The financial position of households after a macroeconomic crisis: the case of Argentina[1]

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Introduction

The measurement of households' financial positions is a relatively underdeveloped subject in Argentina[3]. Although a nationwide household survey is conducted on a regular basis since the mid-1970s, only very recently questions related to financial aspects have been included in it. Several studies have, either from specific surveys or from indirect sources, attempted at determining the main features of households' wealth - or, rather less ambitiously, private sector wealth. The issue has become all the more relevant after a decade of deep macroeconomic reforms and the crisis that followed, both from analytical and policy perspectives. Analysing how household wealth was affected, and what the responses of households to the new situation were, can lead to a better understanding of their financial behaviour, and thus to better policy design - particularly as regards measures aimed at improving households' access to financial services.

This note approaches the main issues faced when trying to determine the financial position of households in Argentina, with emphasis on behaviour before and after the crisis. In section I, a brief review of the macroeconomic and financial aspects of the crisis is provided. In section 2, the main features of households surveys in Argentina are reviewed, as well as those of other, indirect sources of data that help determine aggregate private sector financial position. Section 3 reviews studies that have aimed at portraying household/private sector responses to the crisis. This is complemented by central bank data on financial assets and liabilities, as well as data from household surveys. Section 4 concludes with a preliminary assessment of the situation, as well as with guidelines for future research.

1. The macroeconomy: reform and crisis

An analysis of the Argentine experience in the 1990s is well beyond the scope of this note: only a few features will be noted here that are relevant to our aims. The 1990s witnessed the initially successful implementation of a series of macroeconomic reforms, led by a currency board (the so-called "Convertibility") that pegged the local currency to the dollar on a one-to-one basis from 1991. Reforms included privatizations, commercial and capital account

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3 This is the case in many developing countries; see Honohan (2006).

liberalization, and deregulation in key sectors of the economy, including financial services[4]. The successful stabilisation of consumer prices, the main explicit aim of the peg, led to the economy becoming re-monetized - especially as regards financial intermediation (figures 1a and 3a).

Credit also re-emerged, as a consequence of several factors. On the one hand, newly regained stability gave agents a longer planning horizon, something that stimulated both demand and supply of funds. In addition, the lifting of all restrictions on the capital account, together with the ambitious privatization program, entailed massive capital inflows. As the currency board explicitly permitted the adoption of contracts in either pesos or US dollars, a substantial fraction of both deposits and credits was denominated in the latter currency: in a very "stylized" way, it can be said that the local currency was mainly used for transactions, and the US dollar for savings and loans. As a result of longer planning horizons, a currency in which longer contracts could be made, and abundant supply of funds, credit increased in both amount and term. In particular, long term credit such as mortgage loans reappeared after decades. This, however, happened at the cost of increased financial dollarization (figures 1a and 1b).

The private sector, thus, became progressively indebted in foreign currency, even if, on aggregate, its revenues were denominated in pesos. As will be discussed later, the private sector kept a very significant share of its portfolio in US dollars; the government also became progressively indebted in foreign currency. Notably, both private and public agents displayed behaviour that seemed to consider that favourable conditions would last indefinitely. But the dense contract network that developed was too closely dependent on certain "states of nature"[5]: in short, contracts could only be fulfilled if capital inflows, and thus the real exchange rate, continued at the pace and level seen in the first half of the 1990s.

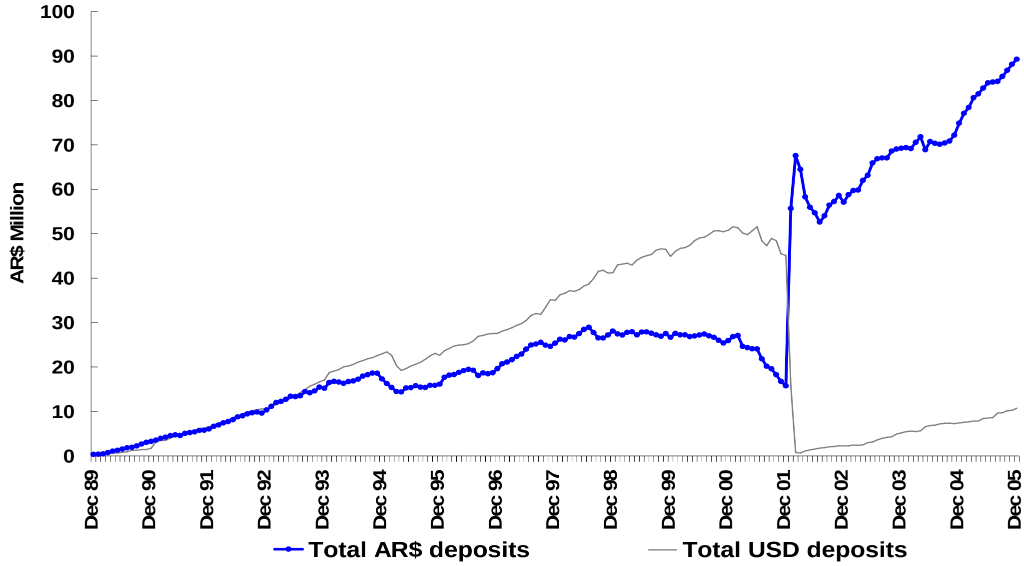
At the same time, reforms went hand in hand with notorious deterioration of income distribution and a significant increase in poverty. Inequality in income distribution has been on the rise since the mid 1970s, when the first household survey was conducted; and while "peaks" in its deterioration have had to do with macroeconomic crises (in the early 1980s, the late 1980s, and the early 2000s), the trend seems to be associated with episodes of reforms, financial and commercial liberalization and weakening of labour institutions (in the second half of 1970s and in the 1990s). Recent studies suggest that this has to do with a strong reduction in unskilled and semi-skilled labour demand, mainly as a consequence of new technologies, together with changes in relative prices against unskilled labour-intensive sectors (Gasparini, 2003). In a short period, companies and government alike introduced new techniques of organization and production, in ways that were biased against unskilled labour. Such changes took place in an abrupt fashion, without government policies aimed at "smoothing" the transition, and in a context of weakening labour institutions. Increasing income inequality was so large that, although the economy grew strongly during the 1990s, poverty soared: headcount ratios went from 20% to 30% between 1992 and 1998, a change that few countries have ever experienced in such a short period of time and during an economic boom.

[4] Financial liberalization took place together with the adherence to international banking regulation and supervision standards, such as those embodied in the Basel Committee's "Core principles for effective banking supervision".

[5] See Galiani, Heymann and Tommasi (2003).

