# The New Millennium Argentine Saga: from Crisis to Success and from Success to Failure<sup>1</sup>

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#### **Abstract**

We analyze Argentina's macroeconomic performance from late 2001 to early 2014. The period began with a severe financial crisis that led to a large default on public debt and a deep economic contraction. A rapid recovery began almost immediately after the devaluation of 2002; recovery then turned into strong and sustained economic growth. By late 2011, despite a very favorable external context, the economy started to face a lack of foreign exchange, which ended up precipitating a currency crisis in early 2014. In our view, the reason of this cycle of success and failure lays in the switch of macroeconomic policy from one based on a stable and competitive real exchange rate to another one of populist orientation.

#### 1. Introduction.

Argentina's economic performance since the beginning of the new millennium has been an object of analysis and intense debate. This is not surprising. The period began with a severe financial and debt crisis. In December 2001, the government announced the largest default on public debt in global financial history. The economy also sunk in a deep depression: GDP contracted by more than 20% compared to its previous peak in mid-1998, unemployment reached almost 22% of the labor force and half of the population became poor. Rather unexpectedly for most observers, the economy began a rapid and strong recovery in mid-2002, which then turned into rapid and strong economic growth. During this process employment grew very fast, many tradable services, manufactures and agricultural activities boomed and non-traditional exports expanded at an unseeing pace. The impact of the global financial crisis of 2008-09 was short-lived and not as severe as in other emerging markets. However, by late 2011, despite the very favorable external context of low interest rates and high terms of trade, the economy started to be constrained by the lack of foreign exchange. In early 2014, it finally faced a balance of

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payments crisis. As a result, inflation accelerated and output and employment contracted. The full resolution and consequences of this crisis are —at the time we write these lines—still to be seen.

Many interpretations have been advanced to explain this convoluted thread of events. Although all of them have their own details and nuances, two polar views can broadly be presented. One view —especially held within the international financial press claims that the default and repudiation of other contracts during the 2001-02 crisis caused long-lasting negative effects on sentiments of investors and consequently on the economy's long-run growth. Under this view, Argentina only experienced a short-lived recovery mostly due to an unsustainable fiscal stimulus and especially to the tailwind of the exceptionally high terms of trade during this period. Another widespread view mostly held by the government and its supporters— argues that Argentina's performance represents a successful experience of progressive economic policy based on a demand-led growth strategy that has the sustained expansion of wages and public consumption as its main pillars. The emergence of a foreign exchange shortage since 2011 would be, under this view, the consequence of a gradual deterioration of the external conditions —"the world fell on us", in President Cristina Fernandez de Kirchner's words— and also to some degree the effect of speculative and destabilizing maneuvers of financial actors and large corporations.

In this article, we argue that both interpretations are wrong. In contradiction to the claims of the first view, evidence clearly shows that the strong economic recovery largely responded to the positive environment created by the policies implemented during the period immediate following the 2001-02 crisis. This new policy orientation was supported essentially on five pillars: 1) a stable and competitive real exchange rate (SCRER),<sup>3</sup> 2) twin surplus of the current account and the fiscal balance, 3) a large and increasing stock of international reserves at the central bank, 4) a very successful public debt restructuring carried out in 2005, and 5) an employment program —called *Plan Jefes y Jefas de Hogar Desocupados* (Program for Unemployed Male and Female Heads of Households)—implemented to mitigate the negative social impact of the crisis and to alleviate the initial contractionary effects of it. These elements were instrumental to create a sound macroeconomic configuration and social environment that made possible a rapid recovery and later on strong and sustained economic growth. It is during this period that real wages, employment and income distribution improved the most.

<sup>3</sup> We follow the Latin American tradition of defining the exchange rate as the domestic price of a foreign currency. Consequently, of rise (fall) of both the nominal and the real exchange rate implies a nominal or real depreciation (appreciation).

Despite its success, this macro-policy orientation was gradually abandoned and was replaced by a shortsighted strategy that sought to stimulate aggregate demand disregarding the impacts on the macro-balances (e.g., inflation, the balance of payments and the fiscal deficit). The new orientation favored the expansion of wages and public consumption to stimulate employment and output growth, in an economy that already had signs of excess demand — a rate of unemployment around 7-8% and inflation around 25%. The demand-led strategy was jointly implemented with a monetary policy that implied highly negative real interest rates and used the exchange rate (and also public utilities) as the main nominal anchors. This cocktail resulted in a growing misalignment of key relative prices, especially a real exchange rate (RER) overvaluation. Thus, contrary to the second view, the balance of payments problems arose not due to changing external conditions and speculation, but due to intrinsic inconsistencies of the economic policy.

We devote the rest of the article to make our case. In section 2, we offer a periodization to characterize the periods in which the two different policy orientations were carried out. In section 3, we analyze the first and successful period. We describe the main measures and policy changes that followed the 2001-02 crisis and preceded the 2003 election in which Néstor Kirchner became President. We also explain how these measures were instrumental to set up a new macroeconomic scenario that encouraged investment, exports, and employment growth. In Section 4, we first discuss the factors and changes in the policy orientation and then the economic performance during the second, less successful phase. We close in section 5 with a few remarks.

### 2. A tentative periodization

Most analysts agree about the existence of two distinct periods: a first one of a very successful economic performance and a second one rather mediocre. Some disagreement persists about the precise periodization, particularly regarding the moment of the shift from one period to another. Several candidates for the turning point are in dispute: the beginning of the falsification of official statistical data in January 2007; the conflict with rural producers due to the increase in export taxes in early 2008; the collapse of Lehman Brothers in September 2008 and the onset of the global financial crisis; the change in the conduct of the central bank in January 2010; the death of Nestor Kirchner in October 2010; the introduction of controls on the foreign exchange market in November 2011, the reform of the central bank law that relaxed the limits to monetize fiscal deficits; and the change of the economic team (including again the governor of the central bank) in November 2013.

