, which meant that fees needed to be retracted to the previous levels. In October, the Price Index increased once again, due to the adjustment of residential gas fees decided at the public hearing required by the ruling. The same will happen, though to a lesser extent, in November.

[17] Likewise, the core inflation rate calculated by the BCRA using a variety of statistical measures to the available information for the city of Buenos Aires has slowed in the third quarter. For more information, see Box 5 of the *Monetary Policy Report* - July 2016.

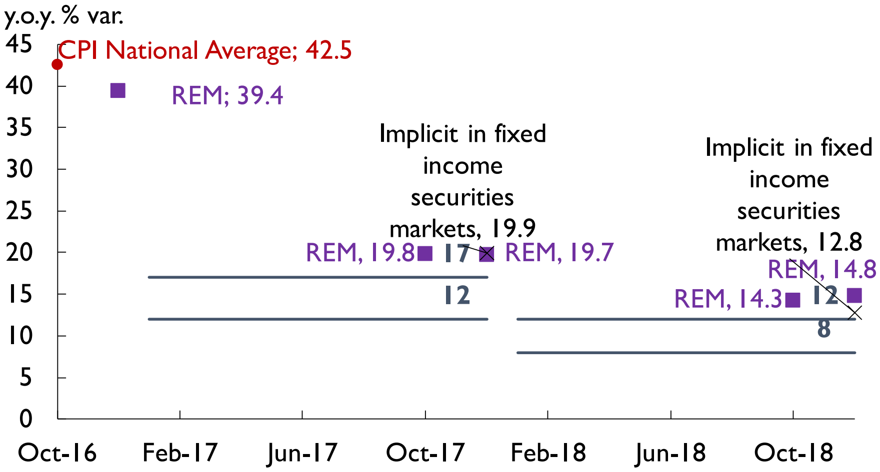
Figure 1.11 | Consumer Price Index



Source: INDEC

Expectations for the fourth quarter are, in average, above the BCRA's aim of achieving a 1.5 percent monthly inflation (see Figure 1.12). However, the policies adopted, coupled with the disclosure of the BCRA's goals, have contributed to keep the core inflation expected by the market anchored around a 1.5 percent monthly rate for that period. The ongoing disinflation process is expected to continue in 2017, with a steep fall in the year-on-year inflation rate in the first semester[18], a scenario that would impact on the inflows and outflows of the financial system (see Chapter 2). Given that private analysts' estimations are still above the goals, the BCRA will keep its monetary policy with the goal of maintaining the expectations within the established fluctuation bands.

Figure 1.12 | Inflation Expectations



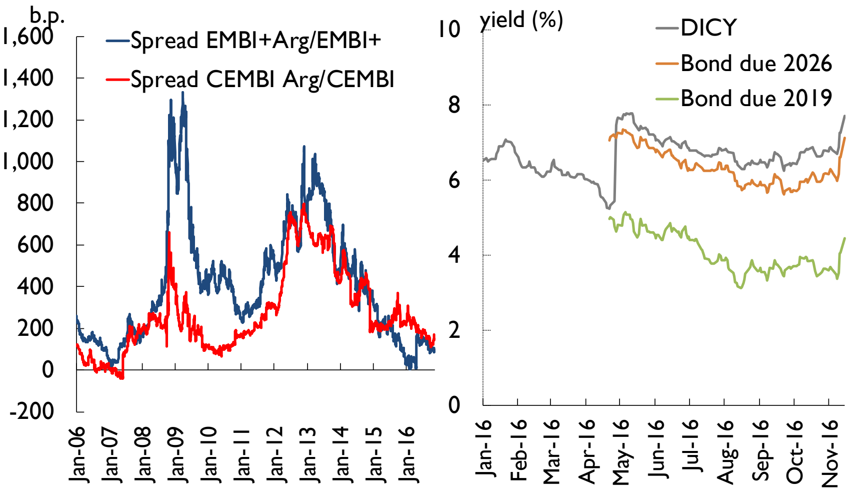
Source: BCRA based on sub sovereign statistical institutes and Market Expectations Survey (REM, October 2016)

[18] Year-on-year variation is expected to be less than 25 percent in April and around 20 percent in May.

1.2.3 Capital Market

With a still-favorable context for emerging countries and positive expectations for the Argentine economy, from August to October, yields of government securities[19] and foreign currency corporate bonds continued to contract (see Figure 1.13). Thus, since the last edition of the FSR, new debt placements have been made by the public and private sectors in international markets, accumulating in 2016 a level well above that of previous years (see Figure 1.14). Following the US election, the yields of debt in dollars started widening, as the favorable context for debt placement in external markets becomes more uncertain.

Figure 1.13 | Risk Premium and Yields on Sovereign Bonds

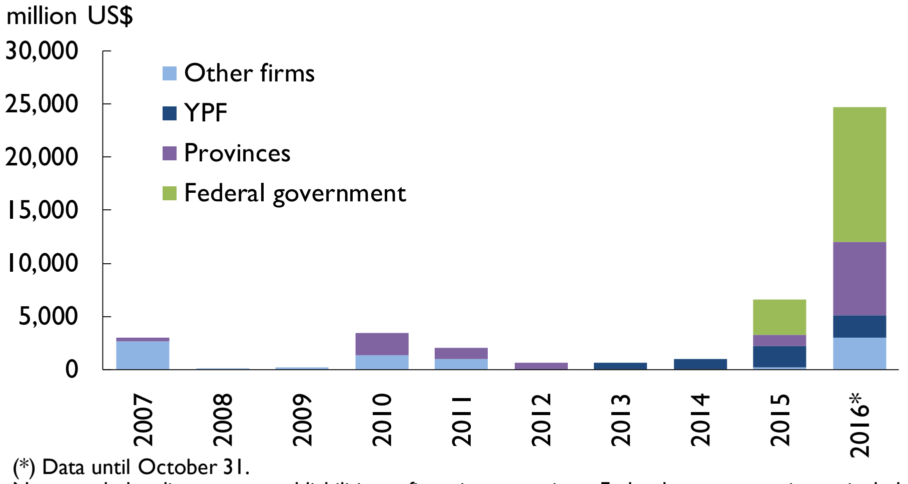


Note: in April 2016 Argentine EMBI+ risk premium and Discount bond (DICY) yield registered a correction due to the lift of the the injunction against Argentina which impeded until that moment the payment on debt in New York.
Source: BCRA based on Bloomberg and Reuters.

So far, access to international funding has made it possible to diversify funding sources and carry out operations to improve the country's financial profile by taking advantage of the global context of low interest rates. Moreover, it has made resources available in the domestic market to fund other agents (such as smaller local companies). However, this kind of financing entails risks, which are being monitored. Although Argentina's starting point presented a relatively low level of leverage, the debt increase with foreign holders might make the domestic system more vulnerable to changes in the conditions of international markets. On the other hand, these operations may imply a capital inflow, with a potential impact on the exchange rate.

[19] The positive trend in the price of government securities (expected to last over the next few months) captures the effect of several factors: external demand of instruments with attractive yields relative to those from developed economies, an expectation that the economy will further its positive trajectory, the effect of the Tax Amnesty Regime (*Regímen de Sinceramiento Fiscal*), the potential reform of regulations regarding the capital market, potential improvements in the rating of Argentine debt, and technical factors (such as the change in the weight of Argentine bonds in the Emerging Markets Bond Index, EMBI).

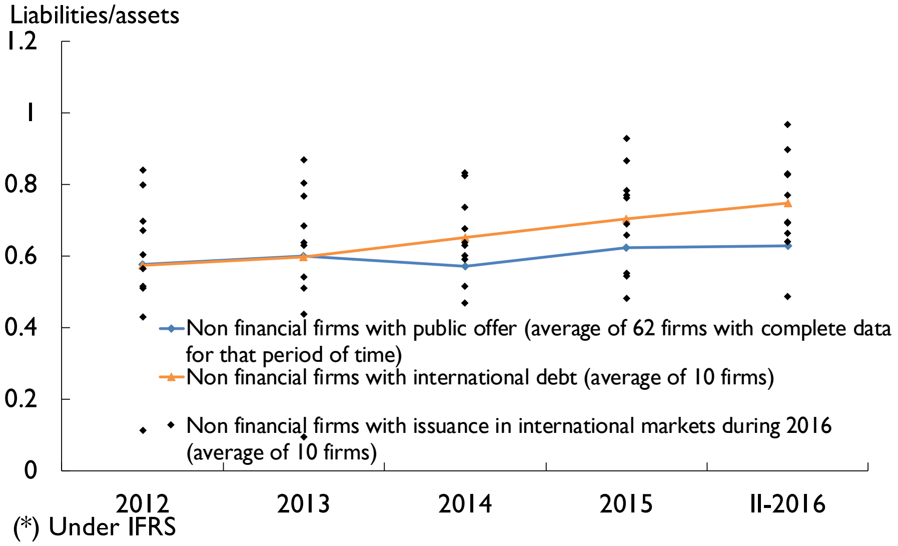
Figure 1.14 | Debt Issuance on International Markets



(*) Data until October 31.
Note: excludes direct swap and liabilities refinancing operations. Federal government issues include dollar-denominated bonds under domestic legislation placed by public auction (which may contain a portion of domestic investors).
Sources: BCRA based on BCBA, CNV, IAMC, MHyFP and Bloomberg.

Although the degree of leverage has increased for the firms that have placed debt abroad, it is still at reasonable levels, slightly above the average for the aggregate of listed national companies (see Figure 1.15). It should be noted that, in the last three months, placements abroad showed a lower dynamism than in the first part of the previous year. By the end of last October, Argentine corporations had placed over USD5 billion in international markets, almost 40 percent represented by YPF.

Figure 1.15 | Corporate Leverage Ratio(*)



(*) Under IFRS
Source: BCRA based on BCBA.

Several corporations that placed debt in foreign markets in 2016 used the funds to repurchase debt or address pre-existing debt payments (nearly half of the funds obtained, leaving aside YPF's operations[20] [21]). As a consequence of debt transactions and liability management operations, the

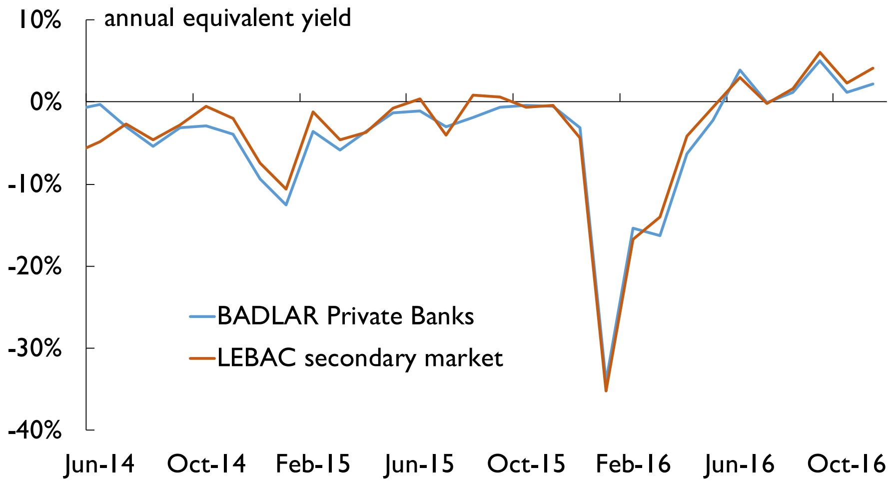
[20] Other uses listed by the issuers in the brochures on the new bonds include investments in tangible assets, funding for productive projects, working capital integration, payments or contributions between companies within the same group, current investments, and, for banks, granting loans to firms and individuals.

companies placing debt abroad increased their debt's weighted average maturity from about 20 months to over 60 months. In most cases, firms have some degree of natural coverage to currency risk, having access to foreign currency income sources.

Regarding the domestic market, the most significant factor in the last few months has been the launch of the Inflation Targeting Regime and the context of expectations of more moderate price changes. In this scenario, the main interest rates in the local markets have tended to fall, in line with the reduction in the LEBAC cutoff rate up to end of September (and again in early November). The Badlar for private banks continued to fall, which kept the rates of placement in corporate bonds and financial trusts in pesos under pressure.

These lower inflation expectations have led to positive expected yields in real terms for investments such as LEBAC or fixed-term deposits (see Figure 1.16). The sustaining of this trend should stimulate the channeling of domestic savings to the Argentine financial sector, thus strengthening both investment in capital market instruments (as reflected, for example, by the increase in the net wealth of fixed income open-end mutual funds (*fondo común de inversión, FCI*) recorded so far in the second semester[22]) and financial intermediation, which would contribute to the much needed scale expansion process for the aggregate of local banks (see Chapter 2).

Figure 1.16 | Real Yields on Short-term Investments



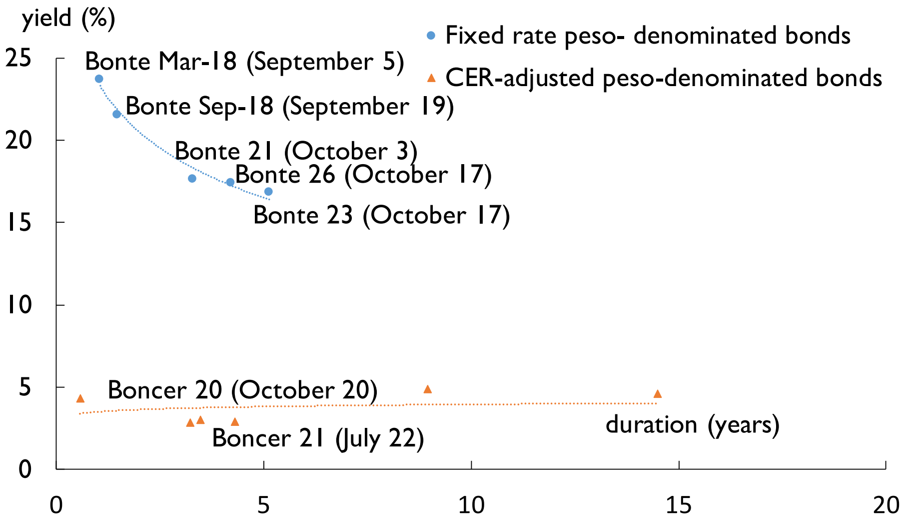
Note: Beggining of period rate, 30-day term. Expected inflation acording Consensus, then REM (since June 2016).
Source: BCRA based on MAE, Consensus and REM.

The disinflation process has also enabled making progress in the construction of a yield curve in pesos at a fixed rate that may serve as a benchmark for the economy as a whole. Starting in September, the Secretariat of Finance was able to place Treasury bonds (*Bontes*) in local currency at a fixed rate with maturities ranging from 1.5 and 10 years (see Figure 1.17). The construction of the yield curve will make it easier for the pricing of other financial transactions in local currency with longer maturities, including, for instance, mortgage loans, and for banking sector investment and fixed income instruments. The Secretariat of Finance has also placed new bonds adjustable by the Benchmark Stabilization Coefficient (*Coeficiente de Estabilización de Referencia, CER*). The coexistence of fixed-rate and CER-adjusted bonds in pesos allows the estimation of implicit market expectations regarding the evolution of inflation[23].

[21] It should be noted that, in early November, a bank made a placement in subordinated corporate bonds (*obligaciones negociables*, ON) (USD400 million with a 6.75% yield). This placement is part of the Tier 2 regulatory Capital (see Chapter 2). However, this amount is expected to be used, in part, to repurchase debt (including an existing subordinate ON).
[22] Fixed income FCI, which accounted for over half of the total wealth in FCI in the end of 2015, have risen to 63% of the total in the last three months. In August 2016 (the latest month with available data on portfolio composition), LEBAC holdings accounted for 62% of the net worth in fixed income FCI.
[23] See Exhibit "Inflation Expectations in the Yield Curve in Pesos" in [*Monetary Policy Report* - October 2016](#).

Whereas the favorable context for the economy facilitated the improvement of Argentine shares since the last edition of the FSR until early November, following the US election, the Merval reverted the increase accumulated over the three months prior to its publication (although the behavior for the year is still positive[24]). This took place in a context of higher operated volumes. From August to October, there were notable increases in the securities linked to oil and utilities (with more limited improvements in banks' shares), although the subsequent fall was widespread.

Figure 1.17 | Yields on Peso-denominated Sovereign Bonds – Secundary Market



Note: date of placement of new bonds issued in 2016 is reported in brackets ().
Source: BCRA based on IAMC and Reuters.

[24] Despite the improvement seen so far this year, the most commonly used valuation indicators, such as the ratio of share price-to-earnings, are at relatively low levels, which makes it possible to rule out the existence of any bubbles.

2. Situation of the Financial System

The new monetary and financial framework presents challenges as to how banks carry out their activity in Argentina, mainly as regards its transactional bias and the share of profits from funding at very low real rates, due to inflation. In a context of disinflation and positive real interest rates for individuals, and conditions promoting competition, entities should readapt their business models. This situation implies the challenge of improving efficiency through entities' own decisions, coupled with the BCRA's cooperation through regulatory changes in that direction. These challenges must be understood as the cost of advancing towards an orderly economic environment, which favors saving channeling into business and household investments. Thus, the materialization of a context of positive economic growth would create new business opportunities for the banking industry, in terms of credit, use of bank accounts and supply of financial services. Entities will be able to plan with greater certainty and benefit from economies of scale. The industry's current strengths are central in this context: a solvent and highly-liquid position, a small, high-quality portfolio with great potential for growth, within a framework of regulations consistent with international standards. During the third quarter, there were signs that the banking sector would be moving to this path, with a slight rebound of intermediation activity (real growth in both credits and deposits), positive real interest rates for individuals, and entities investing in infrastructure.

The Challenges of Sustaining Profitability and Capital Expansion

The Argentine financial system has a sound balance sheet at the aggregate level. Since the last edition of the FSR, no significant changes were recorded in the exposure to a risk map or in liquidity and solvency coverage (see Chapter 3). This is a good starting-point for banks to *pari passu* the expected growth, in an environment of lower inflation[25], positive real interest rates and greater competition. In this sense, certain signs of rebound were seen in financial intermediation activity (see Figure 2.8 and Figure 2.11).

Banks' sources of income and cost levels, as well as the size of their intermediation activity, should adapt in order to sustain adequate levels of profitability —and thus, of capital— over time[26]. In particular, regarding the function linked to means of payment, the adoption and use of new technologies and the entry of new players also imply challenges and opportunities for banks (see Chapter 4).

Net Income from Intermediation

In the next few months, net income from intermediation activity will be affected by downward pressures, given the expected reduction in lending interest rates, as well as by factors which would tend to increase that income, particularly those linked to growth opportunities in the quantity of credit operations and other provided financial services. As to funding, banks fund a major share of their applications with demand deposits paying rates which are virtually zero in nominal terms. In the last few years, that situation has translated into funding provided at very negative real rates. This benefit will decrease as inflation falls. On the other hand, the growth in the demand of money and the use of bank accounts resulting from a lower-inflation context and more modern means of payment will widen this source of stable and affordable funding. In this sense, the BCRA's projections suggest that there may be an increase in worth several GDP percentage points in demand deposits in the next few years. Time deposits are also expected to grow in a context of positive real rates and of protection of savings in the system. The nominal differential between lending interest rates and the cost of funding will undergo downward pressures due

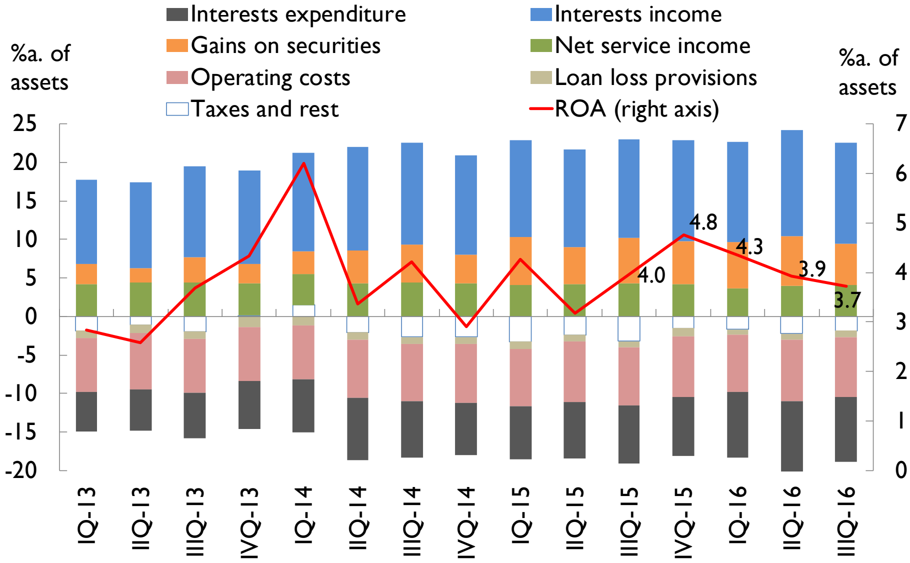
[25]For more details, see Chapter 1, Section on monetary policy and prices.
[26]Previsions on capital growth must include a buffer to deal with turbulent periods (for instance, a negative phase in the economic cycle), while allowing for a sustainable dividend distribution policy.

to the increase in competition and the decrease in inflation. Once again, the projected growth in the business could offset that trend. Based on the experiences of other economies that have dealt with disinflation processes, we are in a position to make projections in this line (see Exhibit 1).

