

Federico Sturzenegger

President

Banco Ciudad de Buenos Aires



Lessons for Europe from Argentina's Debt Crisis

The Discussion in Recent Years

This paper deals with the question of how to build a more sustainable financial architecture in the presence of sovereign debt risk.

In recent years we have discussed extensively the ways of building a more stable international financial system, as well as how to construct a larger and more stable market for sovereign debt. Among the many mechanisms that have been discussed, the one that generated most attention, about a decade ago, was Anne Krueger's SDRM (Strategic Debt Restructuring Mechanism), a framework in which countries could apply to or were going to be asked to participate in an orderly restructuring procedure similar to a typical bankruptcy procedure for a corporation.¹ At the same time, a lot of interest was also placed on the suggestion that collective action clauses (at the time common in London law bonds but not in New York law bonds) should become a standard feature in sovereign debt. Collective action clauses force a restructuring agreement for all bondholders when a minimum number of bondholders decide to accept the conditions of a restructuring proposal.

Beyond these two, other mechanisms and ideas have also been put forward in the last decade. Among them was Calvo's minimum price scheme by which the IMF, World Bank, developed countries, or developed countries central banks would guarantee a minimum price for sovereign debt in an attempt to rule out multiple equilibria which would unnecessarily increase the volatility in sovereign debt prices. The IMF

has been discussing a scheme called GSM (Global Stabilization Mechanism), a mechanism to provide liquidity to debtors in distress.² Along the same lines, the idea of having regional hubs, in which regional central banks support or help in guaranteeing the payment



structure of sovereign debt has never been abandoned. Finally and perhaps more relevant from a practical point of view, in recent years, the IMF has put forward different alternatives such as the PCL and FCL, (Precautionary Contingent Line and Flexible Contingent Line), which worked as mechanisms with clear rules of prequalification aimed at obtaining liquidity at times of distress.³

All these mechanisms have been held as financial innovations to provide a better working market in sovereign debt, yet, when the Greek restructuring finally occurred in 2012, the solution appeared to replicate a typical 1980s debt restructuring package. In the 1980s the restructuring packages were carried through the negotiation of governments with the so called Bank

¹ See Rogoff and Zettelmeyer (2002) for a comprehensive review.

² Fernandez Arias and Levy Yeyati (2010).

³ Fernandez Arias and Levy Yeyati (2010).

Advisory Committee (in the recent Greek restructuring replaced by the Troika) which typically led to the combination of a debt re-profiling together with the disbursement of fresh money, provided with the help of an outside partner, the IMF, the World Bank or the Treasury. These packages imposed adjustment programs in order that countries would put in check both their fiscal and external accounts. The implementation of the Greek restructuring was a radical change relative to the typical restructuring of the 1990s when the focus was put mostly on the debt restructuring terms on bondholders without significant conditionality being imposed (by the IMF if at all) on countries. In other words, countries proposed the package unilaterally.

Before continuing, a point, I would like to stress is that in spite of all the



theoretical discussion, it appears that the personal constraints and interests of policy makers are, at the end of the day, an important determinant, if not the most important one, of the solutions considered. A historical example in this regard is the case of Argentina, which in 2001 was facing a run on its debt. Myself, being a member of the government at the time, I remember the increasingly difficult situation of Argentina during 2001, which was managed

with the help of, increasingly reluctantly forthcoming, programs by the IMF. The last of these provided about USD 4 billion of fresh money by September of 2001 with additional installments to be paid later on. This final package was negotiated around the time of a change of authorities at the IMF by which Stanley Fisher, deputy managing director, was turning over, after many years, to Anne Krueger. By December Anne Krueger had taken over as deputy managing director and shortly after the IMF decided not to continue with the program. At the time, Argentina had a primary surplus and a debt to GDP ratio of below 50%; and therefore it could easily be argued that with only slightly better international conditions Argentina had a macroeconomic situation that could become manageable. The country had made substantial fiscal efforts, including a nominal wage and pension cut in July. My understanding is that had Ms. Krueger gone forward with the package at the end of 2001, she would have become immediately responsible for everything that had been done before. In terms of her personal cost-benefit analysis, she had little to gain and much to lose from such decision. With the benefit of hindsight it looks natural that she would not have supported a continuation of the restructuring program at the time. We see similar situations every day today in Europe as many times a change of government is a prelude for a shift in gears.