As in the plot of Mario Vargas Llosa's classic book *Conversación en La Catedral*, it is hard to determine at what precise moment did the initial successful economic performance "fuck itself up". In sections 3 and 4, we go through the relevant events —the falsification of official statistics having a heavy weight in our assessment— and argue how they contributed to gradually jeopardize macroeconomic policy and performance. However, in our view, rather than a single event, the switch from one period to another is mostly the result of a sequence of wrong turns in the conduct of economic policy that gradually eroded macroeconomic performance.

Since a central goal of this article is to argue that Argentina managed to recover from the economic crisis and to sustain a rapid growth of output, employment and incomes largely due to the sound macroeconomic policy conducted by the government, we need to set up the period during which this happened. Figure 1 shows that the economy began a period of very fast recovery and then growth in mid-2002. It is clear that sustained growth is interrupted in 2008; a minor contraction is observed in the second quarter during the conflict with rural producers and a larger one in the fourth quarter once the effects of the global crisis spread out to the emerging world. From mid-2002 to early 2008 is, in our view, when the macroeconomic policy based on the SCRER strategy was fully operating. Later on, as Figure 1 shows, the trajectory of the GDP becomes sinuous, with two contractions in 2009 and 2012, and growth is much slower than in precedent phase.

Table 1 shows a set of indicators that support our claim that Argentina's successful economic performance since 2002 occurred by large during the SCRER period and that after it economic performance was rather mediocre. For convenience, we use yearly data and consequently encapsulate the SCRER period in the five years of 2003-07. For the second one, we use two alternative periods: 2008-13 and 2010-13. We do it because we want to stress that the degradation of economic performance during the second period is largely independent of the negative effects of the global crisis.

The contrast is evident. In the 2003-07 period, the economy grew at an average rate of 8.7%, in contrast to alternatively 2.2% or 3.7% during the second one. Employment and real wages also grew substantially more in the first period compared to the second one. Furthermore, private sector employment remained virtually stagnant during the second period, and that total employment mostly grew because of public employment. Income inequality —measured through the Gini coefficient— improved the most during the first period as well. Table 1 also shows that the robust macroeconomic configuration consisting of a competitive RER, low (although accelerating) inflation and twin surpluses during the 2003-07 period switches to another one with a substantially more appreciated RER, higher inflation rates and lower surpluses, which turned into twin deficits in 2013. These

outcomes happened despite the fact that external conditions —measured via terms of trade and FED overnight interest rate— improved significantly in the second period.

#### 3. From crisis to success

Key policy decisions that were instrumental to the configuration of the SCRER strategy were implemented between the declaration of the default in last days of 2001 and the beginning of President Néstor Kirchner's administration in May 2003. During this transition period, the decade-long currency board was replaced by a pragmatic managed floating regime and the peso devalued; capital controls were implemented to help stabilize the foreign exchange market; banks' balance sheets were converted into pesos to avoid the collapse of the financial system; dollar-linked public utilities rates were also converted into pesos; taxes were imposed on primary exports, in order to both reduce the impact of devaluation on domestic prices and also to capture resources to finance public spending; in particular, an employment program —called Plan Jefes y Jefas de Hogar Desocupados— that reached almost two million families. The new policy orientation did not arise swiftly from a planned and articulated strategy, but it managed to stop the steep contraction of output and employment in a short period of time. It also paved the way for the economic recovery and growth that soon would follow.

The defaulted debt was restructured in 2005.<sup>4</sup> A debt swap that included a heavy haircut on the nominal face value was accepted by 76% of the bondholders. The debt restructuring implied a substantial improvement of federal government's balance sheet and consolidated the widening of the fiscal space that had *de facto* occurred since 2002 with the suspension of interests and capital payments after the default. The debt swap is the only key measure that helped consolidate the post-crisis macroeconomic framework that was implemented after the transitional period.

#### A transitional period

One of the most complex challenges faced after the collapse of the convertibility regime was the stabilization of the financial system. Some aspects are worth mentioning. First, the financial system in the late 1990s had developed a high indirect exposure to exchange rate risk. In 2001 about 70% of financial contracts were denominated in US dollars.

<sup>&</sup>lt;sup>4</sup> See Damill et al (2010) for an analysis and description of the debt restructuring process.

Although there was not a significant currency mismatch in banks' balance sheets, a large portion of credits in dollars had been awarded to borrowers whose income flows were in pesos. Thus, debtors' financial position and their ability to repay were very sensitive to exchange rate risk.

In such conditions, the devaluation of the peso —without any additional compensatory measure— would have severely impacted on a great proportion of borrowers, leading to a wave of contractual breaches and widespread bankruptcies, including the collapse of the banking system. Consequently, some form of debt write-off became unavoidable. Right after the devaluation, the government decided to convert foreign currency-denominated debts into pesos at a preferential exchange rate of one peso per US dollar. The "pesification" of dollar-denominated bank deposits was also carried out but at a different rate of 1.4 peso per US dollar. The different exchange rates used to "pesify" banks' balance sheets became to be known as "asymmetric pesofication". The government assumed the full cost of the capital losses resulting from the asymmetric pesofication of banks' balance sheets and issued sovereign bonds for such a purpose.

Banks were facing difficulties since late 2000, due to successive rounds of deposit withdrawals that had taken place in the final stage of the currency board regime. Deposit withdrawals, in turn, caused a gradual fall of international reserves at the central bank. In order to stop the draining of deposits and the depletion of central bank's reserves, the authorities imposed severe restrictions on bank deposit withdrawals in early December 2001. The restriction on deposit withdrawal —commonly known as *corralito*— was one of the main triggers of the riots that forced President De la Rúa and his government to resign. However, despite these measures, the loss of banks liquidity continued, because of the existence of various "leaking" mechanisms.

Facing the delicate situation of many banks and the prevailing high economic uncertainty, the new authorities had very narrow margins for maneuver to operate onto the financial system. After some twists and turns, a strategy of gradual reorganization of the financial system was adopted during provisional President Eduardo Duhalde's administration. In particular, massive financial support was provided to troubled banks through the rediscounting window of the Central Bank and the use of "regulatory forbearance" by the regulatory agency, which accepted the non-fulfillment of capital requirements; a measure taken against the recommendations of the IMF, which advocated for a much more drastic treatment. This gradual approach offered time for the recovery of economic activity and the stabilization of the exchange rate and domestic prices, which in turn favored the gradual restoration of liquidity and solvency of financial institutions.