In terms of solutions to these challenges, there is a significant margin for the financial system to increase its efficiency, partly through benefit from greater economies of scale, in an expected context of growth in economic activity. Thus, it is important to coordinate efforts of all players, in order to reduce the structural limitations and increase the financial sector's efficiency and inclusiveness, turning it into a more important driver of economic growth.

We are considering a set of measures to quantify the challenge faced by the financial system. Since the last edition of the FSR, some distinctive behaviors have appeared that are consistent with the current context. In particular, the return on assets (ROA) went down to 3.7 percent yearly in the third quarter of the year, 0.2 and 0.6 percentage points below the two preceding quarters (see Figure 2.1).

Figure 2.1 | Financial System Profitability

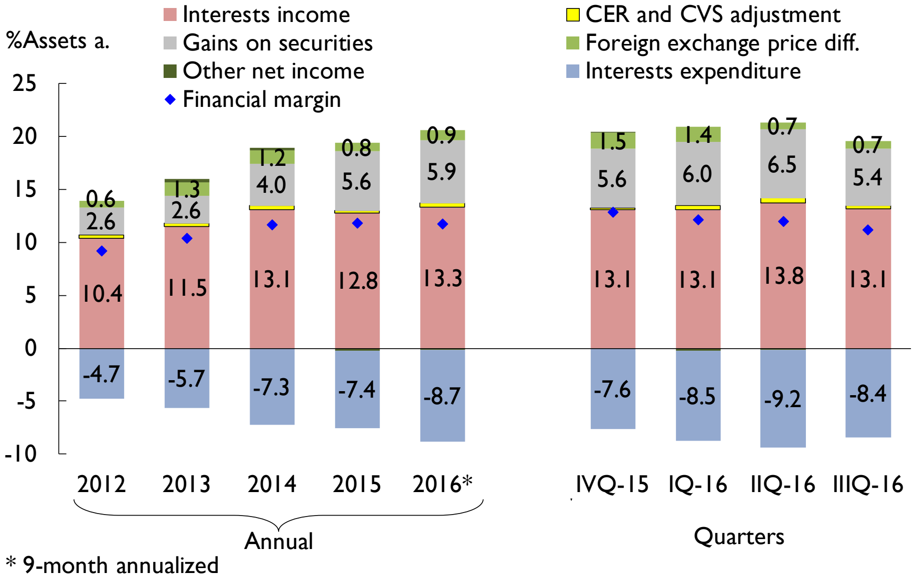


Source: BCRA

This decrease in profitability is due, in effect, to a fall in the financial margin (see Figure 2.2). Given the background of lower inflation and the decrease in the policy interest rate it entails, the evolution of the financial margin was affected by a greater reduction in total financial income relative to that recorded in financial outlays. Financial income fell due to the reduction in lending nominal interest rates prevalent in a still-weak credit market, combined with a decrease in the returns obtained on LEBAC[27] holdings. The total implicit lending interest rate[28] of the financial system, on these categories of income, fell during the quarter. As to financial outlays, the reduction in the last few months in interest rates for fixed-term deposits in pesos resulted in a decrease in the total cost of deposit-based funding (implicit borrowing rate for outlays), though to a lesser degree, given the weight of demand deposits in the aggregate.

[27]For more details, see Chapter 1, Section on monetary policy and prices.
[28]Implicit interest rates are computed based on income (outlay) flows accrued during a period. Depending on the assets (liabilities) average term, these rates gradually capture the interest rates used in the margin.

Figure 2.2 | Composition of Financial Margin

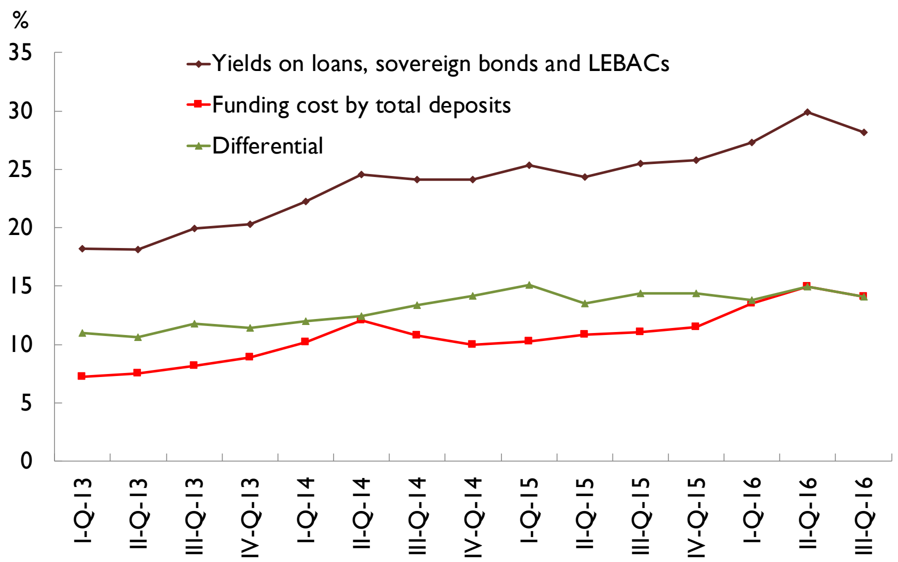


* 9-month annualized
Source: BCRA

It should be pointed out that, in the aggregate, these movements were offset by a fall in the rate differential between total implicit lending and borrowing interest rates relative to the ones published in the last edition of the FSR[29] (see Figure 2.3). These changes affected the system-level as well as all groups of banks.

Figure 2.3 | Lending Interest Rate, Implicit Funding Cost and Differential between Rates

Financial System – Yearly Three-month Flows



Source: BCRA

[29]The reduction in the rate differential takes place despite the fact that, starting in September, the BCRA decided that financial entities cannot charge fees for life insurance over new individual loans (Communication "A" 5928). That is, even if the interest rate on those loans was maintained, this would entail a decrease in the total financing cost for borrowers.

Going forward, it will be especially important to monitor nominal and real interest rates levels, as well as the financial margin and implicit rate differential levels. Besides the changes in the context mentioned above, other factors affect this evolution, such as: the eventual increase in lending capacity in dollars based on a higher inflow of capital (including the effect of the Tax Amnesty Regime *Régimen de Sinceramiento Fiscal*); greater competition with other credit providers; and the growing appetite for local debt in capital markets.

Administrative Expenses

In order to sustain profitability, banks should adjust their operating costs, using innovative techniques and adopting technology, in order to achieve productivity gains, broaden their customer base, expanding their supply of products and services, and generating a significant and sustained growth in the scale of operations. This would enable a substantial reduction in administrative expenses, creating room to absorb the eventual decrease in margins and sustain profitability.

The BCRA supports this process with a program aimed at achieving a greater depth and inclusion in the financial system, as well as directly reducing entities' costs. To this effect, restrictions were removed regarding lending and borrowing interest rates, new financial instruments were launched to promote saving and long-term credit in UVA and UVI, and a greater level of transparency and competition was encouraged regarding fees. It was also established that electronic transfers and saving accounts were free of charge, and the lending capacity in foreign currency was expanded. The BCRA, among other measures[30], also reduced requirements for building-related aspects for the opening of branches in less densely populated regions, loosened conditions for the refilling of ATM, and promoted the digitalization of documents and the electronic accreditation of checks.

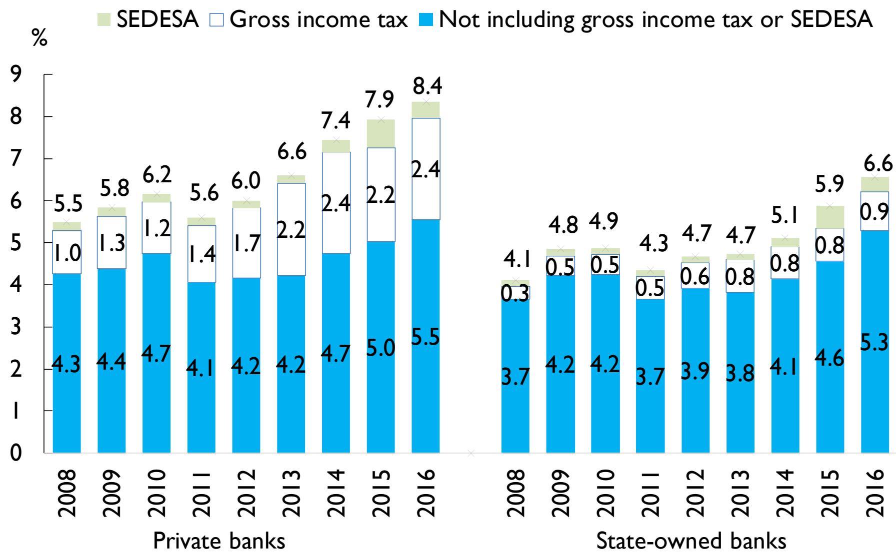
The level of administrative expenses in the Argentine financial system is high and has been growing in the last few years, both in private and state-owned entities. These expenses for the aggregate system reached 7.7 percent yearly of the total asset in the first 9 months of 2016, from 6.7 percent in 2011 (and 5.1 percent in 2006). As we will see below, there is a significant dispersion in the values of this ratio among different entities, even among some with no substantial differences in their business profiles. These levels are the result of certain management incentives and scale issues related to the context of the last few years, and are also affected by structural efficiency.

An important ratio, from a business management perspective, is the one computed taking into account administrative expenses, after deducting net income from services in terms of the earning assets portfolio (see Figure 2.4). This ratio represents an approximation to the equilibrium margin, that is, the lowest rate differential which would make it possible to cover entities' operating costs. Since 2011, this ratio has increased consistently both for state-owned and private banks, with growth rates of expenses above those of the portfolio. It currently hovers around 8 percent for private banks, and this can be compared with the total implicit interest rate differential in Figure 2.3, of about 14 percent. The difference is the profitability (measured in terms of the earning asset) available to offset the risks and the cost of capital.

[30]For more details, see Chapter 5 of this FSR and of FSR I-16.

Figure 2.4 | Equilibrium Margin: Administrative Expenses minus Net Income from Services

In % of Loans and Securities Balances – Weighted Average

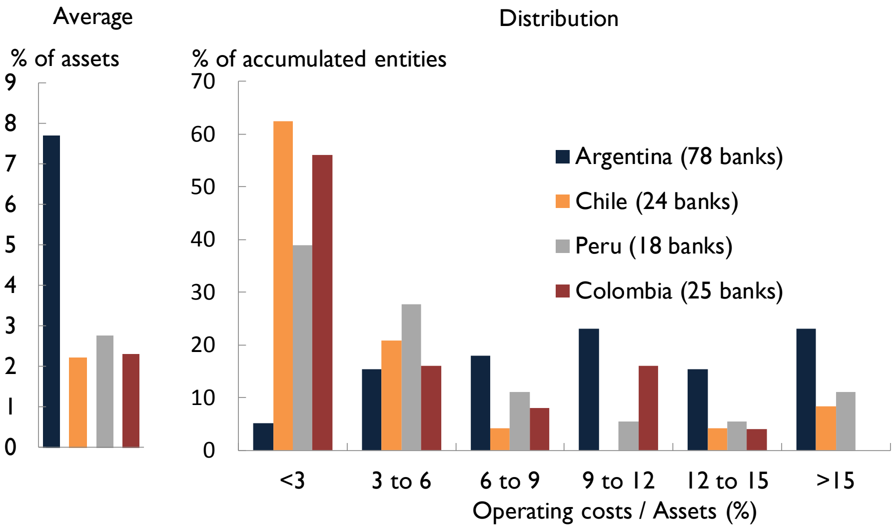


Note: 2016 is the last 12 months to September. Source: BCRA

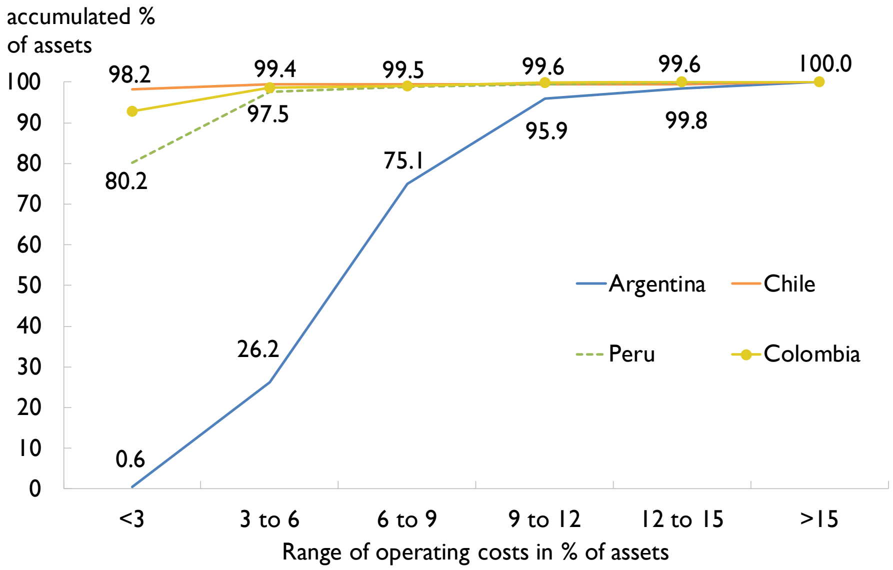
Administrative expenses in the Argentine financial system are also high compared with other countries in the region. In the financial systems of countries like Chile, Colombia, and Peru, administrative expenses at the aggregate level move in a range of 2 percent to 3 percent of total assets[31]. They also show a significantly lower dispersion in the distribution of the ratio defined for each financial entity[32] (see Figure 2.5). The relatively low levels in the expense ratio in terms of the asset for selected countries are linked to higher values in certain productivity ratios (for instance, number of accounts and size of active and passive operations per employee).

[31]There could be difference in definitions and accounting practices between countries. However, comparisons remain useful, given the magnitude of the differences with the local financial system.
[32]These distributions must be interpreted carefully, given the scale differences between different systems, as well as the heterogeneity of business models and the activities on which each entity focuses.

Figure 2.5 | Administrative Expenses – Intenational Comparison



Source: Central Banks of Chile (2016), Peru (2015), Colombia (2016) and Argentina (2016)



Source: Central Banks of Chile (2016), Peru (2015), Colombia (2016) and Argentina (2016)

For the financial system at the aggregate level, staff expenses (compensation plus social security contributions) represent more than 60 percent of total administrative expenses. Other expenses have a relatively significant weight, such as those associated with contracting services, advertising or building-related items (leases, insurance, etc.), which are used to broaden and improve the provision of financial services (see Table 2.1). These expenses have a greater relative weight on private entities. Greater levels of financial intermediation, as those expected for the next few years, would allow to approximate the weight of these expenses in terms of the assets to the levels observed in other economies.

Table 2.1 | Administrative Expenses Composition

2016 - Accumulated to September

	Foreign Banks	Domestic Private Banks	State-owned Banks	No-banking Entities	Financial System
Total %					
Compensations (1)	43.7	46.8	63.7	37.1	**51.0**
Social security contributions	9.2	9.2	12.1	8.9	**10.1**
Taxes	7.3	6.3	2.9	7.4	**5.6**
Maintenance and repair costs (2)	5.7	5.8	5.1	4.6	**5.5**
Administrative service	7.8	5.5	2.9	3.1	**5.4**
Directors and controllers fee (3)	2.3	5.3	1.3	11.5	**3.2**
Security services	2.6	3.0	3.0	3.2	**2.9**
Leases and Insurance	3.6	2.9	1.2	5.9	**2.7**
Advertising	2.9	2.4	1.6	4.4	**2.3**
Electricity and communications	2.4	2.5	1.2	4.1	**2.1**
Amortization for Organization and development expenses (4)	1.2	2.7	0.6	2.0	**1.5**
Stationery and supplies	0.6	0.7	0.5	1.0	**0.6**
Other	10.6	6.8	3.7	6.7	**7.0**
% of Assets	8.8	8.9	6.0	10.4	**7.7**

(1) including: i. Remuneration, ii. Indemnities, iii. Staff rewards, iv. Representation expenses, travel expenses and mobility, and v. Staff services
(2) including other fee
(3) including depreciation of fixed assets and leasing
(4) Including amortization of expenses arising from mortgage loans and financing of productive investment projects.
Source: BCRA

Net Income Related to Services

Net service income will also be affected by challenges faced by the industry in the short and medium term, particularly due to the increasingly competitive environment (considering potential new players in the industry). Moreover, last September, the BCRA removed the possibility of charging additional fees to customers for purchasing life insurance over credits[33]. Early this year, the BCRA also deregulated the fees banks can charge for the services they provide, in a context of greater transparency for customers, promoting competition. Finally, any eventual change regarding legislation on maximum fees charged on debit and credit card operations could affect these sources of income, as much as entities receive fees from participating in these operations.

Regardless of the aforementioned impacts, net service income in terms of the asset in the Argentine financial system appears to be relatively stable. This differs from the volatility observed in these categories in developed economies, where a considerable share of them show a procyclical behavior, as they are

[33]As mentioned before, through Communication "A" 5928, starting in September, the BCRA decided that entities cannot charge fees for life insurance over new personal loans.

largely derived from off-balance product trading activities. This is not the case in Argentina. In the last few years, this item in the profit and loss statement of the local financial system has shown little fluctuation, both in boom and in financial stress periods. Currently, it moves around a 4 percent yearly in the third quarter of the year for the aggregate of entities (see Figure 2.1). The future development of complementary services associated to capital markets could strengthen this source of income.

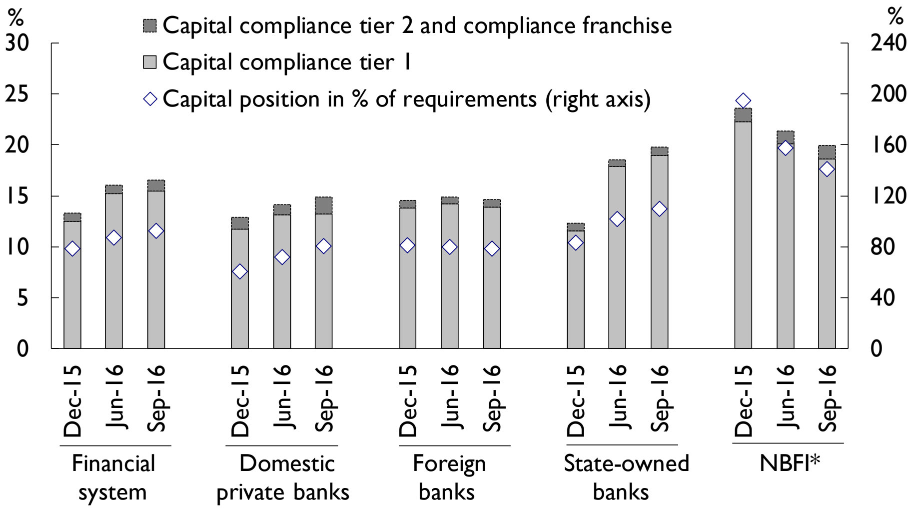
Nonperforming Loan Charges

The quality of the private sector credit portfolio performed well in the last few months, in spite of the negative economic context, with only a slightly increased irregularity (see Chapter 3). Nonperforming loan charges changed only marginally, reaching 0.9 percent yearly of assets in the third quarter of the year, slightly above the preceding quarter. For the next few periods, a path of moderate growth could be expected for these ratios, in a scenario in which entities gradually broaden their activity to include riskier debtors.

