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An analysis of Argentina's 2001 default resolution

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AN ANALYSIS OF ARGENTINA'S 2001 DEFAULT RESOLUTION

MARTIN GUZMAN

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ABOUT THE GLOBAL ECONOMY PROGRAM

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ABOUT THE AUTHOR

Martin Guzman is a senior fellow at the Centre for International Governance Innovation, a research associate at Columbia University Business School and associate professor at the University of Buenos Aires. He is also a member of the Institute for New Economic Thinking Taskforce on Macroeconomic Inefficiencies and Instabilities. He co-chairs the Columbia University Initiative for Policy Dialogue Taskforce on Debt Restructuring and Sovereign Bankruptcy.

ACRONYMS

CACs	collective action clauses
CPI	consumer price index
DC	Determination Committee
EMBI+	Emerging Market Bond Index Plus
FRAN	floating rate accrual note
ICMA	International Capital Market Association
IMF	International Monetary Fund
ISDA	International Swaps and Derivatives Association
RUFO	rights upon future offers
SCDS	sovereign credit default swaps
UNCTAD	United Nations Conference on Trade and Development

EXECUTIVE SUMMARY

Argentina's 2001 default was followed by a complex debt restructuring that included a long legal dispute with so-called "vulture funds" and other holdout creditors. The full resolution of the sovereign default took almost 15 years. This paper examines the whole restructuring process. It describes the strategies followed by the debtor and the bondholders, the domestic economic implications of the restructuring and the characteristics of the legal disputes. It also analyzes the implications of the default resolution for the functioning of sovereign lending markets.

INTRODUCTION

In December 2001, Argentina defaulted on its debt. The decision occurred in the context of a massive social and economic crisis that had been preceded by a decade-long experiment that included major reforms aligned with the tenets of the Washington Consensus. The reforms came with promises of significant increases in the country's wealth — but that did not happen. By the time of the default, Argentina's GDP was falling abruptly — the drop since the beginning of a recession in 1998 until the default was 15.7 percent (and from 1998 to 2002 the cumulative decline was –19.9 percent). The unemployment rate rose to 21.5 percent and the poverty rate reached a historical peak of above 45 percent.[1] Continuing to service debt in full would have implied further fiscal adjustments that would have depressed the economy even more — and that, in any case, would have made full debt repayment eventually unfeasible. The Argentinian society did not tolerate it. Amidst massive social protests and clashes between demonstrators and the police, the elected president resigned. Full repayment was not politically or economically feasible — a fact that had been recognized by creditors who had been demanding large interest rate premiums.

The restructuring process that followed was possibly the most complex and most commented on in the history of sovereign defaults. It raised several controversies, with an impressive variety of opinions on the meanings of this case, ranging from early claims from influential academics stating that Argentina's case suggests that "rogue debtors, rather than rogue creditors, are the ones that pose the greatest threat to the integrity and efficiency of the international financial architecture" (Porzecanski 2005, 331), to "[Argentina's restructuring is] in most dimensions a textbook example of how to do an exchange" (Sturzenegger and Zettelmeyer 2005, 10). Much has happened since those early assertions: opinions evolved, but disagreements still persist on various fronts. This paper provides a comprehensive analysis of the crisis resolution and attempts to shed light on some important controversies that this process triggered. This is not an isolated debt restructuring episode. Instead, it is a case that raises general questions for the functioning of sovereign lending markets. The analysis of its intricacies matters for understanding key features of sovereign lending markets, from the consequences of the lack of adequate frameworks for restructuring sovereign debt, to the implications of the victory obtained by a group of so-called vulture funds.

Argentina followed an unusual restructuring strategy: unlike many debtor countries, the country pursued a high initial debt relief that led to a sustained recovery of debt sustainability, which, in turn, was a key condition for the spectacular recovery that followed. And the restructuring also featured GDP-linked warrants, such that if the country grew more, bondholders would receive more. This strategy was highly resisted by creditors, and not appreciated by the US courts.

By 2010, the country had settled with 92.4 percent of its bondholders. Among the holdouts was a group of New York-based hedge funds that specialize in buying distressed debt and exploiting gaps in the legal financial architecture — the vulture funds. They bought Argentine defaulted bonds, litigated in New York courts (the jurisdiction under which much of Argentine defaulted debt had been issued) claiming full payment, and won. The ruling triggered a massive debate among academics, practitioners and policy makers — as well as enormous controversies on the nature of the activities of these hedge funds.

1 According to calculations of the Center for Distributive, Labor and Social Studies, the US$4 a day urban poverty rate for individuals reached a peak of 45.5 percent in 2002 (see http://sedlac.econo.unlp.edu.ar/eng/statistics.php). According to Argentina's National Institute of Statistics, the urban poverty rate for individuals reached a peak of 57.4 percent in 2002 (see www.indec.gov.ar/el-indec_eng.asp).

The ruling also featured a powerful injunction that prohibited the country from repaying the restructured bondholders until it paid the holdouts in full, and also stipulated that it would penalize any institution that helped Argentina to repay those creditors — no matter where in the world those institutions were operating.

The vulture funds had bought the large majority of the bonds after the country defaulted, at prices that went as low as 10 cents on the dollar.[2] And a large proportion of the bonds were purchased after the first round of restructuring, mostly in 2008. The litigants claimed for full principal, full interest (which, in one particular series, was indexed to the country's risk premium, and in all cases was high enough to contemplate the risk of default at the time the bonds had been issued), and even the pre-judgment compensatory annual interest rate of nine percent for no repayment in due date. The victory they obtained in the US courts ended up delivering exorbitant returns.

The resulting large intercreditor inequities raised concerns in the international community. Different influential actors approached the problem from different angles — in all cases trying to resolve the potential severe moral hazard problem that this resolution could entail. The large disparity in returns between the exchange bondholders and the holdouts incentivizes holdout behaviour — in the legal disputes between Argentina and the holdout bondholders, those who did not participate in the restructuring and did not litigate either (a group that received the denomination of "me too"), received the same terms as the ones set by the US courts' rulings in favour of vulture funds, as Judge Thomas P. Griesa from the New York Southern District Court made the ruling extensive to the former group; therefore, the case reinforces the expectation that in a restructuring process, it would be enough to hold out, let a vulture fund litigate and then wait to get the same treatment the litigant would get. But if many follow the same strategy, it would be impossible for the distressed debtor to finalize a restructuring — hence, countries could not restore debt sustainability or, more generally, set the conditions for economic recovery.

Following the vulture funds' victory, the International Monetary Fund (IMF), the United Nations, the International Capital Market Association (ICMA) and the US Treasury all got involved in the debate on how to improve the frameworks for sovereign debt restructuring. ICMA, with the support of the IMF, suggested new language for debt contracts that would make the vulture funds' business more difficult to carry on — in particular, ICMA suggested a formula for aggregation of collective action clauses (CACs) that would make it easier to bind minorities, and a clarification of the *pari passu* clause. At the same time, the United Nations launched a process for creating a multinational formal framework for sovereign debt restructuring that resulted in the approval of a set of principles. These principles received the support of an overwhelming majority of countries, with six countries voting against them — countries that are very important in the international financial landscape: the United States, the United Kingdom, Canada, Germany, Japan and Israel.

The case also received much attention from academia — not just in the form of scholarly papers, but also in the form of academic blogging, an area where much of the most interesting writing took place. The number of commentaries is so large that a survey will surely miss important contributions. Some of the most valuable contributions from the legal side can be found in various commentaries by Anna Gelpern[3] and Mark Weidemaier.[4] Juan Jose Cruces and Tim Samples (forthcoming 2016) is, to the author's knowledge, the most complete analysis of the elements of the litigation with the holdouts. Several important elements of the restructuring process have also been analyzed in Amrita Dhillon et al. (2005), Marcus Miller and Dania Thomas (2007), Federico Sturzenegger and Jeromin Zettelmeyer (2005) and Eduardo Basualdo et al. (2015). Martin Guzman and Joseph Stiglitz have also provided extensive commentary on the evolution of the saga and its economic implications.[5]

This paper offers a comprehensive description and analysis of the whole restructuring process. It focuses on the economic consequences and meaning of the different actions, elements and events that were involved in the process, but the paper does not intend to delve deeply into a set of complex legal issues that received much attention as the saga was evolving.[6]

The rest of the paper is organized as follows. The second section briefly describes the events that led to the default

2 For instance, NML Capital paid 10 cents on the dollar for its purchases of the series "Global Bonds, U.S. dollar 11.375% due 2017" made on December 5, 2008; 11 cents on the dollar for the purchases of the same series made on January 2, 2009; 10.5 cents on the dollar for purchases of the series "Global Bonds, U.S. dollar 12.25% due 2018" made on December 10, 2008; 17.5 cents on the dollar for purchases of the same series made on November 5 and 11 of the same year; 35.5 cents on the dollar for purchases of the FRAN (floating rate accrual note) series on October 16, 2008 (series that was due in 2005, and for which they got paid an interest rate that included country risk — risk that, according to the purchase date, NML never had to bear). There are many examples like these.

3 See www.creditslips.org/creditslips/GelpernAuthor.html.

4 See www.creditslips.org/creditslips/WeidemaierAuthor.html.

5 See www.project-syndicate.org/columnist/martin-guzman.

6 For an analysis of those issues, see, for example, the cited commentaries by Gelpern and Weidermaier, as well as Buchheit, Gulati and Tirado (2013), Buchheit and Pam (2004), Olivares-Caminal (2009), Weidemaier, Scott and Gulati (2013) and Chodos (2016), among many others.

in 2001. This section offers a simplified analysis of the economic dynamics that the country experienced in the decade before the default, together with a set of references for readers who are interested in a deeper analysis. Understanding the dynamics before the default is important because it shows that the debt problems arose not only as the consequence of a lack of discipline or over-optimism on the borrower's side, but also from the creditors' willingness to lend following a set of reforms that the country carried out in the early 1990s. The third section describes Argentina's macroeconomic performance in the years that followed the default, and analyzes the relationship between that performance and the restructuring. The fourth section analyzes the elements of Argentina's offers of 2005 and 2010. The legal disputes in US courts are described in the fifth section. The sixth section analyzes the implications of the resolution of the event for the functioning of sovereign lending markets. The seventh section concludes the paper.