That gradual strategy proved successful. As the macroeconomic situation began to improve and banks to recover, it became possible to start releasing still withheld deposits. This was done in successive rounds, through the voluntary conversion of deposits into public securities. The process of monetary stabilization also included the redemption of provincial small-value negotiable bonds that were massively circulating as quasi-currency. Several provinces had issued them in the final phase of the currency board in order to alleviate their intense liquidity constraint.

The stabilization of the foreign exchange market was another key challenge for the authorities after the collapse of the currency board. It was achieved thanks to a combination of factors. In addition to the sharp nominal depreciation of the peso, the rise of domestic interest rates —up to 110% in mid 2002—, the intensification of controls over foreign exchange transactions, the obligation to surrender the proceeds of exports and an aggressive selling intervention by the central bank in the foreign exchange market were all key to stabilize the exchange rate. By July 2002, the exchange rate stopped rising and international reserves at the central bank stopped falling.

As soon as the public perceived these developments, the market's sentiment switched from expecting a nominal depreciation to anticipating an exchange rate appreciation trend. In this context, local assets became increasingly attractive. The amount of cash in circulation and bank deposits began to increase for the first time after the crisis, as also happened with the demand for central bank bills and private companies' stocks. Portfolio shifts in favor of peso-denominated assets resulted in a steady decline of domestic interest rates.

The initial depreciation of the peso was followed by a rapid increase in domestic prices. However, the acceleration of inflation was short-lived and within a few months the inflation rate was already declining (Figure 2). Several factors contributed to the mitigation of the inflationary impact of the devaluation and the risk of a hyperinflation. These factors include the introduction of export taxes, which avoided a full pass-through of devaluation to prices. The decision to "de-dollarize" public utilities' rates —which were linked to the nominal exchange rate by contract since the privatization in the 1990s— was also important. On the other hand, the underutilization of capacity and unemployment rates were both very high at that time. In this context, nominal wage hikes initially remained bounded, and producers of goods and services for the domestic market found it difficult to pass on to prices the full increase in the cost of imported inputs. The stabilization of the nominal exchange rate was also important in this process.

The fact that the pass-through of the devaluation to domestic prices was so low implied a substantial real depreciation in just a few months. The RER level in 2003 more than

doubled the one prevailing at the end of 2001 (Figure 3). This substantial rise in the RER implied a similar improvement in the profitability of labor-intensive tradable activities. For instance, the average manufacturing wage measured in US dollars was at end of 2003 about 60% lower than the pre-crisis level. It is worth noticing that —because of the low pass-through— the decline in real wages (i.e., the nominal wage deflated by the consumer price index) was much lower; it only contracted by 14% in the same period (Table 1).

This significant change in relative prices had a very significant impact on the tradable sector. On the one hand, it increased the profitability of firms in these industries, which had been strongly damaged by the prolonged RER overvaluation during the 1990s. On the other, imported goods became more expensive, thus aggregate demand shifted toward domestic substitutes. The subsequent import substitution process was the determinant of sudden stop in the contraction of output in mid-2002 (Figure 1). The recovery of GDP strengthened after exports and especially fixed investment reacted to the incentives of the higher tradable profitability.

The recovery of economic activity gradually led to a recovery of employment and real wages. The latter began to recover in the fourth quarter of 2002, as a result of an explicit policy aiming to raise nominal wages (i.e., lump-sum increases in private wages were granted by government decrees between 2002 and 2004) and also due to the deceleration of inflation. Wage increases were also associated with the rapid reduction of unemployment. Figure 4 shows that manufacturing real wages reached the pre-crisis level by the end of 2003. A V-shaped recovery was also observed in employment. This phenomenon particularly affected full-time jobs in the private sector.

## The successful performance with the SCRER strategy

Once the foreign exchange market was stabilize in mid-2002, a process of nominal appreciation of the peso followed. It lasted until early-2003, when the government strengthened its buying intervention in the foreign exchange market to maintain the exchange rate around 3 pesos per dollar. The resulting RER level was about 115% higher compared to end of the currency board. The authorities conceived that the RER had reached a level sufficiently competitive to support the rapid rates of recovery observed in the manufactures and other tradable activities. This moment can be considered the end of the transitional period, and the full beginning of the macroeconomic policy framework based on a SCRER.

The idea of preserving a SCRER became a key objective for the macroeconomic policy. Early on, the Kirchner administration began to make explicit how important it was in their goal of economic growth and job creation. Although the authorities never mentioned a specific target for the RER, interventions in the foreign exchange market by both the central bank and the Treasury sought to keep the RER stable around the level of 2003.<sup>5</sup>

To maintain the RER stable and competitive, the central bank followed a managed floating regime within a monetary framework of targeting a monetary aggregate.<sup>6</sup> To achieve the targets, the central bank had to sterilized part of the increase in liquidity generated by its buying intervention in the foreign exchange market, issuing short and medium term securities (i.e., *Lebac* bills and *Nobac* notes). Initially, the foreign exchange market operated under excess supply due to the trade and current account surpluses. After the debt restructuring of 2005, the excess supply was also fed by the net capital inflows.

It is commonly argued that sterilized foreign exchange interventions are not sustainable in time because of the rising costs of issuing short-term securities. However, if interest payments that these instruments generate are equal or lower than the yields obtained from the international reserves, sterilized foreign interventions can be sustainable.<sup>7</sup> This was the case during the SCRER period. The evolution of the balance sheet of the central bank showed no signs of unsustainability related to the sterilization policy.