Solvency Remains High in the Industry

The financial system continues to be highly solvent. The group of entities has a significant coverage to face potential unexpected adverse scenarios and expand credit in the short term. The regulatory excess capital —excess of capital relative to the regulatory requirement— was slightly over 92 percent in September, with capital that reached 16.5 percent of risk-weighted assets (see Figure 2.6). Tier 1 capital (named basic net wealth), with the greatest capacity for absorbing losses, account for 94 percent of the total.

Figure 2.6 | Compliance and Excess Capital



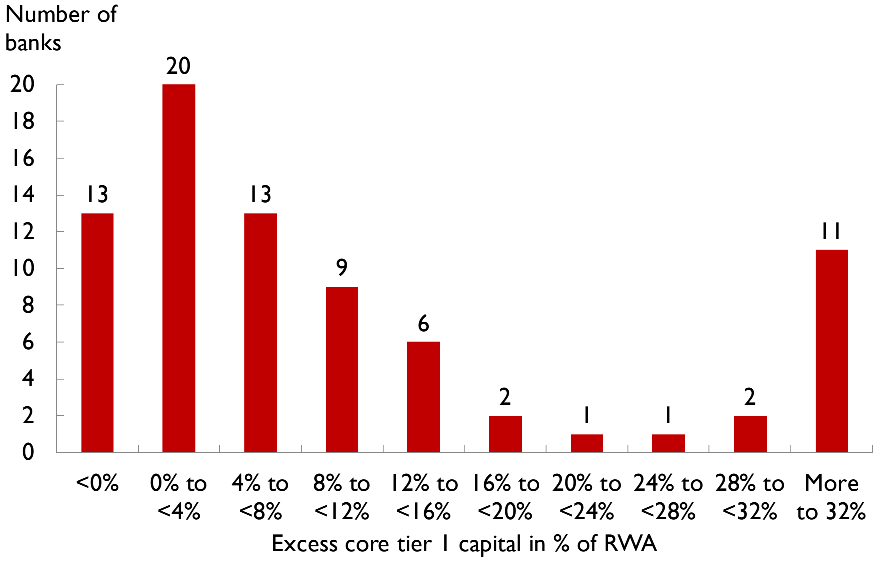
*NBFI: Non-banking Financial Institutions
Capital tier 1: Basic net worth.
Capital tier 2: Complementary net worth.
Source: BCRA

These capital levels are higher than those observed for the last edition of the FSR, due to the profits of the period and the temporally-lower requirements on excesses relative to limit amounts in the Concentration Credit Risk Standards applied to the non-financial public sector[34]. Another factor worth mentioning, even though with a lesser impact, is that of debt issuance from financial entities, which, given their specific features, are part of the tier 2 regulatory capital[35]. Moreover, some entities distributed dividends among their shareholders during the period.

[34] As long as they come from temporary advances. Banks should regularize their situation before 01/31/17. Communication "A" 6035.
[35] Banco Galicia, in July, for US$250 million; and Banco Macro, in early November, for US$400 million.

When considering current capital buffers[36] —both for capital conservation and for domestic systemic entities[37]—, as well as regulatory requirements, as of September, aggregate entities show an excess of core tier 1 capital —common shares and retained earnings— equivalent to 5 percent of risk-weighted assets. In disaggregated terms, it can be seen that 13 of the 78 active entities failed to fully cover all September buffers (see Figure 2.7), triggering restrictions to distribute earnings in the short term.

Figure 2.7 | Excess Core Tier 1 Capital Estimation – Including Capital Buffers - Septembre 2016



Source: BCRA

In terms of a broader solvency ratio, it should be mentioned that the Leverage Ratio[38] —based on Basel III— for the Argentine financial system remained at 10.8 percent in June —latest available data—, in line with the first quarter of the year. These ratios continue to show high values relative to international standards (3 percent) in all groups of banks, particularly in foreign private banks and in non-bank financial entities.

Intermediation Activity: Signs of Marginal Recovery

In the few months since the last edition of the FSR, the financial system balance sheet, on aggregate, did not reveal any major changes. In particular, entities' financial intermediation with companies and households showed a relatively weak performance. However, there are certain events of a relatively more positive dynamics at the margin of the credit market, in particular, due to developments in the foreign currency segment. Several quantitative and qualitative ratios suggest a relatively favorable context, both in supply and demand conditions. Deposit taking, in turn, also changed for the better in the third quarter, thanks to foreign currency placements.

On the asset side, the relative weight of more liquid instruments (in a broad sense) remained unchanged in the third quarter (see Table 2.2). The entities as a group reduced their exposure to the public sector and slightly increased the relative participation of credit extended to the private sector in total assets (though it is below the level seen last year). This growth represents a significant increase of financing granted in foreign currency in the last few months.

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[36]For more details, see Result Distribution Standards.
[37]These buffers are not a minimum binding. Rather, the non-compliance imposes restrictions on the distribution of dividends. That is why they are not considered in the analysis presented in this section's first paragraph and Figure. This exercise assimilates the aforementioned buffers to traditional regulatory requirements.
[38]Ratio between the capital with the highest loss absorption and a broad measure of exposures.

Table 2.2 | Balance Sheet – Financial System

	In % of netted asset							Real y.o.y Variation of balance
						Variation in p.p.		
	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Sep-16 vs. Dec-15	Sep-16 vs. Sep-15	Sep-16
Assets	100	100	100	100	100			
Cash disposal	17	21	19	23	22	1.4	5.5	25.9
Public bonds	16	14	16	12	13	-0.8	-3.0	-22.9
Loans to public sector	10	10	10	10	8	-2.2	-1.3	-18.3
Loans to private sector	49	46	45	46	48	1.8	-1.1	-7.1
Loans in $ to private sector	46	44	42	41	41	-2.3	-4.9	-15.2
Loans in US$ to private sector*	2	2	3	5	6	4.1	3.9	112.0
Other assets	9	9	9	9	9	-0.2	-0.1	-5.9
Liabilities + Net worth	100	100	100	100	100			
Deposits of public sector	16	16	15	15	13	-2.5	-2.2	-18.3
Deposits of private sector	59	58	59	60	61	3.0	1.5	-2.6
In pesos	54	50	50	51	51	0.7	-3.3	-10.9
Sight deposits	27	25	24	25	25	0.1	-2.1	-12.3
Time deposits	26	24	25	24	25	0.4	-1.3	-9.7
Foreign currencya*	5	8	9	9	10	2.3	4.9	61.6
Sight deposits	2	4	5	5	6	1.8	3.2	90.9
Time deposits	2	4	4	4	4	0.3	1.5	33.0
CB, SD y Foreign lines of credit	3	3	3	3	3	0.3	0.6	15.2
Other liabilities	10	11	11	10	9	-1.9	-0.1	-5.6
Net worth	13	12	12	13	13	1.0	0.2	-3.9

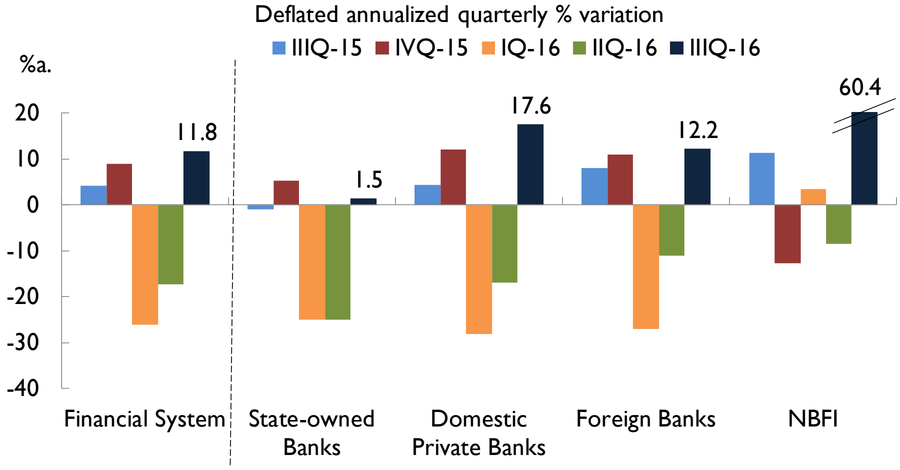
*Balance variation in origin currency. Source: BCRA

As to funding, total private sector deposits increased their share to 61 percent of total funding in September —a cumulative increase of 3 percentage points in the year and 2.8 percentage points since the last edition of the FSR. This performance was, in part, encouraged by the policies implemented by the BCRA in 2016, which led to a context of positive real interest rates for individuals, jointly with the saving accounts free of charge and the simplification of the requirements to open an account, and the widening of the Deposit Guarantee Insurance System, among others.

Relative to the two preceding quarters, the growth of bank financing to the private sector in real terms rebounded in the third quarter of the year. This takes place in a context of slowdown inflation and signs suggesting that the recession which began in 2015 could be moderating[39], coupled with measures promoted by the BCRA to encourage access to credit in better conditions. In the third quarter, credit to corporations and households increased 28.2 percent yearly, or 11.8 percent yearly in real terms[40] after a two-quarter fall (see Figure 2.8)[41].

[39]For more details, see Monetary Policy Report - October 2016 and Chapter 1 of the current FSR.
[40]In order to estimate real variations, the series are deflated by the Consumer Price Index for the provinces of Buenos Aires, San Luis and Córdoba, weighted based on the National Household Expenditure Survey of 2004-2005.
[41]The real increase in credit to the private sector would continue to be positive, 3.5 percent yearly in the third quarter, when deflated by core inflation computed by the BCRA. For more details, see in Monetary Policy Report - October 2016.

Figure 2.8 | Total Lending to the Private Sector by Group of Financial Entities

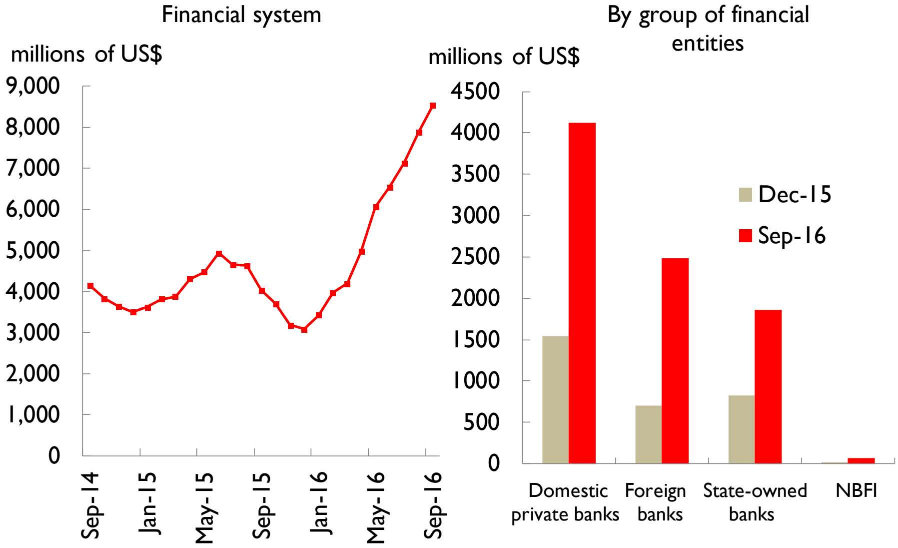


NBFI: Non-banking Financial Institutions
Note: Series are deflated by the CPI for the provinces of Buenos Aires, San Luis and Córdoba, weighted based on the National Household Expenditure Survey of 2004-2005.
Source: BCRA

Real growth of total credit to the private sector was driven mainly by the performance of foreign currency lines. The normalization of the exchange market, the elimination of trade restrictions and the positive context for exporters, in addition to the regulatory changes aimed at channeling more foreign currency resources to productive activities[42],allowed foreign currency credit to the private sector to almost treble (see Figure 2.9). Between December and September, these credit lines grew 176 percent—variation in currency of origin— (112 percent year-on-year), a performance mainly led by foreign and national private banks. Almost 70 percent of this increase was driven by pre-financing and financing of exports, in a scenario of decreasing lending interest rates in foreign currency.

[42]For more details, see Chapter 5 | Financial Regulation of FSR I-16.

Figure 2.9 | Total Lending to the Private Sector in Foreign Currency



NBFI: Non-banking Financial Institutions.
Source: BCRA

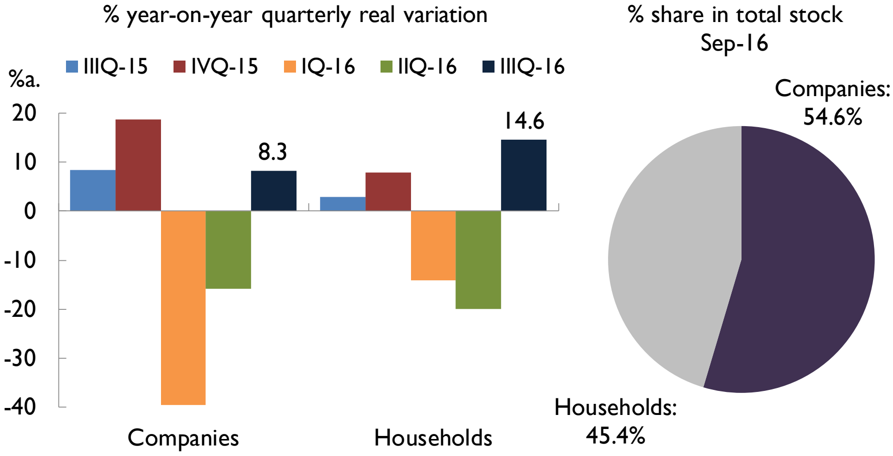
Loans to the private sector in pesos continued to grow weakly in the last few months: 19.7 percent year-on-year in September (a decrease of 7.1 percent adjusted by inflation), and 13.4 percent yearly in the third quarter of the year (-1.1 percent yearly adjusted by inflation[43]). This evolution is explained in part by the recessive scenario which started in mid-2015, by a certain degree of substitution of these credit lines to loans in dollars, given the expansion of the possible applications of those resources, and by the decision of medium-sized and large corporations to resort to the capital market, taking advantage of the context of favorable interest rates and maturities. According to preliminary data, in the last few months, there was an improvement in the performance of loans in pesos, mainly in consumer lines (personal and credit cards). Thus, in October, the volume of loans in pesos to corporations and households increased more than $18,000 million relative to September: the greatest nominal monthly increase so far in the year.

If we breakdown the data by recipient, in the third quarter of the year, total loans to corporations had a positive quarterly real growth, reverting the negative performance of the two preceding periods (see Figure 2.10). This evolution was based on loans to industry (representing 39 percent of total loans to corporations) and, to a lesser degree, on loans to trade. The BCRA extended the "Credit Line for Production and Financial Inclusion (*Línea de Financiamiento para la Producción y la Inclusión Financiera, LFPIF*)" twice[44] during 2016.

The conditions to grant bank loans could have changed slightly for the better in the third quarter relative to the first half of the year, according to the results from the Credit Conditions Survey (ECC)[45]. The financial system reports a light bias towards easing, both of approval standards and of terms and conditions to credits associated to loans granted to corporations (supply). There is also a moderate increase in credit demand from this sector. Additionally, the aggregate of entities seems to foresee a deepening of said aspects by the end of 2016, in line with a certain recovery expected in economic activity levels for the next few months.

[43]This decrease would rise to 8.4 percent yearly if adjusted by the core inflation.
[44]See Chapter 5 for more details.
[45]The ECC is a quarterly survey about the behavior and the trends in the bank credit market. The BCRA publishes the main results of this aggregate survey quarterly in its online site. For more details, see [This link.]

Figure 2.10 | Total Lending to the Private Sector by Type of Debtor



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

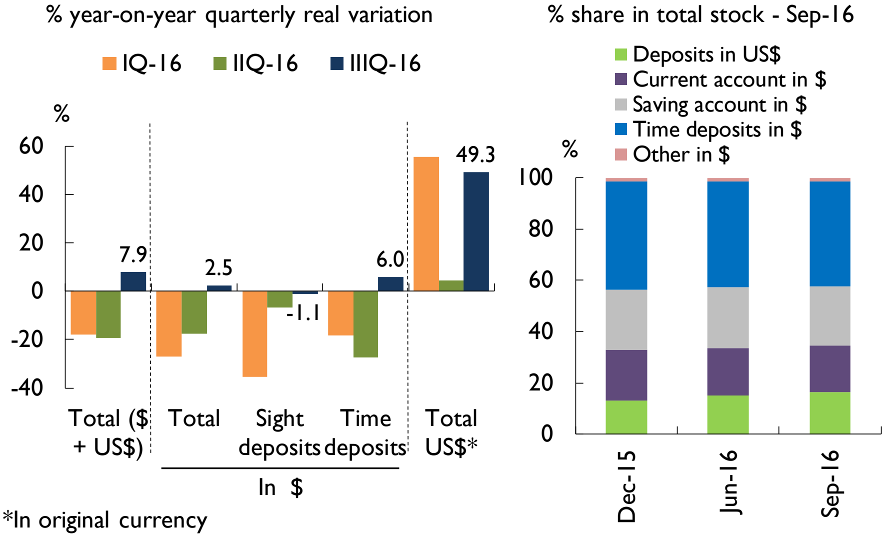
Bank credit channeled towards households also recovered in the third quarter in real terms[46] (see Figure 2.10), jointly with an incipient rebound in private consumption levels. In this case, the ECC also shows a slight trend towards the easing of credit supply to households in the third quarter, together with an increasing demand, and it is expected to continue towards the end of the year.

In the last few months, there was a steady increase in the granting of adjustable mortgage loans to households (adjustable by UVA, CER-adjusted acquisition value units)[47], exceeding $1,000 million accumulated in the year, as of the latest data available. In order to continue to encourage long-term financing, the availability of this type of long-term saving and credit instrument was extended in September by Law Nº 27271 (see Chapter 5). These types of credit were created to provide instruments protected from inflation for households from all economic segments (regardless of their purchasing power) and to increase access to housing. The BCRA will monitor the mismatch between assets and liabilities with these denominations (see Chapter 3).

Regarding the sector's funding, in September, private sector deposits in pesos accumulated a nominal year-on-year increase of 25.8 percent, which turns into a 10.9 percent fall when adjusted by inflation (see Figure 2.11). However, this evolution reverted in the third quarter of the year, when the total deposits of corporations and households increased at a real rate of 7.9 percent yearly[48]. This comes in a context of improvement in the real rates of return of term deposits, encouraged by the BCRA to stimulate the channeling from the private sector savings into the financial system (see Chapter 1). National private banks showed the greatest year-on-year relative increase of private sector deposits, followed by State-owned banks and foreign private banks.

[46]This positive trend holds when using the National CPI and core inflation as well.
[47]For more details, see Exhibit 5 of the FSR I-16.
[48]Unchanged if adjusted by core inflation.

Figure 2.11 | Private Sector Deposits



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

The balance of foreign currency deposits of the private sector accumulated an increase of 61.6 percent year-on-year in September, driven mainly by demand deposits. In the framework of the Tax Amnesty Regime implemented by the government, the balance of these deposits is expected to see a significant increase in the next few months, increasing the foreign currency lending capacity. The BCRA will continue to monitor how foreign currency operations expand.

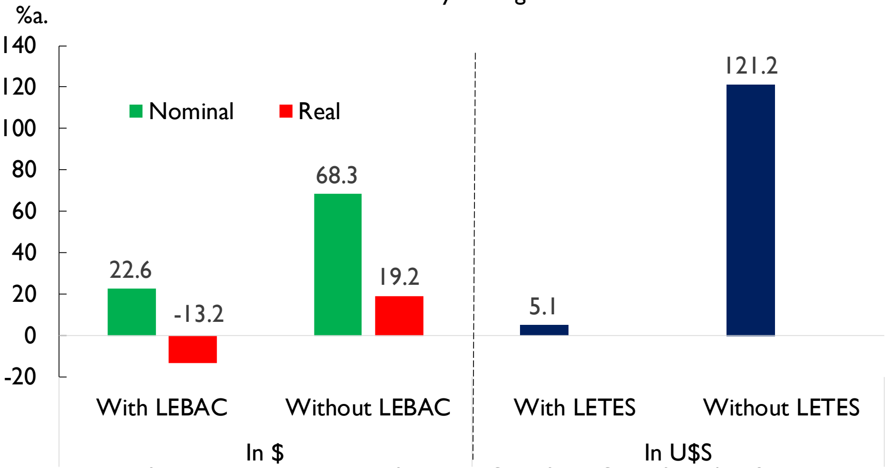
So far in the year, 21 financial entities issued corporate bonds and short-term securities by $21,317 million, 74 percent more than in 2015. Of the total, 46 percent were issued in dollars. Almost 80 percent of the issues correspond to amortizations of debt that entities had to address during the year. Remaining funds should enable to expand private sector loans. Given the improving economic and financial context, and the progress achieved towards the creation of a curve yield in nominal pesos[49], it is expected for the level and the weight of this type of longer-term funding to increase in future periods, sustaining the expected growth in the financial system (they currently represent less than 3 percent) (see Table 2.2).

