Market Reactions to Sovereign Litigation

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Abstract

Recent rulings in the ongoing litigation over the *pari passu* clause in Argentinian sovereign debt instruments have generated considerable controversy. Some official-sector participants and academic articles have suggested that the rulings will disrupt or impede future sovereign debt restructurings by encouraging holdout creditors to litigate for full payment instead of participating in negotiated exchange offers. This paper critically examines this claim by evaluating market reactions to litigation using an event study methodology. We analyze the effect on sovereign bonds from litigation events, with particular emphasis on Argentina for the period, 1993-2014. We find evidence that the market reacts differently to Argentina than in other countries.

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1 INTRODUCTION

On August 23, 2013, the United States Court of Appeals for the Second Circuit affirmed a District Court award of equitable relief that barred Argentina from paying creditors who had exchanged their debt as part of a sovereign debt restructuring while it refused to pay other creditors that had declined the offer.[1] Argentina rejected the ruling and made it clear it planned to ignore adverse rulings. Argentina also appealed to the United States Supreme Court on February 18, 2014.[2]

The petition asked the Supreme Court to send the *pari passu* issue down to the New York Court of Appeals for a possible re-interpretation since the issue fell under state law. Arguing that the lower court held a "deeply flawed interpretation" of the *pari passu* clause, the petition urged, "If New York courts want New York law to upset settled expectations, impede restructurings, and endanger New York's status as the law of choice for sovereign debt, that is their prerogative. But they should not have those consequences thrust upon them."[3] Moreover, Argentina contended that via Judge Griesa's orders, "The Second Circuit affirmed injunctions that effectively reach into Argentina's borders, coercing it into violating its sovereign debt policies and commandeering billions of dollars of core sovereign assets—Argentina's reserves—to pay the vulture fund NML Capital Ltd. ("NML") and other holdout creditors."[4] At stake was whether the FSIA allowed a district court to enjoin a sovereign in the same manner the court can enjoin any non-sovereign litigant.[5] The Supreme Court,

[1] NML Capital, Ltd. v. Republic of Argentina, 727 F.3d 230 (2d Cir. 2013).
[2] Camila Russo, *Argentina Plans New York-Buenos Aires Bond Swap,* Bloomberg News (2013), available at http://www.bloomberg.com/news/2013-08-27/argentina-plans-new-york-buenos-aires-bond-swap-on-singer.html.
[3] Petition for a Writ of Certiorari, Argentina v. NML Capital, Ltd., Supreme Court Docket No. 13-990 (U.S. Feb. 18, 2014)
[4] Ibid.
[5] If Argentina appealed the August 23 decision, it would be the second petition undergoing the Supreme Court process. In January 2013, Argentina submitted a separate petition, seeking a judgment on a procedural issue. The Supreme Court granted this distinct petition in January 2014. As Argentina's litigation involved simultaneous appeals on different judicial rulings, media sources began to confuse the distinct cases. The petition re-raised the FSIA issue, asking, "Whether a district court can enter an injunction coercing a foreign

however, did not hear Argentina's case.

On June 30th, the next installment of interest payments on the bonds became due, and Argentina deposited $539 million with the Bank of New York as payment to the exchange bondholders. However, Judge Griesa's injunction was back in effect, and the Bank of New York was prohibited from distributing the funds. Having missed the June 30th payments, Argentina entered a 30-day grace period, and observers nervously watched whether the sovereign could reach a last minute negotiation with its holdout creditors or voluntarily default on July 30th. Argentina chose not to pay and entered in default. [6]

The Argentinean case in particular, and more generally the wave of lawsuits over the past decade, engendered significant concerns among many policymakers and investors. On the one hand, holdout creditors can create "collective action problems" and present a major obstacle to successful sovereign debt restructurings. Many official-sector participants worried the litigation and controversial rulings could set a bad precedent for future sovereign debt restructurings by creating a "free-rider" problem; creditors would litigate for a better bargain instead of accepting a haircut as part of a restructuring process. The International Monetary Fund (IMF) suggested that the ruling "could have pervasive implications for future sovereign debt restructurings by increasing leverage of holdout creditors."[7] While ultimately deciding not to submit any official briefs to the Supreme Court, the IMF publically commented, "The fund remains deeply concerned about the broad systemic implications that the lower court decision could have for the debt restructuring process in general."[8] France filed an amicus

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sovereign into paying money damages, without regard to whether payment would be made with assets that the FSIA makes immune from "attachment arrest and execution. Ibid.

[6] The litigation stemming from a decade long procession of legal processes and lawsuits ultimately ended in a settlement in February 2016. Argentina settled the dispute with the different holdouts. It returned to international markets in April 2016 (the largest emerging market bond sale to date). See http://www.wsj.com/articles/argentina-returns-to-global-debt-markets-with-16-5-billion-bond-sale-1461078033.

[7] IMF, *Sovereign Debt Restructuring-Recent Developments and Implications for the Fund's Legal and Policy Framework*, Apr. 26, 2013, at 1.