A look backwards to what has happened with sovereign debt markets over the last ten years, shows that the SDRM never was able to take off whereas collective action clauses became a regular feature in sovereign debt markets. The other options were applied selectively with regular success.

Theoretical Issues

It is interesting to review a few of the theoretical issues that are relevant when thinking about the international sovereign debt market. Among these I believe five are the main points, all of them very well known. I will then focus on the last of these, the one for which I think Argentina provides interesting lessons.

The first important issue is that of Moral Hazard: any financial architecture scheme which provides substantial relief to debtors in distress is subject to moral hazard problems. We understand by moral hazard the building of wrong incentives, which would either make the country sustain or pursue unsustainable fiscal policies, as well as create the incentive for investors not to value appropriately the risk of sovereign debt as they attach a positive probability to an outsider coming to their rescue. Moral Hazard was a very significant issue in the discussion of the international financial system in the 1990s (and later on in the run up to the Lehman's crisis).

A second issue which is important for any financial architectural scheme is the issue of limiting accessibility. How much money should be made available to any particular country at a point in time? The issue of accessibility leads us immediately to a distinction which is very easy to do in theory, but very difficult to do in practice: the distinction between facing a liquidity problem and having a solvency problem. It is well agreed by everybody that a financial international mechanism should deal with issues of liquidity but that it should not deal with issues of solvency. Solvency problems should be dealt through restructuring the debt or changing domestic economic policies. The problem is that it is very difficult to distinguish when a country is suffering a problem

of liquidity and when it is suffering a problem of solvency. Again Argentina provides an interesting example. At the time of 2001, Argentina required a 3% primary surplus to make its debt sustainable through basic rules of primary surpluses given the expected growth rate of the economy at the time. Many analysts said Argentina had a solvency problem as Argentina had never achieved a primary surplus that large. However, after debt the restructuring, the primary surplus reached 6% of GDP! Diagnosing a solvency problem is questionable, as always there is a fiscal adjustment large enough that can be implemented if there is the political will to do so. In that respect, understanding when a country is solvent is a very difficult question to answer and my understanding is that we have made not much progress in being able to sort out both situations and that this issue is still resolved on a case by case fashion each time. As an example, in the case of Europe today, many people would agree that Greece is insolvent (even after their recent debt restructuring) and that Germany is solvent. But I would guess that it is very difficult to answer this question for Italy or Spain, and even Portugal, having different analysts argue both ways.

The third issue is that of signaling. Any restructuring mechanism or global financial mechanism has the problem that countries do not want to participate in it unless it is absolutely necessary. Prior to that engaging in any such event or mechanism provides a very negative signal with immediate costs that countries try to avert. I think this was the main issue which undermined the success of the SDRM when it was proposed ten years ago.

The fourth issue, posed by Michael Dooley and colleagues is whether we do in fact need a better restructuring

mechanism than the one we have. For many analysts, it is a positive feature that debt restructurings are costly, and that in fact, it is this costliness what insures that sovereign debt can exist. According to this view a simple and costless debt restructuring could basically undermine the feasibility of sustaining the sovereign debt market all together.

In fact, it's quite striking that the debt restructurings of the 1990s were relatively successful. By successful I mean that they were able to generate substantial reductions of the debt burden and were implemented in a relatively short period of time, at least in comparison with the debt restructurings of the 1980s. Additionally, they typically created the conditions for economic growth during the aftermath of the debt restructuring. So, even from the perspective of the defaulting countries, it looks as if it needs to be discussed whether alternative mechanisms that work better are available. All this supports the view that the current scheme provides a reasonable support for international financial markets.