As mentioned above, since the middle of the year, a framework is beginning to prevail of positive expected returns in real terms for local saving instruments like LEBAC or term deposits (see Chapter 1). Thus, given the policy of positive real interest rates for individuals and economic restructuring, private sector term deposits in pesos and LEBAC holdings grew in 2016 by 68.3 percent yearly as of September, 19.2 percent yearly when adjusted by inflation (see Figure 2.12). Moreover, this growth intensifies and amounts 25 percent yearly in real terms when specifically considering households' investments (see Figure 2.13).

[49]For more details, see Exhibit 5 of the *Monetary Policy Report* - October 2016 and Chapter 1 of this FSR.

Figure 2.12 | Private Sector Term Deposits and LEBACS and LETES Holdings

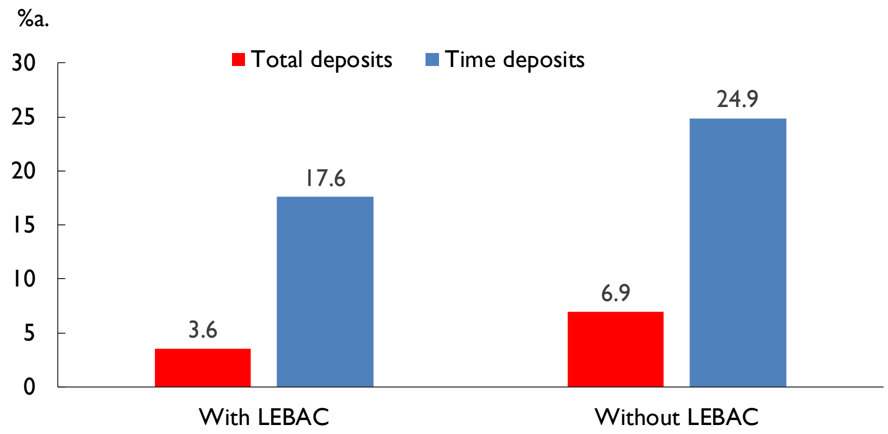
Annualized % variation in currency of origin - First 9 months of 2016



Notes: 1.To deflate an index calculated from the CPI of the City of Bs. As., San Luis and Córdoba is used, weighted according to the National Survey of Household Spending for 2004-2005. 2. The LEBACs and LETEs subscribed by the private sector are considered, excluding the financial system.
Source: BCRA

Figure 2.13 | Individuals Peso-denominated Deposits and LEBAC Holdings

% year-on-year real variation - First 9 months of 2016



Notes: 1. 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. 2. LEBACs subscribed by individulas are considered.
Source: BCRA

The operating structure of the financial system continued to expand, though with significant room for improving the supply of financial services in different regions throughout the country. As mentioned above, the BCRA implemented in 2016 a series of measures aimed at strengthening infrastructure. In the third quarter, 23 new subsidiaries were created, as well as 26 new branches (1.8 percent year-on-year growth, to a total of 4,533 in the country). The number of ATMs and self-service terminals grew 1.3 percent year-on-year, to a total of 19,745. This decision implemented by the entities reinforces the positive expectation relative to the future evolution of the business, as the increase in workforce, which as of June had grown 2.6 percent year-on-year (a total of 109,818 employees).

Exhibit 1 / Disinflation and Financial Intermediation

Financial intermediation is a process that combines many behaviors resulting from saving, spending, and borrowing decisions made by households and firms, from the profitability of projects that are financed, and from decisions made by financial intermediaries. These elements are subject to institutional aspects, as well as the macroeconomic context.

When the macroeconomic context changes considerably, those behaviors adapt, which impacts financial intermediation. The current context in the Argentine financial system is affected by a rapid decrease in inflation, and is therefore subject to readjustment challenges. It is then interesting to study cases of similar processes, which will allow us to create expectations as to how said adjustment may be verified. When doing so, we should remember that the institutional and historical contexts are specific to the time and the economy, and conclusions will be therefore affected by such peculiar factors. However, three impact channels of inflation on financial intermediation can be identified *a priori*. Based on them, we can create adjustment expectations in a disinflation process, and then use experience to check to what extent they have been verified.

First, if actual inflation differs (more or less) from inflation expectations included in the returns of contracts and financial assets, inflationary processes expose those returns to higher uncertainty and deteriorate their quality as a store of value. Through this channel, inflation would tend to reduce the demand for these assets.

Such uncertainty in relative prices discourages long-term spending decisions —typically, investment— which, due to their nature, require a high level of leverage (i.e. they are usually financed using credit). This is translated into a low long-term credit supply and demand in the financial system, as well as a low stock supply and demand in the capital market.

Additionally, both cash money and transactional deposits through which the economy channels its payments are exposed to a dilution of purchasing power, as a result of inflation (they receive negative real rates). This funding benefits banks, which charge lending rates that are, to a greater or lesser degree, linked to inflation. Depending on credit demand aspects and competition between banks, this accessible funding may lead to real rates for customers lower than those seen with reduced or no inflation. This process implies a transfer of resources from the system's creditors (depositors) to the borrowers, as well as to the intermediaries themselves. Depositors will have an incentive to disintermediate the system, by minimizing their debt placement. As a result, the following relationships between inflation and total financial intermediation are expected:

1. Economies exposed to inflationary processes will show a reduced capital market and a tendency towards financial disintermediation. Disinflation will help expand intermediation and obtain gains from economies of scale, which will allow to reduce the equilibrium rate differential.
2. The higher the nominal interest rates, together with inflation, the higher the nominal spreads on funds collected by banks at a zero rate will be. Disinflation will be detrimental to this source of benefits. If banks try to maintain their profits, they should compensate this lower income by reducing their spreads less, increasing the intermediated amounts, or searching for other income sources.

Since these two effects go in the opposite direction to the impact of disinflation on differentials between lending and borrowing rates, what is observed in practice will allow us to theorize about which effect predominates and to contrast the links between inflation and financial intermediation. To that effect, a sample including 29[50] economies which lowered inflation between 1980 and 2015 was analyzed. Said economies were defined as those (i) which have experienced at least 10 consecutive years of annual inflation of more than 10 percent, and (ii) where the average inflation of the last 10 years has been lower than 10 percent per year.

[50] Colombia, El Salvador, Greece, Guatemala, Hungary, Lesotho, Paraguay, South Africa, Tanzania, Argentina, Bolivia, Brazil, Chile, Costa Rica, Ecuador, Guinea, Iceland, Israel, Mexico, Nicaragua, Peru, Poland, Romania, Russia, Sierra Leona, Turkey, Uganda, Uruguay and Zambia.

Within this sample, two sub-samples were identified: (i) countries starting with rates over 50 percent in any year (medium-high inflation cases), and (ii) countries which never reached such inflation levels (medium-low inflation cases). For the total of the sample and both sub-samples, the performance of a set of variables is compared during the ten years before and after breaching (downwards) the 10 percent annual inflation threshold (see Table 1).

Table 1 | Financial intermediation indicators

Indicadores	Muestra	Previous decade	Next decade	Percentage of cases in which increases are observed
		Annual average GDP%		
Bank deposits / GDP	**Experiences of disinflation (total)**	**22.8%**	**31.8%**	**89.7%**
	Group from medium-low inflation	30.9%	36.4%	77.8%
	Group from medium-high inflation	19.2%	29.7%	95.0%
Bank loans to the private sector / GDP	**Experiences of disinflation (total)**	**23.5%**	**31.2%**	**78.6%**
	Group from medium-low inflation	24.5%	30.2%	75.0%
	Group from medium-high inflation	23.1%	31.6%	80.0%
Bank spread (lending rate minus deposit rate)[1]	**Experiences of disinflation (total)**	**26.0%**	**9.9%**	**42.9%**
	Group from medium-low inflation	8.8%	8.7%	55.6%
	Group from medium-high inflation	34.7%	10.5%	29.4%
Market capitalization / GDP	**Experiences of disinflation[2]**	**32.9%**	**43.9%**	**70.0%**
Total value of shares traded	**Experiences of disinflation[2]**	**7.5%**	**13.1%**	**70.0%**

Source: World Bank
(1) Deposit rate: average of current account, savings and fixed terms rates in commercial banks. Lending rate: average short and medium term bank loans to the private sector.
(2) Sub-sample for which this information is available: South Africa, Argentina, Chile, Costa Rica, Israel, Mexico, Poland, Romania, Turkey and Zambia.

It was observed that:

1. In 70 percent of the cases, the low inflation stage corresponds to a higher market capitalization, which grows an average of 10 GDP percentage points, as well as a higher traded volume in the stock market, which is almost doubled in GDP terms.
2. In almost 90 percent of the cases, the bank deposit/GDP ratio is higher in the low inflation stage, and this is much more significant for countries coming from a higher inflation (they go from around 20 percent of the GDP to 30 percent of the GDP, a very significant growth).
3. The bank credit to the private sector/GDP ratio is higher in the low inflation stage, going from an average value of 23.5 percent to 31.2 percent. The increase is higher for the group coming from a higher inflation, but the difference between both groups is not as marked as in other variables.
4. All the countries show a reduction in the borrowing rate, and 90 percent of them also reduce their lending rates. The indicator of rate differential is the only one which does not show a major change for one of the sub-samples. In fact, economies coming from medium-low inflation processes practically maintained their rate differential once the inflationary process was dismantled. Economies which had experienced very high inflation processes show a significant reduction in the rate differential during the low inflation stage.

From this evidence, the following developments could be expected for the Argentine case. On the one hand, disinflation would strongly encourage financial intermediation, both through the capital market and banks. Although Argentina does not qualify for the group reporting a year with an inflation rate higher than 50 percent in the years immediately preceding the disinflation process, it was not far away from that level, so it is expected that gains in terms of intermediation will be significant.

As to the differentials between lending and borrowing rates, the sub-group for which Argentina could be eligible shows few changes before and after disinflation.

3. Stability Analysis

The risk map of the local financial system did not present any significant change relative to the last edition of the FSR. Overall, exposures were moderate and coverage was high regarding potential risk sources. The expected scenario of sustained expansion of intermediation, with a higher degree of inclusion, produces some challenges in terms of risk management. Systemic risk sources are still relatively limited, in a context of small system size, low product complexity, limited interconnection among entities, solvent DSIBs[51] and low concentration of risk factors. Moreover, the system has ample room for developing the credit market without necessarily incurring in debt overhang or the creation of price bubbles.

Credit risk is still low, with moderate exposure in bank balance sheets, low and stable delinquency, and high provisioning. Households and corporations have moderate indebtedness and financial burden levels. As a whole, banks are still resilient to an unlikely extreme credit risk event. Financial entities are robustly positioned against liquidity risks, with high coverage ratios. Exposures to other activity-intrinsic risks (currency, interest rate, and market risks) have not shown significant changes in the last few months. In the future, prudential monitoring should be implemented for potential mismatches between credit and saving instruments adjusted by UVA and UVI and by the loan maturity extension, as well as for any increase in foreign currency operations, the potential search for sources of profitability to offset pressures on rate differential through riskier or more leveraged client and product segments, and the impact of operational costs on soundness (see Chapter 2).

Low Exposure to Systemic Risks

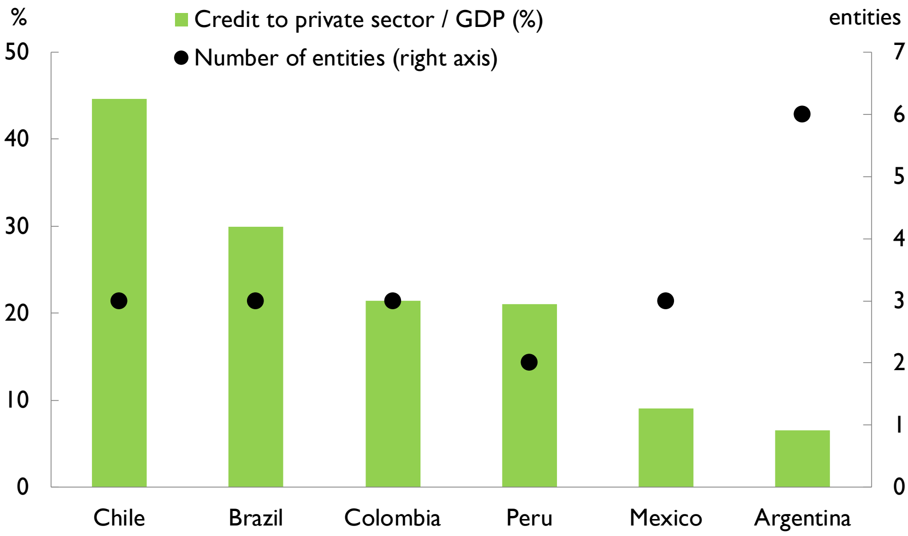
Generally, the local financial system shows low exposure to systemic risk sources. Its small size, its moderate concentration, and the low complexity of its operations are coupled with a low degree of interconnection among entities and a recent performance of slight credit evolution in real terms. In the future, more complex risks will need to be managed as balance sheets expand, and capital markets and links with other financial intermediaries are developed.

In an international comparison, the local financial system reveals low depth in the level of credit in the economy, and a smaller share of relatively larger banks. At the local level, half of the aggregate credit to the private sector is provided by the 6 largest banks, with an amount that equals only 7 percent of the GDP (see Figure 3.1). In contrast, in other economies in the region, half of the credit is provided by a smaller number of large entities (more concentrated systems), and this volume is more significant in GDP terms (deeper systems).

The degree of interconnection among local entities is also moderate in comparison with other financial systems. The importance of inter-bank transactions (active and passive) through the inter-financial markets is similar to that of other emerging economies, and smaller than those of developed economies (see Figure 3.2).

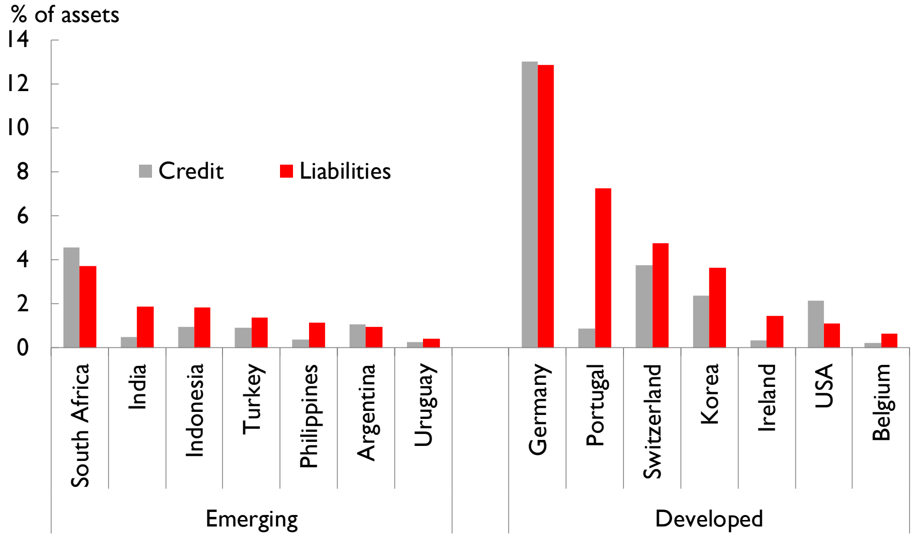
[51] Domestic systemically important entities. For more details, see Exhibit 4 of FSR I-14.

Figure 3.1 | Number and Relevance of the Largest Financial Entities that Account for Half of the Credit to Private Sector



Note: Data as of 2016, except Peru (2015).
Source: Central Banks and Superintendencies of Financial Institutions

Figure 3.2 | Inter-financial Credit and Obligations with Residents



Note: Data as of 2016, except Switzerland (2015), Korea (2014) and Uruguay (2012).
Source: Financial Soundness Indicators (IMF) and BCRA.

Additionally, there is low debtor concentration in the sector. By August 2016, the 100 predominant debtors from the non-financial private sector accounted for 19 percent of the total credit in the sector (almost 75 percent of the net worth), without significant changes relative to the end of 2015.

In terms of coverage for the negative phase of the cycle and the declining of the financial system procyclicality, progress has been made at the local level towards the establishment of a countercyclical capital buffer in line with the Basel international standards. This buffer is not currently used, given the relatively weak evolution of credit and the values of other relevant risk exposure indicators[52].

[52] For more details, see Exhibit 7 of FSR I-16.

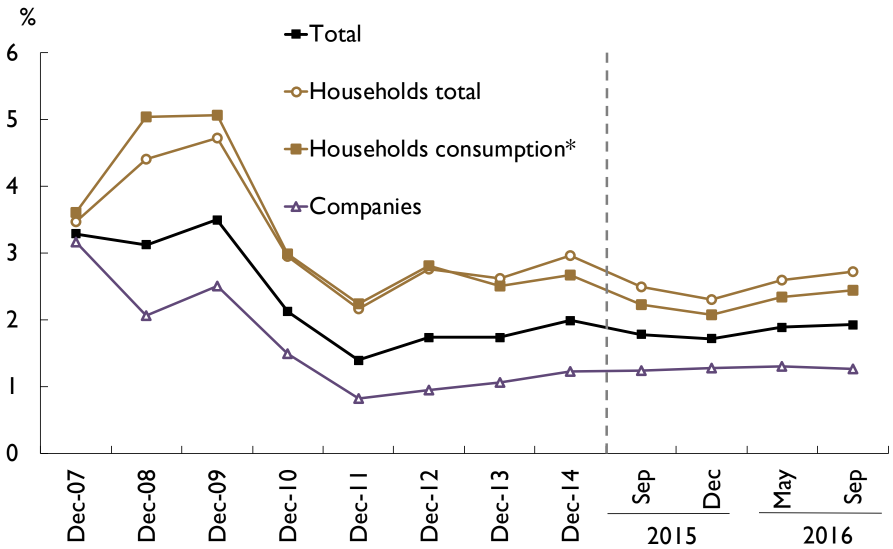
Credit Risk (counterparty)

The expected growth of financial intermediation, together with a process of increased inclusion, entails the need to further monitor the quality of the active portfolio, both by individual entities and by system perspectives. Credit deepening must be accompanied by an analysis of debt levels and debtors' financial burden in aggregate level as well as for specific sets. This scenario implies an increased relevance of monitoring non-bank credit sources, aggregate exposures to various products, regions and productive activities, and the coverages available. A higher degree of credit availability from other suppliers — including both domestic and foreign markets— with an appetite for local corporate debt, particularly from medium and large corporations, might moderate the level of debtor concentration even further. However, it might overstate their indebtedness level. The starting point for facing this process, or a hypothetical unexpected scenario, shows promise if the financial system continues to be highly resilient to a potential extreme, but unlikely, materialization of credit risk.

There have been no significant changes since the last edition of the FSR in terms of credit exposure, delinquency, and the availability of mitigation instruments (provisions and capital). Credit to the private sector accounted for 48 percent of the total asset in the financial system in September 2016, a similar level to that of May 2016, and below the level for the same period in 2015. The ratio of nonperforming credit[53] to the private sector remained at 1.9 percent at the end of the third quarter (see Figure 3.3), below the average levels from the last 20 years and those in most emerging and developed economies[54].

Figure 3.3 | Private Sector Nonperforming Loans by Sector

Nonperforming Loans / Total Financing (in %)



*Note: It includes personal and credit cards. Source: BCRA

Among mitigation instruments, provisioning in the financial system continued to exceed minimum requirements. Without considering the requirements for debtors ranked as creditworthy, provisions accounted for 83 percent of the loans to the nonperforming private sector, 35 percentage points above the regulatory requirement for this segment of the portfolio. Moreover, capital levels are still high (see Chapter 2).

[53] Position of debtors ranked 3, 4, 5, and 6 in terms of total financing position.
[54] See FSR I-16.