[8] Sandrine Rastello and Katia Porzecanski, "IMF's Lagarde Drops Proposal to Back Argentina in Debt Case," *Bloomberg*, July 24, 2013, http://www.bloomberg.com/news/2013-07-24/imf-s-lagarde-drops-proposal-to-back-argentina-in-default-case.html, accessed January 16, 2014.

brief supporting Argentina's petition for certiorari on the grounds that the ruling created a "powerful incentive…for private creditors to forgo participation in voluntary restructuring in order to enforce full payment of debt against an already distressed debtor."[9]

Other observers, however, saw the events as generating positive spillover effects associated generally the enforcement and relative strengthening of creditor rights by activist investors (Shleifer 2003; Roubini and Setser 2004) and portfolio-reallocation effects.

A third view contended that effects were likely to be negligible as creditors faced considerable hurdles in collecting against countries after receiving favorable judgments in support of claims. Other reached similar conclusions claiming that the case reflected the peculiarities of Argentina's approach to their international contracts.

What implications did this case and in particular the associated wave of lawsuits and rulings held for the sovereign debt market and the broader international financial architecture? In this paper we empirically examine the market reaction to sovereign litigation and evaluate whether such activity has imposed negative effects to sovereign debt markets.[10] We use an event study methodology around the dates of the various litigations events. Specifically, starting with the most prominent decision in favor of vulture funds (Elliot v. Peru) followed with the cases subsequently litigated against Argentina (since 2001) and major decisions (the district court's rulings and injunctions)[11], we analyze how sovereign debt markets in Argentina and other Latin American countries react to this litigation.

Our evidence points to a significant decrease in cumulative abnormal returns for Argentina following the court rulings. For other countries, however, the effect tends to be differentiated (and opposite), suggesting a countervailing spillover effect on perceived sovereign risk. As we discuss in sections 2 and 3, these spillovers from sovereign litigation

[9]See Brief for the Republic Of France as Amicus Curiae in Support of The Republic of Argentina's Petition for a Writ of Certiorari, *Republic of Argentina v. NML Capital, Ltd.*, Jul. 26, 5 (2013).
[10] Herber and Schreger (2016) document negative effects on Argentina.
[11] These decisions are discussed in section 2 and analyzed in section 5.

may stem from investor perceptions about the enforceability of contracts and the strengthening of creditor rights.

The momentum towards reforming the "international financial architecture" following the Global Financial Crisis seems to have been faded. An important component of the discussion involved addressing problems with the sovereign debt restructuring process that were thought to contribute to the risk of a liquidity shortage turning into a full-blown financial crisis. With the official sector, private creditors, and sovereign debtors focused on different issues—such as creditor coordination, availability of new financing, moral hazard, capacity versus willingness to pay, excessive versus lack of capital flows, liquidity versus solvency of debtors, or whether improving the debt restructuring process was even the right thing to do—proposals varied widely. They included suggested unilateral actions countries could take to protect themselves as well as grand schemes ranging from statutory approaches involving setting up new institutions to voluntary market-based solutions relying on financial innovation. Each had its own pros and cons and obstacles to adoption. Our analysis suggests that important consideration needs to be given to the direct and indirect (spillover) effects of litigation.

We proceed as follows. Sections 2 and 3 provide background and our theoretical expectations. We discuss our empirical strategy in section 4. Section 5 presents our main finings. Section 6 discusses these findings and their broader economic and legal implications.

2 BACKGROUND

2.1 Sovereign Debt: Enforcement and Litigation

The importance of the recurring phenomenon of debt default has prompted an enormous theoretical and empirical literature on sovereign debt.[12] The distinguishing feature of sovereign debt relative to private/corporate debt is the limited mechanisms for enforcement. In contrast to private entities, sovereign nations are not subject to a legal authority. In the event of default, legal recourses are more limited than at the corporate level.[13] There are also few sovereign commercial assets located abroad to serve as collateral or repayment. Recognizing that few direct legal sanctions can be invoked against sovereign borrowers, initial research in economics focused mainly on why countries ever chose to pay their debts—or why private creditors ever expected them to.

The sovereign debt literature has focused on the different incentives to repay, in particular, loss of access to international credit markets, reputation effects, and trade and direct output costs.[14] But another critical incentive is that creditors—at least those that hold bonds governed by foreign law—have access to at least some legal recourse in the country in which the debt is payable.

Indeed, recent work has focused on the role of legal remedies and actions.[15] International-law-bond creditors can "litigate," which creates an incentive for sovereign debtors to negotiate. Over the past years a nascent literature has studied the role of legal disputes in sovereign debt paying particular attention to country-specific effects of litigation.

[12] For surveys of the literature, see Aguiar and Amador (2014), Eaton and Fernandez (1995), Keltzer (1994),
[13] Section 3 looks at the role of creditor enforcement. In the United States, the 1976 Foreign Sovereign Immunities Act (FSIA) allows suing a foreign government in U.S. course for commercial contracts.
[14] See Alfaro and Kanczuk (2005), Cole and Kehoe (1995, 1998), Dooley (1994), Eichengreen and Portes (1986), Rose (2005).
[15] See Panizza, Sturzenegger, and Zettelmeyer (2009) and Rogoff and Zettelmeyer (2002) and Sturzenegger and Zettelmeyer (2007) for overviews of the literature. See also Ahmed, Alfaro and Maurer (2010).