A SCRER strategy can foster growth via two main mechanisms. First, a competitive RER implies high tradable profitability and thus encourages investment in tradable activities. The stability of the RER level reduces uncertainty, which also favors investment. Development economists have long argued that structural change and economic development is associated with the expansion of key tradable activities such as manufactures and some special tradable services (e.g., software). These activities are the locus where innovation and increasing returns to scale in the form of technological spillovers and learning-by-doing externalities are more prevalent. Consequently, a macroeconomic policy that maintains a SCRER, by inducing investment in these key activities, is development-friendly and fosters growth. Historical experience —especially in Asia— and more recently empirical evidence supports the claim that competitive and

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<sup>&</sup>lt;sup>5</sup> Initially it was not clear whether the targeted level was the multilateral RER or the bilateral RER against the US. The latter began to show a sustained appreciating trend especially since mid-2004, whereas the former remained stable around its 2003 level until the end of the period in early 2008. The divergence between the two indexes was mostly due to the nominal appreciation that several currencies of Argentina's Latin American trading partners experienced against the US dollar, especially during the booming years that preceded the 2008-09 global financial crisis.

<sup>&</sup>lt;sup>6</sup> See Frenkel and Rapetti (2008) for an analysis of monetary and exchange rate policies during this period.

<sup>&</sup>lt;sup>7</sup> See Frenkel (2007) for the conditions for sterilized foreign interventions to be sustainable.

stable RER levels favor economic growth.8

Second, a SCRER plays an important role at promoting macroeconomic stability. Competitive RERs typically generate current account surpluses and facilitate international reserve accumulation. Current account surpluses and large stocks of foreign exchange reserves in turn operate as an insurance against international financial instability and sudden stops. Countries that face lower external financial volatility arguably tend to grow faster. Evidence seems to support this hypothesis too. Polterovich and Popov (2002) and Levy Yeyati and Sturzenegger (2007) find a positive correlation between international reserve accumulation and RER levels, and also between reserve accumulation and economic growth. Similarly, Prasad et al (2007) find that current account balances are highly and positively associated with both competitive RERs and economic growth.

The SCRER policy in Argentina came along with a substantial improvement in the current account of the balance of payments. In 2001, Argentina had a deficit of 1.5% of GDP; in 2003 it turned into a surplus of 5.5% of GDP. Certainly, a good part of this improvement was due to the contraction of imports caused by the fall in domestic demand. However, Argentina maintained on average a current account surplus of 3.2% of GDP during the SCRER period, even when the economy had surpassed in early 2005 its previous GDP peak.

A peculiarity of the SCRER strategy in Argentina was that it also promoted a sounder fiscal balance. The rise in the RER also facilitated an improvement of the fiscal accounts, through the introduction of export taxes. These taxes allowed the public sector to capture a portion of the redistribution of income caused by the devaluation. The primary result of the consolidated public sector went from -2% of GDP in 2001 to 4% of GDP in 2003 (see Table 1). This surplus would reach the maximum of the decade in 2004, with 5.2% of GDP.

Thus, from the point of view of macroeconomic stability, the SCRER policy helped the economy build a solid twin-surpluses configuration. This, together with the positive development effect on tradable output and investment, created a macroeconomic environment that fostered economic growth. This was indeed what happened in the about six years going from mid-2002 to early 2008, during which the SCRER strategy was operating in full.

The improvement of the external environment —in particular, the rise of terms of trade—had a positive effect on economic performance. It is worth noting, however, that terms of trade began to improve from a local minimum reached at the beginning of 2002 and that they remained below the pre-Asian crisis peak until early 2004, when the economy was already growing very fast (Figure 5). Furthermore, the boom of terms of trade would only

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<sup>&</sup>lt;sup>8</sup> See Rodrik (2008), Razmi et al (2012) and Rapetti et al (2012), among others.

#### 4. From success to failure

## Tensions in the SCRER model: inflation and the manipulation of official statistics

Despite its success, macroeconomic management during the good days of the SCRER strategy was not problem-free. Inflation accelerated from 3.7% in 2003 to 6.1% and 12.3% in 2004 and 2005, respectively. An important driver of the acceleration of inflation was the rise of international food prices. Other relevant factors were of domestic source: monetary, fiscal and wage policies followed an expansionary stance almost constantly since 2005. The only nominal anchor that the government provided at that time to curb inflation were public utilities' rates, which had remained unchanged at since before the devaluation.

The authorities deemed unnecessary to instrument a comprehensive disinflation program. Instead, they implemented price "controls" under the form of price agreements with leading firms since 2005. The strategy also included specific regulatory measures for certain markets, such as meat and dairy products. Its effectiveness was limited. Although inflation decelerated to 9.8 % in 2006, the prices of goods and services that had not been in the agreement rose about 15% on average. Furthermore, even prices under the agreement started to rise at an accelerating rate after a while. By late 2006, the persistence of inflation revealed to everyone that the price agreements and controls were becoming increasingly ineffective.

A program to preserve one-digit inflation rates would have required a tighter management of aggregate demand and a reshape of the macroeconomic policy scheme. Considering that monetary policy was partly constrained by the objective of preserving a SCRER, a comprehensive disinflation program would have posed higher weight on fiscal policy to affect the pace of aggregate spending than in a standard inflation targeting framework. This would have implied to switch the bias of fiscal policy from expansive to contractive. The program would have also required a more active incomes policy aiming to coordinate the pace of wage increases with productivity growth. Such a reorientation of the macroeconomic policy —including the adoption of a one-digit inflation target—should have been announced publicly to coordinate private sector's expectations toward decelerating inflation rates.

Instead of such a program, the authorities opted to start manipulating the official figures of the consumer price index (CPI) since January 2007 to keep annual inflation rate below 10%. In other words, the government decided to control the inflation figures rather than inflation itself. This move severely deteriorated the credibility of official statistics. Both provincial bureaus of statistics as well as private consultancy firms began to publish inflation estimates that were considerably above official figures. The official CPI lost social acceptance and stopped being used as a reference for nominal wage negotiations and for the calculation of any variable in real terms.<sup>9</sup>

Statistical data manipulation had various negative effects on the economy. Most sovereign peso-denominated bonds —many of them issued in the debt swap of 2005— were indexed to the CPI index. The underreporting of inflation thus implied lower adjustment of the principal of the debt. Once it became clear that inflation underestimation had become systematic, bondholders began to get rid of Argentine bonds and their prices to descend. Argentina's sovereign risk premium —which was similar to others emerging markets like Brazil— became much higher after this move (Figure 6). The loss of credibility also extended to other debt instruments, making the government unable to get access to the international financial markets to issue new debt. Only the falsification of official statistics can explain the otherwise strange case of a country with very robust macroeconomic fundamentals —low foreign and public debt-to-GDP ratios, rapid economic growth, twin surpluses— that is isolated from the international capital markets.<sup>10</sup>

## The impact of the global financial crisis

The global financial crisis violently hit emerging market economies, especially after the collapse of Lehman Brothers in September 2008. The crisis spread out through two main channels: a trade channel and a financial channel. The sharp fall in commodities prices affected Argentina's exports, which in turn damaged export tax revenues. However, since Argentina's commodity exports are mostly concentrated in agricultural products whose prices suffered a lower decline than other commodities, the impact through the trade channel was not extremely severe.