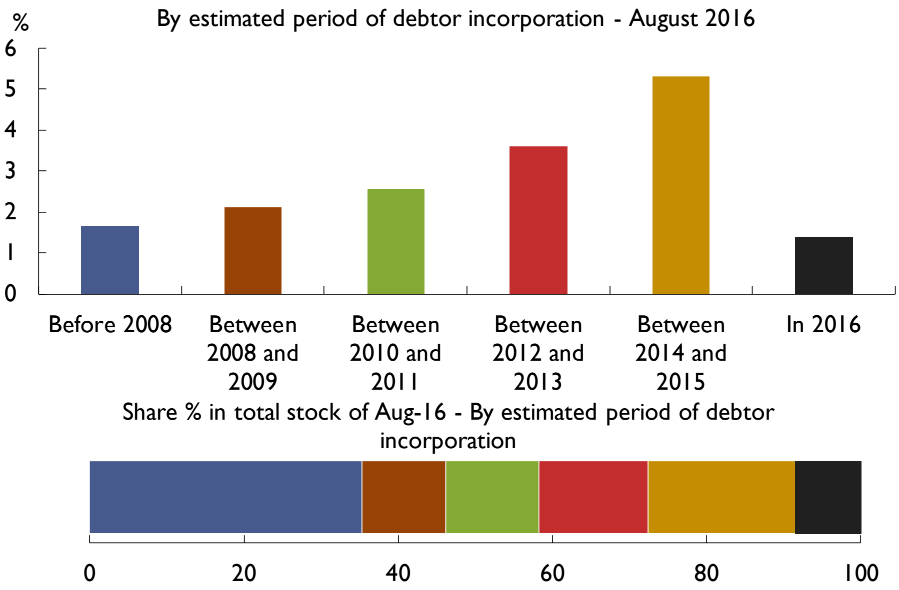
The credit risk faced by the five systemic banks defined at the local level has also remained limited. The nonperforming ratio credit to the private sector for this segment was 1.4 percent, whereas the levels of provisioning and capital have remained ample. In September 2016, the aggregate provisioning[55] of the financial system accounted for 137 percent of the credit to the nonperforming private sector, while excess capital totaled 92 percent of the regulatory requirement.

Households' Credit Risk

Gross exposure of the financial system to households has remained unchanged in the last few months. Credit for households accounted for 21.7 percent of overall bank assets in September 2016. The nonperforming ratio of the segment was 2.7 percent of the portfolio, slightly above the value reported in the last edition of the FSR and in September 2015, and captures the increase in delinquency among consumer credit lines. Entities more oriented to this kind of credit have a higher delinquency[56].

Starting from very low overall levels, the nonperforming ratio among relatively "new" debtors[57] in the financial system (including all kinds of loans) is estimated to be approximately twice that of individuals with a longer credit history[58] (see Figure 3.4). The evolution of credit quality by debtor history in the system is an aspect that should continue to be monitored.

Figure 3.4 | Non-Performance of Lending to Households



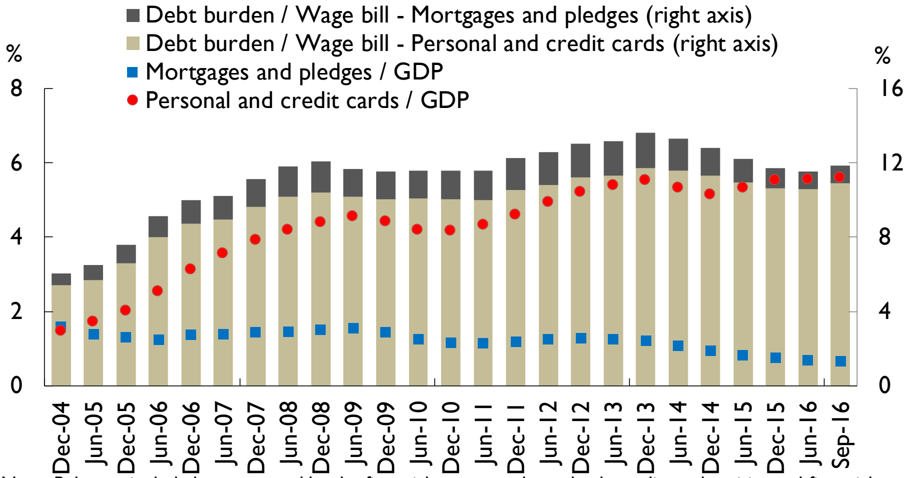
Source: BCRA

Households' indebtedness and financial burden are relatively low and have remained mostly unchanged since the last edition of the FSR (see Figure 3.5). Households' repayment risk is not expected to change significantly in the short term. The positive expectation in terms of economic performance and disinflation for the next few quarters should lead to a gradual improvement in households' real income and financial position. If a distress scenario takes place, however, the sector is well covered (see sensitivity exercise).

55 Including provisioning for both performing and nonperforming debtors.
56 The set of 26 entities where the consumption segment accounts for over half of the credit to the private sector showed a nonperforming consumption ratio of 3.3 percent in September 2016.
57 Such as those who obtained their first bank loan within the last 5 years.
58 Such as those who have 6-year-long or longer credit records in the financial system.

Figure 3.5 | Households' indebtedness and financial burden

Principal and Interest Payments



Note: Balances include loans granted by the financial system and non-bank credit card entities,and financial trusts with consumer loans (credit cards and personal loans) and collateralized loans (pledges and mortgages) as underlying assets. Data subject to change.
Source: BCRA and INDEC

Corporations' Credit Risk

The financial system's gross exposure to corporations' credit risk has remained unchanged since the last edition of the FSR (this credit segment accounts for 26 percent of the total asset). Nonperformance is still low in this kind of funding, 1.3 percent of the total. The construction sector has experienced an increase in its nonperforming ratio in the last few months[59], whereas the ratio was slightly reduced or stable in all other sectors.

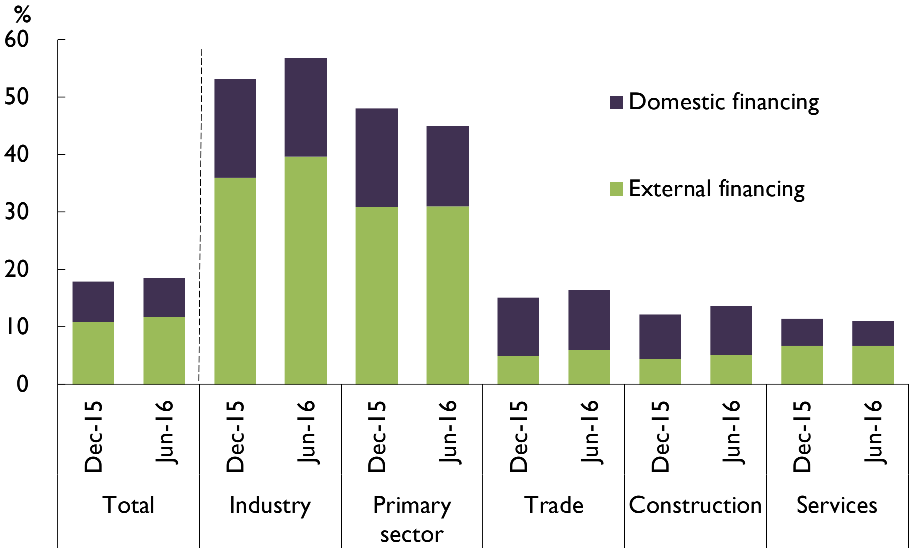
Corporations' aggregate debt remains at moderate levels relative to other economies[60]. In the first half of 2016, industrial activities, trade and construction increased their debt ratios regarding their sectoral output, primarily due to the increase in the external component (see Figure 3.6). This increase comprises mainly the effect of the revaluation entailed by a higher exchange rate, as well as the sourcing of funds.

The free floating exchange rate regime implemented domestically entails the need to monitor the management of funding sources in foreign currency for the various sectors. Although current levels of external and domestic debt are moderate, any potential fluctuation in the exchange rate might have an impact on debt sustainability. However, the sectors that are most indebted in foreign currency today would have access to financial inflows in the same denomination or linked to the trajectory of the exchange rate. As far as local bank credit is concerned, this is the result of the BCRA's macroprudential regulation, whereas, as regards external indebtedness, this reflects the participants' own risk management

[59] For more details, see page 10 of the *Report on Banks* - August 2016.
[60] See FSR I-16.

Figure 3.6 | Corporate indebtedness as % of Sectoral GDP

Average of 4 Quarters



Note: Data subject to change
Source: BCRA and INDEC

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Sensitivity Exercises: Credit Risk Stress[61]

The financial system continues to be strongly resilient to different scenarios of extreme materialization of credit risk. The low degree of the nonperforming portfolio, jointly with the high provisioning and capital levels, explain the positive results even with very unlikely assumptions. This edition of the FSR, with data from August 2016, replicates and expands the three sensitivity exercises regarding capital excessincluded in the last edition of the FSR[62].

EXERCISE A[63]. The fall in capital excess at the aggregate level would not be very significant if all nonperforming debtors failed to repay their obligations, thanks to regulatory and voluntary provisioning levels, and to available capital ratios. Using data from August 2016, the quantity of entities in the group with a capital excess of up to 10 percent of the regulatory requirement would rise from 5 to 9. Within this set of entities, 7 of them would have their capital below the requirement (accounting for only 0.3 percent of the total capital in the financial system and 0.5 percent of the asset[64]), exactly like in the exercise carried out in the last edition of the FSR.

EXERCISE B[65]. The effect on aggregate excess capital is still moderate under the assumption that nonperforming credit presents levels similar to those of the 2008 global crisis, although the nature of the hit compromises a larger number of small-sized entities (see Figure 3.7). Overall, 19 entities would fall into the category with 10 percent or less excess capital, 17 of which would have deficient regulatory capital (with a representation around 2.2 percent of the capital and 3.4 percent of the asset[66]).

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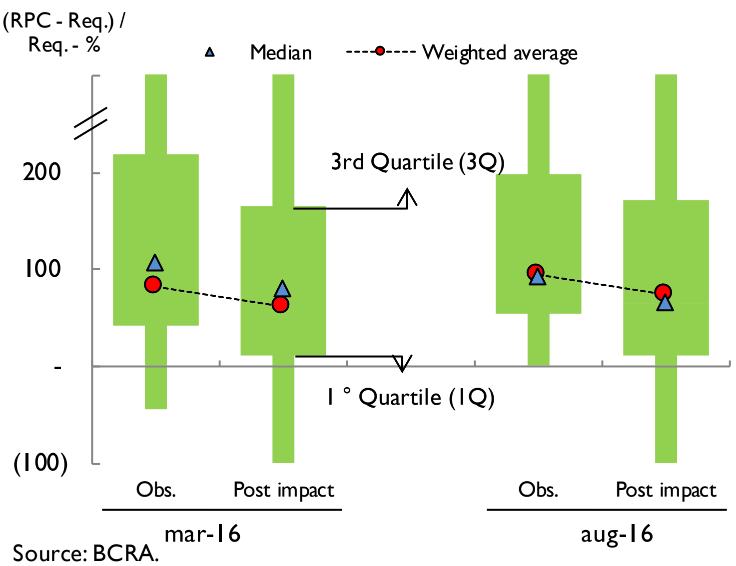
[61] The BCRA carries out these exercises periodically, and as a complement to the stress tests that use macroeconomic scenario analysis.
[62] See FSR I-16.
[63] Voluntary provisions are assumed to be made for nonperforming debtors.
[64] Only 0.1 percent of GDP in terms of credit to the private sector.
[65] The nonperforming ratio in each entity's portfolio is assumed to increase to the maximum level reached during the peaks of the global financial crisis (between IIH-07 and IH-10). No recovery is assumed for the nonperforming portfolio as a whole, and, as in the previous exercise, all excess provisioning is assumed to have been made by nonperforming debtors.
[66] Approximately 0.5 percent of the GDP in terms of credit to the private sector.

EXCERCISE C. This scenario, aimed at capturing the risk of debtor concentration, would create a moderate effect on the aggregate capital in the sector, higher than the one in the other two exercises. In general, larger banks tend to cover a wider share of the credit needs of larger firms. This scenario contemplates the extreme assumption that all 10 largest corporate debtors of the financial system become unable to pay back. We call this stage of the exercise Stage I, which is the same as the exercise included in the last edition of the FSR. Stage II adds the default of all bank debt owned by employees from those 10 firms. In this exercise, the impact is limited in terms of the quantity of entities, but not in terms of the systemic relevance: only 7 entities would have less than 10 percent excess capital, and 2 would be deficient in regulatory capital (7.3 percent of the capital and 7.9 percent of the asset[67]). Both stages show similar results (see Figure 3.8).

[67] Almost 1.3 percent of GDP in terms of credit to the private sector.

Figure 3.7 | Excess Capital Sensitivity Exercise

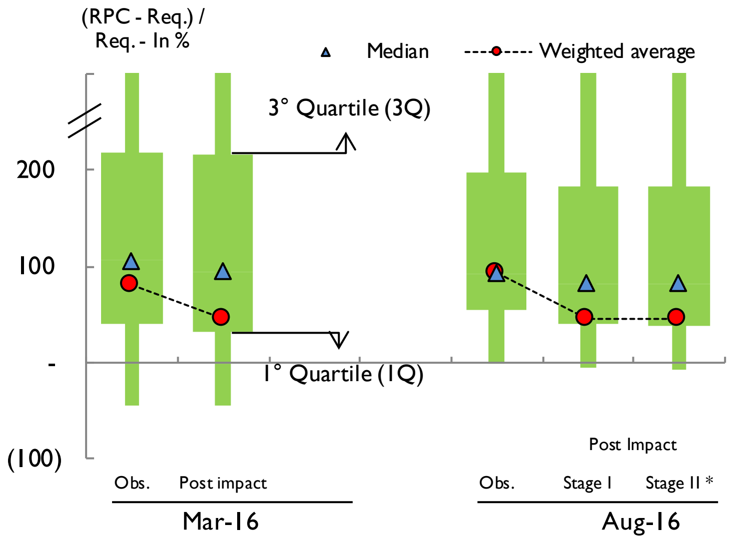
Exercise B



Source: BCRA.

Figure 3.8 Excess Capital Sensitivity Exercise

Exercise C



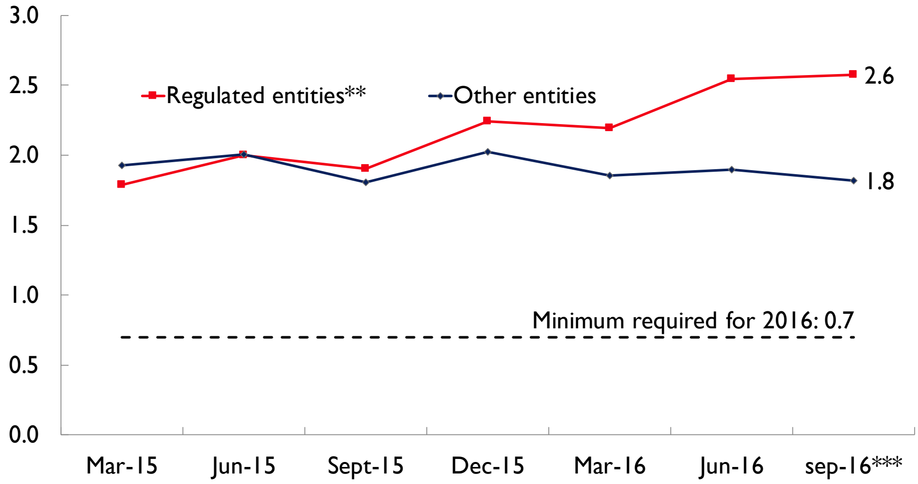
* It was estimated with data as of Jun-16. Source: BCRA

Aggregate Liquidity Levels Continue to be High

The set of banks is extensively covered against liquidity risk, that is, they keep adequate tools to face potential scenarios of significant deposit withdrawals from the system. The Liquidity Coverage Ratio (LCR) as defined by the Basel Committee, which measures the availability of high-quality funds in a severe stress scenario of 30-day deposit withdrawals, increased both marginally and relative to the same period in 2015, remaining comfortably above the internationally recommended lower bounds (seeFigure 3.9).

Figure 3.9 | 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 88% of assets in Sep-16. *** Provisional. Source: BCRA

From a wider perspective, and taking into account not only the aforementioned Basel guidelines, liquidity risk exposure indicators show only slight, though mixed changes since the last edition of the FSR. Short-term funding as a share of total funding has marginally increased, although it is still below the level recorded one year ago, reaching 68 percent of total banking funding as of June, the latest available data[68] (see Figure 3.10). Deposits made by the main clients have declined in relative importance as a share of total deposits in banks as a whole, both in the last quarter and in the inter-annual comparison.

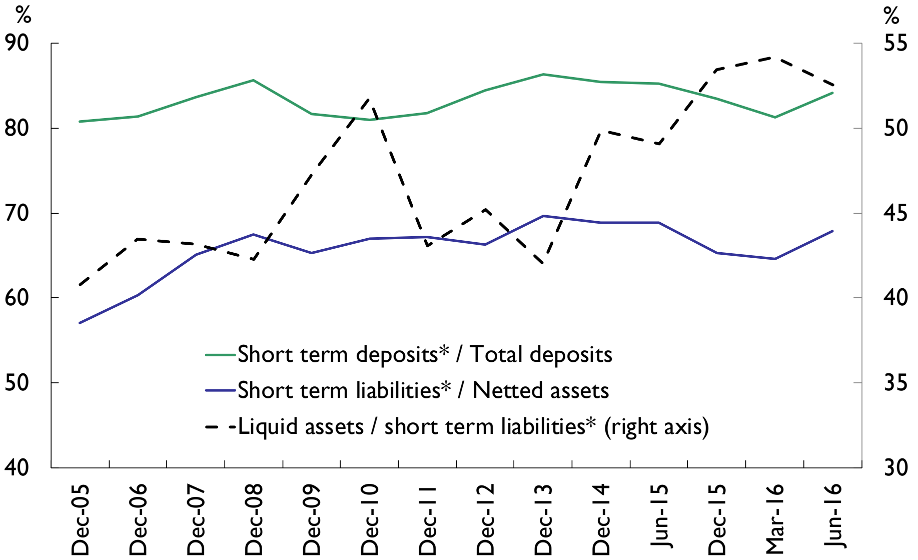
The position of broad liquid assets reached 47.1 percent of deposits (as of September) and 52.5 percent of liabilities with a maturity of less than one month[69] (as of June, the latest available data), representing historically high levels with high-quality liquid assets (see Figure 3.11).

It should be noted that levels of exposure and coverage against liquidity risks are heterogeneous among different entities. In June, the banks with an exposure above the weighted average of the financial system and a coverage below the aggregate average accounted for 44 percent of assets, almost 5 percentage points less than the group with the same aspects in March 2016.

[68] DSIBs showed a similar evolution and level.
[69] For banks considered as DSIBs, the coverage level was lower, with total liquid assets accounting for 46 percent of deposits in September and 50.5 percent of short-term liabilities in June.

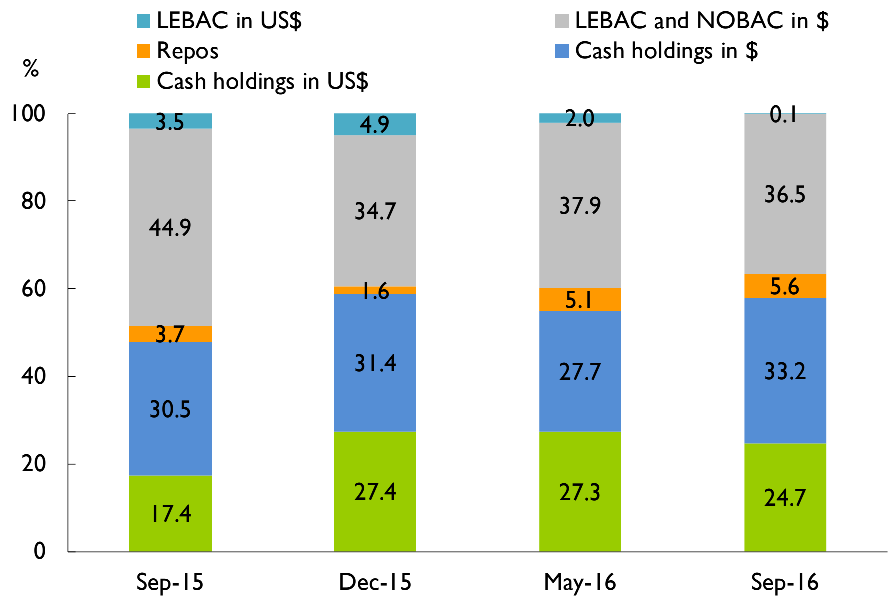
Figure 3.10 | Indicators of Exposure and Coverage of Liquidity Risk

Financial System



* with a residual term of less than 1 month.
Source: BCRA

Figure 3.11 | Composition of Liquid Assets



Source: BCRA

Inter-financial liquidity markets are gradually becoming a tool for a wider availability of resources for entities. Their operations continued to be carried out in a context of limited volatility and a decline of the main reference interest rates (see Figure 3.10), although with volumes increasing slightly. The average traded volume during the third quarter in the secured segment —repos— and the unsecured segment—calls— was reported to be around 1.2 percent of deposits, slightly more than in the previous quarter and in the same period in 2015. Repos between entities rose marginally and accumulated a year-on-year growth of approximately 43.5 percent in the first nine months of the year, with a lower increase in unsecured loans. In the last three months, the supply of funds in the call market was mainly driven by national private banks, while the resource demand was channeled mostly towards non-banking financial entities.