Initial work in this area has documented the process of litigation and its implications.[16] Yet little work has analyzed the overall implications for the international financial architecture. When bonds are issued under foreign law, creditors can sue a defaulting debtor in a foreign court and typically obtain a favorable judgment, since the sovereign debtor is in breach of contractual obligations.[17]

The first step is obtaining a favorable ruling. Several important rulings have paved the way. Allied Bank became the first creditor to use the Foreign Sovereign Immunities Act (FSIA) to sue a sovereign in 1982, when Costa Rica defaulted on the debt it owed a 39-bank consortium to which Allied belonged. Allied received a favorable ruling in 1985, but the U.S. government pressured the bank into settling on the same terms as the other 38 creditors (Sturzenegger and Zettlemeyer 2007, 65). The next year, in 1986, Argentina's central bank defaulted on a series of special dollar-denominated bonds that it had issued in 1982 to refinance existing debts. In 1992, the U.S. Supreme Court decided ruled in the favor of 2 Panama corporations and a Swiss bank in *Weltover v. Republic of Argentina*: sovereign bond payable in the United States qualified as commercial activities, and states immunity did not automatically apply.[18] This ruling further clarified the commercial act exception in the FSIA.

In 1992, the Dart family acquired defaulted Brazilian public debt with a face value of $1.4 billion at a steep discount. The Darts rejected a Brazilian offer to restructure the debt under the Brady Plan. Rather, they sued. In May 1995, a New York court sided with the Darts. The Dart case confirmed the right to litigate on the basis of a claim acquired in the secondary market. It also confirmed that it did not violate Section 489 of the New York

[16] See Rogoff and Zettelmeyer (2002), Sutzenegger and Zettelmeyer (2007), and Panizza, Sturzenegger, and Zettelmeyer (2009).

[17] To be precise, creditors can sue in foreign courts if the issuer submits to the particular jurisdiction or there is a sufficient connection between the debt and the forum. For example, it might be enough for the government to aggressively market domestic, local-law debt to foreign investors. We thank the referee for brining this to our attention.

[18] Republic of Argentina v. Weltover, Inc., 504 U.S. 607 (1992).

Judiciary Law, which ostensibly prohibited the purchase of a claim with the express purpose of bringing a lawsuit, a doctrine called "champerty." The Darts successfully argued that they had purchased the debt with the intention of receiving interest, not of bringing a lawsuit (Sturzenegger and Zettlemeyer 2007, 69).

However, the value of a judgment can be limited for two reasons. First, creditors generally cannot recover a sovereign debtor's local assets since these are typically protected by domestic law (IMF Staff Note, 1996). Second, sovereign debtors benefit from foreign governments' sovereign immunity laws, limiting creditors' ability to seize sovereign assets held abroad. Although sovereign debtors typically irrevocably waive sovereign immunity in their bond documents, this still constitutes a partial waiver of sovereign immunity. The United States Foreign Sovereign Immunities Act (FSIA), for instance, allows sovereign governments to waive sovereign immunity only with respect to commercial assets. Assets held in a sovereign capacity continue to be immune from attachment by sovereign debt creditors. For example, foreign assets held in a diplomatic capacity, such as military assets or an ambassador's residence, are always protected in the United States.

The second step is being able to collect on the ruling and here it is hard to argue there is a reliable process or system. There are some famous cases, which perhaps have given the erroneous idea that the process is simple. In 1997, Elliott Associates successfully sued Panama for the full face value of $70 million of defaulted debt, for which it had paid $17.5 million. When Panama balked at paying, a judge attached the proceeds from a $232 million sale of the country's telecoms company to Cable and Wireless PLC. In another case, in 1999, Elliott obtained a pre-judgment attachment order against Peruvian commercial assets in the United States. It later received a $57 million judgment in its favor. Peru did not have many commercial assets within the United States, but a Brussels appeal court agreed to attach interest payments on Peru's Brady bonds. Rather than default on its entire stock of Brady bonds, the Peruvian government paid Elliott $63.5 million.

This last case received a lot of attention. However, in 2004 Brussels enacted legislation to bar it courts from issuing injunctions in Euroclear. Indeed, IMF directors have emphasized that the impact of anecdotal successes in creditor litigation, such as the favorable Brussels ruling in the Peru case, should not be "overstated."

As a result, in 2012 the IMF acknowledged that "creditor coordination and holdouts have not generally been a major problem (IMF 2012). "[c]reditor litigation in the context of bond restructurings has been rare, with the exception of Argentina (2005)…." (IMF 2013). [19] Between 1976 and 2010, only 30 of the 180 cases of sovereign debt restructuring with private creditors resulted in litigation.[20]

These obstacles and restrictions were highlighted by the Argentinian default in 2001 as overviewed in the next subsection. Argentina's non-exchanging creditors have failed to recover any meaningful assets through litigation in foreign courts.

2.2 Argentina's Negotiations with International Creditors

Our analysis is motivated by the recent wave of sovereign litigation, particularly against Argentina. Argentina has defaulted seven times on its external debt—in 1827, 1890, 1951, 1956, 1982, 1989, and 2001.[21] Argentina has also defaulted on its domestic debt four times.

