

Argentina's experience of debt crisis

By [Augusto Hasman](#) and [Maurizio Iacopetta](#)

There is still a lot of uncertainty around the possible paths that Greece can follow in the near future. One possible path, which may be still averted by the current negotiation, is that Greece will default on the upcoming debt obligations (see graphics [here](#) for a detailed list of the upcoming Greek debt deadlines), thus spiraling into a currency and credit crisis and possibly resulting in a “Grexit”[\[1\]](#).

The Greek debt crisis shares some similarity with the Latin American debt crisis of the 1990s and early 2000s. In both Greece and Latin America, debts are mostly bond debts or debts to international institutions. Similarly to Greece, many Latin American countries had become more and more open in the decades before the crisis. The series of financial crises started with Mexico's December 1994 collapse. It was followed by Argentina's \$95 billion default (the largest in history at that time, although later on Argentina resumed some of the payments), Brazil's financial crisis (1998-2002) and Uruguay's default (2002).

Argentina is viewed as benchmark for getting insights on the possible macroeconomic consequences of a Grexit, partly because it abandoned the peg with the dollar as a result of its mounting fiscal crisis. Nevertheless, some have pointed out at marked differences between the two economies, in terms of industry structure as well as trade composition (see [here](#) for instance).

Here, we review the different steps followed by Argentina during the crisis and propose some statistics related to developments of key economic indicators in Argentina before

and after the crisis. For comparison purposes, we also provide key figures of the Greek's economy.

Argentina and Greece at time of considerable stress

Greece entered the European and Monetary Union in 2001, meaning an irrevocably fixed exchange rate regime and the adoption of the Euro as legal tender. By *early 2010*, Greece risked defaulting on its public debt and had to call for a financial rescue to international institutions. On the other hand, at time of the crisis, Argentina had its currency, the peso, 'immutably' fixed to the US dollar on a one-to-one basis. As today's Greek situation, when Argentina defaulted in late 2001, the country's economy and government were both experiencing considerable stress. 2001 was the third consecutive year of serious recession for Argentina, foreign direct investment had virtually stopped, and inflation, interest rates and the budget deficit all were soaring. The IMF had provided loans to keep the peso stable, on the condition that the government would adopt fiscal and monetary discipline. Argentina's economic problems became a serious crisis in December 2001, when the IMF denounced the government's inability to put its financial house in order and suspended its loans. This development was followed almost immediately by a banking crisis and violent public protests that produced a rapid succession of six presidents in two weeks. Figure (1) depicts the behavior of Argentinian key economic indicators before and after the 2001 devaluation. Figure (2) shows the Greek's indicators since 1998 [\[2\]](#). A quick inspection of the two figures reveals that:

-The magnitude of the decline of Greece's GDP during the crisis, counting from its highest point in 2008 is roughly the same as that observed in Argentina during a recessionary period before the devaluation: 25%.

- The rise in the unemployment rate has been much more severe in Greece than in Argentina. In Argentina, unemployment, rose

from 12.4% in 1998 to 18.3% in 2001 whereas in Greece it went up from less than 10% in 2008 to over 25% to this day. Both in Argentina and in Greece the inflation had been relatively low before the debt crisis; in fact in Greece it has even been negative in recent years.

The recovery

What is somewhat surprising is what happened in Argentina after the crisis.

First, after a short period of turbulence, the Gross Domestic Product, in constant dollars, began to rise at an astonishing pace of almost 10 percent per year, until the 2007-08 financial crisis. Second, the unemployment rate declined from 18 percent to about 7 percent. Third, the poverty rate went down even below the level observed in the heyday of the pegged exchange rate. But financial indices deteriorated. First the difficulties in accessing external credits and the loss of credibility of the government pushed up the bond spreads from 4000 basis points before the crisis to ten times as much after the crisis. Second, the inflation rate seems to have stabilized at a double digit figure. According to some scholars (see for instance [Alberto Cavallo](#) "Online and official price indexes: Measuring Argentina's inflation" Journal of Monetary Economics, 2012) there has been a systematic attempt by government authorities to greatly underestimate or underreport the inflation rate. Therefore, the GDP gain may not be as high as the one showed in Figure 1. Although the Argentinian economy has gone into a sustained period of growth, it would be unwarranted to make an automatic link between the renaissance of the Argentinian economy and the dramatic conclusion of the crisis with the abandonment of the peg and the debt default.