THE PATH TO THE 2001 DEFAULT CRISIS

The default of 2001 was the end of an economic experiment that was a spectacular failure. The experiment started in 1990. The previous decade had featured another massive coordination failure of the economic system that resulted in long periods of high inflation and short but destructive bursts of hyperinflation. A government elected in 1989 led a process of major economic reforms, characterized by the tenets of the Washington Consensus (as trade and financial liberalization, and privatization of public enterprises), as well as the implementation of a convertibility system that tied the domestic currency to the US dollar.

The reforms were supposed to deliver significant increases in productivity, according to their advocates. As a response, both the public sector and the private sector increased the levels of spending, which, in turn, led to a process of indebtedness. This was a two-sided game: international creditors also believed in the virtues of the new system, and were initially willing to lend at low interest rates.[7]

In 1995, the Tequila crisis (as the currency crisis in Mexico was called) proved to be a challenge for the Argentine rigid monetary system, but the country managed to deal with its effects. This reinforced the belief in the system's capacity to absorb shocks, and increased the costs of abandoning it in the near future.[8] After this burst of instability, GDP continued to grow over the next two years. In 1998, the president of Argentina, Carlos Menem, was invited to the IMF annual conference to talk about the Argentine *miracle*: Argentina had become the poster child of the IMF.

But the country did not become richer. Trade liberalization led to massive exclusion of the unskilled labour force, which could not be absorbed by the sector with the static comparative advantage (the agricultural sector), in a context of increasing deindustrialization. The losers of these trade policies were not compensated. There were large increases in unemployment and labour informality. Financial liberalization made the system more unstable, not more efficient. In several cases, the privatization of public enterprises was not associated with efficiency gains. Overall, the increases in productivity that would sustain the higher levels of consumption while at the same time providing the resources for full debt repayment, did not materialize.

In 1998, a recession started. In 1999, a new government was elected, but the economic strategy remained the same. Debt overhang led to a large waste of resources. Unemployment, poverty and subutilization of capital soared.[9] The government tried to defend the exchange rate parity time and again. In a demand-constrained regime with the inability to run an expansionary monetary policy, the government engaged in experiments of fiscal austerity, under the "advice" and pressure of the IMF.[10] The recession got worse, and turned into a depression. By the end of 2001, in a desperate attempt to stop a capital flight, the finance minister decided to freeze bank deposits (the so-called *corralito*). The middle class did not tolerate it, and the government fell: President Fernando De la Rúa resigned in the midst of extreme social tensions. In the 10 days that followed, the country witnessed the succession of five different presidents. On the last day of 2001, the country defaulted on $81.3 billion[11] of sovereign debt with private creditors (the largest sovereign debt default up to that point) and abandoned the convertibility system. This marked the beginning of a new economic regime — and also the beginning of a complex process of debt restructuring.[12]

Assuming the country could have issued more debt at what was at the time a conservative interest rate of 12.5 percent per year, the annual cost of servicing the debt to private creditors would have been $10 billion. Adding the service on preferred debt, the cost would have passed $12 billion.

7 The spread on Argentina's debt decreased until 1995, when it fell below 83 EMBI+ (Emerging Market Bond Index Plus) basis points, and it increased since then until past the default of 2001.

8 See Fanelli and Heymann (2002) for a more extensive analysis of this issue.

9 Capacity utilization fell below 50 percent in the first quarter of 2002, according to data from Argentina's Ministry of Economy.

10 Later, the IMF made a *mea culpa* of its role in Argentina's crisis, recognizing, to some extent, that its approach was flawed (IMF 2004).

11 All figures are in US dollars.

12 See Galiani, Heymann and Tommasi (2003), and Frenkel (2002) for a more comprehensive analysis of the macroeconomic dynamics during the period of the convertibility system.

This was almost 10 percent of GDP after the devaluation. A primary surplus of this size was clearly unfeasible by any standards. Forcing full repayment under those conditions would have depressed the economy further, placing it in an austerity trap. At the time, the country had no alternative but to default.

MACROECONOMIC PERFORMANCE IN THE POST-DEFAULT ERA

Debt sustainability is a necessary condition for economic recovery. Forcing repayment under an unsustainable debt path only makes matters worse — for the debtor, and for the creditors that are not "first in line" to get repaid, as a deterioration of the economic prospects of the debtor decreases the probability of repayment in the future. Argentina faced this harsh reality until the default. Fiscal austerity policies in a recessionary situation and the delay in 2001 in recognizing an unsustainable debt path only aggravated the recession, turning it into a depression. And after the default, the country was able to use the primary surplus to run macroeconomic policies that were essential for the recovery. Later on, a restructuring that provided large debt relief would sustain the favourable conditions.

But debt relief alone is generally not a sufficient condition for recovery. The path to recovery usually requires a change from a structure of production that failed to a more dynamic one that can address the economic deficiencies of the former. Argentina went through this phase. After the devaluation, the country followed a policy of competitive real exchange rates (together with commodity export taxes to capture the windfall of profits in that sector), in a context of favourable external conditions. The combination of debt relief, competitive and effectively multiple real exchange rates, and a benign external environment led to a spectacular economic recovery. In a demand-constrained regime, Keynesian policies worked; at the same time, the new relative prices led to a large creation of jobs that absorbed many of the workers who had been excluded from labour markets in the previous decade. Unemployment decreased from 21.5 percent the year of the default to 7.9 percent in 2008. Real GDP grew above eight percent per year on average from 2003 to 2008 (the year in which the global financial crisis started). Later on, these high rates of economic growth could not be sustained — although that is a story that is not related to the process of sovereign debt restructuring, but to the combination of macroeconomic mismanagement and a deterioration of the external conditions, at least since 2011 (see Damill, Frenkel and Rapetti, 2015; Guzman and Stiglitz 2016b).

THE FIRST TWO ROUNDS OF RESTRUCTURING: 2005 AND 2010

The governments led by husband and wife Néstor Kirchner and Cristina Fernández were in charge of the first two rounds of the process of debt restructuring, respectively, and the government led by Mauricio Macri was in charge of the last round.

The default affected 150 different bonds, denominated in six different currencies, and issued under eight different legal jurisdictions. Holders of the defaulted debt included retail investors from all over the world, investment banks and vulture funds that had bought Argentine bonds in secondary markets both before and after the default. And none of the defaulted bonds had CACs.

The Dubai Offer

The first official exchange offer — the "Dubai offer," as it was presented in the IMF-World Bank Annual Meeting in Dubai — was done in 2003. The top priority for the design of the offer was to ensure the continuation of the recovery of debt sustainability. Argentina promised to run a primary surplus of three percent of GDP beginning in 2004. In the proposed scheme, debt could only be served using the primary surplus — but not issuing new debt. Finally, preferred creditors would be paid in full. This would leave a residual of one percent of GDP to repay private creditors, implying a writedown of 73 percent on the eligible debt of $81.84 billion at a post-crisis interest rate of five percent, and no recognition of due interest.[13] The country would issue three exchange bonds: a discount bond with 75 percent discount on the principal and an increasing interest rate in the range of one to five percent, and a maturity of eight to 32 years; a par bond with no discount on the principal, a fixed interest rate in the range of 0.5 to 1.5 percent, and a maturity of 20 to 42 years; and a quasi-par bond with a 30 percent discount on the principal, a fixed interest rate in the range of one to two percent, and a maturity of eight to 32 years. Creditors rejected the offer.

The Buenos Aires Offer

The next round was the "Buenos Aires offer," proposed in January 2005. The offer again included a par bond with no writedown of principal, a maturity of 35 years and a reduced annual interest rate of 1.33 percent over the first five years, which would then increase over time up to 5.25 percent; a discount bond with a writedown of 66.3 percent on the principal, a maturity of 30 years and an annual interest rate of 8.25 percent; and a quasi-par bond for local bondholders, issued in Argentine pesos adjusted by a proxy of consumer price index (CPI) inflation, with a maturity of 42 years and a fixed annual interest rate of 3.31 percent. In addition, attached to each bond there was a strip of GDP-linked warrants, whose characteristics will be described below. As part of the deal, the Argentine government would promise to achieve an annual primary surplus of 2.7 percent of GDP from the

13 See Miller and Thomas (2007) for a more extensive discussion of the offer.

moment of the swap. This would stabilize public debt in real terms, ensuring that the ratio of debt over GDP would fall with real economic growth and the appreciation of the real exchange rate. In 2004, the IMF had proposed a more ambitious commitment of 4.5 percent of primary surplus, but the Argentine government rejected it on the basis that it would undermine the economic recovery and debt sustainability.[14]

The exchange bonds included CACs, but only at the level of each series and with no aggregation formula as the one suggested by ICMA in 2014 (see ICMA 2014 or Gelpern, Heller and Setser 2016 for details on the new CACs).

The participation rate was 76.15 percent, equivalent to an exchange of $62.32 billion out of the $81.84 billion of old bonds (that included due interest until December 31, 2001) for exchange bonds under the described new terms. Due interest between December 31, 2001 and December 31, 2003, equivalent to $20.72 billion, was not recognized.

Full Repayment to the IMF

By the end of 2005, the country announced it would pay, before the due date, the entire stock of debt borrowed from the IMF ($9.8 billion paid with foreign reserves on January 3, 2006). This act was part of a strategy of de-indebtedness and increase of autonomy with respect to the IMF.

In previous years, during the first phases of the restructuring deliberations, negotiations between Argentina's government and the IMF had been important to shaping the debt exchange proposal. The IMF had objected to different terms of the proposal, but the final terms were close to the ones originally proposed by Argentina's government (terms that will be described below). The context in which the interactions between the country and the IMF occurred put the institution in a position of relative vulnerability, due to the US government's position, it was unlikely to see increases in funding to the IMF from the United States, and the IMF was largely exposed to Argentina, which was the one of its largest debtors.[15] The cancellation of Argentina's debt to the IMF interrupted the relations between the country and the Fund.

The Second Swap

The relatively low rate of participation required more rounds of restructuring if the country wanted to return to the international credit markets. The restructuring was reopened in 2010. In 2005, the country had enacted a law that prohibited the government from making any payments to holdout bondholders (the "Lock Law," which will be analyzed below). This law was suspended to reopen the swap.