Figure 1a

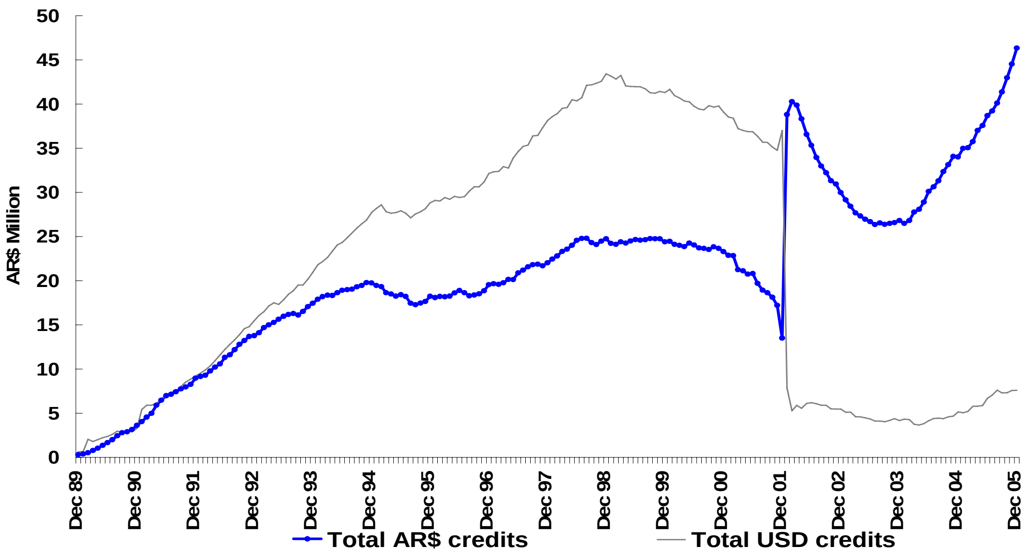
Private sector deposits in financial institutions



Source: BCRA.

Figure 1b

Credit to the private sector granted by financial institutions



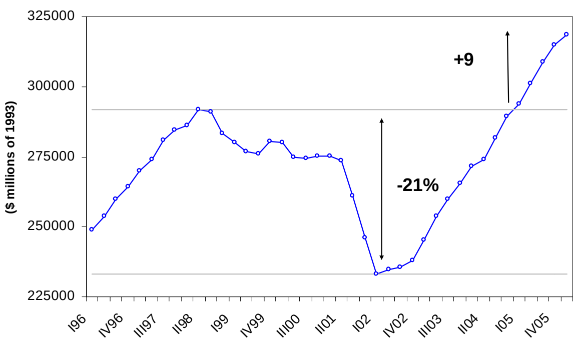
Source: BCRA.

The country entered recession in late 1998; successive emerging economies' crises hit the economy's ability to access foreign financing, and deteriorated its competitiveness. Brazil, Argentina's main trading partner, devalued its currency in early 1999, while the US dollar kept appreciating against the major world currencies, both factors entailing a continuing appreciation of the local currency in real terms. In order to counter that effect, either the nominal exchange rate had to depreciate or productivity had to increase sharply. Productivity certainly increased, but not to the extent that adverse factors required. In addition, the fiscal situation became progressively perceived as unsustainable, in spite of certain efforts of the government to give signals to the contrary. The icing on the cake came under the form of financial system's implicit currency mismatches, not due to deficiencies in supervision (during the decade, state-of-the-art financial regulation and supervision standards were adopted[6]), but to the intrinsic mismatch generated by local currency income earners becoming indebted in foreign currency. The combination of an adverse external environment (with sudden scarcity of foreign funding), a deteriorating fiscal position that spilled over to the banking system (as the government looked to banks and pension funds for increasingly scarce funding), and the currency "mismatch" ultimately triggered a run against the financial system and the currency. That run resulted in the imposition of financial restrictions, the default on government and private debt in late 2001, and the devaluation of the peso in early 2002.

The ensuing crisis was the most severe in the country's recorded history, with GDP plummeting by 15% in four quarters, thus deepening the already negative trend it showed since 1998 (figure 2). The crisis dealt a hard blow to the whole economy. As a dense network of contracts had been generated on the basis of the one-to-one peg to the US dollar, the devaluation meant the breaking up of innumerable arrangements: from big companies' commercial paper to family house rentals and loans. This effect was particularly acute when it came to the banking sector, which suffered the simultaneous effects of a run and of very strict financial restrictions aimed at stopping foreign currency outflows.

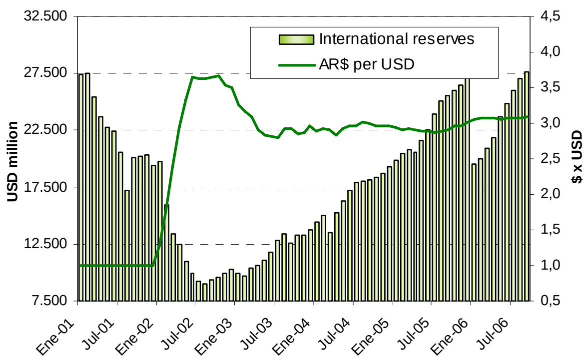
Figure 2

Real GDP



Source: Based on INDEC data.

Foreign exchange rate and international reserves



Source: BCRA.

In a very simplified way, private sector's immediate response to the crisis may be described as combining an extremely abrupt liquidation of banking assets, wherever possible, in favour of liquid positions and a simultaneous move towards foreign currency cash holdings. As the crisis unfolded during 2002, other effects became noticeable, namely a steep fall in private indebtedness to both the local and foreign financial system (figure 3b). This took different forms: outright default, restructuring of loans through the so called "asymmetric pesification" (by which, while dollar-denominated deposits were converted to pesos at a 1.4 rate, credits were changed from pesos into dollars at a one-to-one rate[7]), and gradual repayment together

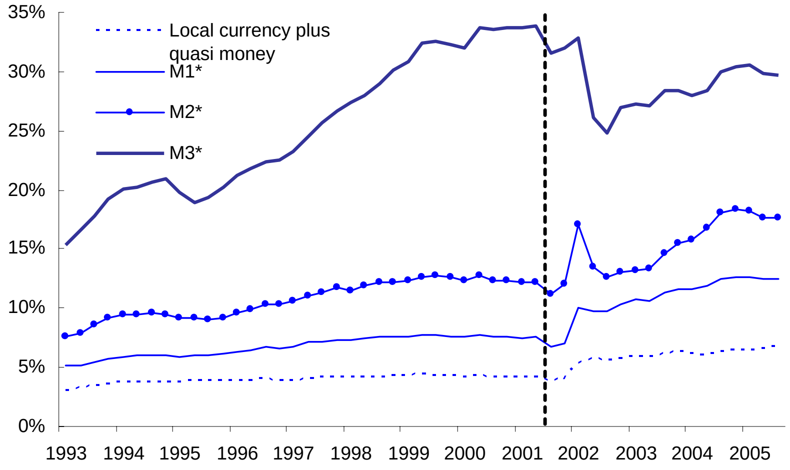
[6] Measures or standards adopted during the 1990s included: minimum capital requirements stricter than those of the Basel accord; consolidated-base banking supervision; debtors rating according to their cash flows; regulations on banks' portfolio diversification; changes to regulation on exit of banks from the financial system.