Some have pointed out that the recovery period coincided with a boom in the price of primary commodities (soybeans), which notoriously account for an important part of Argentinian

exports. Clearly the increase in commodity prices has been a windfall for Argentinian agricultural producers with possible trickling effects on the rest of the economy. Yet, the magnitude of the windfall itself can hardly account for the large GDP gains. In fact, soybean was sold in Iowa at an average price of \$4.57 per bushel in the year 2000 and at \$5.88 in the year 2005. Only since 2010 prices have gone up substantially more, but at that point, the Argentinian economy had already gone through almost a decade of economic boom. Furthermore, the high price of soybeans in the second half of the 1990s (it was \$7.32 in 1997) does not seem to have been helpful to avoid the economic depression. The route to recovery in Argentina has been characterized by setbacks, but also by a number of inventiveness that may have played a role in defraying the shock of the crisis.

Bank runs

At the end of November 2001, rising worries about a peso devaluation and a deposit freeze, increased overnight interest rates sharply. Additionally, spreads between US Treasury bonds and Argentine government bonds increased by 5,000 basis points. In order to stop the effects of a bank run, the Minister of Economy Domingo Cavallo announced a freeze on bank deposits. As in Greece, this measure considerably reduced the capacity of depositors to withdraw and manage their bank deposits. The deposit freeze had even accentuated the feeling among the population that a crisis was going to explode, and a series of demonstrations surged along the country. Subsequently, the IMF announced a cut of its support to Argentina, as it had failed to meet the conditions tied to the rescue program and Argentina lost its last source of funding. With a total amount of almost USD 22bn in 2000 and 2001, Argentina was the largest debtor the IMF had at the time. In the protests and raiding that followed, 24 people died. President De La Rúa and his cabinet resigned soon after these events.

Claims after the currency devaluation

The government decided to 'pesofy' the loans at a rate of A\$1 (Argentinean peso) for each dollar (USD) owned by banks and A\$1.4 for each dollar deposited in a bank. Alternatively, people could get a government bond (Boden 2012), that paid A\$775.12 for a nominal of USD\$100, when the official dollar was 4.35A\$/USD. A less attractive bond was issued the following year: it paid A\$930 for a nominal of USD\$100 but could only be converted at 8.95A\$/USD.

Massive use of money-bonds

In 2001, different Argentinean provinces started to print their own quasi-currencies, several emergency bonds (technically called Treasury Bills for Debt Settlement) issued between 2001 and 2002. They were created as a way of alleviating the enormous financial and economic crisis that occurred in Argentina in 2001. These bonds were considered a "necessary evil" that initially allowed to cover the absence of money circulation. While at first the issuing of these quasi-currencies was controversial, it later gained acceptance partly because of the size of the issue and partly because of the magnitude of the crisis. These bonds circulated in parallel to the Argentinean peso. They could be used to pay some taxes, shopping and even salaries. As the pesos, they were denominated in different values 1, 2, 5, 10, 20, 50 and 100 to facilitate transactions (nominally equivalent to a Convertible Peso). The most popular bond was the Patacon that was issued in Buenos Aires. This bond had an interest rate of 7% and there were two series (Series A maturing in 2003, while the B in 2006). It is estimated that the total issue amount for the Patacons only reached 2.705 millions. Once the economic recovery of Argentina started in late 2003, the government honored 100% the principal of these outstanding bonds, and even the interests were eventually paid. Up to 13 quasi-currencies were issued by different provinces during that period.

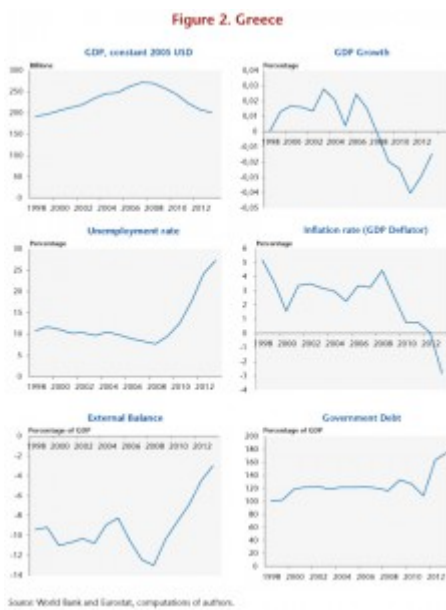
Credit

Figure (1) shows that in Argentina the “Sovereign Bond Interest Rate Spreads, basis points over US Treasuries” has been growing for the last 18 years showing the difficulties Argentina has had in accessing to international credit market. The difficult access to foreign funding has pushed the Argentinean government to get financed internally through the central bank, retirement funds and the tax agency. The high inflation that resulted from this policy (close to 26%, unofficial measures) has made the use of local credit extremely expensive for companies and households. However, as Argentina started posting large surpluses on the fiscal and current accounts after the default and large devaluation of the peso, access to foreign finance became less urgent. Argentina took a hardline approach against creditors. By 2010, 92% of the Argentine defaulted debt had been restructured. However, ongoing litigation by holdout creditors could lead to a new Argentine default in the near future.