The eligible debt for the offer made in April 2010 was $18.3 billion, including due interest. The offer included three types of bonds: as in the previous round, both a par bond and a discount bond; and, in addition, a global bond issued in US dollars with an annual interest rate of 8.75 percent and due in 2017. Each type of bond was issued in different series under different currencies and jurisdictions. The country again issued GDP-linked warrants with the same characteristics as the ones issued in 2005.

The par bond had no discount but a low interest rate (2.5 percent for series in US dollars both under New York or Argentine law, 2.26 percent for the series in euros, 0.45 percent for the series in yen and 1.18 percent for the series in pesos). The due date was the year 2038 in all cases. The due date of the discount bond was set to the year 2033, and the interest rate was 8.28 percent for the series in US dollars (both under New York and Argentine law), 7.82 percent for the series in euros, 4.33 percent for the series in yen and 5.83 percent for the series in pesos (adjusted by CPI inflation).

The participation reached $13.1 billion of old debt that was exchanged for $2.1 billion in par bonds, $4.8 billion in discount bonds and $957 million in the global 2017 bond. These figures implied a face value writedown of 40 percent and a participation of 70.74 percent over the remaining eligible debt, increasing the total participation to 92.4 percent.

GDP-linked Warrants

Argentina had to make payments on GDP-linked securities in respect of any given reference year, if the following three conditions were met:

- For the reference year, actual real GDP exceeded base case GDP.
- For the reference year, annual growth in actual real GDP exceeded the growth rate in base case GDP.[16]

14 See Cooper and Momani (2005) for further details.

15 By October 2003, Argentina's debt to the IMF was $16 billion, about 15 percent of the IMF total credit (Wolf 2004, cited in Heillener 2005). Eric Helleiner (2005) offers a detailed analysis of the characteristics of the negotiations between Argentina and the IMF with an emphasis on the role played by the Bush administration. Andrew F. Cooper and Bessma Momani (2005) also analyze the details of the patterns that characterized these negotiations, describing Argentina's tactics for exploiting the dual role that the IMF had to play, both as a creditor that intended to maintain its super-senior status and as an implicit coordinator of the relationship between the country and its creditors.

16 Base case GDP growth was set to 4.26 percent for 2005, 3.55 percent for 2006, 3.42 percent for 2007, 3.3 percent for 2008, 3.29 percent for 2009, 3.26 percent from 2010 to 2012, 3.22 percent for 2013, 3.03 for 2014 and 3 percent from 2015 to 2034.

Figure 1: Prices of GDP-linked Warrants in ARG$

Source: Author.

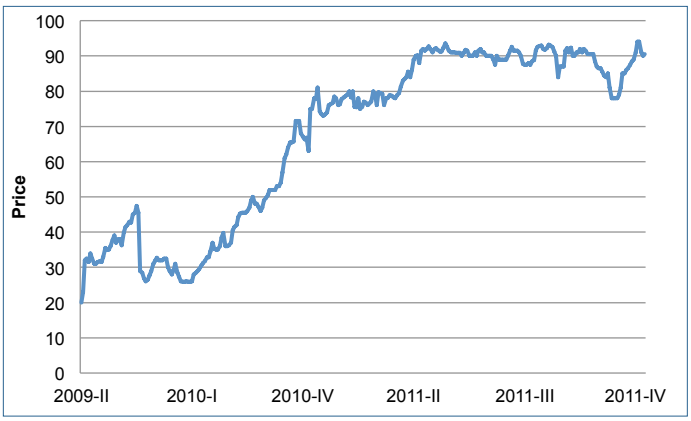
Figure 2: Prices of GDP-linked Warrants in US$ (Argentine Law)

Source: Author.

Figure 3: Prices of GDP-linked Warrants in US$ (New York Law)

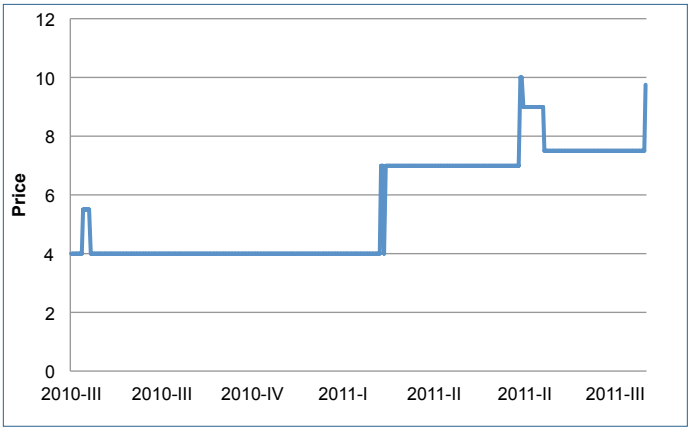
Source: Author.

Figure 4: Prices of GDP-linked Warrants in Euros (English Law)



Source: Author.

Figure 5: Prices of GDP-linked Warrants in Yen (Japanese Law)



Source: Author.

- Total payments made on a GDP-linked security did not exceed the payment cap for that GDP-linked security (the payment cap was set to 0.48 per unit of currency).

The payment on each unit was set to five percent of the difference between the actual real GDP and the base case GDP for each reference year. Payments had to be calculated each year on November 1 following the relevant reference year, beginning on November 1, 2006. The reference year was a calendar year, starting in 2005 and ending in 2034. It is shown above that the performance of these securities led to large differences between the *ex ante* and *ex post* writedowns and haircuts. However, these bonds were initially not well received by market participants, as the low initial market prices suggest. Figures 1 to 5 show the evolution of the GDP-linked warrants prices (daily closing prices data from Bloomberg Generic Prices) for the different series. In all cases, prices went through significant increases over time from initially low values (with the

exception of the period in which the global financial crisis erupted, when prices fell, but recovered again afterwards).

Reaching a settlement during times of recession may be difficult, especially when creditors are optimistic about the recovery prospects of the debtor, as the debt discount that would permit ensuring sustainability with high probability will probably be "large." If there is no settlement that is acceptable for both parties, generally the restructuring will be delayed (Dhillon et al. 2006; Ghosal, Miller and Thampanishvong 2016). The Argentine government considered the GDP-linked warrants (earlier advocated in the literature by, for example, Shiller 2003, Borensztein et al. 2004, and more recently by Blanchard, Mauro and Acalin 2016), as a way around this problem. But as the data on prices shows, there was little enthusiasm on the creditors' side for these instruments. In the final settlement, they accounted for only 10 percent of the initial value of the swap.

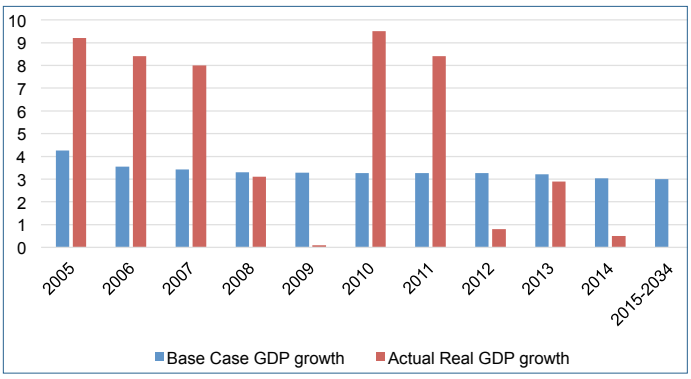
However, these warrants paid off handsomely. Figure 6 compares the base case GDP growth with actual real GDP growth. As noted above, on average, real GDP grew above eight percent from 2003 to 2008. Real GDP growth fell below the base case in 2008 after the global financial crises erupted, but passed the base case threshold again in 2010. It fell below the threshold again in 2012 (and currently remains in that state until the present).

Applying the data of Figure 6 to the GDP-linked warrants formula, we obtain that the country made additional payments in reference year 2005 to reference year 2011 of almost $10 billion. Figure 7 shows the evolution of payments over time. Figure 8 shows the disaggregated payments for bonds denominated in US dollars (both under New York law and Argentine law), in euros (issued under English law), in Argentine pesos (issued under Argentine law) and in yen (issued under Japanese law). All figures are converted to US dollars.

Debt Relief

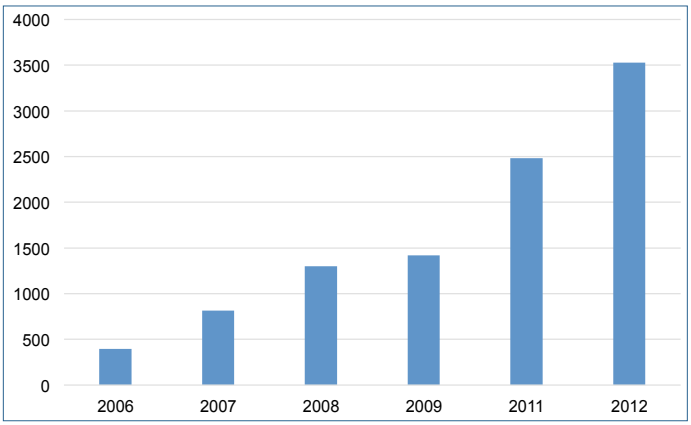
There is no obvious measure for evaluating the deepness of a debt restructuring. The literature offers different methods, all of them valuable but with important caveats. One measure generally used is the haircut, which is a proxy of creditors' losses. The other commonly used measure is the face value writedown, which is a proxy of the debtor's relief. Table 1 summarizes the measures described in this section.

Figure 6: Argentina's Actual Real GDP Growth and Base Case GDP Growth



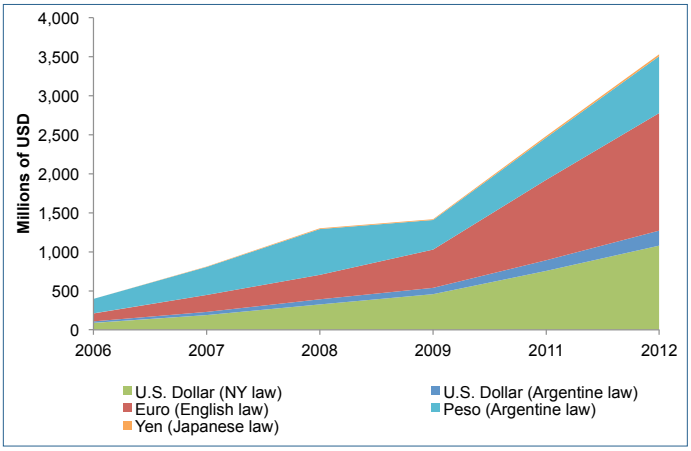
Source: Author.