[7] A difference was made between debt amounts: debts under USD 100.000 were to be adjusted by a wage-linked index, whereas debts over that amount were to be adjusted by a CPI-linked index.

with no new issuance of credit to the private sector during several quarters. At the same time, and not unrelated to financial restrictions, the public remained particularly liquid; this effect may be also associated to the sharp increase in income distribution inequality after the crisis. Such "liquidity preference" has become prevalent throughout the economy, both in the private and the public sector, and shows in a particularly graphic way in monetary aggregates: figure 3a depicts the ratios of such aggregates to GDP; it can be seen that the most liquid forms of money show higher ratios after the crisis, whereas wider aggregates remain "below trend", if we take as such their behaviour during the 1990s.

Figure 3a

Monetary aggregates in terms of GDP (s.a., quarterly)

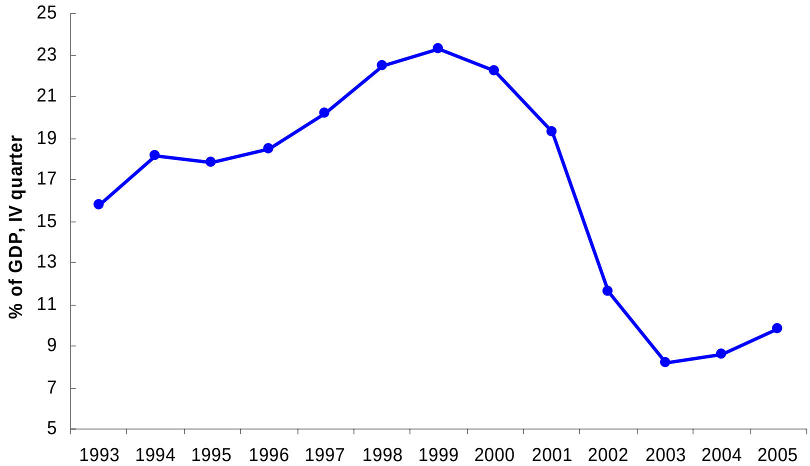


Source: Based on BCRA and INDEC data.

Monetary aggregates are defined as: Local currency plus quasi money = AR$ currency outside banks plus provincial bonds serving as currency. M1* = local currency plus q.m + current accounts in AR$ and USD. M2* = M1* + savings accounts in AR$ and USD. M3* = M2* + fixed time deposits in AR$ and USD. Deposits correspond to total sectors (public + private + financial + foreign residents).

Figure 3b

Banking credit to the private sector



Source: Based on BCRA and INDEC data.

2. What (little) we know about households' financial positions

When trying to measure financial positions of the private sector, two main directions may be followed: measuring directly households' positions, and measuring, at a more aggregate level, private sector's financial position. Regarding the former, it should be noted that no household survey on financial positions has been conducted in Argentina. There are, however, surveys conducted on a regular basis, but mainly aimed at labour and expenditure statistics. As for the latter approach, it could only allow, in an indirect way, to make inferences on household behaviour. In what follows, we review these two groups of data sources.

The *Encuesta Permanente de Hogares* (EPH, Permanent Household Survey) is conducted since 1973 and is the only periodic national household survey, and the main official source on labour statistics; conducted twice a year from 1974 to 2003, it has changed since 2003 to a quarterly frequency. It spans 25,000 households in a rotating panel over 28 urban areas, representing the whole urban population[8]. When household income is measured, certain questions refer very generally to financial income. However, in the new, quarterly version of the Survey, there are somewhat more specific questions pertaining to income derived from deposits in the financial sector, and to loans granted from banks. In particular, under a new section of the questionnaire labeled "household strategies", households are asked if any of their members derived any resources to earn their living from interest on time deposits, or loans from banks or other financial intermediaries - whereas in the previous version of the survey, a more general question was asked. In addition, each member of the family is asked how much of their income came from interests on time deposits.

The *Encuesta Nacional de Gasto de los Hogares* (ENGH, National Survey on Household Expenditure), conducted in 1997 and 2005[9], was designed to measure household expenditure and determine weights on the consumption basket used to measure consumer prices. Once again, certain questions on financial income can be retrieved from the survey, as well as information on household indebtedness. In turn, the Minister of Social Development also conducted household surveys in 1997 and 2001 (Social Development Survey, *Encuesta de Desarrollo Social*), which included questions on credit and income derived from various sources including financial assets.

No overall financial position can be properly determined from these surveys, but only certain aspects related to returns on, or holdings of, financial assets. What is more, except for the EPH, there is no household survey on a periodic basis; and only the most recent version of the EPH may allow the retrieval of certain limited financial information. There have been, however, specific private surveys aimed at obtaining information of, among other things, behaviour on the financial front. This was the case of surveys commissioned by World Bank experts' teams aimed at households' responses to the 2001-2002 crisis (Fiszbein, Giovagnoli and Thurston, 2003), and pensioners' savings.

The second way of approaching the problem has been through the measurement of private sector aggregate wealth. The sources here are manifold, ranging from Central Bank data to national accounts. The Central Bank of Argentina produces three main sets of data: financial institutions' balance sheets and indicators based on them, on a monthly basis; financial institutions selected information on assets, liabilities and interest rates, on a daily basis, compiled in the Central Bank's Statistical Bulletin; and detailed data on individual debtors,

8 See INDEC(2003).

9 Only the 1997 results are partially available.

compiled in the “Central de Deudores” or Debtors’ Information Central[10]. These provide data on holdings of deposits and loans of both the private and the government sector in general. Certain items, like deposits and new loans, can be classified within the private sector in those corresponding to individuals and to companies, financial and non-financial; and certain distinctions are possible between different types of banking credits of indivuals, based on the Debtors’ Information Central. This allows for an indirect way of computing financial positions of the household sector: although the sector as an aggregate may be captured in this manner, there is no specific way of looking at household behaviour, since the unit of analysis are individuals’ accounts - and, in particular, those individuals who have some access to the financial sector.

3. Before and after the crisis: from aggregate to household data

We can have an approximation to the household sector’s reaction to the crisis from aggregate data sources, as well as from the household survey’s data, as referred to above. Regarding aggregate data, Baer (2005) and Sangiácomo (2006) summarize the main features of private sector behaviour in terms of financial assets and liabilities, based on central bank and national accounts’ data.

- The crisis impacted both on the level and on the way in which private sector’s assets are accumulated (figure 4). In 1997-1999, the average private sector portfolio measured in US dollars was made up of 46% of foreign assets (including foreign currency, stocks and bonds issued by non-residents, and deposits in foreign countries), 40% of funds deposited in local banks and in institutional investors, and the rest were holdings of other financial assets (including currency, stocks and bonds); in contrast, in 2004, 59% of such portfolio was comprised of foreign assets, only 25% was allocated to deposit-taking institutions, and 16% were holdings of other financial assets.
- The shift from domestic to foreign assets had to do with the loss of confidence associated with the crisis - and is clearly reflected in both the accumulation of private sector foreign assets, and the change in international reserves. While the former increased substantially throughout the 1997-2004 period, it is the 2001-2002 crisis that shows the peaks of foreign assets accumulation. Growing risk perception led to a sudden change in portfolios in favour of foreign assets - which, to a very significant extent, comprised foreign currency bills and notes. This was just the counterpart of the drain of international reserves in the central bank.
- At the same time, private financial assets held in banks fell from over 40% in 2001 to about half that amount in the following three years. Though deposits have slowly recovered, they now are mainly held in local currency and are made at shorter maturities than in the 1990s. This is above all a consequence of transactional deposits, like checking and savings accounts, displaying a higher share of total deposits than fixed time deposits.
- As for private sector’s liabilities, perhaps the most salient feature has been the sharp drop in domestic banking credit; there seems to be some connection between the conversion of debts from US dollars to pesos at one-to-one rate, the sharp