<sup>&</sup>lt;sup>9</sup> The manipulation of the CPI affected the elaboration of other statistics, in particular real and nominal GDP and poverty and extreme poverty rates.

<sup>&</sup>lt;sup>10</sup> It is interesting to note that before these events, there was a debate within the government about how to best deal with capital inflows and their peso appreciating pressure. The government had even started to move in the direction of introducing controls to capital inflows to lean against the wind.

The financial channel manifested itself through the behavior of private capital flows. The crisis drove investors to move their capital away from riskier to safer assets. This "flight to quality" affected many emerging market economies, particularly in the last quarter of 2008. Argentina was a priori in a robust position to digest the impact of capital outflows, since it had a large stock of international reserves, and significant both current account and public sector surpluses. However, the impact of global financial crisis combined with other uncertain factors of domestic source and made capital outflows very intense. One of them was the already mentioned falsification of official statistics. Another source of uncertainty was the conflict between the federal government and the agriculture producers over tax exports. This had happened between March and July 2008, and caused an intense capital outflow mostly driven by the domestic private sector. The nationalization of the private pension system in late 2008 was a third important source of uncertainty. Figure 7 shows how private capital outflows increased in the second half of 2007, shortly after the CPI falsification became public, and another jump in the second quarter of 2008 during the conflict with the farmers and before the fall of Lehman Brothers.

The size of capital outflows during 2008 and 2009 can only be compared with other traumatic experiences in Argentina's economic history such as the financial crisis of the early 1980s, the Tequila effect of 1995, and the collapse of the currency board in the early 2000s. However, their destabilizing effects were comparatively much lower in the recent period. The reason lies on the substantially different macroeconomic fundamentals Argentina had in this more recent event. In the older episodes of capital outflows, Argentina was in much more vulnerable conditions due to growing current account deficits, strong RER overvaluations and public sector deficits. In all previous cases, the domestic financial system had undergone through strong credit booms fed by large capital inflows before the outbreak of capital outflows. This feature made banks highly vulnerable to exchange rate risk.

The situation was completely different in the capital outflows episode of 2008 and 2009. The economy had been maintaining a SCRER and, as a consequence, it had been running current account surpluses, reducing its external debt and accumulating large amounts of international reserves at the central bank. On the other hand, the low degree of financial deepening inherited from the financial crisis of 2001-02 was also an important factor that helped reduce the impact of the global financial shock. While it is true that the scarcely depth financial system made almost no contribution to strengthen the recovery after the crisis, it is also true that the same characteristic turned the system less vulnerable to capital outflows.

The low degree of dollarization of banks' (and other domestic agents') balance sheets was another important aspect that reduced the degree of financial vulnerability. The dedollarization of balance sheets resulted to a great extent from regulations introduced after the crisis of 2001-2002, seeking to reduce currency mismatches. New regulations forced banks to offer foreign-currency loans only to clients capable of generating resources in the same currency (e.g., exporters), thereby shielding the banking system from systemic exchange rate risk.

Finally, the fact that the government was running a fiscal surplus instead of a deficit was also an important factor that helped buffer the effect of the global financial crisis.

We emphasize the factors that enhanced Argentina's resilience to external financial shocks, because crisis prevention is one of the main objectives of a sound macroeconomic policy. This is particularly relevant regarding employment, real incomes, and income and wealth distribution; since crises often have negative impacts on all these variables. The SCRER strategy that enabled the accumulation of foreign reserves and the preservation of twin surpluses helped Argentina surf the global financial crisis without serious social or political disruptions and without jeopardizing its long-run growth prospects.

#### Macroeconomic populism: 2010-...

The acceleration of inflation since 2007 posed a dilemma for the economic authorities. During 2003-2006, the government had benefited from a sort of "divine coincidence" in which the central bank managed to maintain a SCRER and accumulate international reserves through a policy of sterilized foreign exchange interventions that kept the nominal exchange rate stable around 3 pesos per dollar. Once inflation accelerated, the monetary authorities found increasingly difficult to target both the nominal and the real exchange rate simultaneously. There was now a trade-off. Keeping the SCRER would require to devalue the peso at a similar rate as the inflation rate, but this would imply to stop using the exchange rate as a nominal anchor. Keeping the nominal exchange rate stable to provide an anchor for inflation, on the contrary, would imply to let the RER appreciate and give up to the SCRER goal.

For some time, the authorities handled this conflict somewhat ambiguously. Between early 2007 and the collapse of Lehman in September 2008, they kept the exchange rate stable around 3.10 pesos per dollar in order to provide a nominal anchor for inflation. The consequence was a significant appreciation of the RER. In 2009, the central bank sought to reverse this outcome and guided the exchange rate upwards —from about 3.05 to 3.85 pesos per dollar— to reach a multilateral RER level broadly similar to the one prevailing in

early 2008 (Figure 3).

