The international banking crisis and its impact on Argentina

Central Bank of Argentina

1. Cross-border bank lending to emerging market economies (EMEs)

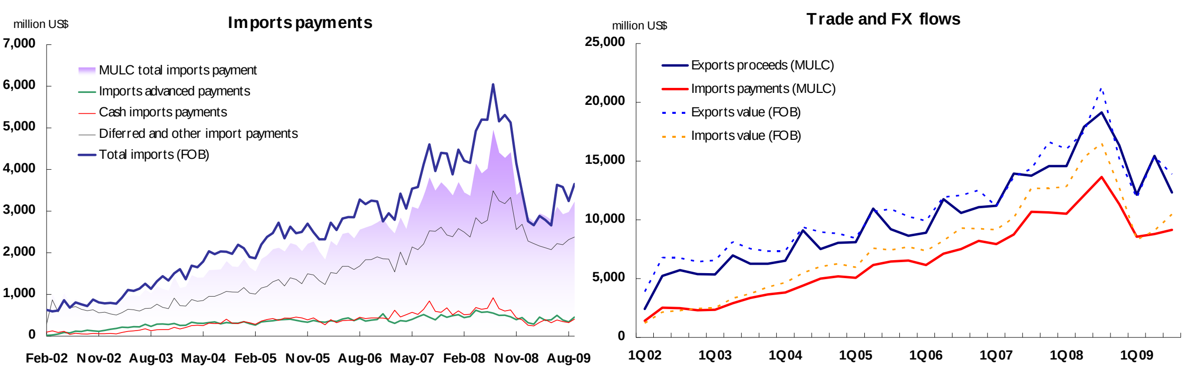
(a) The role of supply and demand factors

The volume of trade financing usually depends on the size of international trade. However, during the recent crisis there was a slump in trade financing related to the troubles in one particular large financial institution, which led to a sharp decline in world trade. Another significant factor behind the retrenchment in trade financing was the increase in the perception of counterparty risk, which is critical for this type of operation where, typically, more than three financial institutions are involved in a single operation.

In this regard, there was an increase in import payments in Argentina between the last quarter of 2008 and the first half of 2009, which led to a reduction in outstanding commercial debt and an increase in local trade financing (see Figure 1 below).

Figure 1

Trade in goods and trade financing

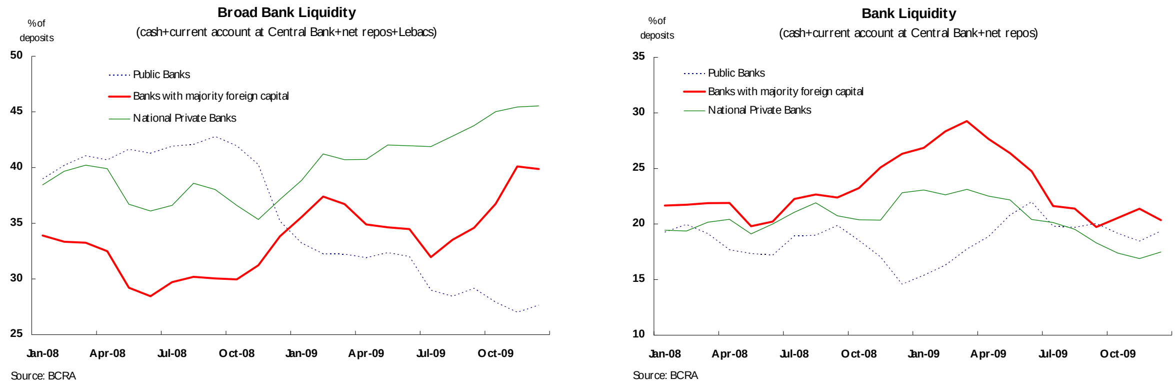


All in all, the liquidity in the local banking system was high enough to allow a normal functioning of the economy without foreign lending for some time (broad liquidity, which includes banking sector holdings of central bank papers, in the financial system is above 40% of deposits whereas narrow liquidity occurs at a rate of almost 30% – see Figure 2).

At the same time, interest rates on foreign currency denominated loans in the local banking system were cheaper than loans from abroad. Regulatory policies set in previous years to deter currency mismatches in the domestic financial system together with the relaxation of minimum liquidity requirements for foreign currency denominated deposits at the onset of the crisis allowed the local banking system to increase lending in foreign currency for trade operations. As a result, there was an increase in the proportion of local trade financing in relation to external trade financing.