Argentina's 2001 Sovereign Default. The last time Argentina defaulted on its external sovereign debt was in December 2001, after a prolonged period of economic crisis and political chaos. As part of the negotiations with the IMF to renew its financial assistance

[19] Shleifer (2003) and Roubini (2002) note that the "rouge-creditors" problem "has been vastly overstated" pointing to restructuring experiences such as those of Ecuador, Pakistan, Russia and Ukraine. See also Duggan and Oosterveld (2012).
[20] Panizza, Sturzenegger, and Zettelmeyer (2009) and Schumacher, Trebesch, and Enderlein (2014).
[21] Reinhart (2006). See also Rogoff and Reinhart (2006).

package, Argentina agreed to "engage in constructive negotiations with all representative creditor groups" and make an offer that "would attain broad support from creditors" (IMF 2004). The government also agreed to include a minimum participation threshold in its debt restructuring offer. This would give the country a strong incentive to negotiate with creditors and to avoid a piecemeal approach to restructuring.

However, and despite different objections, Argentina proceeded with an unilateral offer. In the end, 76% of the creditors accepted the offer. According to the IMF, Argentina failed to keep its agreement with the IMF "to establish a minimum participation threshold for the debt restructuring" (IMF 2006). The participation rate for all bonds held in Argentina was 98%, with 100% participation among banks and pension funds. The participation rate for bonds held by foreigners was 63.3%. The threshold significantly lagged behind the participation rates of other recent sovereign debt restructurings, which had achieved participation in the range of 93%–99% and, as a result, residual arrears were modest (see Table A.1). The IMF noted that the only other country that had a significant problem with holdout creditors, Dominica, worked constructively with individual creditors to convince them to accept its exchange offer (IMF 2012).

Yet this did not assuage bond bonders. NML Capital launched a decade-long, multi-pronged legal battle to reclaim the full value of their bond holdings under New York law.[22] Other investors sued as well (see Table A.1).

The Argentinian "authorities reiterated that they would not re-open the offer to accommodate non-participating creditors" (IMF 2005). In fact, they passed a law (known as the "Lock Law") that "limited the power of the executive to effect judicial or nonjudicial settlements with nonparticipating creditors or to re-open the debt exchange."[23] Argentina was warned that the Lock Law "might increase on the margins the government's vulnerability to

[22] See Alfaro and Vogel (2007).
[23] Staff Representative for the 2005 Consultation with Argentina.

legal challenge… [since the] holdouts will surely argue that the law amounts to a legal act formally subordinating the old debt to the new in violation of the *pari passu* undertakings in the old bonds" (Gelpern 2005).

All the same, in June 2010, Argentina re-opened its debt exchange in an attempt to settle with the remaining holdout bondholders from its 2001 default. Argentina's economic health had improved substantially since the 2001 crisis, and holdout creditors argued that reserves were more than ample enough for Argentina to repay its full debts (US$52.2 billion in 2010 compared with US$10.4 billion in 2002). The 2010 exchange consisted of two different offers: retail and small investors holding less than US$50,000 in defaulted bonds were issued par bonds equivalent to the face value of the original bonds, while institutional investors were offered a discounted bond at a 66.3% reduction from the original bond value. Ultimately, 67.7% of the holdout investors accepted the second bond offer, raising the overall participation rate to 91.3%.

After the 2010 bond exchange, Argentina still owed US$11.2 billion to holdout investors, and the nation faced the question of how to eliminate these debts. The IMF stated that the case of the Argentinian holdouts was a cautionary tale for creditors litigating against sovereigns: "The long-running quest for assets by Argentina's 'vulture' creditors demonstrates the practical limits on litigating against sovereigns even where one has an enforceable judgment in hand" (IMF 2012). Similarly, Lee Buchheit of Cleary Gottlieb Steen & Hamilton has stated that in light of the Argentinian experience, "the markets now seem to believe that legal remedies alone are unlikely to be a satisfactory recourse for private sector debt holders, at least if the sovereign default is large enough or persists long enough," (Bucheit 2005). Moody's, in a recent report, stated that "the case of Argentina was and remains unique in its unilateral and coercive approach to the debt restructuring."[24]

[24] Elena Duggar and Cantor (2013).

Violation of Pari Passu. In December 2011, the Southern District Court of New York found that Argentina had violated the *pari passu* clause in its bond contract with holdout investors. *Pari passu* clauses are found in a variety of formulations in many sovereign bond contracts issued under foreign law.[25] In its ruling, the District Court argued that Argentina had not only formally subordinated the holdout creditors through legislation known as the "Lock Law"; Argentina had also violated the clause by choosing to pay interest on the restructured securities "while persisting in its refusal to pay" the holdout bondholders.[26]

And a couple of months later, on February 23, 2012, Judge Griesa backed up his order with a judicial punch by granting injunctive relief against Argentina.[27] The court required that "whenever the Republic [of Argentina] pays any amount due under the terms of the bonds… the Republic shall concurrently or in advance make a 'Ratable Payment' to NML."[28] That is, whenever Argentina made a payment to exchange bondholders, the Republic was required to pay NML the same fraction of the amount owed. Moreover, the order banned "all parties involved, directly or indirectly, in advising upon, preparing, processing, or facilitating any payment on the Exchange Bonds [from]… aiding and abetting this order."[29]

During the summer of 2012, Argentina appealed both the December 2011 and February 2012 orders. On October 26, 2012, the Second Circuit issued a preliminary ruling in support of Judge Griesa's decision, contending that support for both the narrow and wide interpretations of *pari passu* could be found in the two full sentences of the clause found in