In conclusion, the Argentina exit from the debt crisis through a default did not have long lasting dramatic consequences on real activities as many had anticipated. The crisis meant a transfer of wealth from depositors to debt holders and promoted exports. After an abrupt decline, GDP quickly started its ascent and the country experienced high rates of growth in the 2000s, which reduced significantly unemployment.

Nevertheless the period right after the devaluation was characterized by political instability, large macroeconomic fluctuations and social revolts. The political stability that followed, might have played a role in sustaining growth, but the rate of inflation climbed at double-digit figures and the various price control mechanism introduced by the government have created a lot of frictions in the business sector. Finally, the increasing isolation of the government from the international political arena partly, due to the outstanding litigation with international lenders, could, in the long run,

have negative repercussion on trade.



[\[1\]](#) “Grexit” is a combination of “Greece” and “exit” and refers to the possibility of Greece leaving the Euro area.

[\[2\]](#) The plots are generated using World Bank data, except for

the level of 2013 Greek debt/GDP ratio, which is taken from Eurostat.

Who will pay the bill in Sicily?

by [Augusto Hasman](#) and Maurizio Iacopetta

Rumors of a Sicily's possible default are in the air again. The employees of the Sicilian parliament did not receive their checks at the end of September. Another possible default of Sicily made already the international headlines in July (see the [New York Times 22/07/12](#)) due to the contagion effects it could have had on other regions. But in that occasion, the central Italian government prevented Sicily's default by providing an immediate injection of liquidity in the order of 400 million euros.

Other Italian regions are in trouble. In recent months the provision of basic health care services has deteriorated; regions are renegotiating contracts with their creditors to obtain deadline extensions. The [figures](#) reported by Pierre de Gasquet in *Les Echos* of 02/10/2012, give a good idea of the deterioration of the Italian regional public finance over the last decade.

It will take a good deal of imagination for regional governments to come out of the impending budget crisis, not only in Italy but also in other European countries that have difficulties in managing their public debts, such as Spain, Ireland and Greece.

In recent weeks we learned that some local politicians are endowed with a good deal of creativeness, but they hardly use it to find a solution to the budget crises. The governor of the region Lazio –where Rome is located – resigned a few days ago in the midst of a political scandal due to revelations that members of the regional parliament funneled electoral funds to pay extravagant personal expenses, including car upgrades and luxury vacations.

Why don't regional governments issue their own money to finance public expenditures? It may seem absurd that now that European countries have finally accepted a common currency, regional and possibly local governments might be tempted to create some sort of fiat money. But historically it would not be the first time that local monies emerge when the central government has its hands tight.

Argentina in the early 1990s (convertibility law n° 23.928, 27/03/1991) pegged the currency on a one-to-one basis with the U.S. dollar (See Anne-Laure Delatte's [article](#) on this blog for a parallel between the Argentinean events and hypothetical scenarios for Greece.). For most of the decade, things seemed to be working well; the economy was growing at the impressive annual rate of almost 5.7%, notwithstanding (or perhaps thanks to) the fact that Argentina, in practice, gave up the monetary policy instrument. But by 1998, the load of public debt started to become unbearable. Financing it by printing money was out of question. The IMF was called for help to prevent the panic of Argentinean savers. It granted a loan of 40 thousands million dollars but it also asked the government to impose a severe austerity plan, which had, among many effects, that of depriving provinces under financial difficulties from the prospect of being rescued by the central government.

It was at this point, in 2001, that a number of provinces began to print their own money in order to pay wages and current expenses. (Krugman's open editorial of ten years ago at the New York Times – [Crying with Argentina](#), 01.01. 2002 –

gives a fresh reading on the unfolding of the events). Fifteen out of twenty-two provinces ended up using newly issued interest-bearing notes, which earned the name of 'quasi-money'. At the beginning, thanks to an agreement between provinces and large stores, quasi-money had a high level of acceptability. Indeed, competition led more and more stores to accept the quasi-money. Local trade seemed to resuscitate. In August 2002, 5 thousands million pesos of quasi-money circulated side-by-side with 12 thousands million of (real) Argentinean pesos.

Interesting, although the case of Argentina seems very surprising, the academic literature has always been puzzled of why it does not happen more often. The question is why government non-interest bearing banknotes circulate side-by-side with government bonds that promise an interest. In principle the phenomenon defies an elementary no-arbitrage principle.