Figure 2

Systemic liquidity



Given the particular situation facing Argentina in recent years, financing in the economy has been more reliant on domestic savings and less dependent on international capital flows, which is one of the key reasons for the relatively good performance of the local economy when compared to the rest of the world and to previous international crises.

(b) Types of lending that were hardest hit

Until the financial crisis became a fully fledged economic crisis, commercial lending from abroad registered 10 consecutive quarters of growth but, starting in the last quarter of 2008, it declined by more than 50% in six months.

However, financial lending began to fall only in the fourth quarter of 2008 and by just 4.5% against the previous period and it recovered in the first three months of 2009 increasing again by 0.2%.

(c) Cross-border lending terms

There has been no significant change in the terms of lending. Neither the duration of outstanding debt (around two years) nor interest rates (although the average rate remained stable, the spread over Libor increased by more than 100 basis points (bp)) have changed significantly since the last few months of 2008.

Nevertheless, there has been a significant change in the types of instruments issued since the beginning of the crisis. There has been a move from financing via loans to issuing debt instruments.

(d) Parent financing of affiliates versus unrelated parties

Although there was a decline in the amount of external lending, the non-financial private sector showed a decline in lending from foreign financial institutions, whereas the financial sector remained financed by related financial institutions at pre-crisis levels.

2. Domestic bank intermediation: domestically owned versus foreign-owned banks

(a) Changes in bank business models in the domestic market

Domestic financial entities exhibit high liquidity levels. The financial system's total liquid assets[1] amount to 30% of deposits, almost 7 percentage points (pp) above the figure recorded prior to the start of the subprime crisis. All groups of banks have maintained high liquidity levels (public banks, domestic private banks and foreign institutions), even showing an increase in liquidity levels in the last two years. Moreover, financial system liquidity amounts to 42% of deposits if holdings of central bank bills and notes are included.

In order to ensure the adequate management of liquidity risk, the Central Bank of Argentina (BCRA) developed additional liquidity windows with non-traditional collateral and introduced changes to the rediscount window (with pre-assessments of collateral and enhanced access to all funding sources, not only deposits) and implemented larger facilities on the repo market (new lines in domestic and foreign currency). It also started auctioning repo options, anticipated the buyback of central bank bills and notes (secondary market, automatic facility and put options) and made open market operations more flexible by making more types of government bonds eligible as collateral. These measures, combined with the BCRA's role as lender of last resort, consolidated a sound banking system position in order to face liquidity risk.

The severity of the global economic scenario was reflected in a moderate worsening of local economic activity during the first few months of 2009, with some economic sectors adjusting their output levels. This framework led to a slight decrease in the strong performance demonstrated by domestic financial intermediation vis-à-vis companies and households over the previous few years. Private sector credit growth slowed, showing a 5% year-on-year (y-o-y) increase, below the outstanding annual average expansion recorded in the previous three years. Whereas in the period 2007–08 the rise in private sector lending stock was predominantly driven by households loans (especially in terms of credit cards and personal loans), this framework gradually changed, augmenting the role of productive companies in bank financing in 2009.

Bank deposits continued to be the main source of funding for credit to households and firms, and there was no need to resort to central bank assistance. After growing steadily over the last few years, deposits now represent more than two thirds of financial institutions' liabilities, and are significantly boosted by both time and sight deposits. Further, domestic banks do not depend on foreign financing, thereby minimising any possible adverse effects associated with the volatility of international capital flows during the last two years. In particular, the financial system's outstanding obligations (ON) and foreign credit lines currently represent 3% of total banking liabilities (almost 1.5 pp less than two years ago) and are mainly channelled to local and foreign private banks.

Private banks have shown a lower credit increase since the beginning of the international financial crisis, while public institutions have continued to expand credit at a remarkable pace. Regarding credit expansion to the private sector, November 2009 data show that, while public banks grew by 19.3% y-o-y, in the same period, domestic private banks grew by 9.8% and foreign private banks fell by 2.8%. As a consequence, public sector financial institutions have been progressively increasing their market share (almost 30.2% of total credit), while both private domestic and foreign banks have been slowly reducing their share

[1] Local and foreign currency liquid assets.

(34.3% and 31.9%, respectively, the latter being mainly led by European global financial institutions[2]).

In a global context of continuing uncertain economic conditions, the repayment capacity of local households and firms gradually came under pressure. Although it showed a slight increase, non-performance of credit still remains at a historically low level and, following a hike between October 2008 and August 2009, it is currently showing signs of a gradual reduction. The activity levels of some productive sectors were partially affected by the economic crisis, while households began to face some challenges. After reaching a minimum of 2.8% in September 2008, some of the credit risk assumed by banks started to materialise, and the non-performance ratio gradually rose to almost 3.8% of loans to the private sector in July 2009. In that month, the increase in the non-performing loan (NPL) indicator stopped and subsequently began to fall. This trend has been mostly observed in domestic and foreign private banks. In line with this movement, credit line interest rates showed a moderate increase among all bank groups.