[25] *Pari passu* clauses were generally not included in sovereign bond contracts issued under local law, which comprised a major portion of sovereign debt for most countries.
[26] The district court ordered payment to holdouts not because of one missed payment, but because of a persistent and ongoing refusal to comply with the Equal Treatment clause. Indeed, the district court only ordered equitable relief because of this ongoing refusal. See the district court orders from Dec 7, 2011 and early Jan 2012.
[27] By extending the order to include the trustee bank, clearing house, and brokers who facilitate Argentina's bond payments, Judge Griesa assured that his injunction would have effect, since institutions doing business in New York would not want to be in contempt of court.
[28] Order, *NML Capital v. Republic of Argentina,* No. 08-Civ-06978 (S.D.N.Y. Feb. 23, 2012).
[29] *NML Capital, Ltd. v. Republic of Argentina,* 699 F.3d 246, 255 (2d Cir. 2012).

the original bond contract.[30] Before issuing its final ruling, the Appeals Court remanded the case to Judge Griesa, who was asked to clarify how the payment formula under the injunction would work and how the injunctions would apply to third parties.

On November 21, 2012, Griesa clarified his earlier injunction, ordering Argentina to pay NML Capital and the other plaintiffs the full US$1.3 billion owed to them "concurrently or in advance of the payments on the Exchange Bonds." To ensure Argentina's compliance, all third parties involved in the bond re-payment process remained legally bound by the injunction's requirement that payments were to be made on the Exchange Bonds only if appropriate payments were made to plaintiffs. Argentina appealed.

On August 23, 2013, the Second Circuit Court of Appeals filed its final judgment in the *pari passu* case that Argentina had violated its bond contracts. However, the court agreed to delay the effect of the ruling and allow Argentina to file an appeal with the U.S.'s highest court. If the Supreme Court refused to hear the case, the stay would be lifted, and Argentina would have to decide whether to pay the plaintiffs or default on the holders of its performing bonds.

On September 6, 2013, Argentina filed its final petition with the Second Circuit, this time for an *en banc* review of the August 23, 2013 decision. On November 18, 2013, the court denied the petition, and Argentina was given 90 days to file an appeal with the Supreme Court. Argentina submitted its petition to the Supreme Court on February 18, 2014. On June 16, 2014, the Supreme Court announced that it would not hear Argentina's case, causing the Second Circuit's stay of the injunction to be lifted.

[30] The contract read: The Securities [i.e., the bonds] will constitute... direct, unconditional, unsecured and unsubordinated obligations of the Republic and shall at all times rank *pari passu* and 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 (as defined in this Agreement).

3 IMPLICATIONS AND POLICY CONCERNS

The role of the enforcement of sovereign debt in foreign courts opened an important debate.

a) *Positive Spillovers*

One argument is that litigation is simply requiring sovereigns to legally abide by its contracts. The IMF, for example, recognized that the threat of litigation is an important underpinning of the sovereign debt market: "Effective creditor enforcement supports a credit culture and increases the availability of credit to sovereigns. Litigation may also cause a recalcitrant sovereign debtor to acknowledge the extent of its financial difficulties and bring it to the negotiating table" (IMF 2004). Sovereigns would be more likely to engage in good faith negotiation to avoid hold out problems. If investors cannot collect against a uniquely intransigent and problematic debtor such as Argentina, then this suggests "the troubles afflicting sovereign-debt markets result from creditor rights being *too weak*, not too strong" (Shleifer 2003).

In practice, of course, foreign investors might reallocate their exposure in Latin America – and emerging markets more broadly – across multiple countries. Thus, if investors seek to maintain a constant exposure to Latin America, especially given the uncertainty that any litigation may induce, litigation *against* Argentina may make debt issued by other Latin American countries seem *relatively* more attractive. In effect, litigation can signal an increase in the relative likelihood of enforcement of sovereign debt in other countries. Thus, market participants may interpret litigation as a means to strengthen a sovereign government's willingness to pay in *non-litigated* countries. Litigation may therefore generate "positive spillovers."

b) Negative Spillovers

As mentioned, an alternative view is that litigation eliminates the incentive for creditors to voluntarily agree to future sovereign debt restructurings on the grounds that U.S. law could compel sovereigns to pay. If in some cases, restructuring is the only option available to a country facing an insolvency crisis, law and policy should promote equitable burden-sharing among the sovereign and all its creditors. As such, market participants might interpret litigation as a means to undermine a country's – especially those that are 'similar' (e.g., in investor asset classes) – capacity to pay and reduce the likelihood of a successful debt restructuring. Thus, litigation may generate "negative spillovers."

c) Neutral/Argentina Specific Effects

Different views sustained a more neutral perception. First, NML Capital's litigation strategy is unique because it was not financially viable for the vast majority of creditors to initiate a legal battle of similar magnitude. Investors still faced substantial hurdles in collected their legal claims.

Second, most bonds issued since 2003 had narrower *pari passu* language.[31] The majority of new bonds also contained collective action clauses (CAC), under which a majority of bondholders could agree to a bond restructuring that was legally binding for all other bondholders. Given the recent litigation involving Argentina, the international bond market evolved such that the majority of new bond offerings included CACs. However, the court's ruling would still affect older bonds without such clauses (most of these bonds were Brady bonds).