In early 2010, the central bank started again to utilize the exchange rate as a nominal anchor, although this time more thoroughly. In our view, it is about this time that the government fully adopted a new macroeconomic strategy. Some analysts like to label the new orientation as "demand-led", because of the strong impulse that the government gave to wage increases and public consumption during these years. We disagree with this way of characterizing the strategy because we believe that there is no intrinsic incoherence in the formulations of demand-led growth developed by various authors. On the contrary, we think that the macroeconomic policy strategy followed especially since early 2010 had severe inconsistencies. We prefer to label it as "macroeconomic populism". This is certainly a bold and controversial term. To avoid confusion (and hopefully controversy), we clarify in advance: we use this label to characterize a strategy that —seeking to improve the economic conditions of the working class— engages in very expansive monetary, fiscal and incomes policies, which after a while ends up generating both inflationary pressures and balance of payment problems; a generalised excess demand that is not sustainable in time and typically leads to a balance of payments crisis, devaluation and consequently a contraction of employment and real wages. 11

Although fiscal policy started to follow an expansive stance in 2007, it intensified especially since 2010. The unexpected nationalization of private pension funds in 2008 was instrumental to this change. The decision altered the fiscal scenario radically both in terms of flows and stocks. Regarding flows, it ensured the government a significant annual income stream from payroll contributions to the pension system. Regarding stocks, it implied a transfer to the government of bank deposits, foreign assets and other financial claims that were previously held by the pension funds. It also implied the virtual cancelation of the government bonds that were previously held by the private pension system. All these resources enabled the government to face the negative effects of the global crisis in much better financial conditions and later on to stimulate the recovery of aggregate demand. In 2012, the central bank law was reformed in order to allow a larger financing of fiscal deficits.

The size of fiscal impulse to aggregate demand can be measured by the reduction of the primary fiscal surplus. In 2007, the federal government had a primary surplus of 3.1% of GDP, which then turned into 1.7% in 2010 and -0.7% in 2013. Because international financing was virtually shut down since the beginning of the manipulation of official statistics, the government had to rely on domestic sources to finance the move from fiscal

<sup>11</sup> The seminal article on macroeconomic populism was written by our late CEDES colleague Adolfo Canitrot (1975). Dornbusch and Edwards (1990) and Bresser-Pereira and Dall'Acqua (1991) are other relevant contributions to this literature.

surplus to deficit. Resources came from loans of either the central bank —both in the form of "inflation tax" and pure seigniorage— or the nationalized pension system. Public sector debt in foreign currency had to be paid with central bank's reserves.<sup>12</sup>

Monetary policy also had a very expansionary bias. Figure 8 show the evolution of the exante real interest rate of the Lebacs and Nobac notes, a policy interest rate. It is clear that monetary policy had a relatively neutral stance until early 2007 and then behaved procyclically since that moment up to late 2009. From early 2010 onwards, the ex-ante real interest rate used by the monetary authority had an extremely expansive bias; it remained around negative 7% until the devaluation of early 2014.

In 2010-11, consumer prices grew at an average annual rate of 23% and private sector wages at 27%. In the same period, the exchange rate rose 5.5% per year. These nominal variations imply an annual growth rate of real wages around 3.5% and one of 20.5% for wages in US dollars. The flipside of the latter was a substantial RER appreciation. By the end of 2011, the level of the bilateral RER against the US was about the same as the one prevailing before the 2001 crisis; a level that was no doubt overvalued. The multilateral RER was about 50% higher than at the end of the currency board, but this was due to the fact that some Latin American trade partners —most notably Brazil— had overvalued currencies themselves.

International competitiveness can be observed by looking at the unit labor cost measured in constant US dollars (ULCU\$) for the manufacture sector (Figure 4). Variations of the ULCU\$ can be decomposed into the variations of three components: the real wage, the RER, and labor productivity. Table 2 shows the variation of the ULCU\$ and its components for the manufacture sector during the two analyzed periods. On the top panel, the analysis is carried out using the ULCU\$; on the bottom panel instead of the US dollar it is used the currency basket of the multilateral exchange rate. Both panels reveal that during the SCRER period the increase in the ULCU\$ in foreign currency (either US dollar or the basket of foreign currencies) was largely a result of real wage increases and to a lesser extent due to RER appreciation. The opposite happens in the populist period:

<sup>&</sup>lt;sup>12</sup> A presidential decree in late 2009 determined the creation of a fund (called "Bicentennial Fund") to serve the public external debt. The fund was built with more than six billion dollars from central bank's reserves. This move freed fiscal resources —that otherwise would have been used to service foreign debt—to finance public consumption and thus helped keep the expansionary fiscal stance.

<sup>&</sup>lt;sup>13</sup> Formally, ULCU\$ =  $W/yEP^*=\omega$ /qy where W represents the nominal wage rate, E the nominal exchange rate, E labor productivity, E the US price level, E the real wage rate, and E the RER.

<sup>&</sup>lt;sup>14</sup> The sum of all factors adds up to the total variation of ULC\$ when the calculation is carried out in continuous time. Because calculations in Table 2 were done in discrete time, the sum of the parts does not add up to the total. The reported variation of the factors, however, suggests the relative incidence of each of them on the total variation.

the rise in real wages had relatively minor effect on the increase of the ULCU\$, which is largely explained by the appreciation of the RER.

It is important to note here the following point regarding the relationship between the RER, real wages and output. A well-known notion developed within the structuralist tradition claims the existence of a negative relationship between real wages and currency depreciation. It is argued that in the *short run* a *change* in the RER (i.e., a real devaluation) implies a redistribution of income that reduces real wages. The regressive redistribution of income has in turn a negative impact on aggregate demand and output level. There is lots of historical evidence supporting this prediction. Other more recent proposition —also within the structuralist tradition— argues that a high or competitive *level* of the RER —through mechanisms discussed above— has in the medium run a positive effect on the growth rate of output and real wages. The two structuralist propositions are not contradictory: the former refers to the short-run effects of a change in the RER and the latter to the medium-run effects of the level (and stability) of the RER. Argentina's experience in the period under analysis provides support to both. The real devaluation in 2002 is coincident with a contraction of both real wages and output as predicted by the former. In the six years of the SCRER policy, a competitive RER level coexists with strong growth rates of manufacturing output, GDP and real wages, as predicted by the latter.

# Macroeconomic populism reloaded: controls and the balance of payments crisis

In October 2011, Cristina Fernandez won re-election in a landslide victory, with 54% of the votes, retaining the top office for a second term; the third one in a row for the Kirchner family. In the months before the elections, there was a generalized perception that the economy was turning uncompetitive, that the RER was appreciating at a rapid pace and that sooner than later the exchange rate would have to be corrected upwards (i.e. devaluation). Because devaluation is unpopular, people believed that the authorities would wait until the elections had passed. Trying to anticipate this move, the public ran against the international reserves of the central bank, which lost 6 billion dollars in the process.