The moderate increase in private sector non-performance was being driven by household credit (due to higher levels of indebtedness), in particular consumption lines. Households' NPLs account for 5.2% of total financing to this sector, almost 1.5 pp above the figure observed two years ago – this trend has been observed among all groups of private institutions (local and foreign). This evolution can also be seen in corporate loans, but the ratio is still at a very low level (2.5% non-performance). In order to tackle this situation, banks have provision coverage that exceeds NPLs, thereby enabling them to face greater levels of arrears without significantly affecting their solvency levels. This coverage amounts to almost 118% for the financial system, and is even higher in public banks.

Banking sector solvency has remained at adequate levels, due to both the new capital injections received (almost USD 6 billion since 2002 and USD 600 million since the onset of the subprime crisis) and the recovery of traditional sources of revenue. All groups of financial entities exceed internationally recommended and local prudential solvency levels. Financial system capital compliance in terms of risk-weighted assets totals nearly 18%, and has remained at similar levels for the last few years.

The moderation of banking activity has not prevented the financial system from continuing to accrue book profits, reaching almost a five-year period with consecutive nominal utilities (an average return on assets (ROA) of 1.4% in the 2005–08 period and 2.4% annualised in the first nine months of 2009). These gains are being mainly driven by the more stable revenue sources, net interest income and service income margin, which currently account for 7.9% of bank assets (above the level of the last few years). Operating costs and loan loss charges are gradually increasing, reaching 6.6% and only 1.1% of assets, respectively. Regarding profits, during the first few months of 2009, while private banks showed an ROA of 3.1% and a return on equity (ROE) of 23.7% (at annualised rates), public banks showed 1.3% and 13.9%, respectively.

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[2] The other financial institutions are non-banking financial entities.

3. Impact on the financial markets

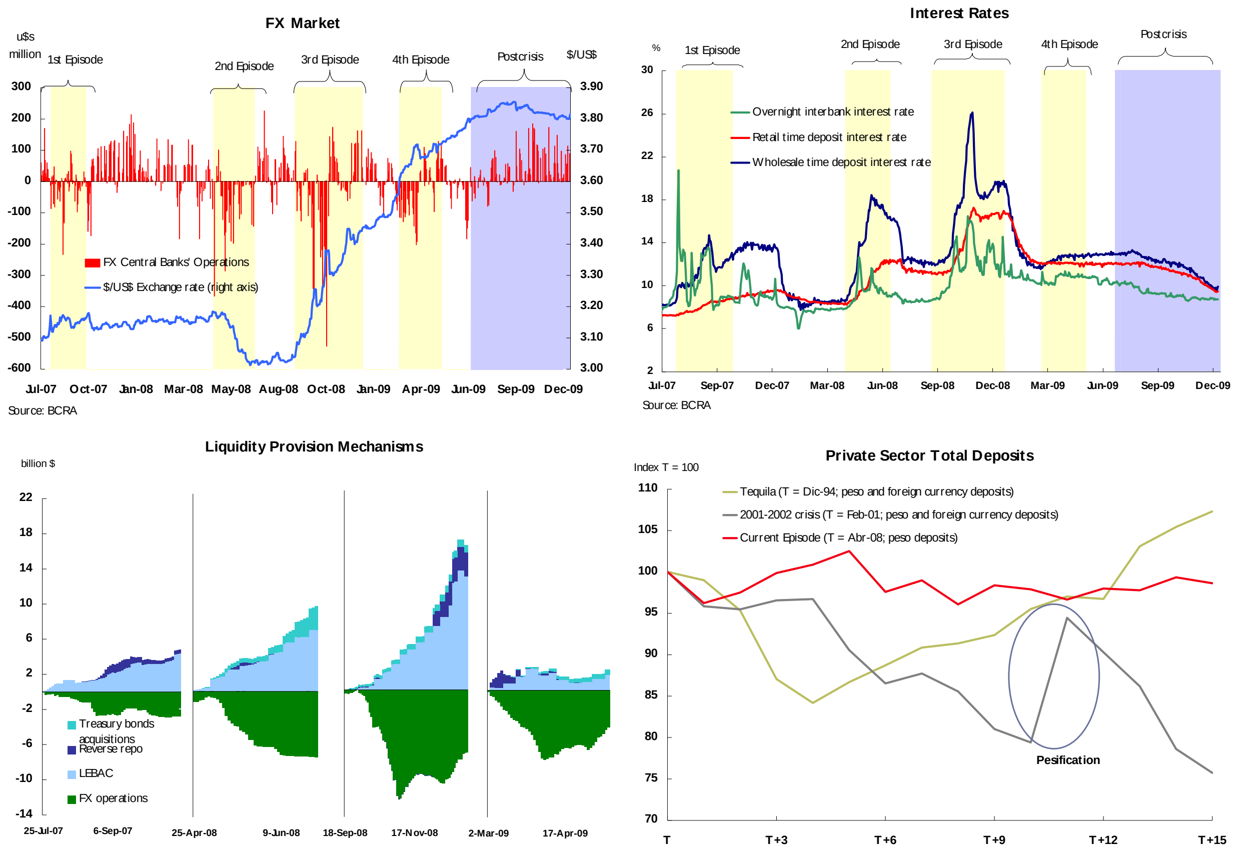
(a) Impact on the foreign exchange and domestic money markets