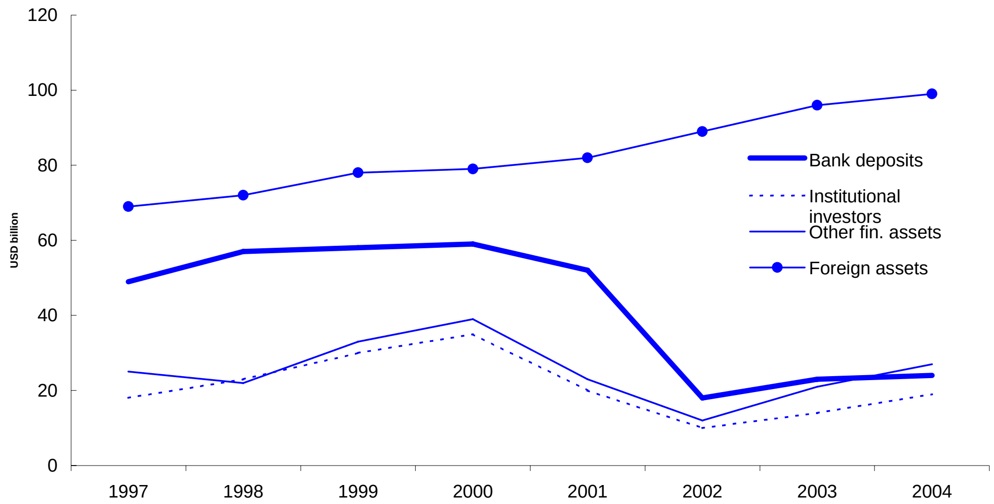
[10] Balance sheet data and the Statistical Bulletin (published monthly) are available on line from the Central Bank of Argentina’s website, http://www.bcra.gov.ar Data from Debtors’ Information Central is partially available on line on the same site, and a CD can be purchased from the Central Bank with detailed information.

depreciation of the local currency, and the liquidation of private debt (both domestic and foreign). The difference between debts converted into pesos and liquid assets held by private agents and revalued after the devaluation favoured those who were net debtors in US dollars before the crisis, thus making it possible for them to cancel liabilities. At the same time, foreign debt also decreased, although at a more gradual pace: from December 2001 to the end of 2004, the private sector's foreign debt went down by 22%. This stood in contrast with previous behaviour, when foreign assets and debt tended to move together. The decrease of private sector foreign debt took place mainly through creditors' condonation or capitalization, the use of debtors' own foreign funds, and even the transfer of currency from Argentina[11].

- Together with the decrease in banking sector credit, there was a substantial change in the denomination of private liabilities: while over 60% of banking credit was granted in US dollars before 2001, after the crisis loans denominated in pesos amounted to over 80% of banking loans. This was both a consequence of "asymmetric pesification" as well as of the intention to close the significant mismatches originated during the 1990s - when credit was granted to agents whose income was in pesos. Credit granted after the crisis has tended to be in pesos, except for credit lines aimed at financing foreign trade activities. Finally, as in the case of deposits, financing seems to take place at significantly shorter maturities than before the crisis, a common feature among countries that have undergone similar episodes.

Figure 4

Private sector (excl. financial institutions) financial assets



Source: Sangiacomo (2006), based on national accounts and Central Bank data.

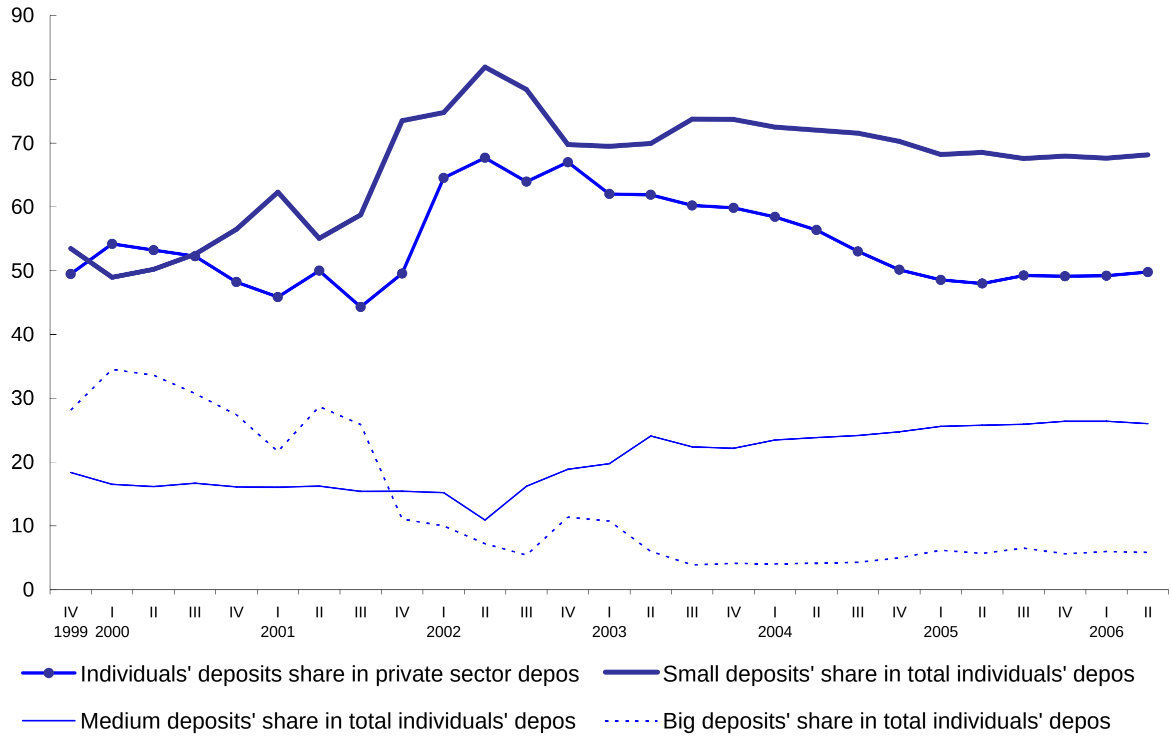
In addition, information from the Central Bank's Statistical Bulletin and Debtors' Information Central can provide insight on individuals' behaviour, as opposed to that of the whole private sector. On the asset side, deposits of "physical persons" or individuals (as distinct from companies), both in pesos and in US dollars, appear rather concentrated in what may be

[11] The Central Bank publishes a report on private foreign debt, available on http://www.bcra.gov.ar under "Statistics: Private foreign debt".

called “smaller” amounts throughout the 1999-2006 period (figures 5a and b): that is, the share of small amounts in the total number of private sector deposits looks quite stable along the years. But the crisis seems to have accentuated this pattern: as noted, banking deposits decreased within the private sector’s portfolio after the crisis, and that they tended to become increasingly denominated in pesos; in turn, smaller inverstors’ share in total individuals’ holdings of time deposits in pesos grew after the crisis, as - although to a smaller extent - it did in the US dollar segment[12]. While some 50% of the total amount of peso time deposits made by individuals were of relatively small amount in 1999, almost 70% fell under that category in 2006 (the same figures for USD time deposits are 70% and 80%, respectively). At the same time, physical persons’ share in both the amount and the number of private sector time deposits in USD substantially decreased after the crisis, while share in the amount of peso time deposits generally increased. Together with shorter maturities in time deposits, individuals seem to be investing significantly smaller amounts by deposit that in the past, and - as aggregate data also show - in domestic currency. All this could be interpreted as the counterpart of individuals’ wealth being allocated to non-banking assets such as cash or foreign currency.