The final point which is the one I want to focus in this piece is the relationship between debt restructuring and the financial sector. When studying sovereign debt restructurings, there is evidence suggesting that when the debt restructuring coincides with a financial crisis, the output cost increases dramatically.⁴ Thus, I think a very important question to be made, and one that appears to be very relevant for Europe in 2012, is whether there is a way of isolating the financial sector from the debt restructuring which may occur in sovereign debt. In this respect, I think there is an interesting parallelism between the case of Argentina and that of Europe in 2012, and, particu-

larly given the success of Argentina's emergence from its own crisis, that there are useful lessons to be learnt.

Isolating the Financial Sector

To start with, we should mention the similarities between the case of Argentina and that of Mediterranean Europe. A first, evident similarity is the fact that they both have to deal with the debt crisis under a fixed exchange rate regime. In the case of Argentina it was a hard peg with the US dollar that had been in place since 1991 through the Convertibility Law. In the case of Mediterranean Europe is the participation in the European Monetary Union, which at the individual country level imposes a fixed exchange rate with other member economies. The second similarity is the exposure of the financial sector to sovereign risk. In the case of Argentina banks had about 35% of their assets invested in government bonds. With differences across countries, the situation is similar in the case of Europe.

There are also dissimilarities. In the case of Argentina, as we mentioned before, both liquidity and solvency were questioned. In the case of Europe, solvency is a problem which is restricted just to a small set of countries whereas liquidity on the other hand should or could not be an issue. This is a critical difference because in the case of Argentina, the country could not provide liquidity in US dollars, whereas in Europe the European Central Bank can provide liquidity in euros for individual countries if it decided to do so. Another dissimilarity is that the peso is not the euro. Breaking the peg with the US dollar in the end would have been a common occurrence in Argentina, the fear of which actually triggered sub-

⁴ Sturzenegger (2004).

stantial capital flight from the Argentine peso to the US dollar throughout 2001. In the case of the European economies there is no need to run away from the euro even if a new local currency were to be introduced. Current transactions are already done in the stronger currency.

On the other hand, there is a similar risk regarding what may happen with deposits in the financial sector. For example, whether they would be reconverted to the local currency or not, this risk is what is triggering a steady deposit outflow from Greek and Spanish banks.

Yet, in all events, it seems that a substantial capital flight as the one occurred in Argentina is not likely in the context of Europe.

While all these dissimilarities work in favor of concluding that there is a much more manageable situation in the case of Europe, on the other hand, the size of the financial sector is substantially larger in Europe and therefore the interrelation between sovereign debt restructuring and the health of the financial sector looks more critical.

What did Argentina do after its financial crisis and how did it deal with this relationship? In a nutshell, Argentina took a series of measures which forced the financial sector to take the losses for the sovereign debt crisis and default, but at the same time introduced mechanisms so that the losses could be absorbed over a long period of time.

The same critical question has to be made today in Europe: Who is going to pay the costs and losses imposed by the debt restructurings that may occur? Of course, part of the costs will be paid by the taxpayers, part will be paid by the multilaterals (in this case the European Union or the IMF), part will be paid by bondholders and there is a fourth

player, even though it could be considered a subset of the bondholder segment, which is how much will be paid by the financial sector. To the extent that one wants to avoid the financial sector from paying or assuming any of the losses of the debt restructuring, that would either overburden the budget (as the Irish case shows) or affect the depositor if bank deposits also suf-



fer a haircut (Argentina tried this option several times as well).

So, to the extent that the answer is that the financial sector should pay at least a part of the costs, the question is how to make the financial sector pay its share without having a financial crash. I believe that the key to solving this dilemma is allowing the financial sector sufficient time for recapitalization. In this way, the financial sector pays the burden from its own income, but only as this income is generated. There is some justice in this solution as it was the financial institutions themselves which decided to own this government debt.