Foreign exchange (FX) markets remained highly liquid over the crisis period, both spot and futures, although there was a setback in the money market which was partly policy-driven as a means to prevent a feedback loop to the FX market.

However, it is worth noting that, after three episodes of stress in the local market, a fourth one occurred at the beginning of 2009 but had no major impact on the money market, as can be seen from the evolution of the interest rate.

Figure 3

Local FX and money markets

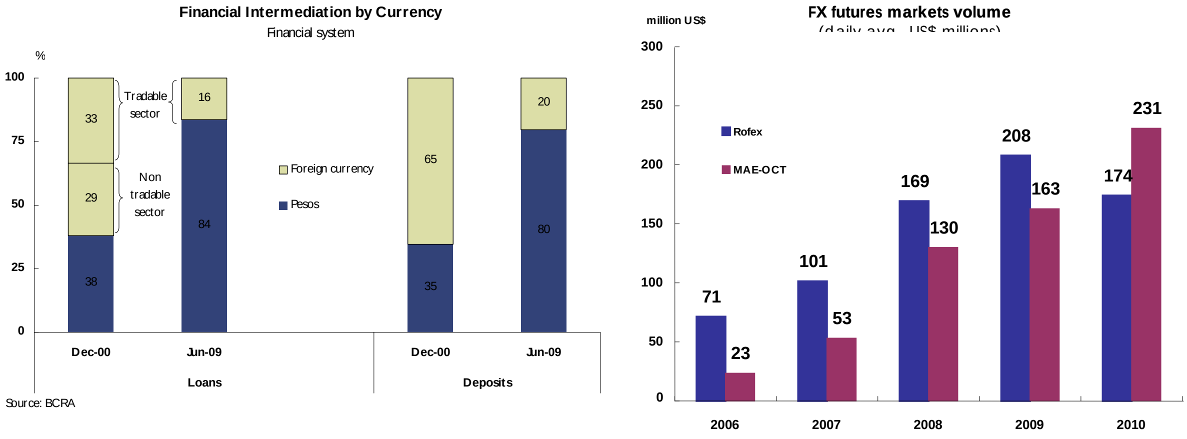


Private sector deposits also showed a remarkable performance when compared to the previous crisis. Local currency deposits remained relatively stable while foreign currency deposits showed an upward trend for several consecutive months.

To encourage a gradual reduction in the mismatch between assets and liabilities in foreign currency, the financial policy implemented by the BCRA established that deposits in dollars could only be used to make loans in dollars, and that loans in dollars should only be granted to companies and households recording dollar-linked income. In addition, limits were placed on positions in foreign currency and capital requirements for foreign currency mismatching. The development of hedge markets was encouraged in order to provide market solutions to this risk (see Figure 4, left-hand panel). As a result of this series of measures, foreign currency mismatches are currently well below the levels recorded four years earlier, amounting to 32% of bank net worth, compared to the post-2002 crisis high of 69%.

Figure 4

Currency mismatch and FX futures markets



(b) Effects on the local money markets

Different factors affected the local money markets in EMEs according to their level of interconnectedness with the international markets. In some cases, the margin calls from parents' institutions on developed economies were one of the key drivers of the funding drain.

On the other hand, when risk appetite was at its highest level, carry trade on FX markets between EMEs had a significant impact on some countries.