Third, Argentina represented a rare case, and the ramifications of the court's ruling would remain limited and the Court has explicitly mentioned that uniqueness of Argentina's

[31] See Duggar et al. (2013).

case. The Second Circuit classified Argentina as a "uniquely recalcitrant debtor." The Second Circuit had also stated in its October 2012 and August 2013 opinions that the liability and the remedy related only to the specific clause found in the original bond contract and Argentina's unique defiance of creditors. The district court's *pari passu* order granted relief because Argentina had sufficient sums to pay the judgment, distinguishing the decisions from other future cases where the sovereign may not be able to pay its obligations.

4 EMPIRICAL STRATEGY

4.1 Event study methodology

To better understand whether and how sovereign bonds "react" to litigation, we employ an event-study methodology to examine the reaction of investors to positive and negative news (see MacKinlay 1997 for a review). The method is used widely in empirical finance and is predicated on the common assumption that if capital markets are semi-strong efficient with respect to public information, asset prices will quickly adjust following an announcement (e.g., earnings statement, legal filing), incorporating any expected value changes. Optimally event windows over which news reactions are measured ought to be short so that other news about events does not contaminate the measurement of the market's reaction to the particular news event of interest.

We examine the abnormal return (in sovereign bonds) around various event windows surrounding publicly available litigation events. All returns are estimated using a symmetric corresponding day event window around the date of litigation. We calculate the mean cumulative return of the target bond price within the different windows of the announcement dates. Our estimation period is 280 days before and up until 30 days preceding the event date. Cumulative abnormal returns sum the abnormal returns over the event window.[32]

$$CAR_{it} = Constant + Country\ controls_{\ it} + e_{it} \qquad (1)$$

As equation (1) shows the basic regression specification regresses cumulative abnormal returns (CAR) of country *i* over the event window *t* on country-specific controls such as trade flows, debt to GDP, and the quality of governance. In these regressions, the constant term captures the impact of the litigation "event" on average abnormal returns. To account for potential serial correlation, we cluster the standard errors at the event level.

4.2 Data

Our data set on emerging market sovereign bonds are drawn from J.P. Morgan and consists of U.S. dollar denominated daily traded "EMBI (Emerging Markets Bond Index) plus" bond yields. The EMBI+ is the most closely watched indicators of emerging markets by market participants and have been widely used by researchers in previous work (e.g., Mauro et al 2002). We examine the available bond yields from December 1993 until March 2014 for Argentina, Brazil, Colombia, Ecuador, Mexico, Panama, Peru, and Venezuela. The market returns used in the benchmark estimations uses the composite Latin America EMBI+ index. Figure 1 plot the EMBI+ for Argentina and the composite index for Latin America. Perhaps one of the most challenging features in ascertaining the economic effects from sovereign debt litigation activity is *correctly* identifying the appropriate event dates. Since there is no central database documenting this legal history, we compiled our own original data set of the dates associated with case filings, settlements, and major decisions. We used the "Jury Verdicts, Settlements & Judgment" directory in the Lexis-Nexis Research Software

[32] We estimate abnormal returns using a market model with Scholes-Williams betas that make adjustments for the noise inherent in daily returns. In particular, nonsynchronous trading of securities introduces a potentially serious econometric problem of errors in variables to estimate the market model with daily returns data (Scholes and Williams 1977). To address this problem, Scholes-Williams betas provide computationally convenient and consistent estimators for the market model. Using a standardized value of the cumulative abnormal return, we test the null hypothesis that the return is equal to zero.

7.2 database and read through the relevant case histories to discern the case dates. Unfortunately, this database did not contain all the relevant dates. We therefore searched through the Westlaw database, the docket of the Second District Court of New York, and newspaper, law journal, academic, and policy (e.g., Singh 2003) articles to identify the remaining case dates.[33]

We identify and verify the dates – year, month, and day – for 199 cases filed against Argentina that correspond to 96 "unique events." (Table A.1 lists these lawsuits.) In our data, it was not uncommon to observe lawsuits filed by multiple parties on the same day and sometimes multiple filings by the same litigant (e.g., NML capital) on the same day. The typical litigant is an investment fund (about 90 percent of the sample), with the remaining 10 percent of cases involving firms in the insurance, oil, gas and other commercial sectors. The modal lawsuit involves one only named litigant, although 5 percent of cases have 6 or more parties (and one case has 21 parties). Most lawsuits (55 percent) involve multiple legal actions.