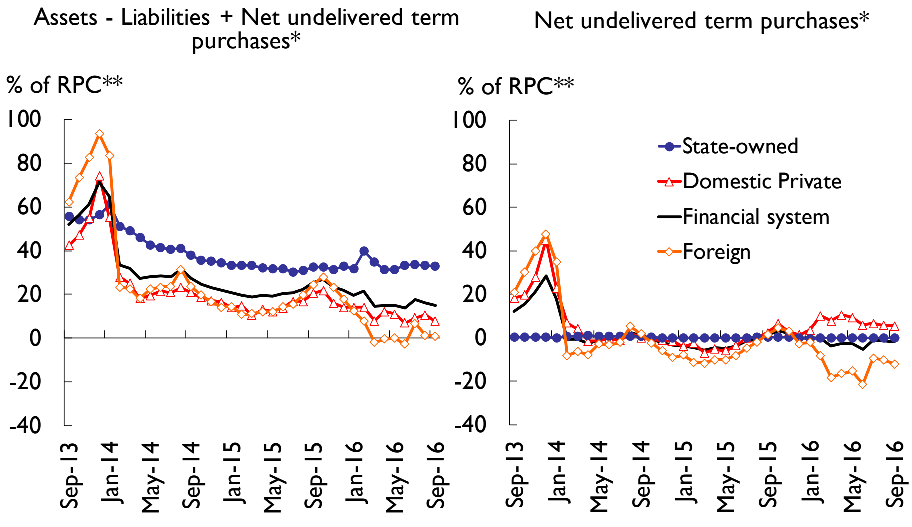
In the expected context of disinflation, lower nominal policy interest rates, economic recovery, and a higher degree of financial inclusion, banks will face the challenge of increasing the weight of intermediation with the private sector in their business flow. A context that fosters positive real interest rates and reduces uncertainty might also have an impact on fund maturities, as the rates for time deposits would become more appealing. On the other hand, policies that encourage a more limited use of cash, such as those aimed at modernizing means of payment and at promoting financial inclusion, might lead to more ample short-term funding in contractual terms, though highly stable in effective terms. In sum, the characteristics of liquidity risks might gradually change if the context expected for the financial system materializes.

Low Foreign Currency Risk

Argentina has a floating exchange rate regime, which can create risks for financial entities as much as they present currency mismatches[70]. In order to reduce this risk, the BCRA has adopted a set of macroprudential measures[71] adding to the existing ones in this field and to the constant monitoring.

In a scenario of higher financial intermediation in foreign currency (see Chapter 2), in the last few months, the exposure of the set of financial entities to the currency risk has been very limited. In September 2016, the currency mismatch of the aggregate financial system was 15 percent of the regulatory capital (*Responsabilidad Patrimonial Computable, RPC*), a value in line with the one reported at the time of the last edition of the FSR, and 6.9 percentage points lower than that of the end of 2015[72] (see Figure 3.12).

Figure 3.12 | Foreign Currency Mismatch



* Off-balance accounts
** Regulatory capital. Source: BCRA

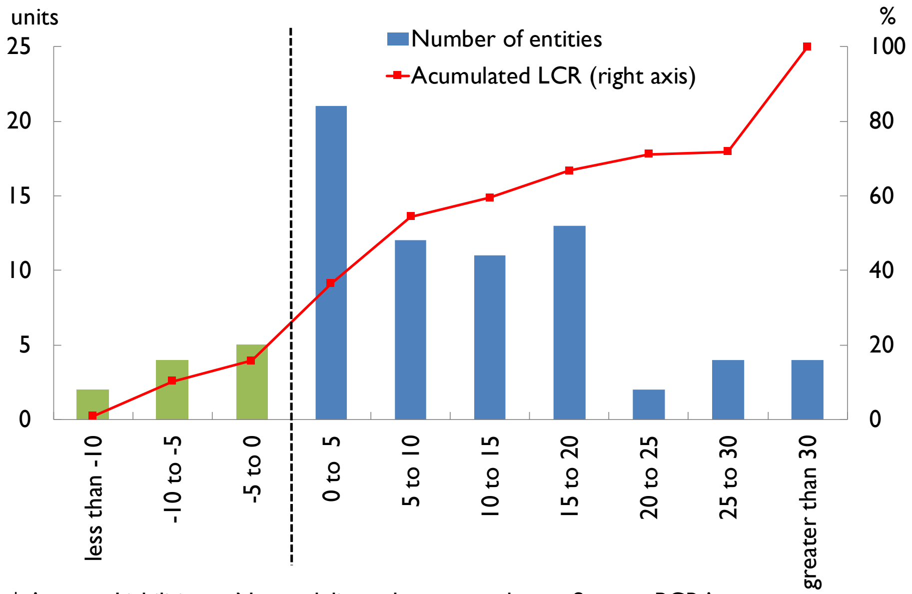
The fall in the currency mismatch last year had its source in private banks, in particular in foreign institutions. State-owned banks as a whole have the largest active currency mismatch. With the information from last September 2016, a total of 11 entities (accounting for 16 percent of the system's RPC) reported a passive mismatch (see Figure 3.13).

[70] The risk associated to potential currency mismatches in debtors' balance sheets is discussed in the section on credit risk.
[71]For more details on the measures adopted in this area in late 2015 and early this year, see FSR I-16.
[72] Entities considered to be systemically important have a slightly higher level of currency mismatches, 23 percent of RPC in September, a similar level to the one reported in May 2016 and below that from late 2015.

As of September, the capital requirement for currency risk —included in the regulation within market risk— accounted for only 2.5 percent of the RPC and 4.5 percent of the total requirement. These levels are in line with the ones reported last May, although they exceed those in late 2015.

Figure 3.13 | Foreign Currency Mismatch*

% of RPC – as of September 2016



* Assets - Liabilities + Net undelivered term purchases. Source: BCRA

UVAs and UVIs: The Importance of Monitoring

Since April 2016, a number of new savings and housing credit promotion instruments have been made available to the public, whose capital is adjusted by inflation or by construction costs. The immediate outcome has been a higher growth of loans, in contrast to deposit growth (see Chapter 2). This has resulted in a still incipient, low mismatch (only $700 million, or 0.3 percent of RPC). However, the deepening of this effect might create the need to not only further monitor, but also to adopt prudential measures.

First, the potential risk for the financial system associated to these instruments might be interpreted as just one more aspect of the currency risk. That is, a risk is incurred when the asset balance denominated in a given currency (pesos, UVIs, UVAs or foreign currency) is different from the liability balance denominated in the same currency, since fluctuation would have an impact on bank's equity determined by the net position in the type of instrument according to the adopted variable (the exchange rate, the price level, etc.).

Secondly, there may be a term mismatch in UVI or UVA positions. This situation is analogous to a term mismatch in any given currency, characterized in traditional banking by long-term asset and short-term liability positions. In this scenario, and even if assets and liabilities are adjusted based on the same index, the financial system would expose itself to increases in the real interest rate on adjusted capital.

As a consequence, insofar as UVI or UVA positions grow and long-term assets are not securitized, identifying and monitoring the mismatches faced by each entity and by the aggregate system will become increasingly relevant in order to limit potential adverse effects on equity. The development of securitizations and UVI and UVA derivative markets would enable to better manage this risk.

The Financial System Continued the Slight Transformation of Maturities

In a context of disinflation and sustained expansion of banks' balance sheets, monitoring term mismatches and interest rate risks for the financial system will become increasingly important. These sources of intrinsic risks are currently very limited. In marginal terms, the drop in inflation has contributed to the construction of a fixed-rate curve in pesos that will serve as a benchmark and ease the establishment of interest rates for longer-term loans and bank funding (see Chapter 1).

There have not been significant changes in the maturity of loans not valued at market price in bank portfolios in the last few months. Current levels reflect the limited transformation of maturities by the local financial system, still focused on transactional activities. In August, assets net of liabilities in pesos had an average maturity[73] of 8.7 months[74]. In this context, the interest rate risk faced by the set of banks was kept at low levels. Assuming a 200 basic-point increase in the interest rate, the economic value of the financial system portfolio would only suffer a 1.2 percent reduction[75].

Local regulations on financial entities' minimum capital requirements do not include any specific capital requirements to face the interest rate risk. This is consistent with the standards recommended by the Basel Committee, Pillar 2. Therefore, local entities should assess their capital adequacy regarding this particular risk. However, when the SEFyC concludes that a specific entity does not hold sufficient capital for its degree of interest term risk, it may require a risk reduction, the holding of a specific amount of additional capital, or a combination of both measures.

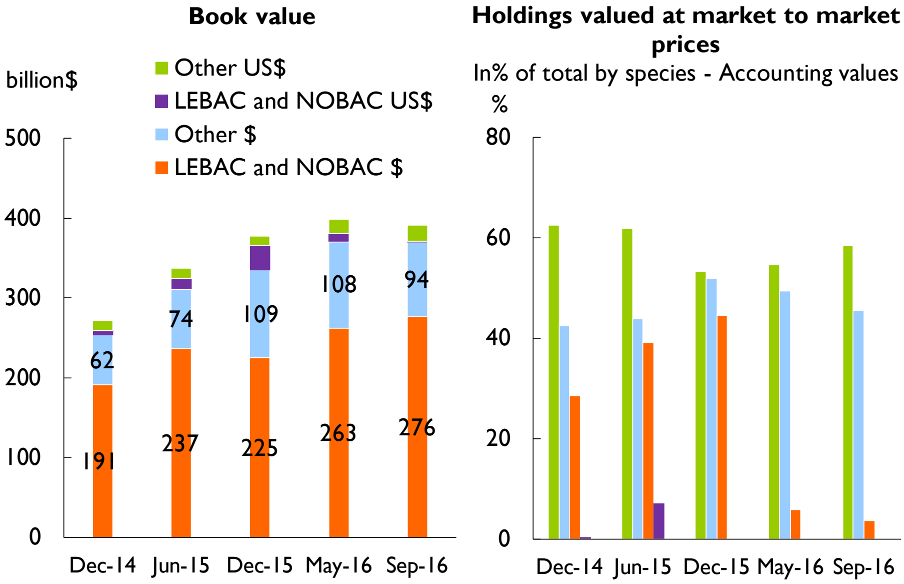
Limited Equity Exposure to Market Risk

At the end of the third quarter, the financial system continued to show a limited equity exposure to the risk of having fluctuations, in the market price of financial assets, which could adversely impact on its balance sheets[76]. Capital requirements for this kind of risk accounted for only 1.5 percent of total capital requirements and 0.8 percent of risk-weighted assets. This position was in line with the one observed in mid-2016[77].

In September, almost 85 percent of capital requirements for market risk were related to public sector debt instruments. According to the latest information available, public sector securities recorded at fair market price accounted for only 3.1 percent of the total asset in the financial system, with a decrease in the last few months (5.7 percentage points by the end of 2015). This performance was mainly due to the evolution of holdings in monetary regulation instruments (see Figure 3.14) —although the total balance of holdings in LEBAC has grown in the last few months, these were mainly recorded using "cost plus yield" accounting methodology.

[73] Inflows net of outflows, discounted by fixed-term deposits interest rate, weighted by their time range.
[74] The maturity of the net active portfolio of DSIBs was approximately 6.4 months.
[75] Based on Communication "A" 5398 methodology. Another criterion established by the BCRA (Pillar 2) focuses on the annual change in interest rates observed on the 99th percentile of the moving distribution in the last five years. According to this criterion, the loss in the economic value of the financial system's portfolio would be 4.84 percent.
[76] We only consider here the debt security and share portfolio. The exchange rate risk is discussed earlier in this chapter.
[77] See FSR I-16.

Figure 3.14 | Holdings of Government and BCRA Securities



Source: BCRA

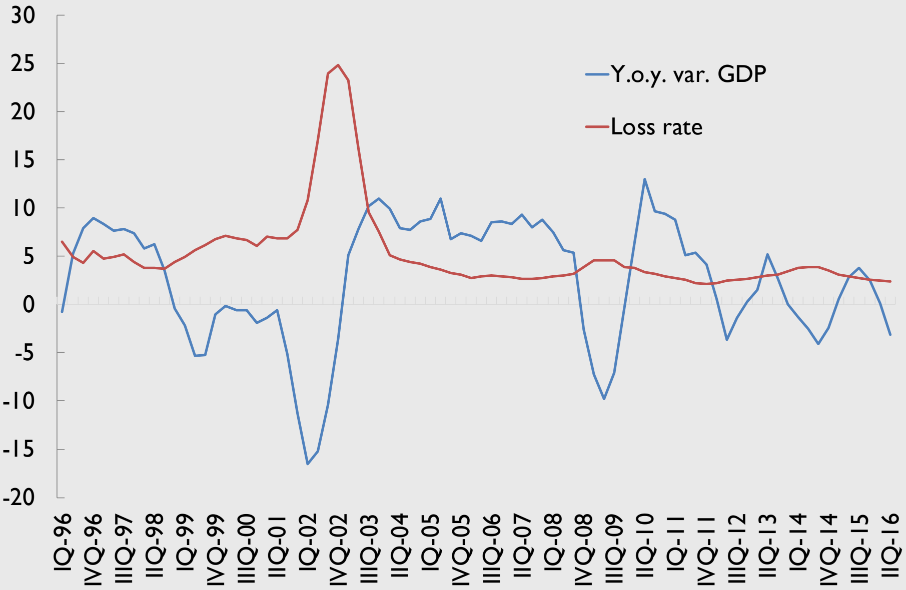
The context of a favorable macroeconomic outlook for debt placement by the different levels of the Government and, in particular, by corporations, might create a gradual increase in the aggregate level of bank exposure to market risk from the current low levels. The financial system would be relatively well equipped for this kind of scenario, given its excess capital position (see Chapter 2) and the Prudential Standards that preserve its equity from a rise in exposures, such as the concentration of credit risk, for example.

Exhibit 2 / Sensitivity Exercise: Credit Risk-Loss Rate due to Changes in the Economic Cycle

Given that credit risk is considered first when analyzing the solvency of financial entities, both entities and regulatory agencies have developed different types of models to measure the default risk. Taking into account the link between this risk and the macroeconomic context, many of these models involve econometric estimations that attempt to link the deterioration of the credit portfolio to aggregate economic events. In this sense, an exercise based on a credit risk model is presented to assess the sensitivity of the portfolio to fluctuations in the level of activity. This econometric model exploits the advantages of panel time series estimators in order to analyze the relationship between the loss given default rate and its determinants, particularly the evolution of the economic activity level and the real interest rate. The results suggest that the local financial system portfolio would be resilient to abrupt product movements.

There is a negative correlation between the economic cycle and the credit quality of entities' portfolios, which is represented, for example, through the evolution of nonperforming loans. In Figure 1, this inverse relation is evident in the last 20 years, mainly until 2008. In 2009 no overall loss growth is observed as it would be expected based on a simple analysis of previous years. There are other features of entities' context and policies that could explain this low sensitivity; for example, the fact that in this year the economic recovery was rapid or that the quality of the financial system credit portfolio was very high. Moreover, within the system there were certain discrepancies in the evolution of the loss rate. In order to predict future potential paths, the model set out here —using the common correlated effect mean group estimator (CCE-MG)[78]—attempts to capture this heterogeneity.

Figure 1 | GDP Change[79] and Credit Risk-Loss Rate[80]



Source: BCRA e INDEC

The database involves a panel of 56 financial entities with a quarterly frequency for the IQ-1994 – IIIQ-2015 period and 3,968 observations (this is an unbalanced panel). In the model — see equation (1) — the

[78] This is a version of the panel time-series model enriched with cross-sectional averages, both of the explanatory variables and the dependent variable, for each time point, to capture common unobserved effects —Pesaran, (2007); Burdisso T and M. Sangiácomo (2016).
[79] Year-on-year seasonally adjusted GDP change (as logarithmic differences).
[80] Financial system average rate of nonperforming loan charges (gross of recoveries) to non-financial private sector credit.

dependent variable is the loss rate for each entity defined as nonperforming loan charges (gross recoveries) regarding the loans for the non-financial private sector. The natural persistence of the dependent variable led to a dynamic panel specification. In addition, the year-on-year seasonally adjusted GDP growth rate (the higher the growth, the lower the loss rate), the square of the year-on-year GDP growth rate (in order to capture the non-linear increase verified in the loss rate when the economy enters into recession) and the evolution of the weighted average active real rate for each entity[81] [82](the higher the real rate, the higher the loss rate) were included. All the determinants are lagged to determine the period time between the increase of the rates or the economic performance and its impact on the portfolio deterioration[83].

$$\ln\left(\frac{Y_{it}}{1-Y_{it}}\right) = C_i + \alpha_i \ln\left(\frac{Y_{it-1}}{1-Y_{it-1}}\right) + \beta_i X_{it-1} + \gamma_i Z_{t-1} + \varepsilon_{it} \quad (1)$$

$$\text{with i} = 1, \dots, \text{N y t} = 1, \dots, \text{T}_i$$

where the credit risk-loss rate Y_{it} is represented by means of the logarithmic transformation[84], C_i is the constant per entity, X_{it} reflects the variables that vary in time and by entity, in this case the weighted average active real rate, and Z_t are the observed effects that vary only in t, such as the economic growth rate. Finally, ε_{it} is the shock for each entity at the t moment. Please note that in the model estimation (1), coefficients vary by entity[85, 86].

Figure 2a shows the simulation results. Taking the product fall of the 2nd quarter of 2016 (≅ 3 percent year-on-year) as a benchmark, product variations around this fall are considered plus/minus 2 standard deviations from the historical quarterly variation rate between the first quarter of 2004 and the second quarter of 2016, which shows a range from a 14 percent decrease to a 10 percent increase. According to this exercise, the financial system as a whole would show narrow signs of deterioration (a maximum decrease of 0.4 percentage points in GDP) as a result of customers default (see Figure 2a, red line), reaching a credit risk-loss rate of 2.8 percent.

The segregation of financial entities into three groups[87] shows that the third, the one with the highest lending rates, is more sensitive to the decline in the level of activity. In fact, with a year-on-year GDP decrease of 14 percent for the quarter, the credit risk-loss rates of entities would be around 2.1 percent for the first and second groups and nearly 6.5 percent for the third group (see Figure 2a), which is mainly focused in the retail sector and includes 25 percent of the entities.

When doing the same exercise, but assuming that the contraction of the economic activity continues in the next three quarters (equal to an annual average decrease of 3 percent), it is observed that the nonperforming rate is almost doubled both for the system as a whole and for the individual groups, regardless of the range of variation of the product considered (see Figure 2b). The entities of Group 3

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[81]The real rate was calculated as $r_i = \left(\frac{1+j_i}{1+\pi}\right) - 1$, where j is the weighted average by the nominal rates amounts of the various credit lines of the entities; π is the year-on-year inflation rate, 4 quarters in advance.

[82] The economic growth rate in Brazil, the real growth rate of loans for the system average, the differential between the real growth rate on each entity loan and the system rate, and the net worth compared to the net assets by entity, among others, were not statistically significant.

[83] All the variables were stationary according to the panel-data unit root test developed by Im, Pesaran and Shin (2003), and modified by Pesaran (2007) in order to control by the cross-sectional dependence (CSD) caused by the unobserved effects.