Once Cristina Kirchner was re-elected, the government decided not to devalue the peso. The excess demand for foreign currency continued and the central bank kept loosing reserves. The government could have tried to correct the excess demand for foreign exchange with a standard balance of payments stabilization program; a mix of devaluation and interest rate hikes. This option would have surely accelerated inflation, reduced real wages and contracted the level of activity and employment. In other words, the correction

of the overvaluation of the RER would have implied an adjustment of real wages and a contraction of employment. The government considered this option unpopular despite the fact that they have won the election and had a large political capital. They decided instead to curb the excess demand of foreign currency by imposing controls on imports, the transfer of profits from foreign investment and the acquisition of foreign currencies for saving motives and tourism.

Many Latin American countries experienced with this kind of controls in the past. A lesson learned from these experiences is that controls can be very useful when implemented in conditions of sound macroeconomic fundamentals (e.g., the RER is not misaligned and fiscal and external balances follow sustainable paths). However, experiences have also shown that controls not only fail to correct macroeconomic imbalances, but also tend to exacerbate them. The prototypical sequence is that controls end up debilitating or destroying existing markets and stimulating the creation of new ones: black markets. Black markets undermine transactions and shorten planning horizons and thus have negative effects on output and employment. Historical experiences also reveal that the black market exchange premium tends to increase the tighter controls are and the stronger the imbalances are. The widening of the premium is especially problematic because it generates incentives to reduce the supply of and increase the demand for foreign exchange in the official market. Exporters have incentives to postpone and under-invoice their proceeds and importers to anticipate and over-invoice their purchases. Firms and banks also try to have access to the official market to cancel foreign debts up-front. The proliferation of this kind of strategies creates a feedback loop that exacerbates the excess demand in the official market, the fall of central bank's reserves, and the rise of the black market premium. At some point, when international reserves reach a critical level, the central bank has no choice but to devalue.

These stylized trends were observed in Argentina since controls were imposed in late 2011. The black market exchange premium followed an upward trend and central bank's international reserves fell non-stop. In November 2013, after a poor mid-term election, Cristina Fernandez fired the governor of the central bank and put in charge a new economic team. International reserves were U\$ 33 billions and the exchange rate had reached 6 pesos per dollar. The situation had severely worsened since July 2011, before the presidential election, when the stock of international reserves at the central bank was 52 billion dollars and the exchange rate 4.1 pesos per dollar. The new economic team accelerated the rate of depreciation, but since interest rate were substantially lower than expected inflation, international reserves at the central bank kept falling. In January 2014, when reserves reached a low of 28 billion dollars, the central bank devalued the domestic currency from 6.7 to 8 pesos per dollar and raised the reference interest rate from 15% to

At the moment we write these lines, the economy is absorbing the impacts of these measures. Preliminary evidence suggests that the currency crisis has accelerated inflation —which is estimated to be between 35% and 40% for most analysts— and that output and employment is contracting.

## 5. Closing remarks

We assess the complete dissolution of the macroeconomic policy scheme that prevailed broadly between mid-2002 and mid-2008 as a loss of a big opportunity to set Argentina on a sustainable and inclusive economic growth path. The SCRER strategy resulted in high growth rates for output, employment and productivity and also relaxed both the external and fiscal balances. We believe that the maintenance of this macroeconomic configuration would have allowed a sustained non-inflationary increase in real wages, which combined with the increase in private sector employment, would have tended to reduce income inequality. All these trends were observed in the first period under analysis.

The SCRER strategy was not problem-free. Together with the positive trends that we have highlighted, inflation was accelerating. That inflationary pressure should have been tacked with a widespread anti-inflationary program that would have involved a proper coordination of fiscal, monetary and income policies. In 2005, there were some initiatives within the government in such a direction, as the constitution of a countercyclical fiscal fund. However, they were soon abandoned. Whether such a comprehensive approach would have been successful at stabilizing inflation around a one-digit rate and simultaneously maintain a SCRER and its positive effects on growth is an open question. Nothing guarantees that its full implementation would have delivered such positive outcomes. What we do know is that the government did not try this alternative and instead headed into a completely opposite direction and drove the country to a new economic failure.

 $^{\rm 15}$  See Frenkel (2008) and Rapetti (2013) on this regard.

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Table 1
Key macroeconomic variables

	GDP Growth Rate (1)	Growth Inflation Rate Rate	RER (Dec 2001 = 100) (3)		Manufacture Wages (4q 2001=100) (4)		Terms of Trade (2004=100) (5)	Fed Funds Rate (6)	Primary Public Sector Balance (% of GDP)	Current Account (% of GDP) (8)	Unemploy- ment Rate (9)	Gini Coefficient (10)
	, ,	. ,	Bilateral US	Multilateral	Real	in US\$	, ,		(7)	. ,		
2002	-10.9%	40.9%	244	236	80.1	33.8	86.4	1.67	0.7%	9.1%	19.7	0.533
2003	8.8%	3.7%	215.8	216.3	86.2	40.1	93.4	1.10	2.3%	6.5%	17.3	0.528
2003-2007	8.7%	11.2%	196.7	226.3	114.3	59.4	100.0	3.15	3.3%	3.6%	12.2	0.493
2007	8.2%	25.3%	170.2	224.6	135.1	79.8	107.7	5.00	3.1%	2.8%	8.5	0.468
2008-2013	2.2%	23.3%	119.6	174	149.6	129	131.4	0.52	0.9%	0.8%	7.6	0.440
2010-2013	3.7%	25.5%	108.1	161.9	157.7	147.4	136.6	0.25	0.2%	-0.2%	7.3	0.431
2013	3.1%	29.7%	97.3	143.2	164.5	169.5	136.8	0.25	-0.7%	-0.5%	7.1	0.420