Figure 7: GDP-linked Warrants Total Payments (in millions of US$)



Source: Author.

Figure 8: GDP-linked Warrants Payments per Bond Series (in millions of US$)



Source: Author.

Creditors' Losses

The haircut is defined as

$$H=1 - \frac{\textit{Present value of new debt } (r_t^i)}{\textit{Present value of old debt } (r_t^i)}$$

where (r_t^i) is the exit yield prevailing after the exchange. This measure does not provide a measure of relief for the debtor, but an approximation of losses for the investors. However, this approach (introduced by Sturzenegger and Zettelmeyer 2008) is not exempt from problems. First, both the old and the new debt are discounted at the same rate, the exit yield after the debt exchange. If the restructuring is effective in recovering sustainability, the interest rate the day after the restructuring should be lower than the day before, as the post-restructuring interest rate is unlikely to capture the perceived probability of default before the restructuring. Therefore, using the same yield for computing the present value of the new and the old debt will probably overestimate the size of creditors' losses, as it overestimates the value of the old debt. A more accurate measure of investor losses is the difference between the present value of the new bond and the price paid for the old bond, which will, in general, be different at different times.

Second, the measure does not capture the size of *ex post* losses when a restructuring includes contingent debt. This issue is particularly important in the analysis of Argentina's debt restructuring, as the exchange bonds included a coupon that was related to GDP growth.

Cruces and Trebesch (2013) obtain that the value of the haircut in Argentina's exchanges was 73 percent. This haircut is relatively high when it is compared with other episodes of sovereign debt restructuring.[17] However, in many of the cases where the haircut was lower, there needed to be another restructuring shortly afterwards.[18] Moreover, a judgment on whether the haircut was "too large" should not be done on the basis of an inter-country comparison, but on the basis of whether it was larger than was necessary to achieve sustainability — taking into account that the *ex post* performance is endogenous on the amount of debt relief. In this respect, the size of the haircut on Argentina's private creditors was consistent with the criterion for ensuring the recovery of sustainability, as the discount was compatible with a feasible target of primary surplus over GDP since the moment of the restructuring, and full payment to preferred creditors.

Cruces and Samples (forthcoming 2016) show that the *ex post* haircut significantly differed from these early computations when the payments on the GDP-linked warrants are included — and they show that the returns on these warrants were exceptionally large. They do the following illustrative exercise: suppose that in 2005, a holdout bondholder had a hypothetical portfolio of what by 2010 were the seven most litigated bonds, and exchanged in 2005 that portfolio for the same basket of bonds that the average restructured bondholder received in the first swap — a basket that included GDP-linked warrants. By 2005, the value of that basket would have been of 37 cents on the dollar. Suppose that the holdout bondholders reinvested all the coupons in the same security year after year. In 2015, every holdout bondholder would have had a claim of $1.33 — that is, every holdout would have had 33 more cents than the original face value, even having accepted an initial deep discount. Interestingly, investing $1 on June 2, 2005 (the day the first exchange was settled) in a US Treasury bond would have resulted in a claim of $1.27 on the same date of 2015.

Debtor's Relief

Another way of measuring the size of the debt discount is by computing the diminution in the face value after the debt writedown. This provides an estimate of the relief for the debtor, but it does not capture the investors' actual valuation of the bonds.

Of the total eligible debt for the exchange offer of 2005 and 2010 of $81.8 billion, $75.5 billion was exchanged for new debt with a face value $43.1 billion. This is an initial discount of 43 percent on the face value. Adding the $10 billion of payments on the GDP-linked warrants, the face value discount decreases to 30 percent. On top of this, if we add the approximately $12 billion payments to holdout creditors according to the deal of 2016 (see the section "The Legal Disputes"), then the final debt writedown decreases to 20.5 percent.

Interpretations on the Role of GDP-linked Warrants

The interpretations of whether it was sensible from the country's viewpoint to issue GDP-linked warrants vary. Some point out that the exchange has actually been very costly for Argentina in terms of the payments that were ultimately made; hence, in this view, it was a mistake to issue GDP-linked warrants. For example, Sturzenegger and Zettelmeyer (2005) conclude that given the low market valuation at the time of their introduction, it could prove an expensive mistake to have included growth bonds in the swap. Although it is true that Argentina would have benefitted from repurchasing those bonds when prices

17 Cruces and Samples (forthcoming 2016) report that the average haircut for all sovereign debt restructurings from 1978 to 2010 was 37 percent.

18 Guzman (2016) shows that, since 1980, 51 percent of sovereign debt restructurings with private bondholders were followed by another restructuring or default within five years. Moreover, evidence shows that deeper debt relief is associated with better *ex post* performance (Reinhart and Trebesch 2016).

were still low, the issue has to be analyzed through a different lens.

First, at the time of the issuance of the GDP-linked warrants, there was uncertainty about the evolution that the country's GDP would follow. It is not correct to judge an *ex ante* decision made under uncertainty in light of an *ex post* performance. Second, from the country's viewpoint, what matters is not only the amount of payments, but ensuring the continuation of the recovery of sustainability; the distribution of payments over time is not necessarily less important than the present value of what is paid. On the other hand, from the creditors' viewpoint, what matters most is not when payments are made, but the expected present value of payments. In this case, the country had a large relief when it was most needed (that is, at the time when there was a massive deficiency of aggregate demand that required expansionary macroeconomic policies), and paid more when it was able to.

Ultimately, the restructuring and its aftermath showed that GDP-indexed bonds can, in practice, improve the trade-off between the *ex ante* amount of debt relief that the debtor requires to restore sustainability, and the principle of good faith that would require that the debtor pays according to its actual capacity — capacity that may evolve over time as the result of the recovery that follows a positive process of restructuring.

However, Argentina's case also shows that the novelty risk associated with the issuance of this type of contingent debt may be sizable, and expensive for the debtor. Even though the value of the contingent instrument should be larger when uncertainty is greater, in Argentina's case there seemed to be an aversion to the complexity of these instruments that resulted in low enthusiasm among creditors (complexity not in terms of the design of the bond, which was quite simple, but on the nature of the instrument in general). As analyzed in Olivier Blanchard, Paulo Mauro and Julien Acalin (2016), coordinated issuances by several countries at a larger scale could ameliorate this aversion.

Other Elements of the Debtor's Strategy

The restructuring included a set of clauses and provisions that were intended to discourage holdout behaviour. Two elements that became particularly important in the legal

Table 1: Creditors' Losses and Debt Relief

Concept	Formula	Value	Pros	Cons
Haircut	1 – present value new bonds/present value old bonds	0.73 (Cruces and Trebesch 2013)	Proxy of creditors' losses	It does not reflect the debtor's relief. It uses the same discount factor for the old and new debt, possibly overestimating the value of old debt.
Face value reduction, 2005 and 2010 restructurings	1 – face value of new debt/ face value old debt	0.43	Proxy of debtor's relief	It does not reflect the value of creditors' losses. It does not capture payments on contingent debt. It does not contemplate liabilities under litigation.
Face value reduction, final	1 – (face value of new debt + GDP- linked warrants payments + payments to holdouts)/face value old debt	0.205	Proxy of debtor's relief It includes the value of payments on GDP-linked warrants and payments to holdouts.	It does not reflect the value of creditors' losses. It captures payments on GDP-linked warrants only until the period of calculation.

Source: Author

dispute with holdout bondholders were the Lock Law and the rights upon future offers (RUFO) clause.

Lock Law

The Lock Law prohibited reopening the exchange offer to non-participating bondholders. Some argued that the Lock Law violates the *pari passu* clause because it amounts to a formal declaration that exchange bondholders may be paid while holdouts may not. But neither the district nor the circuit courts specifically refused to limit their definition of breach to the Lock Law.

The Lock Law was actually just an article of the more comprehensive law that defined the terms of the restructuring. The evolution of the saga showed that there was an important degree of flexibility regarding its application. In 2010, the article was suspended to reopen the swap, and on September 2013 it was suspended again.[19]

This article was Argentina's government response to influential press claims that the exchange bonds prospectus released when the country initiated the exchange offer of 2005 was leaving open the possibility of a better settlement with holdouts. More specifically, it was the government's response to an article published by the *Financial Times* on January 14, 2005, one day after the initiation of the "road show" for the 2005 exchange offer. The article basically suggested that Argentina could be manipulating the language of the exchange bonds prospectus to facilitate a later agreement with the holdout bondholders. It began by stating that:

> A detail in legal documents setting out Argentina's offer to restructure $100bn of defaulted sovereign debt could weaken the government's marketing strategy.
>
> In the build-up to today's opening of the global debt-exchange offer, President Néstor Kirchner's government has consistently promised that investors participating in the exchange will be entitled to any subsequent improvements in the offer thanks to a "most favoured creditor" clause.

But later denounced that:

> However, careful study of a paragraph in the Prospectus Supplement, one of the legal documents submitted to — and approved by — the US Securities and Exchange Commission, suggests the government will be able to settle with individual bondholders at a later date on better terms without necessarily triggering the clause.
>
> Bondholder representatives said yesterday that investors entering the exchange now could find themselves shut out from potentially more favourable terms settled with bondholders at a later date.
>
> [A] paragraph [of the Prospectus Supplement] states that "Argentina reserves the right, in its absolute discretion, to purchase, exchange, offer to purchase or exchange, or enter into a settlement in respect of any Eligible Securities that are not exchanged pursuant to the Offer."

The paragraph added:

> "The terms of any such purchases, exchanges, offers or settlements could differ from the terms of the Offer."