Going back to the case of Argentina, a series of measures were taken to deal with the exposure of financial in-

stitutions to sovereign debt. To start with, their exposure to sovereign risk was limited going forward. This was done by not allowing banks to have more than 30% of their assets applied to sovereign debt, this including sovereign debt from all levels of government. At the same time there was a second cap of 75% of net worth of exposure, and the one which applied was the most stringent of the two. Of the latter, national government debt was capped at 50% of net worth, any individual state debt at 10% and municipal debt at 3% of net worth. If a financial institution was going to lend to a state or a city, it would have to ask this state or this city to pledge federal tax collections transfers (in Argentina, part of the income of states and provinces is obtained in a tax sharing agreement with the National Government), as a guarantee for the loan. In addition, any



authorization of public sector lending by any bank had to be authorized by the central bank and the Ministry of Finance. I find that this is an interesting procedure because it would be easily replicable in the case of Europe if there was a European Commission which from here onwards supervised or authorized any lending by financial institution to a sovereign. The benefit of this measure is that the depositors

would be reassured that the risk of the financial sectors exposure to sovereign debt would be minimized and would be returned to reasonable levels over time, without imposing a big adjustment in the short run. In the case of Argentina, banks that were above this target were given a waiver at the time when the measure was implemented, but which was implemented together with the prohibition of further lending until they would get back within the authorized limits.

Additionally, Argentina temporarily reduced capital requirements from 11% to 8%, and liquidity requirements were also decreased by allowing that cash and money in transit would be included towards fulfilling the mandatory liquidity requirements. This way, the credit contraction that the country experienced at the time of the crisis was somehow eased through these mechanisms.

Finally the accounting procedures for valuing public bonds were changed. The central bank established a theoretical price which banks could use in their accounting of sovereign debt even under the knowledge that the market value of the bonds was much lower. The reason for allowing this was to allow the banks to show positive net worth allowing time until they could get accounting and market prices back in line. The authorities believed that had the whole financial sector would have ended with negative net worth, this would have triggered a deeper financial crisis and a deeper run on deposits. In fact, over time these numbers converged.

Of course all this accounting forbearance and the other measures were combined with a feature, which I think was critical: banks were not allowed to distribute dividends until their accounting was fully back to normal. In all, these measures eased the

availability of funds to the bank and allowed them to show more reasonable net worth, but at the same time imposed on them that they should retain dividends until the situation would normalize itself.

How to Do a Debt Restructuring

Another important lesson to be made, particularly when discussing the accounting procedures for valuing bonds, relates to the way the debt restructurings are implemented. If we look at table 1, we will see a series of results taken from a series of works done with Jeromin Zettelmeyer⁵ on the debt restructuring.

The table shows two columns. The first one has the market haircut of the main episodes of debt default, starting with the Russian default in 1998 and going all the way to the Uruguayan restructuring of 2003. The market haircut is computed by taking the stream of payments of the original debt and comparing them to the stream of payments of the restructured debt, both valued at the post restructuring discount rate. The difference between the two net present values provides a measure of how much bondholders lost as a result of the debt restructuring in its immediate aftermath. We can see that the number varies significantly from Argentina's external debt restructuring of 73% to 13% in the case of the Uruguayan external debt restructuring. I would say that a number of 30% is a common occurrence in terms of haircuts.

The second column, entitled debt relief, shows a different computation. Here, the computation does not use as discount rate the spreads prevailing in the immediate aftermath of the debt restructuring, but a theoretical dis-

Table 1

	Market	Debt
	Haircut	Relief
	%	
Russia GKO, residents	46.7	31.8
Russia GKO, nonresidents	60.0	47.9
Russia Minfin	63.2	40.0
Russia Prins/lans	52.6	33.2
Ukraine OVDP, nonresidents	56.4	43.3
Ukraine Chase Loan	30.7	15.8
Ukraine ING Loan	38.0	4.8
Ukraine External	28.9	10.2
Pakistan Eurobond	31.0	11.2
Ecuador External	28.6	24.8
Argentina Phase I	40.5	30.8
Argentina External	73.0	70.9
Uruguay External	13.4	-5.3
Uruguay Domestic	22.3	0.0

Source: IMF.