[84] The literature of loss rate models usually calls for the logarithmic transformation, since it converts the narrow range between zero and one by the loss rate construction into a transformed variable that varies among the real numbers, accounting for the non-linearities to which the dependent variable is subjected due to major shocks on the variables –IMF 2014; Moretti (2008).

[85]The CSD presence was assessed through the LM test developed by Pesaran, Ullah and Yamagata (2008). This test strongly rejects the null hypothesis of lack of serial correlation of the residuals.

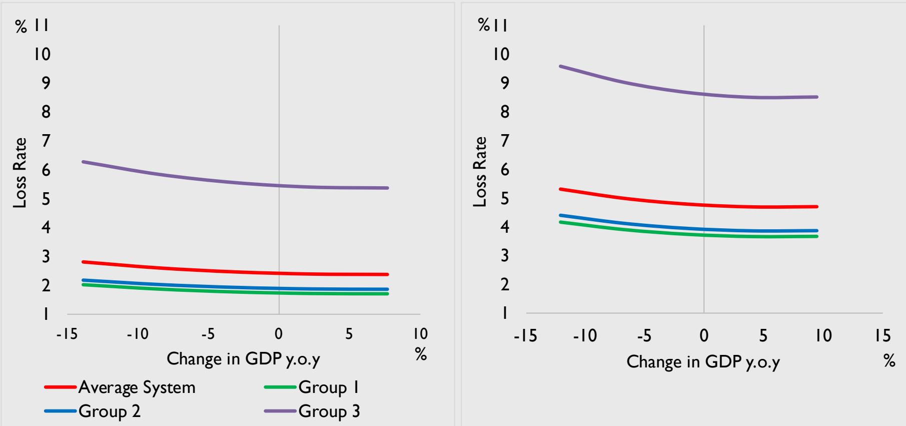
[86]The equation (1) is increased by the incorporation of cross-sectional averages, both of the explanatory variables and the dependent variable, for each time point, and then estimated with the CCE-MG, in order to control by the presence of CSD. See the Stata command **xtmg3** developed by Eberhardt M. and M. Sangiácomo at https://sites.google.com/site/medevecon/code

[87]It is grouped based on the distribution of entities according to their active average nominal interest rate in the IIQ-16. Group 1 includes the entities in the first quartile, Group 2 includes the entities in the second and third quartiles, and Group 3 corresponds to the upper 25 percent.

would show loss rates around 9 percent for the proposed product variation range, thus standing out as the group to be more closely monitored.

Figure 2 | Sensibility of the Loss Rate* to GDP Changes**

(a) 1 Quarter Projections **(b) 4 Quarters Accumulated Projections**



Source: BCRA and INDEC

Source: BCRA and INDEC

*Average rate for nonperforming loan charges (gross of recoveries) in terms of non-financial private sector credit.

** Year-on-year seasonally adjusted GDP change (as logarithmic differences).

References

Burdisso T. and M. Sangiácomo (2016). “Panel Time Series Review of the Methodological Evolution.” Stata Journal 16

Im K., H. Pesaran, Y. Shin (2003). “Testing for unit roots in heterogeneous panels”. Journal of Econometrics, 115

IMF, (2014). A guide to IMF stress testing: methods and models. Editor Li Lian Ong.

Moretti M., Stolz S. and Swinburne M., (2008). “Stress Testing at the IMF”. FMI, WP/08/206.

Pesaran, M.H. & Ullah, A. & Yamagata. T., (2008). "A Bias-Adjusted LM Test of Error Cross Section Independence," Econometric Journal, volume 11, pp. 105-127.

Pesaran, H. (2007). “A simple panel unit root test in the presence of cross-section dependence”. Journal of Applied Econometrics, 22: 265-312.

Exhibit 3 / Households' Indebtedness by Income Level

The BCRA has developed a set of tools to monitor and analyze the different risks faced by the financial system. In the case of the credit risk, besides stress tests[88], a series of measures is used to approximate the economic and financial situation of households and corporations. The aggregate average indebtedness in the household sector has been monitored regularly, though the analysis by income level is pending. To face this challenge, a preliminary disaggregation of households' indebtedness was carried out recently, without evidence of risks due to excessive indebtedness in any of the population's income levels.

A low level of households' indebtedness in aggregate could be concealing a financially delicate situation in certain households regarding income levels. That is, only looking at the certain aggregate situation could lead to incomplete conclusions, which would entail the risk of inadequate policy decisions. With this in mind, an approximation was made of the disaggregate debt ratio based on debtors' income levels, including more specific dimensions about liabilities, such as the type of loans taken by each individual.

To that effect, the information used was taken from the different Reporting Regimes periodically surveyed by the BCRA. First, the Financial System Debtors' Reporting Regime[89], which provides information on the loans each individual takes from financial entities and credit cards of the closed system (non-bank credit cards). Second, the Compensation Payments' Reporting Regime[90] which, also at the individual level, collects information on the amounts deposited by employers in wage accounts of employees.

Thus, for the estimation exercise, compensations received by employees in July, 2015 - June, 2016 were considered, which are estimated to comprise 65 percent of the total wage bill[91]. In a universe of 8.6 million individuals reporting income during the 12 months under analysis, the ones considered were those with a series of requirements established to discard extreme observations, resulting in a total of 7,207,529 wage earners[92].

Regarding debt data at the individual level, the information covers all individuals with liabilities in financial entities —including debts originated in banks and then moved to trust funds— and the issuers of credit cards of the closed system. It should be pointed out that, in the case of those credits in which there are co-debtors, the available information places the total debt on only one of them (common occurrence in the case of mortgage loans).

The combined processing of the aforementioned information sources allowed obtaining the individuals' debt distribution based on their income level. It is important to point out that, given the characteristics of the information taken from each of the aforementioned Reporting Regimes, the ratios built under them must be interpreted with caution. First, the exercise's results refer exclusively to debtors with income from registered active working relationships, that is, they do not include income from other sources, such as pensions, retirements, self-employed work, transfers not linked to wages (for instance, rent or financial gains from claims) or informal income, as well as other, less significant sources. As a result, wage-earners who receive other income apart from their registered compensation, cannot include it as income (even though it should be included in that category), resulting in overestimated indebtedness ratios. It is also impossible to carry out an analysis at the family unit level, due to the lack of a family relationships' database. As to the Debtors' Reporting Regime, the lack of disaggregation of debt with co-debtors implies that there is a bias on the debt allocated to each income level.

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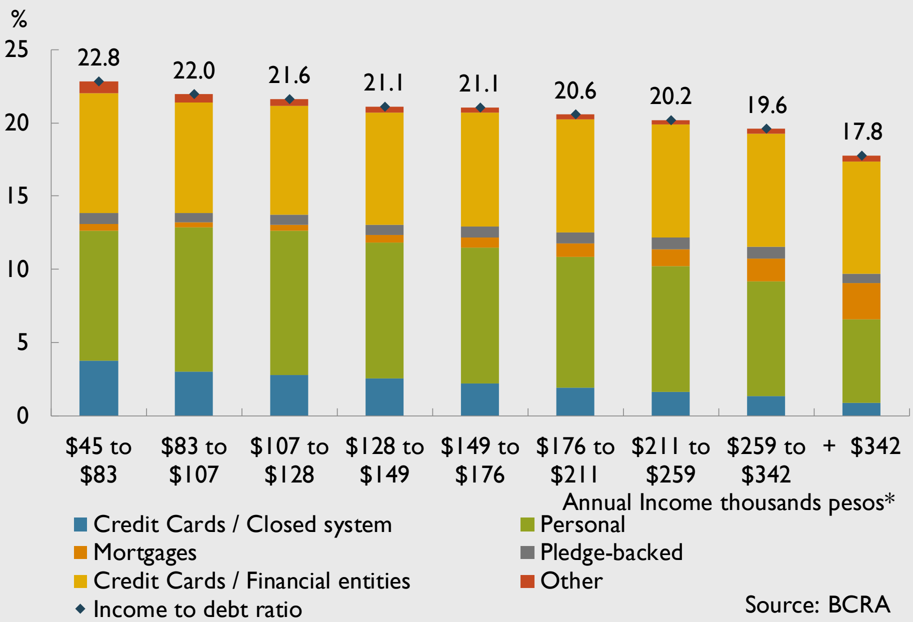
[88] See Chapter 3.
[89] Monthly Accounting Reporting Regime— Financial System Debtors.
[90] Monthly Accounting Reporting Regime — Compensation Payments.
[91] This amounts to $1.59 trillion in accredited total compensation, discounting income tax and other income, and including collected family endowments, relative to $2.44 trillion of total wage bill estimated for the same period, net of contributions, but without considering other concepts associated to wages.
[92] In order to place this magnitude in perspective, the number of employees estimated by the INDEC in the Permanent Household Survey (*Encuesta Permanente de Hogares, EPH*) of the second half of 2016 was of 11.3 million individuals, in a universe of approximately 28 million individuals (estimated for the 31 urban conglomerates in which the survey is carried out).

As should be expected, the seven million individuals for whom there is information on perceived compensations are in the highest deciles of the income distribution at the population level, according to the INDEC's EPH. Considering the data for the second quarter of 2016, 23.6 percent of these individuals are in the top decile of the employed population, and slightly more than half is in the three top deciles.

Considering the decile distribution of individuals with compensations (population classified as "active"), so that each level has the same number of individuals, the estimation of the weighted debt ratios shows that they decrease as individuals' income levels grow, as can be seen in Figure 1.

Figure 1 | Debt Ratios by Annual Income and Line of Credit



Source: BCRA

* Individuals with reported compensations of less than $ 45,000 have a debt-to-income ratio of 122%, likely signaling that compensation recorded is a small portion of the total income of those debtors

The share of different credit lines in total indebtedness is not homogeneous across the different income levels: while mortgage loans contribute 2.5 percentage points to the debt ratio of 17.8 percent of the richest decile, they barely amount to 0.5 percentage points in individuals with an annual income between $45,000 and $83,000, whose total ratio is of 22.8 percent. Moreover, personal loans and credit card debt appear to have a greater weight in the lower income groups. This is important because, given the different term and rate structures of each granted credit line, the monthly debt burden derived from the same total balance can vary considerably based on the composition by type of loan.

This first approximation to the acknowledgement of differences in the indebtedness levels in the different income levels and in their composition, with an effect on the associated debt burdens, will enable a more comprehensive assessment of the sectoral situation.

4. Payment System

The BCRA keeps moving forward a modernization of the means of payment of the economy, resulting in a more agile, efficient, reliable and competitive service, and promoting a wider financial inclusion. This framework promotes the technological development of alternative payment tools other than cash that will contribute to the expansion and increased use, at a lower cost, of financial services among population. Besides, these tools will enable a more efficiently use of the financial entities' resources, a challenge they will face within a context of lower inflation rates, as the expected for the upcoming years (see Chapters 1 and 2). A significant development in this aspect since the last edition of the FSR was the BCRA regulation which implements an option for an electronic check deposit.

4.1 Modernization of the Payment System

According to the previous FSR (I-16), the BCRA continues to drive the development of a modern financial and payment system that can take advantage of accessibility, cost reduction and other benefits provided by the technology available, in line with international trends. The development of the electronic means of payment also contributes to reduce the informal economy, improve its competitiveness, promote financial inclusion and create productive employment.

As highlighted in the last edition of the FSR[93], the immediate transfer modality is available since last August through a new channel, the so-called Mobile Payment Platform[94] *(Plataforma de Pagos Móviles, PPM*). This modality provides a higher level of competitiveness and transparency in the electronic payment instruments of the economy, reduces costs for users (businesses and consumers) and enables virtually unlimited collection points. It offers three payment options under a free of charge scheme: (i) the electronic wallet, a cell-phone application that allows the loading of bank accounts in order to make transfers to other accounts; (ii) the mobile point of sale (Mobile POS), which allows the reception of transfers from debit cards through safety devices (dongles) that are connected to the cell phone and used in order to validate transactions; and (iii) the payment button, which allows buyers to operate at virtual points of sale using the debit in their sight accounts.

As of mid-December, with the purpose of facilitating electronic transfers and payments, entities must have their systems ready to enable users to change their Banking ID (*Clave Única de Identificación, CBU*) for an alphanumeric "alias" of up to fourteen characters of their choice[95]. In order to activate this alias, entities will have to adjust the functionalities of the online banking, mobile banking and PPM. Unlike the CBU, the alias will be portable, which means that if the user moves to another bank, he/she can keep the same alias and associate it to the CBU of the new account.

Moreover, aimed at a more efficient use of checks, it was created the electronic check deposit modality under which, since November, entities will be able to save their clients the trouble to submit physical documents at the teller window or cashier for accreditation[96]. This process will involve mobile banking or online banking applications that allow for the electronic delivery of images. Entities will benefit from this, particularly due to less crowded branches and a lower need of physical archives.

It will also have a positive impact on the payment system, through the bancarization and the financial inclusion, the opportunity to open saving accounts remotely for new clients[97] by electronic or

[93] See Exhibit 6 of the FSR I-16 and Communication "A" 5982.
[94] Communication "A" 6043.
[95] Communication "A" 6044.
[96] Communication "A" 6071.
[97] Communication "A" 6059.

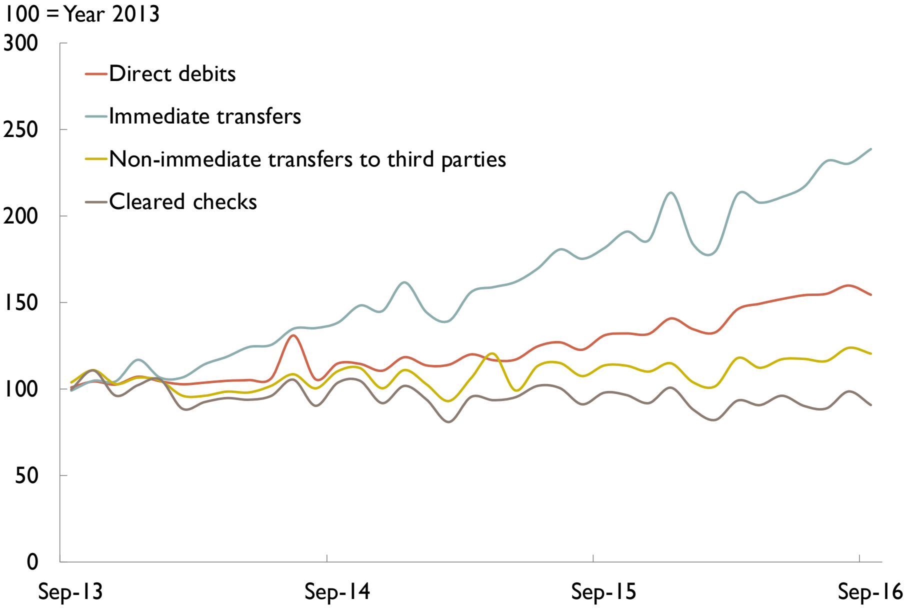
communication means, recently authorized by the BCRA. See Chapter 5 for further details about these standards.

4.2 Statistics of the National Payment System

Although cash is still widely used in regular economic transactions, the BCRA's efforts to modernize the payment system are reflected on the changes in the modus operandi within the system. Actually, an increase in the level of immediate transfers can be observed[98], both in quantities (see Figure 4.1) and in values, significantly higher than the rest of the means of payment other than cash. Therefore, immediate transfers continue to increase their share within other payment alternatives (+3 percentage points in 2016 respect from previous year), while checks continue to reduce their relevance (-5 percentage points compared to 2015)[99] (see Figure 4.2). Values are even more significant with the elimination of the limit regarding the amount.[100]

Figure 4.1 | Evolution of the Use of Different Means of Payment

In number of transactions



Source: BCRA

The migration towards a higher use of immediate electronic transfers in the economy, will be more significant as long as the aforementioned most recent measures taken by the BCRA are being implemented.

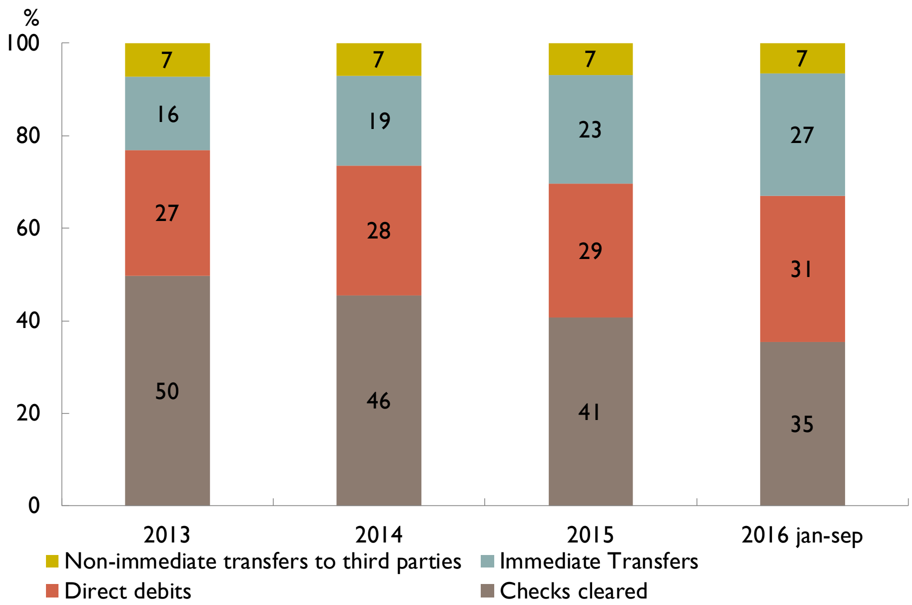
[98] They are transfers with online accreditation processed by the following channels: online banking, ATM and self-service terminals, corporate electronic banking and mobile banking.

[99] In line with the evidence presented in the last edition of the FSR, check clearing is still diminishing in terms of quantity of documents.

[100] Through Communication "A" 5927, the BCRA settled that all transfers made by financial services' users, are free of charge (up to $250,000 in companies).

Figure 4.2 | Use of Means of Payment other than Cash

In number of transaccions

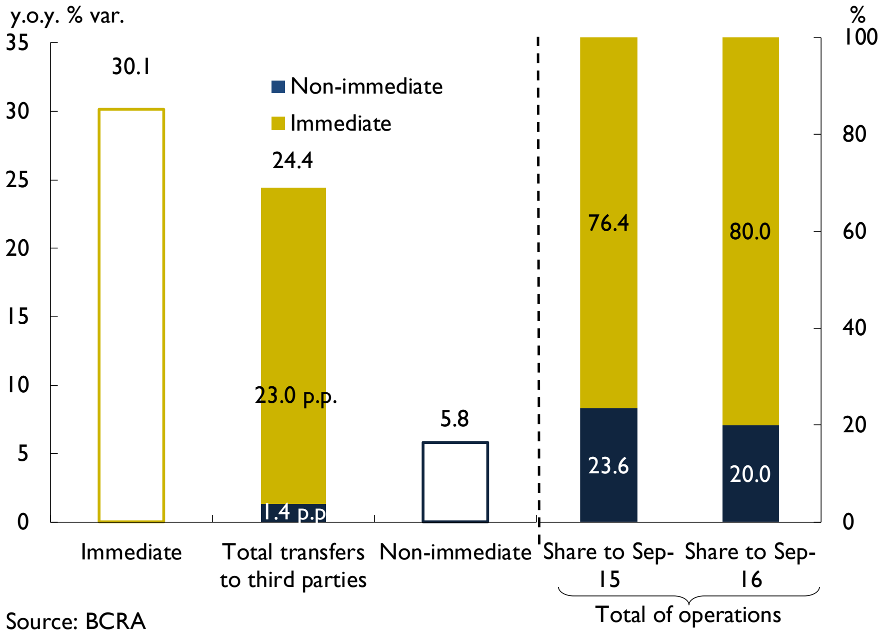


Source: BCRA

Transfers to third parties[101] are being explained mainly by immediate transfers —which increase by 30.1 percent on the number of transfers accumulated during the last 12 months (66.5 percent on the actual transfer amounts)— (see Figure 4.3), a trend that is expected to go on deepening during the next months.