The *Financial Times* article continues:

> Critically, however, the wording in the subsequent sentence omits the word "settlement." Instead, it states: "Holders of New Securities will be entitled to participate in any voluntary purchase, exchange, offer to purchase or exchange extended to or agreed with holders of Eligible Securities not exchanged pursuant to the Offer."
>
> The FT has discovered that the same sentence in an earlier version of the Prospectus Supplement, published in December last year as part of the presidential decree authorising the debt exchange, contains the word "settlement."

And it concluded:

> The inevitable question will be why the word "settlement" was omitted from the offer if there is no contemplation of settling with hold-outs at higher values. (Thomsonin 2005)

In this context, the law was originally conceived as a marketing instrument that was not a repudiation of the holdouts' debt. Argentina's Congress finally repealed it in March 2016.

The RUFO Clause

The RUFO clause stated that if the country made a superior *voluntary* offer to holdout bondholders before the end of the year 2014, it had to match the offer to the exchange bondholders. It was written as follows in Argentina's exchange bonds prospectus:

19 Article 2 of Law No. 26,017 (the article known as the Lock Law) was suspended on September 23, 2015 by Law No. 26,886, article 7.

> Under the terms of the Pars, Discounts and Quasi-pars, if following the expiration of the Offer until December 31, 2014, Argentina voluntarily makes an offer to purchase or exchange or solicits consents to amend any Eligible Securities not tendered or accepted pursuant to the Offer, Argentina has agreed that it will take all steps necessary so that each holder of Pars, Discounts or Quasi-pars will have the right, for a period of at least 30 calendar days following the announcement of such offer, to exchange any of such holder's Pars, Discounts or Quasi-pars for the consideration in cash or in kind received in connection with such purchase or exchange offer or securities having terms substantially the same as those resulting from such amendment process, in each case in accordance with the terms and conditions of such purchases, exchange offer or amendment process.[20]

This clause turned out to be an important factor in the evolution of the saga after July 2014, which will be analyzed below.

THE LEGAL DISPUTES

The restructuring featured long and complex legal disputes that started in 2002, three years before the first round of restructuring. During the first semester of 2016 these disputes were finalized.

Pari Passu Clause

The *pari passu* is a standard clause in sovereign bonds that is supposed to ensure equitable treatment among equal creditors, but whose meaning in the practice of sovereign lending markets is dubious. Mark Weidemaier, Robert Scott and Mitu Gulati (2013) put it succinctly: "In the context of sovereign lending, then, it is fair to say that no one really knows what the *pari passu* clause means." The prospectus of Argentina's defaulted bonds included it as follows: "[t]he Securities will constitute...direct, unconditional, unsecured and unsubordinated obligations of the Republic and shall at all times rank *pari passu* without any preference among themselves. The payment obligations of the Republic under the Securities shall at all times rank at least equally with all its other present and future unsecured and unsubordinated External Indebtedness."

Vulture Funds

The restructuring process included the presence of notorious Wall Street-based hedge funds that specialize in buying distressed debt at bargain prices and exploiting the gaps in the legal architecture — a business that in Argentina's case resulted in enormous profits.

This group of hedge funds included NML Capital (a subsidiary of Elliott Management), Aurelius Capital Management, Dart Management, Blue Angel Capital, Bracebridge Capital, Olifant Fund and Montreux Partners. They all bought debt in distress at a fraction of its face value and litigated claiming full payment — defined as full face value plus full interest, plus a compensatory interest rate for the lack of repayment in due date. The annual interest rate already included a high risk premium: the range of interest rates for the bonds-under litigation range from 9.75 percent (for the global bond in US dollars issued in September 1997, due in 2030) to 12.375 percent (for the global bond in US dollars issued in February 2001, due in 2012). In addition, one of the bond series (the FRAN series, issued in April 1998, due in 2005) that was purchased after the default included a variable interest rate that was tied to the country risk. After the default, country risk skyrocketed (see Figure 9) and, as a result, the contracted annual interest payments on that series increased to 101 percent before the maturity of the bond.[21]

Figure 9: Spread on Argentine Bonds (EMBI +)

Source: Author.

This practice is not new. It had been followed in several other distressed countries. One important antecedent was the case of Peru, following the restructuring negotiations under the Brady Plan in 1996 — by then, the country had been in default for 12 years. In 1996, Elliott bought Peruvian debt in default at a price of about half its face value. It litigated in New York Courts claiming full payment, but the New York Southern District Court ruled in favour of Peru. By that time, Champerty law, which prohibited the purchase of debt in default with the intent of suing the issuer, was still in place. Elliott appealed and won: in 1998, the Second Circuit ruled that Champerty did not apply, interpreting the intent as *contingent*; in the

20 See www.sec.gov/Archives/edgardata/914021/000095012305000302/y04567e424b5.htm.

21 See www.srz.com/files/upload/Alerts/2nd_Circuit_Court_of_Appeals_Decision.pdf. The FRAN was a bond with a ridiculous economic design for the debtor, a form of anti-insurance, such that Argentina would pay more in bad times and less in good times.

Second Circuit's view, Elliott had bought the debt to get repaid in full, or *otherwise* to litigate. This interpretation of Champerty constituted a game changer (see Blackman and Mukhi 2010).

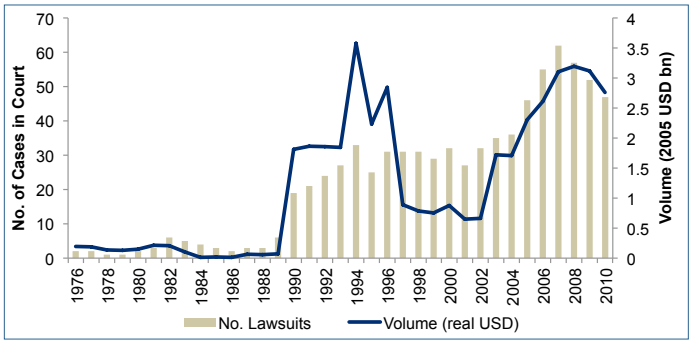
Such an interpretation of Champerty was *unreasonable*. How could the reasonable expectation be to get repaid in full, when the country had already broken its promise of full repayment and the litigant had bought the debt at about half of its face value?

Finally, Champerty was repealed from New York legislation in 2004, for purchases over $500,000. The justification was that Champerty had already been an archaic law. The bill (Assembly Bill 7244-C) was presented by New York State Senator John Marchi. Vulture funds' lobbying may have influenced this legal change.[22]

All the Argentine bonds under dispute had been issued before Champerty was repealed. Therefore, the elimination of Champerty constituted de facto a change in property rights that favoured vulture funds.

Changes in legislation and its interpretation have been essential for the good health of the vulture funds' business. Figure 10, reproduced from Schumacher, Trebesch and Enderlein (2014), shows that there has been a rapid and significant increase in litigation since the early 2000s, around the time Champerty started to be interpreted in a way that favoured the vultures' case. The increase in litigation continues after Champerty's subsequent elimination in 2004 — much of it corresponding to Argentina's case.

Figure 10: The Rise of Creditor Litigation (Case Numbers and Amounts)



Source: Schumacher, Trebesch and Enderlein (2014). Reprinted with permission.

22 There were documented connections between Paul Singer, head of Elliott, and John Marchi — on March 25, 2004, Paul Singer made a direct donation to "John Marchi and friends." See https://nyopengovernment.com/NYOG/search_summary.jsp?page=camcon&page=camcon&var=paul+singer&d-49681-p=7.

Other Holdouts

The group of holdouts included not only vulture funds but also other bondholders that had bought the bonds before the country entered into a period of distress. Table 2 shows the distribution of holdout bondholders in 2015, before the last round of restructuring.

The *pari passu* group refers to those who obtained the initial favourable ruling from Judge Griesa. Those are all vulture funds. The "me too" group refers to the bondholders that also had claims being disputed under New York courts and to whom Judge Griesa's ruling in favour of NML Capital was extended. This group includes vulture funds and good faith creditors. The ICSID group refers to a group of Italian bondholders that had litigated under the International Centre for Settlement of Investment Disputes (ICSID) — which required treating sovereign debt as investment.

Table 2: Distribution of Holdouts

Holdout bondholder	Percentage of total defaulted debt
Pari passu group	0.6
"Me too" group	2.8
Litigants in other US courts	1
Litigants in ICSID	1.3
Litigants in other courts in Europe	0.3
Unknown identity (no litigants)	1.6
Total	7.6

Source: Argentina's Ministry of Finance.

The disputes were resolved in different ways for the different groups. The groups that received the most favourable treatment were the ones that benefitted from Judge Griesa's ruling. In 2016, Argentina paid at least 70 percent of the "acknowledged" claim to the group of *pari passu* and "me too" — defined as the claim according to the terms of Judge Griesa's ruling. Different groups ended up receiving different treatment as the original "*pari passu* offer" was modified in subsequent negotiations. For instance, NML received 75 percent of the acknowledged claim plus compensation for legal fees (Argentina paid $325 million to vulture funds as compensation for all the legal fees incurred during the trial). The other bondholders ended up receiving 150 percent of the face value of the original bonds (the "base offer"). Table 3 in the appendix shows the payments to the different vulture funds and "me too" that benefitted from Griesa's ruling. The appendix summarizes what Argentina would pay to the holdout bondholders if all of those who received the base offer accepted it.

Early Stages of the Litigation Process

In the early stages of the litigation process, the judicial discretion from US courts prevented holdouts from blocking the restructuring efforts. Initially, Judge Griesa refused to allow NML to block Argentina's 2005 exchange, and the Second Circuit cited concerns for "the economic health" of the nation in support of this decision.[23]

Miller and Thomas (2007) define different stages of the early phase of the litigation process. First, the judge refused enforcement of holdout claims long enough to promote a successful debt swap. But after the swap had been accepted by a supermajority, it threatened the debtor with enforcement, seeking to distribute the surplus to the litigant minority.

Finally, the threats turned into costly sanctions through an injunction that will be analyzed below.