One of the first to pose the puzzle was Hicks in 1935 in a famous article by the title of 'A suggestion for simplifying the theory of money'. An answer to Hicks' puzzle was offered by [Bryant and Wallace](#) (1980). Their argument is based on observation that private banks are not allowed to slice large denomination government bonds in small denomination banknotes. If banks could issue their own small denomination notes that are fully backed by large denomination government bonds, then, competition among banks would presumably drive the return on private banknotes in line with the return on bonds. If interest rates on bonds are positive, the argument goes, the demand for non-interest bearing money should then fall to zero. For Bryant and Wallace only the legal restriction on intermediation would prevent this from happening.

But Makinen and Woodward (1986) report that, during the period from 1915 to 1927, French government treasury bonds circulated at a relatively small denomination of 100 Francs (roughly 50-60 euros of today). The bonds were issued with terms of 1

month, 3 months, 6 months, and 1 year. These bonds were continuously available to all banks (including branches of the Bank of France), post offices, and numerous local offices of the Finance Ministry. This historical episode casts some doubts on the legal hypothesis, for the Bank of France kept issuing Francs.

Why then in Argentina bonds emerged as money – albeit for a limited period? It seems to us that the key was the promise offered by the issuer to accept the regional bonds in settling a debt – typically a tax obligation. The rules on what the regions can and cannot do in Europe are different from country to country. In Italy for instance regions, provinces, and municipalities have been authorized to issue bonds by the law of ‘rationalization of public finance’, introduced in the first half of the 1990s (art. 32 of the law of 8.6.1990 n.142, for municipalities and provinces, and art.35, law 23.12.1994 n. 724). The law set several conditions for an administration to qualify to issue bonds. First, bonds can be issued only to finance investment projects. The law explicitly forbids the issue of bonds to finance current expenditures. Second, the issuer has to demonstrate a good history of balanced budgets. Third, the maturity of the bonds cannot be shorter than five years. Fourth, the bonds cannot go in direct competition with the central government bonds, namely cannot be offered a real return above the one offered by the central government for bonds with similar maturities. Fifth, the central government is not allowed to back-up bonds of the regions who, in turn, cannot take responsibility for the bonds issued by provinces or municipalities

Is it desirable to relax these conditions? Perhaps it is useful to see the end of the story in Argentina –not particularly that of a Hollywood movie. The acceptability of quasi-money outside the region that issued it was very low. More importantly, the central government did not allow tax payers to use quasi-money for their federal taxes.

Consequently, in a few months the de-facto exchange rate between the quasi-money and the national currency dropped from 1 to around 0.7 – it was somewhat higher for Buenos Aires quasi-money, for this was accepted in many other provinces.

At the beginning of 2002, a new government, presided by Eduardo Duhalde, decided to abandon the convertibility law. As a result, the exchange rate of the pesos vis-à-vis the U.S. dollar dropped from one to four. During that year, the GDP declined 10.9%.

Having gained the power of printing money again, the central government allowed quasi-monies holders to convert them into the devalued national peso. The short run benefits evaporated soon. The recession along with the depreciation slashed the purchasing power of the working class. At the end of the crisis, the national product was about a quarter lower than its 1998 level, and the rate of unemployment shot up to 24%. It appears that issuing of local money delayed the collapse of the financial system, but it is unclear whether the temporary breath gained by local administrators that issued bonds made the subsequent recession less severe. The case of Argentina suggests, nevertheless, that a major relaxation of the current constraints of regional and municipal entities is not going to help solve how to guarantee the provision of health care service in the long run. Nonetheless, the current policy of cutting basic public services indiscriminately is the least imaginative of the solutions. Alesina and Giavazzi in an [open editorial](#) published on Corriere della Sera on Sept 27, suggested that hospitals could charge health care users directly instead of being reimbursed by the regional authorities. By doing so, they argued, not only the quality of the service would improve, but regions would need fewer resources. Although this is food for thought, in the U.S. such a system generated a colossal profit making machine that contributed to the explosion of the health care costs. Similarly, Fitoussi and Saraceno (2008) argue that the

spectacular gain in income of the last three decades in China did not go hand-in-hand with similar gains in life expectancy and quality of health care, because the government opted for a health care system based on out-of-pocket expenses.

The Argentinean experience tells us that local administrators in distressed regions of Europe are going to lobby the government to give more freedom in managing their budget intertemporally – something that is already happening in Spain, and is summarized in the London School of Economics [blog by K. Basta](#) . They are also probably going to make more intensive use of ‘creative accounting’, so as to prolong their serving time in office. But this will not be the solution. A major reassessment of the national government’s priorities in combination with a sensible monetary policy at the European level is the only way out. We badly need to free up resources to revitalize the public educational system and to maintain the overall good standard of public health care services.

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