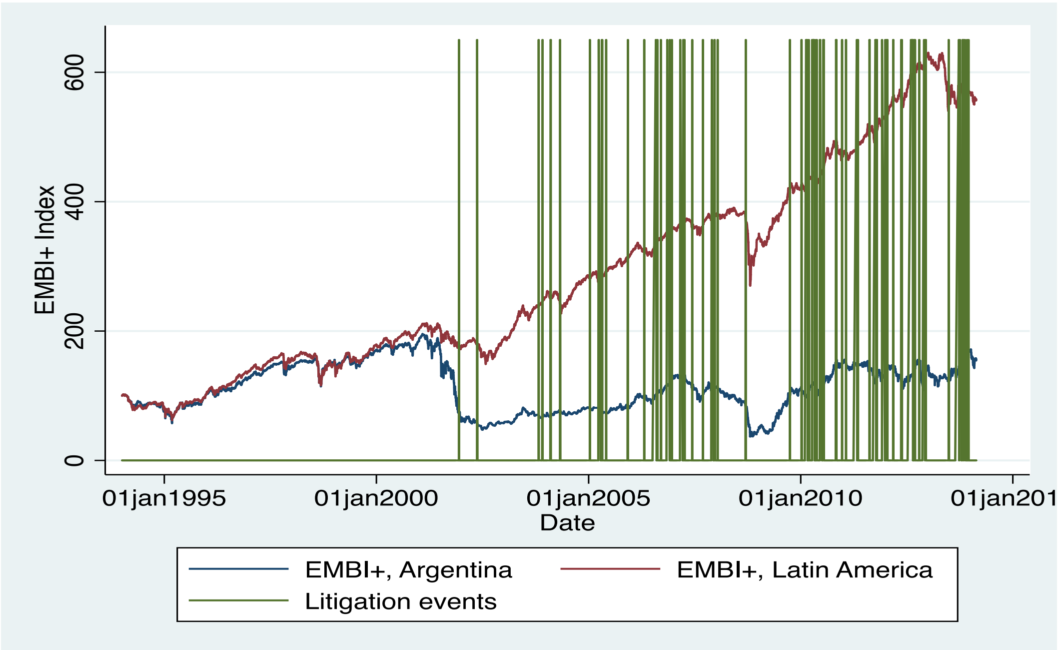
We plot these events with the EMBI+ total index for Latin America in figure 1. Since many cases were ongoing during our sample period, we believe the date of filing offers the best first-pass in evaluating the impact of sovereign litigation on investor perceptions on sovereign risk in the Latin American EMBI market. For these particular countries, these bonds have been the most widely documented cases in the existing literature and have received the most public media attention (Singh 2003; Sturzenegger and Zettelmeyer 2007; Ahmed, Alfaro and Mauer 2013; Schumacher, Tresbesch, and Enderlin 2014).

In our baseline specifications we control for country-specific economic (trade, debt) and political (ICRG composite index) factors that is available at highest frequency possible

[33] We were able to identify (and confirm) most of our dates in the Wall Street Journal and the New York Times.

(i.e., monthly). The economic and political data is drawn from the International Monetary Fund and Political Risk Services, respectively.

Figure 1: EMBI+ total indices for Argentina and Latin America (composite) and events

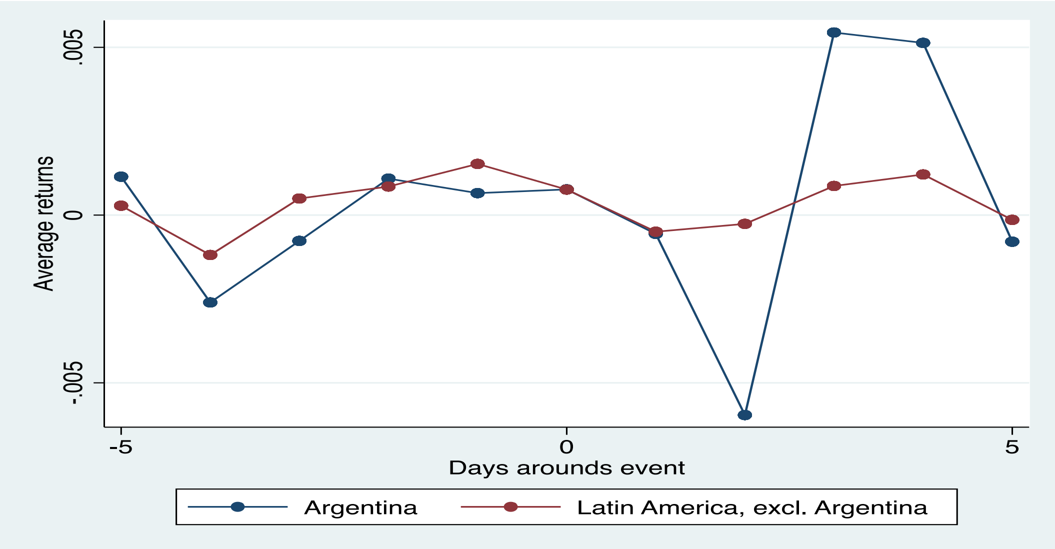


5 RESULTS

5.1. Trends

To motivate our analysis, in figure 2, we first plot the average raw return (across all events) surrounding the 5-day window for the Argentine and Latin American EMBI+ total index. Figure 2 shows that raw returns, on average, rebound in Argentina after a sharp decline in the first two days after a case filing. Across other Latin American countries, raw returns exhibit less dramatic changes in daily returns and tend to increase after 2-5 days after a case filing.