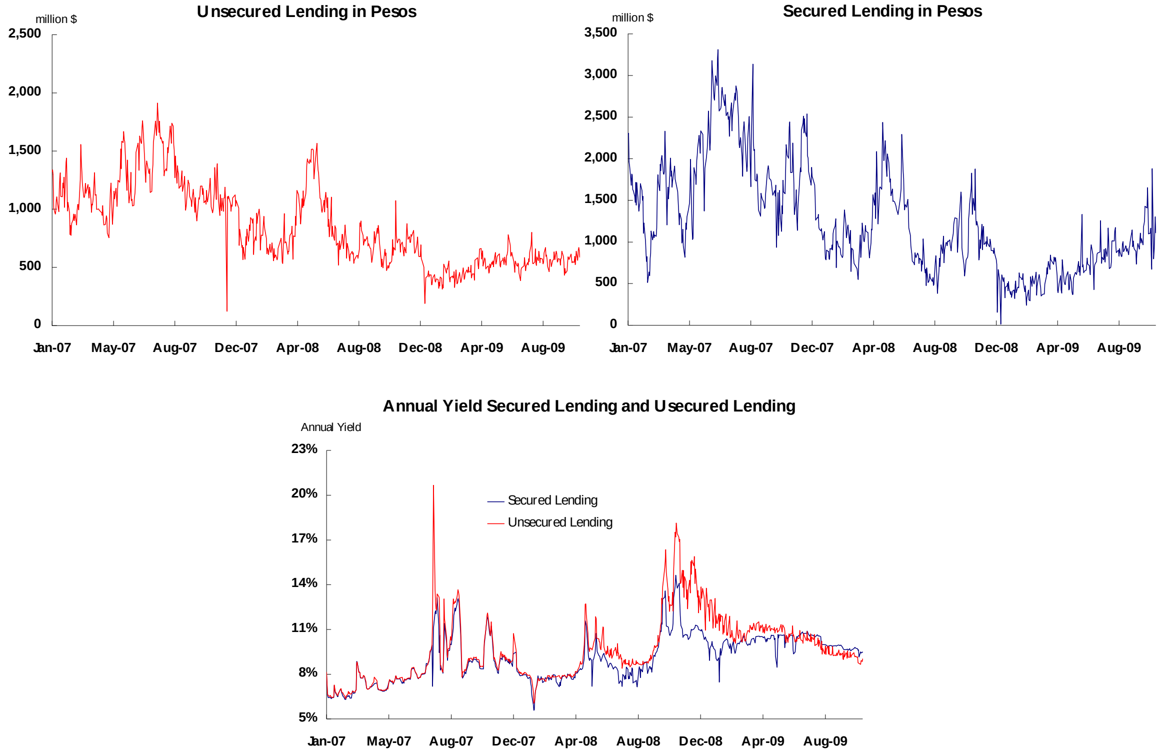
With the onset of the crisis, the flight to quality and to safety hinged on those kinds of speculations, leading to a decrease in money market liquidity and a significant impact on the currencies involved.

(c) Effects of the crisis on secured and unsecured interbank lending (local currency)

As mentioned above, the local financial market operates with very high liquidity levels. This is reflected in the reduced levels of interbank lending. However, at some points during the crisis there were some spikes in interest rates, which were more related to local circumstances than to the international crisis.

Figure 5

Local money market: secured and unsecured lending



(d) Difficulties in the local currency government debt market

A remarkable feature during the pre-crisis period was the performance of local markets in EMEs. They witnessed a surge in long-dated local currency bond issuance by some countries, and an appetite for these assets as more EMEs became rated as investment grade and were thus allowed to be incorporated into institutional investors' portfolios.

As the crisis spread from subprime mortgages to the whole financial system, EMEs started to suffer a sudden stop episode, not only in the local markets but also in the international ones. More recently, there was a return to the markets for sovereign and corporate bond issuance in EMEs, but for the moment, it is mostly confined to the international markets.

Thus, following a period of de-dollarisation of EME debt, the crisis brought back the need to issue bonds in developed economies' currencies (it is interesting to note the issuance of samurai bonds by some countries even during a difficult period for the yen).

As long as the markets return to normal and, more importantly, as risk appetite returns, there is a high probability of a resurgence in the local bond markets.

4. Central bank instruments to deal with the crisis

(a) Instruments at the disposal of the BCRA

Facing an adverse scenario, the BCRA, like other central banks, started to deploy measures to ensure systemic liquidity and avoid abrupt fluctuations in exchange rates. These measures were accompanied by government countercyclical fiscal measures. In this context, it is worth noting that the Argentine economy was better prepared to face a crisis episode than in previous years, due to the liquidity buffers reflecting fiscal and current account surpluses and the BCRA's implementation of sound monetary and financial policies over the last five years. This included the implementation of countercyclical policies, generating liquidity buffers in local and foreign currencies, a managed floating exchange rate regime, and regulatory policies that boosted financial system soundness, limiting excessive risky exposures.