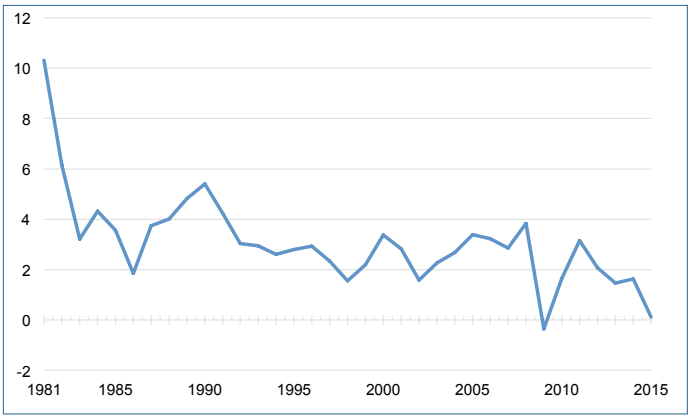
The Growth of Liabilities

Cruces and Samples (forthcoming 2016) offer a detailed analysis of the growth of liabilities conditional on obeying the ruling of Judge Griesa for bondholders who held debt contracts issued under New York law.

Interest liabilities accumulated at higher rates for claimants who did not have a judgment: pre-judgment interest includes not only the contracted interest but also interest on missed payments. Under New York law, the annual interest on missed payments (called compensatory or statutory interest rate) is nine percent. Post-judgment, liabilities grow at the interest rate on one-year US Treasury notes. Cruces and Samples (ibid.) calculate that interest alone represented from 1.6 to 3.2 times the initial value of debt under litigation by 2015.

New York's statutory pre-judgment interest rate is in practice punitive. It was fixed at nine percent in 1981, when inflation in the United States was high (slightly below nine percent). But inflation has been much lower since then, as Figure 11 shows. Average annual CPI inflation in the United States since 2001, the year of Argentina's default, until 2015, has been 2.16 percent and global nominal interest rates have reached historically low values.

Figure 11: Annual CPI Inflation Rate, United States



Source: Author.

Griesa's Injunction

In November 2012, Judge Griesa interpreted *pari passu* as ratable payments — a decision that from the economic understanding of equitable treatment is absurd, and that from the legal viewpoint was considered controversial by many (see Gelpern 2013; Weidemaier, Scott and Gulati 2013). According to Griesa's interpretation, equitable treatment meant that exchange bondholders would receive a fraction of about a third on the dollar over the original bonds, while vulture funds would get one dollar, plus interest that included the compensatory rate, for bonds acquired at a fraction that in most cases was below 30 cents on the dollar.

But the most important aspect of the ruling was an injunction that blocked Argentina's scheduled payments to the exchange bondholders until it paid the vulture funds in full. Argentina appealed, but the Second Circuit upheld Griesa's *pari passu* injunctions, and later on the Supreme Court rejected a review of the case.

The injunction had a remarkable reach. It banned Argentina from using its resources to pay the exchange bondholders anywhere in the world, impeding the country from fulfilling its obligations toward the majority of its creditors, in order to increase the cost of not obeying what the US courts considered were the country's obligations toward a minority of bondholders that had purchased defaulted debt.

The injunction exceeded the US territory: it blocked Argentina's payments on its foreign debt not only under New York law, but also under other foreign law, and even Argentina's law. The ruling also implied that any financial intermediary that helped Argentina could be in contempt with the US courts, even if this occurred beyond US borders. And that is why the injunction was so powerful: it was not really threatening Argentina that made it effective, but threatening third parties willing to perform roles that would help the Argentine government's intentions. A

23 See EM Ltd. v. Republic of Argentina, 131 F. App'x 745, 747 (2d Cir. 2005).

ruling from a UK judge in February 2015 that clarified that bonds governed by English law were covered by English law put some limits to Griesa's attributions, but it had no practical immediate consequences (see Guzman and Stiglitz 2015a).

In response, Argentina enacted a new law (the "Ley de Pago Soberano," or "Sovereign Payment Law") that would allow restructured bondholders to exchange their bonds for other bonds with equivalent terms but issued under Argentine law. The law also allowed making debt payments through the Banco de la Nación Argentina — replacing the original trustee, the Bank of New York Mellon. Judge Griesa found Argentina to be in contempt of court for this action.[24]

The injunction was costly for Argentina, as it impeded the country from borrowing under any of the major financial jurisdictions. From the time it came into effect until it was lifted, the country borrowed relatively minor amounts from China at a high annual interest rate of 8.75 percent.[25]

The 2014 "Default," or the Impossibility of Making Payments

On July 30, 2014, Argentina was forced to miss the interest payments to the restructured bondholders. The case was atypical,[26] as Argentina did send the money to the trustee (the Bank of New York Mellon), but the trustee did not pass it on to Argentina's creditors to avoid being in contempt with the US courts.

The main impediment for repaying holdout bondholders according to Judge Griesa's terms was the RUFO clause. If Argentina had paid, the 93 percent of bondholders that had accepted the restructuring could have asked for a similar treatment.

The activation of the RUFO clause was uncertain. But *if* Argentina paid before its expiration and *if* the clause was activated, it would have surely led to another default, as the country would have had to pay any restructured bondholder at least the full value of their original bonds. The total payments in case of activation of the RUFO were uncertain, as it would have been necessary to define what was an offer in equal terms to the ones received by the holdouts, but it would have certainly led to another default even in the most conservative scenario.

From the viewpoint of the policy makers deciding on behalf of Argentina, the political cost of the potential activation of the RUFO clause would have been immense. Compliance with Griesa's ruling was both politically and economically unfeasible until the expiration of the RUFO clause on December 31, 2014.

International Swaps and Derivatives Association's Classification of the Impossibility of Making Payments

The unique nature of the event raised questions on whether the missed payments event of July 2014 was a default or not.[27] The activation of sovereign credit default swaps' (SCDS) payments required a definition: in what direction should the money go? Should the buyers of the SCDS on Argentina's bonds continue paying premiums to the sellers? Or should the sellers make a payment to the buyers corresponding to the contingency of the default?

To define whether Argentina's impossibility of making payments was a credit-related event (that is, whether it was a default or not), an International Swaps and Derivatives Association (ISDA) Determination Committee (DC) had to interpret it. The question to be voted on was "Has a failure to pay credit event occurred with respect to the Argentine Republic?" The 15 institutions that formed the DC voted "yes": the event was a default. But among the members of the DC was Elliott Management. Note the perverse conflict of incentives: the same hedge fund that was suing Argentina, Elliott Management, was one of the 15 members deciding whether SCDS payments corresponding to a default scenario could potentially be activated. It has not been possible to determine whether Elliott held SCDS referencing Argentine debt. But this is a dangerous situation, which could distort any restructuring negotiation, as the same agent could potentially be a litigant, a holder of SCDS referring to the bonds under litigation and, at the same time, the person or institution deciding whether the conditions for activation of SCDS payments are met.

24 The September 29 order of contempt by Judge Griesa is available at www.shearman.com/~/media/Files/Services/Argentine-Sovereign-Debt/2014/Arg182-093014-086978-Doc-687.pdf.

25 The country issued $1,415.9 million of the bond Bonar 2024 at that interest rate.

26 The case was so atypical that it received different names to distinguish it from ordinary defaults, such as "technical default" or "Griesafault" (Guzman and Stiglitz 2014).

27 The prospectus of the exchange bonds states that "Holders of New Securities will be paid in accordance with the procedures of the relevant clearing system and its direct participants, if applicable. Neither Argentina nor the U.S.-European trustee shall have any responsibility or liability for any aspect of the records of, or payments made by, the relevant clearing system or its nominee or direct participants, or any failure on the part of the relevant clearing system or its direct participants in making payments to holders of the New Securities from the funds they receive. Notwithstanding the foregoing, Argentina's obligations to make payments of principal, interest or other amounts on the New Securities shall not have been satisfied until such payments are received by the common depositary (or its nominee), as registered holder of the New Securities." See www.sec.gov/Archives/edgar/data/914021/000095012305000302/y04567e424b5.htm and www.sec.gov/Archives/edgar/data/914021/000090342310000252/roa-424b5_0428.htm.

The Dispute after the RUFO Expiration

Negotiations resumed after the expiration of the RUFO clause. In 2015, President Fernandez's administration offered the holdouts the same as it had offered in the swaps of 2005 and 2010. Argentina's finance minister later revealed to the press that the group led by NML had proposed to settle for a 30 percent discount over the terms of Griesa's ruling. The differences between the proposals of the Argentine government and the litigants were large, and as a result there was no deal.

By that time, the dispute with the vulture funds had become an element of Argentina's internal politics. The administration presented the saga as a case where the population and the politicians had to take one side, that of the "Fatherland," or that of the "Vultures" — the slogan was "Patria o Buitres," or "Fatherland or Vultures." Anyone supporting full payment to the vultures would be against the Patria.

However, the dispute with the vulture funds was not a state policy, but simply a government policy. This made it very difficult to achieve a deal only a few months before the presidential elections. For the litigants, the option value of waiting was large.

In November 2015, the incumbent government's party lost the presidential elections. The winning party had publicly expressed different opinions on the approach the country would follow under its mandate regarding the continuation of this saga. Therefore, this event was a major change in the course of the dispute.

The new government resumed the negotiations with the litigants early in 2016. Soon afterwards, an agreement with almost all the holdout bondholders was reached — with different terms, as described in the section "The Legal Disputes."

But payment according to the terms of the deal was contingent on the capacity of the government to issue new debt. However, the country would not be able to do so until Judge Griesa lifted the injunction.

Finally, on February 19, 2016, Judge Griesa announced that he would drop the injunction if Argentina repealed the two domestic laws that impeded paying the holdouts, namely the Lock Law and the Sovereign Payment Law. The judge's justification was basically that the country was now behaving well; hence, there was no longer a need for the injunction. In his words: "The injunctions, once appropriate to address the Republic's recalcitrance, can no longer be justified. Significantly changed circumstances have rendered the injunctions inequitable and detrimental to the public interest."

"President Macri's election changed everything," he added.[28] The language of the decision shows the high level of judicial discretion that was applied to putting a remedy to a situation that the judge considered "unjust." In his view, before Macri's election the country was not behaving well, but after the election the country appeared to be acting in "good faith" — again, a concept not specifically defined from a quantitative viewpoint.

Finally, Argentina enacted Law 27,249 on March 29, which repealed the Lock Law and the Sovereign Payment Law. As promised, Judge Griesa lifted the injunction, and Argentina's government paid the vultures and other holdout bondholders.