Figure 5a

Share of individual AR$ time deposits in AR $ time depo total amount (private sector - quarterly data)

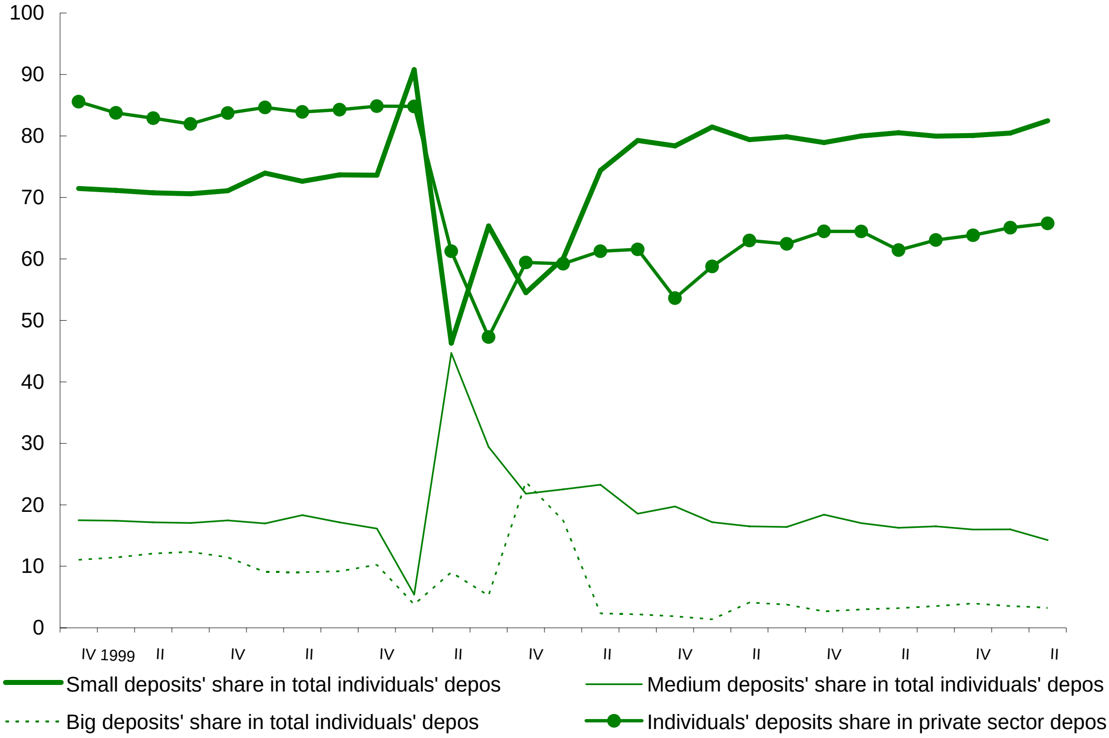


Source: BCRA.

[12] Time deposits are considered a better indicator of individuals’ and households’ savings decisions, while current and savings accounts are mostly held for “transactional” purposes (in Argentina, salaries and wages are paid in savings accounts).

Figure 5b

Share of individual USD time deposits in USD time depo total amount (private sector - quarterly data)



Source: BCRA.

Methodological note: the definition of deposit size is as follows. Small: prinicipal less than AR$ or USD 100.000; medium: principal equal to or higher than AR$ or USD 100.000, lower than AR$ or USD 1.000.000; big: principal higher than AR$ or USD 1.000.000.

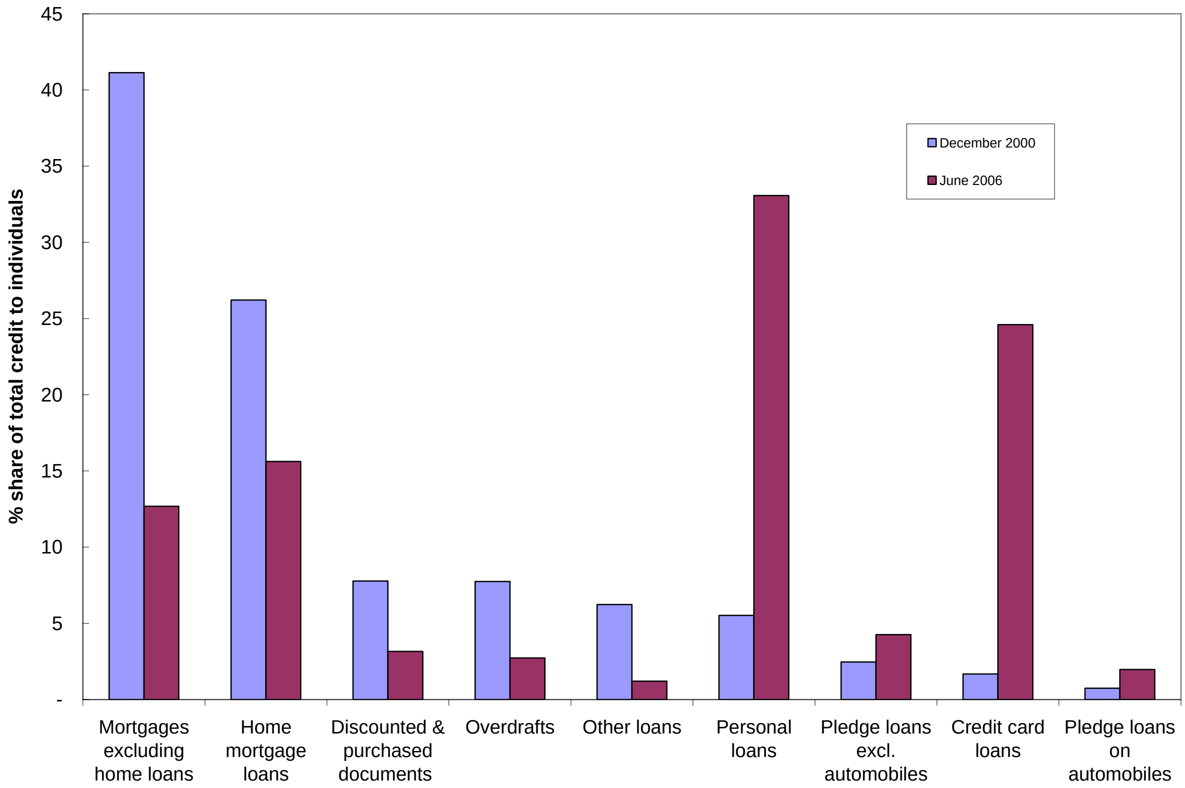
In general, data on individuals' savings accounts do not reveal, changes as important: these accounts are mainly open for "transactional" purposes, as formal workers' salaries and wages are paid - by law - in bank accounts. Thus, it is unsurprising that the share of indivuals in peso savings accounts remains relatively unchanged before and after the crisis (see Annex), while this item is dominated by smaller accounts. In turn, individuals' share of US dollar denominated savings accounts - when total amounts are taken into account - only shows a notable change immediately before devaluation, when individuals must have shifted a sizable portion of their banking assets to liquid, foreign currency holdings, as a hedge against exchange rate and banking risk.