Within this framework, the BCRA has been able to react to secure the normalisation of the demand for money and stabilise the FX market. During that period, the BCRA played an active role on the FX market in order to moderate volatility in the value of the peso and sterilise the monetary effect of foreign currency sales by injecting liquidity, mainly through the market for central bank bills (LEBAC) and notes (NOBAC), which proved to be an appropriate way to manage liquidity across the cycle (issuing notes when the peso supply was in excess of demand, and redeeming the notes when the peso supply was needed). As a result of the BCRA's prudential policies and sound individual banking strategies, domestic financial entities exhibited high liquidity levels.

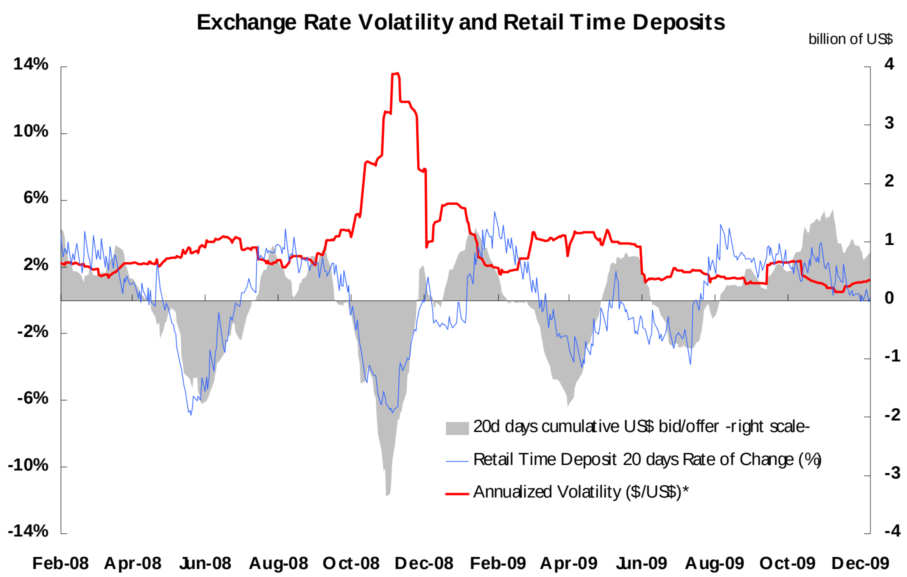
In order to ensure the adequate management of liquidity risk, the BCRA developed additional liquidity windows with non-traditional collateral, redefined the rediscount window (with pre-assessment of collateral, enhanced access to all funding sources – not only deposits), implemented larger facilities on the repo market (new lines in domestic and foreign currency), started to auction repo options, anticipated the buyback of central bank bills and notes (secondary market, automatic facility and put options) and implemented open market operations with government bonds. These measures, together with the BCRA's role as lender of last resort, consolidated a sound banking system position to face liquidity risk.

(b) Determinants of monetary policy response

There are several features that determine the capability of monetary policy to react to an international crisis. Among the most important for Argentina is the degree of dollarisation of the private and public sectors' balance sheet, particularly on the liability side. As history has taught us, having large currency mismatches on an agents' balance sheet has a strong impact on economic performance in the event of an international crisis.

Figure 6

FX and financial stability



(*) Volatility is a measure of change in respect to its average value, with a time horizon of 20 working days and annualized.

However, the traditional use of interest rates as a countercyclical monetary response is not an appropriate option in Argentina given the existence of a shallow credit channel. This was the reason why policy rates were unchanged, and had nothing to do with fears of a large depreciation of the peso.

Argentina has a managed floating exchange rate regime and, as such, the BCRA performs FX market operations to keep exchange rate volatility low given the high correlation between this variable and financial stability measured by term deposit withdrawals (see Figure 6).

(c) Support to interbank lending in local currency

Much of the support occurred through changes or intervention in the repo market.