count rate which relates to the fundamentals of the country. Using a very simple model which relates the cost of debt to some basic fundamentals, we value debt at that so called "steady state" discount rate. Again, the Uruguayan external restructuring provides an interesting case because we see a negative number in terms of debt relief. What does this negative (-5.3%) value mean? What it means is that the new instrument that was issued by Uruguay carried an interest rate which was higher than the steady state interest rate, though it was lower than the crisis rate prevailing immediately after the exchange. Thus, while in a market haircut we observe a loss of a 13%, when we value the instrument at the steady state rate, interestingly, we have a gain of 5%. In other words, a maturity extension that has been achieved at a relatively high interest rate is the reason for this negative debt relief. One could conclude that for a bank or investor

⁵ Sturzenegger and Zettelmeyer (2007a) and Sturzenegger and Zettelmeyer (2007b).

with sufficient patience to wait for this steady state to materialize, she would have ended with an instrument which was better, because it carried a convenient interest for a longer period of time than the instrument one started with. In the case of Argentina, it is interesting to notice that the market haircut and the debt relief numbers are very similar, 73% and 71%. The reason for this is that a big chunk of the restructuring was done through a haircut in the nominal value of its debt. It cannot be any other way, if you cut the nominal value of this debt, there is no difference between the two numbers. The difference emerges when you actually implement the debt restructuring with a maturity extension with lower interest rates.

The lesson of this table is that when implementing a debt restructuring, it is much more difficult to provide accounting forbearance for the financial sector if you do it through a debt restructuring which imposes a very strong nominal haircut. Alternatively, providing a debt restructuring through a maturity extension at a relatively low interest rate would easily allow the banks, or the financial supervisory committees, to allow the banks to value at least transitorily the debt above its market value, or to discount the value of the debt at a more reasonable interest rate and therefore not force substantial losses on the financial sector in the short run. By the way, this is the way the European Central Bank itself measures and values, for example, Greek debt in its balance sheet, but not the way the Greek restructuring was implemented.

Conclusions

The conclusions are that we should not overburden the financial sector with capital requirements at time of stress in order to provide reassuring signals of the solvency of the system. If a sovereign debt restructuring is necessary, it appears that there are benefits to do it not through a nominal haircut but through the extension of maturity below market rates (countries would oppose such measures because it does not allow them to show immediate reduction in its debt to GDP ratios). This mechanism for restructuring should be complemented with accounting forbearance to improve the value in the balance sheet of the banks. Finally, lending by financial sectors to sovereigns should be authorized only by an European supervisory committee; a measure that I think is perfectly feasible in the current context in Europe. A key feature is that this helping hand to the financial sector must be combined with a dividend policy that should be restricted until solvency of the financial sector is guaranteed and accounting forbearance eliminated.

In all, these are a combination of measures that provide a better time frame for the financial sector to absorb the losses of the debt crisis in Europe. In the end, it is just a question of time, and the objective is to provide the financial sector with sufficient time so that it can actually absorb the losses, of which they have responsibility for having taken the burden and by having purchased such large holdings of sovereign debt.

In the end, I think these lessons from Argentina are useful to reduce the cost in Europe of a debt restructuring event, by focusing on the issue of the relation between the financial sector and its exposure to sovereign debt.

References

- Calvo, G. A. 1983.** Staggered Prices in a Utility-Maximizing Framework. *Journal of Monetary Economics*. 12:383–398.
- Fernández, A. and E. Levy Yeyati. 2010.** Global Safety Nets: where do we go from here? IDB Working Paper Series 231.
- Rogoff, K. and J. Zettelmeyer. 2002.** Bankruptcy Procedures for Sovereigns: A History of Ideas, 1976–2001. IMF Working Paper 02/133.
- Sturzenegger, F. 2004.** Tools for the analysis of debt problems. In: *Journal of Reconstructing Finance* 1 (1). 201–203.
- Sturzenegger, F. and J. Zettelmeyer. 2007a.** *Debt Defaults and Lessons from a Decade of Crises*. Cambridge and London: MIT Press.
- Sturzenegger, F. and J. Zettelmeyer. 2007b.** Creditors' Losses versus Debt Reliefs: Results from a Decade of Sovereign Debt Crisis. In: *Journal of the European Economic Association*. 5 (2–3). 343–351.