As for the private sector's liabilities, data on the distribution of the different types of individuals' bank loans confirms what was inferred for the private sector maturities in the aggregate. After the crisis, loans of longer maturities, like mortgages, went down significantly, while shorter term loans gained ground (figure 6). This cannot be dissociated from the absence of a "unit of account" for longer terms, and it could also be hypothesized that shrinking credit demand after the crisis has something to do, as well as the banks returning to granting credit to those subjects that show less risk of repayment.

Household survey data provide a depiction along the lines of that portrayed by aggregate information. The most comprehensive and recent coverage is that provided by the Permanent Household survey - subject to the important limitation that financial data has only been gathered after the crisis (figure 7a). It is first of all evident that income derived from time deposits is scarce among households, something that could support the view that households have relied less, on their asset side, on interest-bearing deposits. As for the liability side, households have progressively resorted to paying in instalments after the crisis - either through credit cards or through informal credit granted by shops. At the same time, there is a small but growing share of households that has been taking credit either from banks or from other type of institutions - questions in the survey do not allow us to distinguish between households obtaining loans from banks, financial institutions or more informal lenders. Going by this data, the point is, once again, that credit looks scarce from the point of view of households, but nonetheless recovering since the crisis.

Figure 6

Individuals' credits from financial institutions - share of total credit to individuals

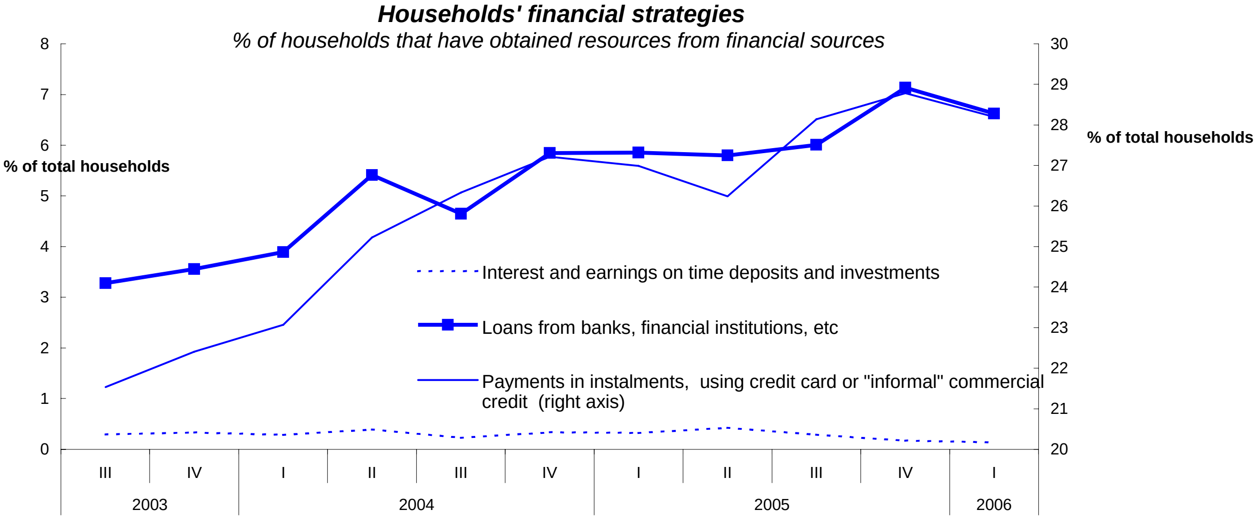


Source: BCRA.

Data from the Permanent Household Survey also show how certain financial resources are distributed according to households' incomes (figure 7b). Interest on time deposits appear extremely concentrated in the upper decile; at most, only 0,3% of households in deciles from the first to the ninth have received such income, as compared to 1,4% in the tenth; the interdecile ratio is above 12. When it comes to loans from banks or other financial agents, the distribution is less unequal - the interdecile ratio is 4.7; this is not necessarily an indication of better access to banking credit than to banking deposits, but rather to the fact that the question includes credit granted by money lenders. Finally, payment in instalments appears more generalized across income deciles, with the interdecile ratio at 2,8 - although we are unable to distinguish the use of credit cards from, for instance, informal instalment payments such as those accepted by local shops. These data suggest that households seem more prone to access financial services in the form of liabilities rather than assets, and that those associated to liabilities, seem less unequally distributed. This may have to do with the fact that, as measured by the survey, financial assets are associated to banking time deposits, while liabilities include other financial intermediaries.

Figure 7a

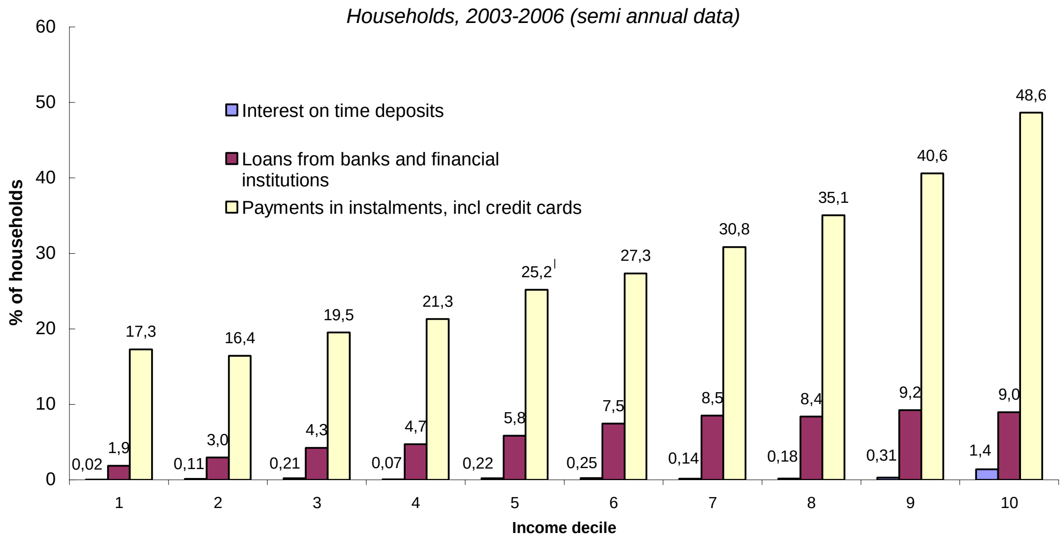
Households' financial strategies



Source: Own estimates based on INDEC data.