- In order to avoid distorting the liquidity reserve characteristics of LEBAC and NOBAC, the BCRA decided to issue domestic LEBAC and NOBAC, which can only be traded locally, seeking to prevent short-term foreign investors from acquiring positions in these securities.
- A scheme was established to offer liquidity at a fixed (up to 3 billion pesos) and a variable (BADLAR) interest rate. By offering a wider variety of options, the BCRA ensured the availability of resources in appropriate conditions to provide liquidity to the system.
- Central bank securities coming due were renewed only partially and some other securities with near-term maturities were repurchased.
- The BCRA began to carry out open market operations through the government securities market by purchasing instruments that could be liquidated in pesos or dollars in the secondary market. This mechanism worked as an additional tool to provide liquidity beyond the banking sector and, at the same time, enabled intervention on the various segments of the yield curve, avoiding distortions in its temporal structure.
- To alleviate the seasonal effects on the traditionally illiquid month of July, the BCRA unified the financial institutions’ minimum cash requirement for June and July 2007/08 in a single bimonthly term. This improved the institutions’ liquidity management.
- A new liquidity window was opened to include as collateral certain instruments (Bogar and guaranteed loans) that cannot be used in traditional repo operations. This enabled institutions that had no significant central bank bills and notes positions in their portfolios to access the BCRA’s liquidity-providing mechanisms.
- New maturity options for repos were offered, readjusting the cost in line with the new term structure.
- The liquidity provision scheme was adapted to provide immediate liquidity to bank holders of LEBAC–NOBAC with a maturity of up to six months.
- Repo interest rates were modified several times.
- Auctions of put options on LEBAC and NOBAC.
- A window to pre-qualify collateral for the illiquidity assistance regime was established.
- The fixed-rate repo line was expanded to $10,000 million from the previous $3,000 million.

(d) Measures taken to support foreign currency refinancing of banks/corporations

The BCRA also took steps to support foreign currency financing. Measures included:

- The limits to operate in the futures market, both for the BCRA and for some of its counterparties, were extended.
- The reference FX rate for futures and forward transactions between the BCRA and its counterparties was allowed to be settled by the Emerging Market Traders Association (EMTA). This measure is clearly a vote of confidence in the BCRA's approach.
- A mechanism was developed for supplying US dollar-denominated repos. This was an additional way of ensuring dollar supply at times when the dollar increased its share in investors' portfolios and when it was necessary to lower depreciation expectations.
- The BCRA started to participate in the NDF market with operations up to 12 months and with counterparties whose credit quality was not lower than A–.
- Auctions of US dollar repos with a pre-established interest rate directed to the financial system institutions that had previously increased their loans in US dollars to the export sector and had suffered a drop in US dollar deposits.

(e) Other instruments and their effectiveness

The BCRA also used other instruments or took other measures to strengthen financial conditions, including:

- Adjustments to minimum cash requirements. The minimum cash requirement on dollar deposits was reduced so that financial institutions could have more funds available to grant loans in this currency (for the tradable sector). In addition, the October and November 2008 minimum cash requirements were changed to a two-month position. Changes were also made to the way in which cash holdings in banks are considered in the reserve requirements position. Specifically, financial entities were temporarily allowed to include their entire cash holdings in order to fulfil reserve requirements.
- Currency swap arrangements. A currency swap arrangement with the People's Bank of China was agreed which will provide CNY 70 billion/ARS 38 billion. The effective period of the arrangement will be three years, and could be extended by agreement between the two sides. A currency swap arrangement was also agreed with the Banco Central do Brasil.
- Interest rate swap auctions to help banks avoid mismatches in fixed and variable interest rates were established.

(f) Lessons learned from the role of FX reserves and interventions

The crisis proved once again the need for prudential FX accumulation in the absence of an international lender of last resort and a set of inadequate lending facilities from the IMF.

The accumulation of foreign reserves allowed most EMEs to withstand the crisis with no major impact on the domestic financial markets without recourse to the IMF, given its lack of assistance to fulfil the needs of EMEs with sound fundamentals but with a foreign currency liquidity shortage.

In a framework marked by large capital inflows, the government decided, by means of Decree no 616 of 2005 and regulatory and complementary measures,[3] to deepen the instruments to follow up and control capital movements. Among the measures adopted was the obligation to set up a non-remunerated deposit at a one-year term (called a reserve) of 30% of the inflow for certain concepts related to: (a) private sector foreign financial debt; (b) portfolio investments by non-residents; and (c) repatriations by residents that exceed USD 2 million monthly.[4] In addition, the minimum term for financial debt contracted abroad and for portfolio investment by non-residents was extended to a year.

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3 Ministry of Finance Resolution no 365/05 and BCRA communications "A" 4359, 4360, 4377 and 4386.

4 Exceptions are allowed for: (a) primary issuances of publicly quoted and traded debt instruments, loans from international organisations, loans used to cancel other debts abroad or direct investments in foreign companies and loans with average maturities of over two years used for investment in non-financial activities; (b) investments by non-residents to be used for primary subscriptions of shares and bonds publicly quoted for trading on self-regulated markets; and (c) repatriations by residents to be used to subscribe to primary issuances of national government bonds.