Figure 4.3 | Transfers to Third Parties by Modality

Numbers of Transactions – September 2016

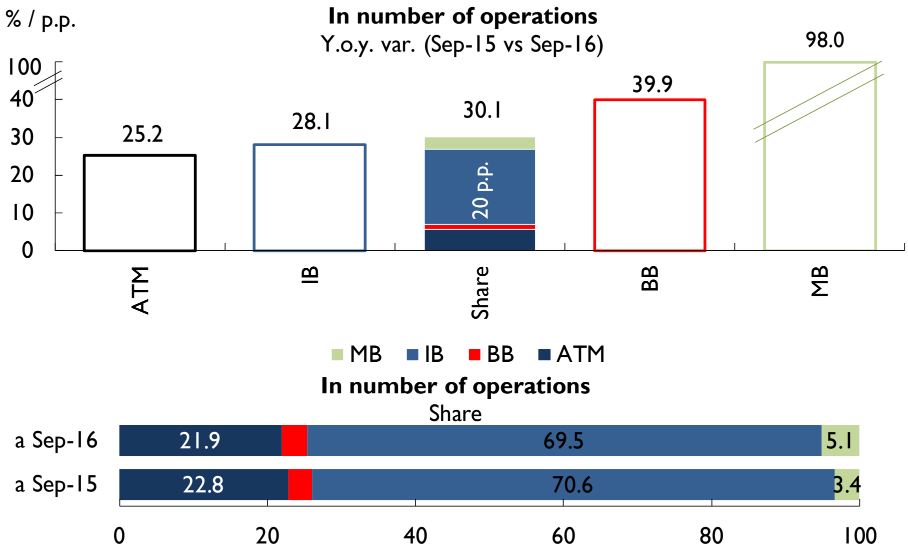


Source: BCRA

[101] They are those released by the bank on behalf and to the order of the clients. They do not include transfers such as: payroll, suppliers' payment, family allowances, provisional payments, payment of taxes, judicial payments and seizures.

Regarding immediate transfers, online banking accounts for over two thirds of the total (see Figure 4.4), even though the greatest dynamics can be observed in the mobile banking, which has duplicated its activity during the last twelve months and has reached a weight of 5.1 percent.

Figure 4.4 | Immediate Transfers by Channel



Note: Internet Banking (IB), Automated Teller Machine (ATM), Business e-banking (BB), and Mobile Bank (MB). Source: BCRA

In the second quarter of 2016 —the most recent information available— there was an improvement in the growth rate of the number of debit and credit cards compared to the first quarter of the year, rising 8.9 percent and 7.9 percent annualized, respect to each year (5 percent annualized and 2.9 percent annualized during the first quarter of the year). Consistent with the BCRA's plan of deepening financial inclusion and bancarization, the application of those instruments has become increasingly relevant among the local population so far this year.

5. Financial regulation

Updates in banking regulation presented in this chapter are classified according to two main objectives: the sector's development and financial stability. Relevant measures for the financial system from between the publication of the last edition of the FSR and the closing of the current edition (July-November 2016) are included.

5.1 Development of the Financial System, Efficiency, Competition, Bancarization and Transparency. Exchange Regularization

There is a feedback between the development of the financial system and economic growth. In order to promote bancarization and deeper credit, specific measures have been taken over 2016 (those reported in this FSR are a follow-up on those taken in the previous period) aimed at simplifying or removing operational requirements both for customers and entities, and incorporate technological developments to facilitate transactions in order to reduce costs. In turn, new instruments which ensure savings' value promote the channeling of saving throughout the system and help guarantee the availability of resources to grant loans. In particular, this development is expected to encourage the inclusion of segments of the population so far excluded. Lastly, the regularization of the exchange rate aims at releasing the usage potential of other currencies to grant credit, make transactions and allow portfolio decisions by individuals and firms, facilitating international trade and risk management.

5.1.1 Simplification of the Exchange Market and Removal of Remaining Standards of the Pervasive Foreign Exchange Controls (*Cepo Cambiario*)

At the beginning of August, the BCRA removed the last remaining standards of previously pervasive foreign exchange controls[102]. The new configuration simplifies bureaucratic requirements and reduces costs of operating in the **exchange market**. The obligation of justifying all operations with documentation was removed. Instead, people are required to submit an affidavit explaining the purpose of the transaction (saving, international trade), as well as other basic data. The monthly cap of USD5 million for purchases aimed at saving was removed, as well as monthly caps on operations, with only provisions limiting the use of cash remaining, as part of the Anti-Money Laundering policy. The monthly cap for cash purchases was raised from USD500 to USD2500. Online banking operations and foreign exchange bureaus were allowed to freely choose their working hours, and the destination account in an exchange transaction with non-residents is no longer required to be in the name of the local operator. The terms for entering and settling foreign exchange related to certain operations were also loosened[103].

Starting in August, and because of the removal of restrictions on derivative transactions with foreign counterparties[104], financial entities must meet a series of requirements to operate in these markets[105]. Following international criteria, two guidelines were adopted for the coordination of operations with futures, forwards and other derivative products with foreign counterparties. Thus, these operations can be carried out in institutionalized markets of countries belonging to the Organisation for Economic Co-operation and Development (OECD), with international investment grade, as long as they are settled through Central Counterparties (CCP). Alternatively, they can be carried out through contracts providing for the creation of initial margins and the daily settlement of variation margins (mark-to-market), whose counterparty is an investment-grade foreign bank with operations in a country or territory cooperating with fiscal transparency, according to Anti-Money Laundering and Combating the Financing of Terrorism standards (FATF-GAFI).

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[102] Communication "A" 6037 and Press Release of 08/08/16.
[103] Communication "A"6003.
[104] Communication "A"6037.
[105] Communication "A"6038.

The limits to the Overall Exchange Position were temporarily modified in order to include the effects of the Tax Amnesty Regime[106].

In November, the BCRA loosened the operations of foreign exchange bureaus, agencies and offices[107]. The requirements for the establishment of exchange entities and branches were simplified, through a reduction of the minimum guarantees and capital requirements. Additionally, banks were authorized to operate in this segment as a complementary activity, through a controlled company. The establishment of branches of foreign exchange bureaus and agencies in certain businesses, such as hotels and tourism agencies, was facilitated.

5.1.2 New Financial Instruments to Promote Saving, Long-Term Credit and Inclusion

Law No. 27271, passed in September 2016, broadened the availability of **long-term saving and credit instruments,** through the creation of the UVI, an instrument used to update loans and deposits based on the construction price index. Moreover, the existing UVI (updated based on inflation — CER), was renamed as UVA. This change merely affected the name without modifying previously agreed contract conditions.

UVI deposits can be made for a minimum term of 90 days, while UVA deposits kept their minimum at 180 days. Savings accounts were created for UVI and UVA, and it was decided that the former can be used to receive deposits on behalf of minors, with the participation of their legal representative[108].

5.1.3 Financial Inclusion and Bancarization through Modernization of the Means of Payment

Greater financial inclusion and bancarization require a promotion of access to financial services and products by certain sectors of the population which are currently excluded. A central element to this purpose is the simplification of the processes needed to enter the system. During the second half of the year, several measures were taken to facilitate the **establishment of savings accounts.** Taking into account the provisions of Resolution 94/16 of the Financial Information Unit (UIF), the requirements customers face to open a savings account were loosened[109]. Now, rather than having to submit a certificate of residence and utility service bill in their name, a national ID is the only requirement. This simplification applies to any user of financial services, as long as they do not have another deposit account in the financial system, are not a politically-exposed person, and the account's balance and movements remain within certain limits[110]. It was also decided that individuals who are not bank customers should be able to establish savings accounts through electronic or communication means[111], without having to visit the bank's branch. To that effect, financial entities should ensure full compliance with Anti-Money Laundering and Combating the Financing of Terrorism Standards, verifying the applicant's identity and the authenticity of the information received.

Bancarization is boosted by the creation of conditions and instruments which promote and facilitate transfers for online payments. In August, the BCRA enabled users to make transfers or payments since early December using an **alias** (associated to each of the customer's banking ID, the CBU)[112] and a different alias associated to the destination account. In July, complementing the measure which allows banks to offer **Mobile Payment Platform** (PPM) services, this electronic channel was added to the regulation on minimum requirements related to technological and IT risks[113], in order to protect the availability, integrity, and confidentiality of the data of those who use this platform.

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[106] Communication “A”6088.
[107] Communication “A”6094 and BCRA Press Release of 11/03/2016.
[108] Communication “A” 6069 and Press Release of 09/15/16.
[109] Communication “A” 6050.
[110] The cap is 25 times the minimum wage for balance and four times the minimum wage of monthly cash for movements.
[111] Communication “A”6059 and Press Release of 09/08/16.
[112] Communication “A”6044.
[113] Communication “A” 6017.

In early November, the BCRA created the **Immediate Debit means of payment (*Débito Inmediato, DEBIN*)**[114]. The DEBIN will enable, through specific operations, the collection of goods and/or services through "online" debit in the paying customer's bank account once the operation has been authorized, with "online" credit in the receiving customer's account. This function will be available 24/7 for debits in pesos and dollars.

Moreover, with the purpose of continuing to improve everyday payments, in late June[115] and late October[116], the BCRA launched new **$500 and $200 bills**, respectively, with images of native Argentine animals.

Finally, against the backdrop of the Tax Amnesty Regime, the **opening of different special deposit accounts**[117] was regulated in late July, on behalf and in the order of individuals disclosing their holdings of cash in the country (in pesos or in foreign currency, as appropriate).

5.1.4. Promotion of Systemic Competition and Efficiency

Competition in the banking sector contributes to long-term economic growth and to the efficient allocation of resources. For that reason, the BCRA is promoting, among other measures, the **mobility of customers between financial entities**[118]**.** Starting in August, wage accounts can be opened upon request by employees, without the intervention of employers; starting in November, entities will have to allow their customers to open and close accounts through online banking, and potentially other channels, such as phone banking, e-mail or ATM. Additionally, users can cancel credit cards without having to attend branches. Finally, physical certificates of fixed-term deposits can be offset between entities and, consequently, can be deposited in an account that the same account holder has in a different bank.

A series of measures was adopted during this period to **reduce the operating costs** of customers and entities. Check deposits (both common and deferred) through electronic means was enabled in November (applications for mobile phones and online banking, among others)[119]. In June, it was established that ATMs in third-party stores could be refilled by the company of transportation of valuable assets or by the store staff, using cash from these stores[120]. Moreover, starting in July, it is possible to open the banks' vaults to refill ATMs on non-working days, as long as safety measures are complied with (before, this was only acceptable in periods of more than two consecutive non-banking days)[121]. Document requirements to operate as a service provider for the transportation of valuable assets or as an entity's own transportation of valuable assets were eased; and formal requirements for these companies were lifted[122]. The amounts related to certain operations carried out by customers (such as cash transactions) which must be kept in databases as a part of Anti-Money Laundering regulation framework were raised from $40,000 to $120,000[123].

Lastly, various reporting requirements for entities with the BCRA are no longer in place[124]. Electronic or similar means were included to submit documents as long as the law does not require a specific instrumentation form, and only if authoring and authenticity can be verified by experts[125].

5.1.5 Channeling of Savings towards Productive Activities

[114] Communication “A” 6099.
[115] Communication “A”6001.
[116] Communication “A” 6087.
[117] Communication “A” 6022.
[118] Communication “A” 6042 and Press Release of 08/11/16.
[119] Communication “A” 6071 and Press Release of 09/22/16.
[120] Communication “A” 6005.
[121] Communication “A” 6014 and Communication “A” 6029.
[122] Communication “A” 6002.
[123] Communication “A” 6051 and Communication “A”6060.
[124] Communication “A” 6081. Set aside Reporting Regimes are application of advances made by the BCRA, total financial cost of personal loans and official export credits. Part of the Quarterly/Annual Supervision Regime was simplified.
[125] Communication “A” 6068.

Acknowledging that **small and medium enterprises (SME)** have a key role for economic development and, particularly, for job creation, different measures were taken to promote their **access to bank credit.** In July, eligible destinations for the allocation of the quota for the Line of Financing for Production and Financial Inclusion (LFPIF), including working capital loans for MSME working in livestock production, dairy production, or other productive activities in regional economies. These loans must have a risk coverage contract for the price of the good produced by the debtor, a weighted-average term of 18 months or more, and an amount that does not exceed 10 percent of the quota defined for the second half of 2016 (equal to 15.5 percent of the deposits in pesos from the non-financial private sector for May)[126]. In October, the maximum rate for these loans decreased from an annual nominal rate of 22 percent to one of 17 percent, and the minimum term was reduced from 36 to 12 months[127]. Considering the type of guarantee MSMEs can provide, it was decided that the total quota for the second half of 2016 can be allocated to discounting deferred payment checks and other documents for this type of firms. Also, the LFPIF was extended to include the first half of 2017, increasing the required amount from 15.5 percent to 18 percent of the balance of deposits in pesos from the non-financial private sector[128].

With the same goal of promoting access to SME credit lines, and acknowledging the role played by Mutual Guarantee Societies in this regard, the maximum amount a bank can grant to societies of that kind enrolled in the BCRA's register was extended in April: 300 percent of the Mutual Guarantee Society's capital (previously, 200 percent), as long as that amount does not exceed 5 percent of the bank's capital (previously, 2.5 percent)[129]. In July, it was decided that these caps should be applied on a consolidated basis[130].

Also in July, the destinations for **lendable capacity of foreign-currency deposits**[131] were extended, adding the possibility of financing outward direct investments by resident companies focused on producing non-financing goods and services, and investment projects (including working capital) which allow to increase the production in the energy sector and have firm sale contracts or total guarantees in foreign currency.

With the purpose of encouraging and deepening international trade in our country, in September, the Commerce Secretariat of the Ministry of Production extended the settlement term for goods exports[132] from one to five years. Thus, local companies can pre-finance exports and simultaneously offer financing to customers for a longer term.

5.2 Standards Linked to Financial Stability, Macroprudential Regulation and Convergence with International Standards

Throughout 2016, the BCRA has made some adjustments to converge with best practices outlined in international standards, and has been classified as a compliant jurisdiction (the highest possible rating) in international evaluations (see Exhibit 4).

5.2.1 Adjustments to Basel Standards in Certain Capital Regulations

In early July, the BCRA introduced some changes to calculate credit risk requirements relevant to the standard of **minimum capital requirements,** including practices suggested by the Basel Committee on Banking Supervision (BCBS). Capital requirements of exposures to national financial entities —except those denominated and funded in pesos which also have a contract term of less than three months— must

[126] Communication "A"6032.
[127] In the case of real estate mortgage loans for individuals, the minimum term continues to be 10 years. The operations of discounting deferred payment checks and other documents to MSMEs as well as consumer credit portfolios will have no minimum terms.
[128] Communication "A" 6084.
[129] Communication "A" 5949.
[130] Communication "A" 6023.
[131] Communication "A" 6031.
[132] Resolution No. 242 of the Commerce Secretariat of the Ministry of Production and BCRA Press release of 09/01/16.

be computed taking the risk weight of a category worse than that allocated to exposures in foreign currency to the National Government, with a limit of 100 percent: with the exception of a rating worse than B-, in which case the limit will be 150 percent[133]: In practice, the weight does not change, as it used to be unequivocally 100 percent and remain in that level, given the current rating of the National Government.

The requirement for credit risk from exposures to foreign non-financial public sector entities must be based on a rating granted by an External Credit Assessment Institution (ECAI) accepted by the BCRA[134], the same as the one applicable to foreign financial entities. The Bank of International Settlements, the IMF, the European Central Bank, the UE and Multilateral Development Banks receive a zero percent risk weight. Given the balance sheet composition of Argentine entities, these changes do not have a significant impact. The standard also lists the conditions an ECAI must meet to be accepted by the BCRA, such as the use of objective criteria for rating and a check of their accuracy through backward-looking tests.

Finally, the capital requirement for a securitization position is now determined by taking into account its economic reality or purpose, rather than its legal form, even if the underlying asset is debt issued by the National Government.

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133 Communication "A" 6006.
134 Communication "A" 6004.

Exhibit 4 / Basel III Regulatory Consistency Assessment Program – RCAP

In the first days of the second half of the year, Argentina concluded its assessment about the local implementation of the Basel III standards under the Regulatory Consistency Assessment Program (RCAP), obtaining a general "compliant" score, which is the best possible.

In 2012, the BCBS introduced the RCAP to assess the adoption of the Basel III regulatory framework in each of the member jurisdictions. By ensuring a consistent implementation of the agreed regulatory guidelines, the RCAP contributes to financial stability by complementing the work of other international agencies such as the Financial Stability Board (FSB), the International Monetary Fund (IMF) and the World Bank.

The program is developed through two complementary parts. The first is the regular **monitoring** of the standard implementation according to the schedule, based on what is reported on a semi-annual basis by the different jurisdictions. The results are approved and published by the BCBS[135]. The latest available report focuses on the adoption of all standards included in Basel III by September 2016 due at that date (risk-based capital, Leverage Ratio, Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR), the standards for systemically important —local and global— banks, securitizations, buffer requirements for derivatives, market discipline and diversification of credit risk or large exposure risk)[136].

The second part of the program is based on the **assessment** of the consistency and integrity of the adopted standards and their alignment with the minimum international requirements. Its purpose is to promote the full adoption of the Basel framework and to identify those national regulations that do not follow its letter and spirit. At this stage, the potential impacts of any regulatory gap on the financial stability and the regulatory environment of internationally active banks are also noted. In this context, each member state has the possibility of identifying areas for improvement and carrying out the necessary adjustments to adapt their regulations.

All jurisdictions belonging to the Basel Committee accepted to have their national regulations under the previously agreed implementation schedule reviewed[137]. The work is developed both by jurisdiction and by topic. It begins with a self-assessment by jurisdiction, then off-site and on-site assessments and a final review phase. The program is implemented by experts from member jurisdictions, which is why it is called peer review[138].

The final result of the assessment is summarized in an overall rating, assigned according to a preset scale: "compliant" (the best possible), "relatively compliant", "substantially non-compliant" and "non-compliant" with the Basel regulatory framework.

RCAP Argentina

The process of assessing Argentine regulations began in the second half of 2015 and included the full range of capital standards (known as Basel II, 2.5 and III) and the LCR. The final reports were published in September 2016[139].

Risk-Based Capital Assessment

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[135] Monitoring adoption of Basel standards.
[136] Basel Committee on Banking Supervision Tenth progress report on adoption of the Basel regulatory framework - October 2016.
[137] Assessment Schedule.
[138] Questionnaires available on the Bank for International Settlements (BIS) website.
[139] Assessing consistency of implementation of Basel standards.

The assessment concluded that the local capital framework is "compliant" with the Basel minimum provisions. For that purpose, regulatory changes were introduced to significantly improve the level of compliance.

In 2015, during the preparatory phase of the assessment, a number of measures were taken, including the implementation of countercyclical capital buffers and conservation buffers[140], capital requirements for operations with central counterparties, treatment of exposures under a framework of eligible bilateral netting contracts[141] and the adaptation of regulations regarding market risk requirements[142].

Throughout 2016, during the implementation of the RCAP and based on comments received from the assessment team, the provisions related to the use of external credit assessments to determine the risk weights applicable to sovereign exposures, public sector entities outside the central government and financial entities were amended, as well as the treatment applicable to securitizations[143]. Standards regarding market discipline were also adjusted[144].

The final report includes observations on some of the components assessed[145]. The most relevant one relates to the scope of application of the standards or the consolidation standards. This topic was rated as "relatively compliant" with the international standard, since the local capital framework is not applied to the controlling companies of financial entities (to comprehensively capture the existing risk in banking groups, Basel standards require a full consolidation of exposures, including the activity of the controlling or holding company of the group). However, this observation has not affected the final score, given the low representativeness of this type of organization in our financial system. The remaining components were rated as "compliant" with the international standard.

Assessment of the LCR

The local standard on the LCR was also rated as compliant with Basel standards, as well as each of the components analyzed.

During the RCAP process, the assessing group did not identify any substantive discrepancies, with the suggested changes being of little significance and having no impact on local banks. The changes introduced include clarifications regarding stable retail deposits and the re-categorization of deposits ordered by the Court as contingent obligations [146] and in the disclosure standard[147].

[140] "Result Distribution" Standards, according to Communication "A" 5827.
[141] "Financial Entities' Minimum Capital Requirements" Standards, according to Communication "A" 5821.
[142] Idem, according to Communication "A" 5867.
[143] Idem, according to Communications "A" 6004 and 6006.
[144] Market Discipline Standards.
[145] The assessment of the capital framework is based on the analysis of 14 components -scope, transitional arrangements, capital definition, nine Pillar 1, Pillar 2 and Pillar 3 components- and an overall assessment.
[146] Communication "A" 6004.
[147] Communication "A" 5936.

Abbreviations and Accronyms

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 Societes.

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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