Figure 7b

Distribution of financial resources by income decile



Source: Own estimates based on INDEC data.

In turn, the World Bank survey whose results are included in Fiszbein, Giovagnoli and Thurston (2003) covered 2,800 households during June-July 2002, one of the worst moments of the crisis, and was specifically focused on strategies aimed at coping with the event. The financial segment of the survey indicates that after devaluation and default, households' access to banking loans decreased, while plummeting incomes were made up for (at least partially) by selling assets, using saved funds, and recurring to informal credit granted by shops - which was the case of lower-income households (tables 1a and 1b).

Even before the 2001-2002 “multiple crisis” broke out, the long recession undergone since 1998 had put households under great strain; in a report on household coping strategies based mainly on EPH and EDS data[13], a World Bank teams found that families did not, irrespective of their income level, borrow money from the banking system to cover unexpected expenses. While wealthy households responded to negative income shocks selling assets or using savings in a much larger proportion than poorer ones, poor and rich showed the same probability of resorting to banking loans.

Table 1a

Households’ financial strategies

Argentina, 2001-2002

	Households resorting to selected strategy (%)		Households that declared income reduction resorting to selected strategy (%)	
	June-July 2002	**October 2001**	**June-July 2002**	**October 2001**
Asset sales	3.7	1.1	5.5	1.0
Use of savings	5.1	3.0	7.1	4.9
Banking loans	1.7	2.4	1.3	3.1
Differed payment purchases	7.3	5.1	9.7	6.6

Source: Giovagnoli, Fiszbein and Alduriz (2002).

Table 1b

Households’ financial strategies by income quintile

Argentina, 2002

	Income quintile					
	I	**II**	**III**	**IV**	**V**	**Total**
Asset sales	5.9	3.7	3.3	2.7	1.1	3.3
Use of savings	2.8	3.5	4.0	8.0	5.6	4.8
Banking loans	0.9	3.6	1.8	0.6	2.0	1.8
Differed payment purchases	14.6	13.1	9.5	2.3	0.7	8.0

Source: Giovagnoli, Fiszbein and Alduriz (2002).

Finally, data from the Household Expenditure Survey are adequate to focus on housing credit, if only before the crisis. In particular, they show a relatively limited penetration of

[13] World Bank (2001).

housing credit even during a boom phase, and the concentration of such credit in wealthier households. Thus, according to 1997 data, only 3,7% of households in the Buenos Aires metropolitan region[14] declared to hold debt related to house purchases. Although the definition is vague, and may not be taken to strictly represent banking mortgage loans, it can safely be assumed that they represent an important share of housing debt. The distribution of such credit among households appeared concentrated in households belonging to the upper quintiles of income distribution (table 2): while just 1% of households in the first quintile declared to finance home acquisition through some form of credit, 6% of those in the fifth quintile did so. Average financing represented only 13% of average household income in the first quintile, but rose to almost 46% in the fifth[15]. The idea of concentration is reinforced when total declared household debt is compared to total declared income, which yields a ratio of 38%. This follows the usual pattern (in less developed financial markets) of lower access to financial services by lower income households. One point may, still, contrast with unequal access to housing credit: that, when credit is measured as a proportion of income of households that actually declare holding credit, the ratio appears fairly stable throughout income quintiles.

When it comes to other household debt, the situation is somewhat different: throughout the sample, 54% of respondents declared holding some form of debt other than that related to house purchase, and their distribution by income quintile was less unequal (table 2). This may not necessarily reflect a better access to financing, since debts included in this class may range from loans granted by family members or informal networks to formal banking credit, and may include loans granted by lenders other than financial institutions.

Table 2

Households' debt holdings

Shares by income quintile - Greater Buenos Aires, 1997

Income quintile	Housing debt	Other debt
I	1.1%	32.0%
II	1.7%	42.1%
III	3.2%	53.7%
IV	6.2%	64.1%
V	6.5%	78.5%

Income = net household income. Quintiles correspond to regional distribution. Housing debt = debt for home acquisition.

Source: own estimates based on ENGH.

As for possible determinants of these households liabilities, correlations between certain households characteristics and household debt point in expected directions (table 3): the amount of housing debt is positively correlated to the household head labour situation, his or her level of formal training, but negatively correlated to sex. Thus, access to housing credit

[14] The metropolitan region or Greater Buenos Aires (Gran Buenos Aires) spans both the Federal Capital and suburban areas that are politically under provincial jurisdiction, but form the same urban conglomerate.

[15] This should only be taken as a measure of credit penetration, since it is calculated including all households in each quintile, whether they had taken housing loans or not.

seems associated to households facing relatively less vulnerable conditions. As for sex, one should bear in mind that a female household head usually entails a more “risky” situation as women: a) tend to have higher unemployment rates; b) become households heads when the male head is unemployed or absent. In turn, the amount of declared housing credit is positively correlated with household income and expenditure, to the house tenancy regime, and to the fact of already owning other goods, such as a car. Similar results are observed for other types of household debt - in this case, the number of household members is also associated to debt holdings, something that could be in line with “coping strategies” as a household grows bigger.

Table 3

Pairwise correlations: housing debt, other debt, and selected variables

Greater Buenos Aires, 1997

	deud_viv	deud_otr	jnivins	jsitocup	jedad	jsexo	regten	propauto	cantmiem	ingtot	gastot
deud_viv	1,000										
deud_otr	0,028	1,000									
jnivins	0,080	0,122	1,000								
jsitocup	0,024	0,094	0,193	1,000							
jedad	-0,053	-0,062	-0,233	-0,415	1,000						
jsexo	-0,029	-0,048	-0,044	-0,228	0,198	1,000					
regten	-0,042	-0,032	-0,036	0,070	-0,309	*0,000*	1,000				
propauto	0,067	0,151	0,249	0,238	-0,079	-0,251	-0,159	1,000			
cantmiem	*0,005*	0,047	-0,107	0,178	-0,263	-0,287	*0,017*	0,122	1,000		
ingtot	0,123	0,181	0,498	0,228	-0,080	-0,144	-0,134	0,427	0,160	1,000	
gastot	0,093	0,198	0,463	0,205	-0,106	-0,125	-0,100	0,423	0,124	0,802	1,000

Variables significantly different from zero at 10% levels or less shown in bold type. Variable definitions as follows. Deud_viv: debt holdings for house purchase; deud_otr: other debt holdings; jnivins: maximum educational level attained by household head (from 1 = no education to 10 = university degree); jsitocup: household head situation in the labour market (1 = unemployed or inactive; 2 = employed; 3 = self-employed or business owner); jedad: age of household head; jsexo: sex of household head (1 = male; 2 = female); regten: home ownership (1 = owner; 2 = tennant; 3 = occupant); propauto: car ownership (1 = no car; 2 = 1 car; 3 = 2 or more cars); cantmiem: number of household members; ingtot: total household income; gastot: total household expenditure.