Annex:
Argentina's banking system

Table 1

Structure of the domestic banking system

In domestic currency

End of year (or latest available month for 2009)

	2006	2007	2008	2009
Total assets	**254,900**	**292,588**	**339,743**	**370,870**
Private domestic banks	82,585	93,968	109,073	115,501
Foreign-owned banks	69,829	81,541	99,815	102,948
Subsidiaries	49,699	66,406	79,258	83,786
Branches	20,130	15,135	20,557	19,162
State-owned banks	102,486	117,079	130,855	152,421
Total capital (*)	**26,189**	**29,245**	**33,248**	**37,964**
Tier 1 capital as a % of total assets (**)	11,2	11,2	10,4	10,2
Memo items[1]				
Total assets of non-bank financial institutions	3,483	5,375	7,019	6,264
Stock market capitalisation	157,118	179,771	137,815	163,252

[1] Total for the economy.

(*) RPC: Adjusted stockholders' equity, calculated towards meeting capital regulations (Responsabilidad Patrimonial Computable).

(**) The RPC (Responsabilidad Patrimonial Computable) is the result of: Basic Net Worth (Patrimonio Neto Básico) plus Complementary Net Worth, concepts that are net of deductible items (Conceptos Deducibles). In this case, Basic Net Worth is taken into account to build the ratio "Tier 1 capital as a % of total assets".

Table 2

Bank funding

In domestic currency

End of year (or latest available month for 2009)

	2006	2007	2008	2009
Total liabilities	**222,954**	**257,103**	**300,447**	**327,083**
Foreign funding	**11,789**	**10,632**	**10,615**	**9,689**
By source				
Banks (*)	4,240	3,864	4,541	3,611
Other foreign fin'l insts				
Int'l money market instruments				
Int'l bonds issued by banks (**)	7,549	6,768	6,074	6,077
Domestic funding	**175,264**	**210,922**	**241,201**	**265,376**
Total deposits	170,402	204,783	235,529	261,176
Households	71,718	87,610	92,897	101,463
Non-financial private corporations	51,225	66,681	72,854	82,712
Government and public sector corporations	45,410	48,340	67,102	73,078
Other	2,049	2,152	2,676	3,922
Domestic market funding	5,236	6,270	5,794	4,275
Borrowing from other domestic fin'l insts	4,731	4,683	4,436	3,296
Domestic bonds issued by banks (**)	506	1,587	1,357	979

(*) Foreign lines of credit (USD).

(**) Outstanding bonds and subordinated debt.

Table 3

Bank lending

In domestic currency[1]

End of year (or latest available month for 2009)

	2006	2007	2008	2009
Total assets	**254,900**	**292,588**	**339,743**	**370,870**
Total loans	**97,848**	**125,606**	**148,858**	**155,960**
Holdings of bonds[2]	**69.298**	**69.241**	**59.241**	**74.475**
Domestic				
Government (*)	37,131	31,814	27,085	34,453
Central bank securities (**)	25,749	31,555	25,652	32,841
Other (***)	6,418	5,872	6,504	7,149

[1] Including foreign currency loans, where applicable.

[2] ie debt securities held by banks with a fixed interest rate and maturity greater than one year.

(*) Public sector.

(**) Central bank bills and notes.

(***) Includes total amounts of private bonds, financial trust, corporate outstanding bonds and subordinated debt.

Table 4

Bank lending (currency breakdown)

In domestic currency, end of period

	2006	2007	2008	2009
Households	**28,770**	**44,258**	**58,422**	**59,298**
Domestic currency	28,177	43,123	56,870	57,989
Foreign currency[1] [(*)]	593	1,136	1,552	1,308
Non-financial corporations	**48,205**	**64,582**	**73,360**	**77,500**
Domestic currency	37,292	48,967	54,359	58,654
Foreign currency[1] [(*)]	10,913	15,615	19,001	18,846
Government and public sector corporations	**20,873**	**16,765**	**17,077**	**19,163**
Domestic currency	20,784	16,699	17,047	19,134
Foreign currency[1] [(*)]	89	67	30	29
Total	**97,848**	**125,606**	**148,858**	**155,960**
Domestic currency	86,253	108,789	128,275	135,777
Foreign currency[1] [(*)]	11,595	16,817	20,583	20,183

[1] Or linked to the exchange rate; total of all currencies, in domestic currency terms.

[(*)] In the case of foreign currency items, the exchange rates considered are those of the last day of each period.