- (1) Sources: see Figure 1.
- (2) Sources: see Figure 2.
- (3) Sources: see Figure 3.
- (4) Sources: see Figure 4.
- (5) Source: INDEC.
- (6) Sources: Ministry of Economy.
- (7) Includes the federal government and the provinces. Source: Ministry of Economy.
- (8) Source: INDEC.
- (9) As a percentage of active population. Source: EPH, INDEC.
- (10) Sources: CEDLAS (Center for Distributive, Labor and Social Studies)

Table 2
Decomposition of changes in unit labor cost (UCL) in foreign currency

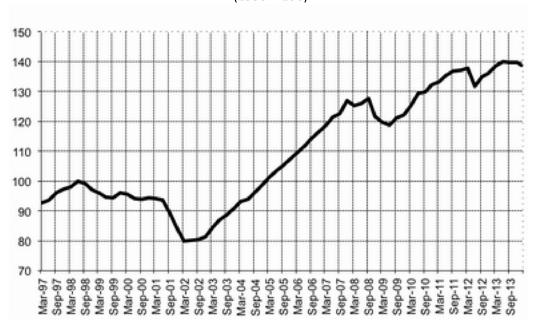
	ULCU\$	Real Wage	Real Appreciation	Productivity
2002	-65.3%	-18.9%	-58.5%	1.0%
2003-2007	80.3%	68.7%	40.7%	-22.2%
2008-2012	59.3%	21.2%	69.5%	-22.6%

	Multilateral ULC	Real Wage	Real Appreciation	Productivity
2002	-64.7%	-18.9%	-57.6%	1.0%
2003-2007	33.4%	68.7%	3.5%	-22.2%
2008-2012	41.9%	21.2%	51.3%	-22.6%

Source: Own calculations based on INDEC, BCRA and CIFRA for CPI since January 2007.

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Figure 1
GDP in constant prices
(1993 = 100)



Source: EMAE-INDEC until January 2007 and afterwards IGA by OJFerreres and Associates.

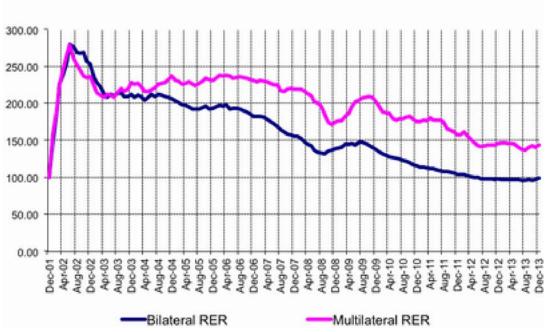
Figure 2
Annual CPI Inflation rate

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Source: INDEC until December 2006 and afterwards an index based on CPI of nine Provincial bureaus of statistics (IPC-9, CIFRA).

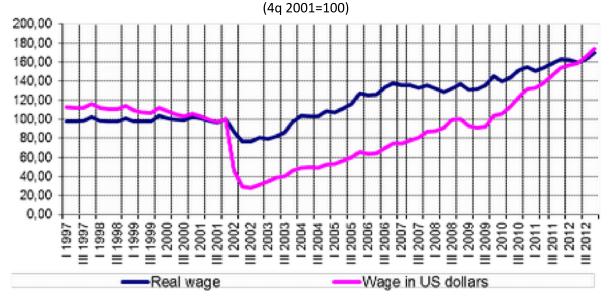
Figure 3
Bilateral RER against the US dollar and multilateral RER
(December 2001 = 100)



Source: Own elaboration based on BCRA and CIFRA for CPI since January 2007.

Figure 4

Manufacturing wages in real terms and in constant US dollars



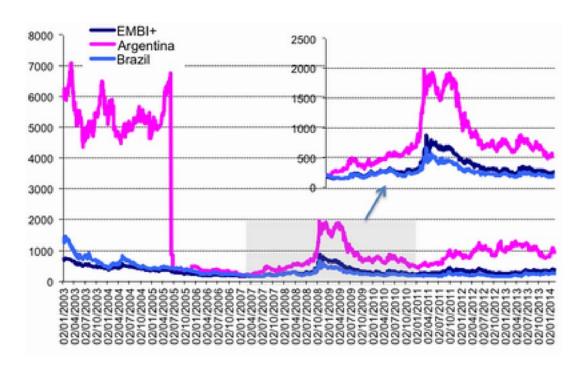
Source: INDEC, Bureau of Labor Statistics (USA) and CIFRA for CPI since January 2007.

(2004=100)15.00% 250.00 Terms of Trade (% var) Terms of 10.00% 200.00 Trade (level) 5.00% 150.00 0.00% 100.00 50.00 -5.00% -10.00% 0.00

Figure 5 Terms of Trade

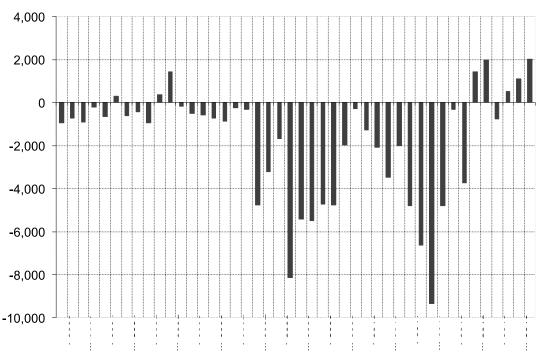
Source: INDEC

Figure 6
Country risk premia for emerging markets: EMBI +, Argentina and Brazil (in basis points)



Source: Argentine Ministry of Economy.

Figure 7
Gross Private Capital Outflows
(in billion US dollars)



Source: Argentine Ministry of Economy.

Ex-ante real interest rates of NOBAC and LEBAC notes (309 to 444 days)

15%
10%
5%
-5%
-10%
-15%
-20%
Ex-ante real interest rates of NOBAC and LEBAC notes (309 to 444 days)

15%
5%
-5%
-10%
-5%
-10%
-10%
-15%
-20%
Ex-ante real interest rates of NOBAC and LEBAC notes (309 to 444 days)

Figure 8
Ex-ante real interest rates of NOBAC and LEBAC notes (309 to 444 days)

Source: BCRA, INDEC and CIFRA for CPI since January 2007.