Source: Own estimates based on ENGH.

Analysing the determinants of household debt is well beyond the scope of this note, but the point is that, even during a relatively favourable economic phase, when credit was growing and, for the first time in decades, reaching significant levels in terms of GDP, there is reason to believe that longer term credit was still concentrated in few households - a result that could be somewhat related to the general, worsening trend in inequality.

4. Concluding remarks

The 2001-02 macroeconomic crisis took its toll on households’ financial positions. The private sector became much more liquid, with a less significant share of both banking deposits and credit, and with higher holdings of foreign assets; and, once recovery was under way, renewed growth in deposits and credits has taken place at shorter maturities - as transactional deposits have carried more weight - and, mostly, in local currency. Individuals seem to have followed the same pattern, and we have reason to believe that, as banking credit was relatively concentrated in few households before the crisis (and even before the

1998-2002 recession started), credit during the ensuing recovery has also been rather concentrated. What is more, while access to longer term banking credit may be taken to be concentrated in the wealthier households, deposits in financial institutions tend to be dominated by relatively small amounts - something that could be taken as evidence that wealthier individual investors abandoned the financial sector.

There is information that can properly describe private sector behaviour, as well as that of individuals' within it; however, sources on household behaviour are still very scarce when it comes to the financial dimension. There are several lines for further research, comprising work on already existing information sources as well as the development of new data.

- In the first place, data on private sector and individuals could be further refined, so that measures of the financial position of the "representative" individual could be obtained[16]. These measures could be analysed together with micro and macroeconomic variables, so as to obtain determinants of private sector and individuals' financial behaviour.
- The structure of existing household surveys could be accommodated so as to include improved information on financial income and expenses. This, of course, would require the coordination of experts from both the National Statistic Agency and the Central Bank.
- Finally, specific households surveys aimed at determining their financial position could be conducted. This, of course, poses the most important challenge, as it involves virtually "starting from scratch".

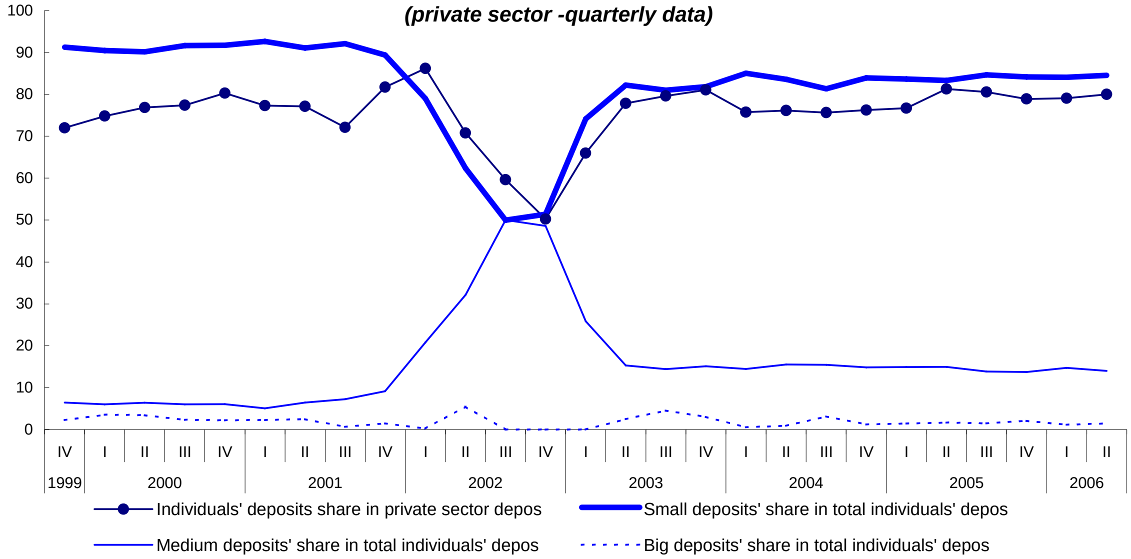
There is question as to whether further work on this subject would be relevant, since aggregate data show that the population's access to financial services remain limited. But it is precisely because of this fact that such a survey would be useful - not in order to determine households' financial position *per se*, but rather to measure their ability to access financial services. In this way, policy measures aimed at improving and extending access to banking services could be taken[17], entailing a more efficient individual and social use of resources - something particularly relevant in an economy that has so far shown a "cash-driven" growth phase after the recession.

[16] Measures of the representative private agent are presented in Baer (2005) and Sangiácomo (2006), as previously discussed.

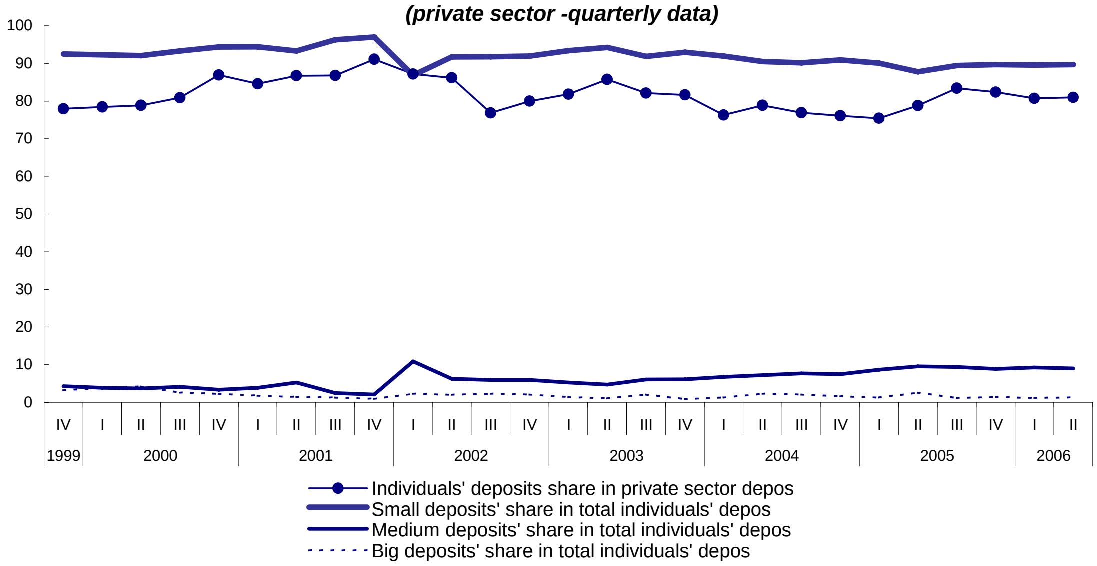
[17] As pointed out by Honohan (2006), deeper financial systems are correlated with improved income distribution.

Annex

Share of individual USD savings accounts in USD savings accounts total amount (private sector -quarterly data)



Share of individual AR$ savings accounts in AR $ savings accounts total amount (private sector -quarterly data)



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Glossary

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

INDEC: Instituto Nacional de Estadísticas y Censos, National Institute of Statistics and Census.