IMPLICATIONS FOR SOVEREIGN LENDING MARKETS

The resolution of this debt crisis provides important lessons on several fronts. It highlights the importance of recovering debt sustainability as the outcome of a restructuring process for recovery prospects. The context in which the restructuring occurred and the outcomes of the legal disputes also have important implications for the functioning of sovereign lending markets. And the stance taken by Judge Griesa, who was using statements made by Argentine politicians that targeted the country's voters as a justification for defining the republic as a recalcitrant debtor that did not act in good faith, raises questions on the interplay between domestic politics and the workings of international debt markets — questions that should feed the discussion on the extent to which improvements in the contractual approach will resolve the deficiencies observed in sovereign debt restructuring in a context where domestic judges of major lending jurisdictions such as New York, who do not understand the nature of sovereign debt restructuring processes, are still the ones in charge of deciding what the ultimate goals of a restructuring should be, and what remedies should be implemented to achieve those goals.

There May Be Life after Debt Crises

Argentina's experience shows that there may be life after a deep debt crisis — but this requires recovering sustainability as a pre-condition for implementing any other policies that could contribute to a recovery (see Stiglitz and Heymann 2014; and the discussion in Guzman and Stiglitz 2015b). Argentina's restructuring succeeded in recovering debt sustainability. The post-default period showed an impressive record in terms of creation of employment and reduction of poverty. This would not

28 See "Rule 62.1 Indicative Ruling" by Judge Griesa, February 19, 2016. http://www.shearman.com/~/media/Files/Services/Argentine-Sovereign-Debt/2016/Arg296-021916-11cv4908-Doc-47.pdf.

have been possible if the country had not addressed the sustainability problems in the way it did.

Other countries that succumbed to the creditors' demands in times of distress had significantly worse records. Greece is a famous recent example. By 2016, the country still could not get out of a recession that turned into a depression: unemployment reached 25 percent, youth unemployment is above 50 percent, GDP fell by 25 percent since the recession started in 2008, and despite going through a debt restructuring in 2012, sustainability was not enhanced, but deteriorated as the country fell into an austerity trap (see Varoufakis 2016).

However, a "good" debt restructuring is not a sufficient condition for permanent recovery. Countries in distress often need other policies that give rise to more dynamic structures of production, replacing the old ones that did not work. But nevertheless, the recovery of sustainability is a necessary condition for implementing those other policies.

GDP Indexed Bonds Can Improve the Trade-off between Sustainability and Good Faith

GDP-indexed bonds can be an important vehicle for reconciling the principles of sustainability and good faith.[29] But the "novelty risk" may be expensive. This should not deter the adoption of these instruments, but instead it should encourage a simultaneous adoption by several countries, creating a larger scale that could make the novelty risk disappear. It should also foster more innovative designs that could include clauses that allow the debtor to repurchase the bonds if they are not well received by markets. A deeper engagement from influential institutions in the promotion of these bonds would certainly help. The constructive work of the Bank of England on this issue is important in this respect.[30]

Vulture Funds Harm the Functioning of Sovereign Lending Markets

Vulture funds ended up obtaining exorbitant returns. Court records show that NML paid, on average, approximately 23 cents on the dollar for the declared purchases made after 2008. Considering what NML got on those bonds, the annual return was above 40 percent, over a period of almost eight years (see the appendix). Court records also show that for the declared purchases since June 2001 — most of which occurred after the default of December 2001, NML paid, on average, approximately 28 cents on the dollar (this covers 64 percent of the total purchases). If we use this average price as representative of the remaining 36 percent of purchases, for which this author does not have purchasing dates data, then the estimated total payment is approximately $177 million, for which NML finally received $2.426 billion — a total return of approximately 1270 percent.

Such a profitable business creates a problem of moral hazard: vulture funds' behaviour gets incentivized, but also the incentives of other bondholders to hold out, follow the lead of vulture funds and get a "me too" treatment will increase. This could either make future sovereign debt restructurings impossible, or could, alternatively, lead to settlements with terms friendlier for bondholders *even if* those terms do not lead to the recovery of debt sustainability, putting more pressure on societies in distress, and also increasing the probability of subsequent costly disruptions of payments.

And it surely reinforces the incentives of existing vulture funds to continue in the business. The early reactions of Elliott's head, Paul Singer (2016), suggest that this was indeed the case: in an opinion article published by *The Wall Street Journal* on April 24, 2016, Singer advertised that his firm plays a positive role for the functioning of sovereign lending markets.

Griesa's injunction turns into a powerful weapon for litigant holdout bondholders. We should expect more holdout bondholders' requests for injunctions, such as the one granted by Judge Griesa, in cases in which sovereigns refuse to satisfy their demands. We should also expect adaptive precautionary behaviour in the language of contracts in order to protect all of those third parties who could be exposed to court sanctions in future litigations based on the same arguments.

An argument that has been put forward to oppose these views is that Argentina is not an ordinary country in sovereign lending markets — on the contrary, it is a "uniquely recalcitrant" debtor,[31] hence this case is not relevant for future restructuring processes. Gelpern defines this view as "naive at best, manipulative at worst."[32] The dimension in which Argentina was clearly an exception was in obtaining an amount of debt relief that ensured the recovery of sustainability. On the other hand, evidence shows that many countries that follow "friendlier" approaches do not manage to resolve their sovereign debt crises properly (Guzman and Lombardi, 2016).

29 See Haley (2016) for a more extensive discussion on this trade-off.

30 See, for instance, www.bankofengland.co.uk/research/Documents/conferences/gdplinkedbonds.pdf.

31 See page 23 of the Second Circuit Decision of August 23, 2013, www.shearman.com/~/media/Files/Services/Argentine-Sovereign-Debt/2013/Arg33_NML_Second_Circuit_Decision.pdf.

32 See www.creditslips.org/creditslips/2014/06/missed-payment-date-musings.html.

Reforms Are Needed

The global community is reacting to Argentina's dispute with vulture funds to put a limit to the distortions they create. Much of how sovereign lending markets perform in the near future will depend on what reforms can be carried out and to what extent they are adopted. ICMA has suggested new language for sovereign debt issuances, as the inclusion of more robust CACs with an aggregation formula (see Gelpern, Heller, and Setser 2016 for a thorough description of the new CACs), and a clarification of the *pari passu* clause that differs from the interpretation given by Judge Griesa. This new language will harm the vulture funds' business. However, although it is a significant improvement over the old language, it will not suffice to resolve the problem of the vulture funds in the near future, or even to fully resolve a more comprehensive set of current deficiencies in sovereign lending markets that led to the "too little, too late" syndrome (see Guzman, Ocampo and Stiglitz 2016; and Guzman and Stiglitz 2016a for a more extensive discussion). The current global situation puts several countries at the risk of experiencing sovereign debt crises in the near future (Reinhart 2015). And most of the debts of countries in distress have been issued without the new language suggested by ICMA — which will create new profitable opportunities for vulture funds. IMF (2016) reports that only 11 percent of the $935 billion of emerging countries' government debt has been issued with super CACs and clarification of the *pari passu* clause.

Argentina's case ultimately shows the dangers of leaving the resolution of legal disputes that arise in a sovereign debt restructuring process in the hands of judges who do not understand the goals and intricacies of sovereign debt restructuring, or the principles on which a restructuring process should be based. Judge Griesa's narrow view of debt contracts simply considered that the "just" resolution required full payment of the original contracts to agents that bought them when they had already been broken. Argentina's government also went far in its resistance to satisfy the vultures' demands, which earned the country the tag of "recalcitrant republic" in the judge's consideration. The judge came up with a remedy to this situation (the described powerful injunction) that violated important principles of sovereign debt restructuring. No matter how much progress is made on the contractual side, situations like the one provoked by Judge Griesa through the implementation of a strong remedy such as his injunction will remain a possibility, which will impede achieving the objectives of sovereign debt restructuring processes. In this author's opinion, this is why, for correcting the current deficient frameworks, it will be essential to build an alternative based on reasonable principles, consistent with the broad objectives of debt restructuring, that guide courts and educate their members on how to deal with these complex situations. This framework should be complemented and strengthened by more robust contracts, as suggested by ICMA.

The United Nations and the United Nations Conference on Trade and Development (UNCTAD) support this view (see Blankenburg and Kozul-Wright 2016). In September 2014, the United Nations launched a process for creating a multinational formal framework for sovereign debt restructuring. In September 2015, the UN General Assembly approved nine principles that should guide sovereign debt restructuring processes (see Li 2015 and Bohoslavsky and Goldmann 2015). These principles had been repeatedly violated in many of the recent experiences of sovereign debt restructuring. If they were respected, they would resolve some of the important deficiencies observed in the resolution of sovereign debt crises. Only six countries voted against their adoption: the United States, the United Kingdom, Canada, Germany, Israel and Japan. But as that group includes the major lending jurisdictions, these principles will not have any major effective impact in the short run — which makes the vultures' victory in Argentina's case an even more relevant precedent for the functioning of international debt markets.

CONCLUSIONS

A well-performing sovereign lending system is a global public good. While the vulture funds' activities are socially unproductive (and even destructive), and fighting the vultures has important positive externalities, individual countries do not internalize these externalities. The final resolution of Argentina's dispute illustrates this phenomenon. At the time of the settlement with the vultures, Argentina's government considered that in the context of a weak macroeconomic situation with a large fiscal deficit, falling reserves and an appreciated real exchange rate, the recovery of the access to international financial markets had a larger value than the cost of settling with the vulture funds and the other holdouts. But while if the country pursues a healthy use of the access to international credit markets the settlement could be in the best interest of the country, the vultures' victory aggravates a moral hazard problem that harms the functioning of international debt markets.

A proper solution to the existing deficiencies in sovereign lending markets requires a global approach. This will be difficult to achieve, but, in the meantime, there are reforms within the legal architecture of lending jurisdictions that could help. Recently, Belgium made a positive step in this direction through the adoption of anti-vulture legislation that intends to avoid providing "illegitimate advantages"

to holdout bondholders.[33] The UN principles for sovereign debt restructuring are the right basis for building a system that works.[34]

Argentina's case also shows how expensive it can be for a country to engage in a long legal battle under New York law. The New York annual statutory rate of nine percent punishes risky debtors twice: they have to pay a high interest rate that includes risk compensation when they do not default and, on top of that, they have to pay nine percent per year after they default and until a judgment is reached. Such a rate is more punitive than compensatory. And on occasion (as is certainly the case with the vulture funds), it compensates for risks that were never borne. A change of this feature of the system tailored to the characteristics of sovereign lending would correct inequities and inefficiencies.

In the current state of affairs, there is an enormous amount of discretion left to New York judges for making decisions that exceed the US borders, which can create coordination problems that undermine international lending markets.[35] Better contracts will certainly help to improve matters on several fronts, but as long as legal disputes that arise when sovereign defaults occur are resolved by judges that do not understand the meanings of a sovereign debt restructuring process, they will probably not suffice.

The role played by New York courts in Argentina's dispute with the vulture funds also raises questions on the interplays between globalization and domestic politics. Judge Griesa put much emphasis on the "intransigent" attitudes of Argentina's politicians — even getting information on their speeches from NML's letters. The judge considered the nation to be a "uniquely recalcitrant" debtor that justified such a remarkable remedy. But the definition does more harm than good, as there never was a well-defined metric for determining what "recalcitrant" means in this context. Does it refer to the "defiant" messages of the debtor country's politicians — that target the local population? Or does it refer to any economic aspect of the restructuring process, for instance, the large haircut on private creditors compared to other restructuring experiences obtained by Argentina? If it refers to the first, the judge's view would be an imperialistic one, where domestic politics of distressed debtor countries should be circumscribed to actions that do not offend US judges — or else the country will be punished; regardless, it violates basic principles that the process should respect in order to ensure the objectives of the restructuring are achieved. If it refers to the latter, the judge's view will create a very negative precedent, as it will harm the prospects of obtaining the necessary debt relief for recovering sustainability in seriously distressed countries.

There is another way in which Argentina's case was unusual: the country had the economic and political resources to fight vulture funds for more than a decade, in an economic context in which the value of the access to international credit markets was low for many years. Most distressed debtor countries cannot afford such a battle, or do not find themselves in the same favourable external circumstances after a default. They will be the ones that suffer most from this precedent's consequences.

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33 An illegitimate advantage would exist if the bondholder bought sovereign debt at a price manifestly disproportionate either with its face value or the amount that it seeks to get repaid and if any of the following special circumstances hold: the sovereign was in a state of default when the bondholder purchased the claims; the bondholder is incorporated in a blacklisted tax haven jurisdiction; the bondholder systematically initiates court proceedings to obtain payment; the sovereign restructured its debt but the bondholder held out; the bondholder abused the weakness of the sovereign state; or full repayment would have an adverse impact on the state's budget that would compromise the socio-economic development of its population.

34 See the proposal for creating a soft law approach based on the UN principles in Guzman and Stiglitz (forthcoming 2016).

35 Debtor countries are, of course, partly responsible for exposing themselves to New York law, as it is their choice to issue under such a jurisdiction. After this long and costly dispute with the vulture funds in the US courts, Argentina's government, led by President Macri, decided in 2016 to issue debt again under New York law — a decision that is hard to justify from an economic viewpoint, considering that the country could have issued debt under alternative jurisdictions at similar terms.

APPENDIX

Timeline

1991: Beginning of Washington Consensus policies experiment and adoption of convertibility system.

1998: A recession in Argentina starts.

2001, December: A full-fledged macroeconomic, social and financial crisis implodes, including a default on sovereign debt.

2002: Litigation in New Y courts starts.

2003: Presidential elections: Néstor Kirchner is elected. First exchange offer is made but it is rejected by Argentina's creditors.

2005: Road show for restructuring offer starts on January 13. On January 14, the *Financial Times* publishes an article accusing the government of trying to leave open the possibility for a better treatment for holdout bondholders. First exchange swap is made in June.

2006: Plaintiffs try to attach Argentina's central bank funds. Argentina got a favourable ruling in January 2007.

2007: Presidential elections: Cristina Fernández is elected.

2008-2009: NML purchases large amount of Argentine defaulted bonds.

2010: Second exchange swap.

2011: Presidential elections: Cristina Fernández is re-elected.

2011, December 7: Judge Griesa rules Argentina is in breach of *pari passu* clause.[36]

2012: NML persuades a judge to allow the seizure of an Argentine ship (*Libertad*) docked in a port in Ghana. The International Tribunal for the Law of the Sea in Hamburg orders Ghana to release the ship.

2012, February 23: Judge Griesa's *pari passu* ruling with injunction.[37]

2012, October 26: Second Circuit decision that Argentina cannot pay its restructured debt unless it also pays the holdouts.[38]

2013, October 7: The Supreme Court rejects Argentina's June 2013[39] request to review the Second Circuit's October 2012 decision that it violated the *pari passu* clause in its defaulted bonds. The court gave no reason.

2014: Argentina's appeal did not go through.[40] On July 31, Argentina misses interest payments. On September 11, Argentina's Congress passes the Sovereign Payment Law.

2015: Presidential elections: Mauricio Macri is elected.

2016: Settlement with vulture funds and other holdouts is reached. Argentina's Congress repealed the Lock Law and the Sovereign Payment Law, Judge Griesa lifted the injunction[41] and Argentina paid the holdout bondholders according to the terms of the deal.

NML Returns

From court records of *NML v. Republic of Argentina*, we know the purchasing dates for $394,102,549 in face value, over nine different series of bonds.

By matching that information with data on bond prices in secondary markets from Bloomberg Generic Price, we estimate a purchasing cost of $113,596,396.51 over the face value of $394,102,549, which implies an average price of 28.82 cents on the dollar. For purchases since 2008, the average price is 23.83 cents on the dollar (over a declared face value of $221,949,549 million).[42]

The total face value of NML purchases was $617 million. NML received $2.426 billion on that face value. If the average price of 28.82 cents that we obtain with the purchases for which we have available information was representative of the average price over the whole purchases, then the total purchasing cost would be $177 million. Therefore, NML's return would be 1,270 percent.

Payment to Vulture Funds and Other Holdout Creditors

Table 3 shows the payments to the vulture funds and other holdout creditors that benefited from Judge Griesa's ruling.

Including compensatory interest and legal fees, the country paid $6.25 billion for the "*pari passu* offer."

36 See www.shearman.com/~/media/Files/Old-Site-Files/ArgCourtOrderholdingArgentinainbreachofparipassuclauseNMLCapitalvArgentina12711.pdf.

37 See www.shearman.com/~/media/Files/Old-Site-Files/ArgCourtOrderwithinjunctionNMLCapitalv Argentina22312.pdf.

38 See www.shearman.com/~/media/Files/Old-Site-Files/secondcircuitdecision110512.pdf.

39 See www.shearman.com/~/media/Files/Old-Site-Files/NML20130626ArgentinaCertPetitionpdf.pdf.

40 See www.shearman.com/~/media/Files/Services/Argentine-Sovereign-Debt/2014/Arg76Order-List-061614zor_2b8e.pdf, page 5.

41 See www.shearman.com/~/media/Files/Services/Argentine-Sovereign-Debt/2016/Arg421-order-vacating-422.pdf.

42 For the days for which there is no available information in Bloomberg Generic Price Database, the average of the prices for the closest days there is information for before and after is used.

Every bondholder that benefitted from Judge Griesa's ruling could also choose the "base offer," that recognized a claim equal of 150 percent of the defaulted bonds' principal value. If all the non-*pari passu* bondholders accepted this offer, the total payments on this offer would be approximately equal to $4.62 billions (corresponding to $1.35 billion for the bondholders that sued the country under the ICSID, $1.17 billion for litigants under other US courts, $300 millions for litigants under European courts, and $1.8 billion for bondholders that did not litigate). Besides, for some funds that benefitted from the *pari passu* ruling, the payments under the base offer are larger, as it is the case of Dart Management, that received a judgment for $725 million in 2003, that including interest liabilities would add up to $847 million in 2015 (less than the payment of $891 million that received under the base offer; see Levine 2016). Adding payments on the *pari passu* offer and on the base offer both to the bondholders that were not included in the *pari passu* ruling and the ones that did but that would receive larger payments under the base offer, the approximate total payments under the deal of 2016 would be about $12 billion if every bondholder accepts it.

Argentina's Exchange Bond Prospectus

Available at: www.sec.gov/Archives/edgar/data/914021/000095012305000302/y04567e424b5.htm.

Court Records

Available at: http://argentine.shearman.com/.

Table 3: Payment to Vulture Funds and Holdout Creditors According to Deal of Year 2016 (in US$)

Funds	Payment	Compensatory interest	Legal fees
NML Capital, Ltd.	2,390,120,222.89	10,379,124	26,111,111
EM Ltd.	849,201,747.00		
Blue Angel Capital I LLC	383,012,906.89	2,301,391	26,111,111
Aurelius Capital Master, Ltd.	405,464,794.89	2,900,136	26,111,111
Capital Ventures International, Ltd.	221,833,952.53		
Aurelius Capital Partners, LP	142,693,986.89	336,273	26,111,111
Capital Markets Financial Services	110,468,850.45		
FFI Fund Ltd.	524,216,734.89	275,936	26,111,111
FYI Ltd.	340,112,110.89	183,840	26,111,111
Aurelius Opportunities Fund II, LLC	106,949,842.89	1,164,497	26,111,111
ACP Master, Ltd.	81,655,773.89	945,090	26,111,111
Procella Holdings, L.P.	37,866,814.00		
VR Global Partiners, LP	35,508,705.00		
Montreux Partners, L.P.	308,560,843.00		
Los Angeles Capital			
Wilton Capital Ltd.			
Cordoba Capital			
Lightwater Corp Ltd.	9,634,370.00		
Olifant Fund, Ltd.	44,023,625.89	855,764	26,111,111
Rafael Settin	3,235,439.00		
Old Castle Holdings, Ltd.	963,437.00		
Paolo Ercolani	1,008,964.48		
Tortus Capital Master Fund, LP	739,265.25		
Total	5,997,272,387.72	19,342,051.00	235,000,000

Source: Argentina's Cámara de Diputados de la Nación, Report No. 95.

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