Figure 2: Average returns for Argentina and Latin America



5.2 The impact of litigation

Impact in Latin America. After Argentina defaulted on its debt in 2001 the vast majority (if not all) of court cases were filed against the Argentine government. To examine this further, we first evaluate the impact of these subsequent case filings on sovereign bond markets across Latin America.[34]

Table 1 reports the "average" effect for these case filings across for the 2-day event window. The table reports the cumulative abnormal returns across various samples of countries and regression models. We begin with the full sample of Latin American countries and control for their economic and political characteristics at the time of litigation event (column 1). Across Latin America, on average, the filing of a new case has a positive (=0.055) and highly statistically significant effect on abnormal returns. This positive effect is not influenced by any *specific* case filing, as the effect holds in a specification that controls

[34] As a first step, we examined returns surrounding the verdict in Elliot versus Peru on September 26, 2000. This event served as the first prominent decision in favor of "vulture" funds and ushered a subsequent rise in vulture fund initiated litigation in the 2000s, especially against Argentina. In Peru, the decision continued the pre-event downward movement in returns (i.e., negative daily changes), while in Argentina the decision contributed to an increase, at least for two days. A skeptical reader may argue that Elliot did not create a credible regime, but perhaps the cumulative of later court filings (and decisions) created a regime.

for the potential idiosyncratic effects associated *each* litigation event (using a "litigation fixed effect", see column 2). Together, the positive coefficient in columns 1 and 2 suggest that litigation might actually increase the perceived performance of EMBI+ bond indices, on average, across Latin America countries and thus decrease the perceived risk of sovereign default. Stating that litigation increases abnormal returns across *each* Latin American country, however, may be presumptive as this effect masks the differential effect of litigation on default risk in Argentina relative to other Latin American countries.

Table 1: Effect of litigation on cumulative abnormal returns

Sample:	Latin America		Argentina	Latin America, excl. Argentina	
	(1)	(2)	(3)	(4)	(5)
2 day window	0.055	0.044	-0.107	0.069	0.059
	(0.013)***	(0.014)***	(0.050)**	(0.014)***	(0.016)***
Country characteristics	Yes	Yes	Yes	Yes	Yes
Litigation fixed effects	No	Yes	No	No	Yes
R-squared	0.02	0.13	0.13	0.04	0.16
Number of observations	767	767	96	671	671

Notes: Robust standard errors, clustered by event in parentheses. *, **, *** = significant at 10%, 5%, 1% respectively. Every specification controls for monthly: imports (% GDP), total reserves (% GDP), and ICRG composite index. In column 3, the sample is restricted to abnormal returns in Argentina only. In columns 4 and 5, the sample is restricted to abnormal returns across all Latin American countries, excluding Argentina.

Evidence of spillovers. In column 3, we examine the effect of litigation on abnormal returns in Argentina *only*. The filing of a new case has a *negative* (= -0.107) and statistically significant effect on abnormal returns on Argentina's EMBI+. Interestingly, the effect of case filings tends to have countervailing effects on perceived sovereign bond performance risk in other Latin American countries (column 4). Whereas, lawsuits have a negative effect on cumulative abnormal returns in Argentina, they have the opposite (positive) effect on cumulative returns in other Latin American countries. Litigation against Argentina tends to generate a positive response in sovereign bond markets in the rest of Latin America. We interpret this to mean that litigation (against Argentina) constitutes a positive "spillover" in other Latin American countries.

This countervailing (positive) spillover effect holds when we control for the potential idiosyncratic effect of *each* individual case (with a fixed effect for each case filing, see column 5), as well in specifications that control for various case characteristics, such as the number of litigating parties, the type of plaintiff (e.g., law firm, hedge fund, banks, insurance company, and other corporations), and cases with multiple actions.[35] We also observe spillover effects for cases involving NML Capital *only,* as well in a sample restricted to case filings that *do not* involve NML Capital as a litigant (which comprise 59 out of our 96 litigation events)[36]. Thus, our findings are not driven by the subset of case filings involving NML Capital. Nor do the substantive findings change in relation to major restructuring events. [37] And, *by each* litigation event, we observe positive spillovers.[38] Finally, in related work, we also identify countervailing spillovers (associated with litigation against Argentina) using alternate measures of default risk (e.g., credit-default swaps on sovereign debt instruments) and on stock market performance in Brazil (Ahmed and Alfaro 2016).[39]

Major decisions. Our analysis thus far demonstrates that *case filings* generate strong countervailing effects in Argentina relative to the rest of Latin America. We also observe countervailing responses, albeit somewhat weaker (e.g., due in part to a smaller set of "events"), in response to major legal decisions pertaining to whether Argentina violated *pari*

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[35] These results are available upon request.

[36] This latter finding (of spillovers involving non-NML cases) differentiates our paper from Hubert and Schreger (2016), which examines market responses to cases involving NML Capital only.

[37] We observe spillovers in separate regressions (samples) associated case filings prior to 2005, between 2006-2010, and after 2010, as well following the first and second debt exchanges (after January 14 2005 and April 15 2010, respectively).

[38] To evaluate this, we estimate a regression for *each unique* litigation event for the sample of Latin American countries (excluding Argentina). Thus, in total we estimate 96 regressions. The average effect (i.e., the constant from each regression) across these regressions is positive and exhibits a positive trend over time. That is, each *successive* litigation event tends to generate a positive effect on the 2-day abnormal return.

[39] Ahmed and Alfaro (2016) also identify potential channels through which spillovers are transmitted.

passu. In particular, we focus on market reactions to key decisions issued by Judge Griesa, the Second District Court of Appeals, and the U.S. Supreme Court (as we described in section 2).[40] We present these findings graphically in figure 3.

Figure 3: Average returns for Argentina and Latin America around major decisions

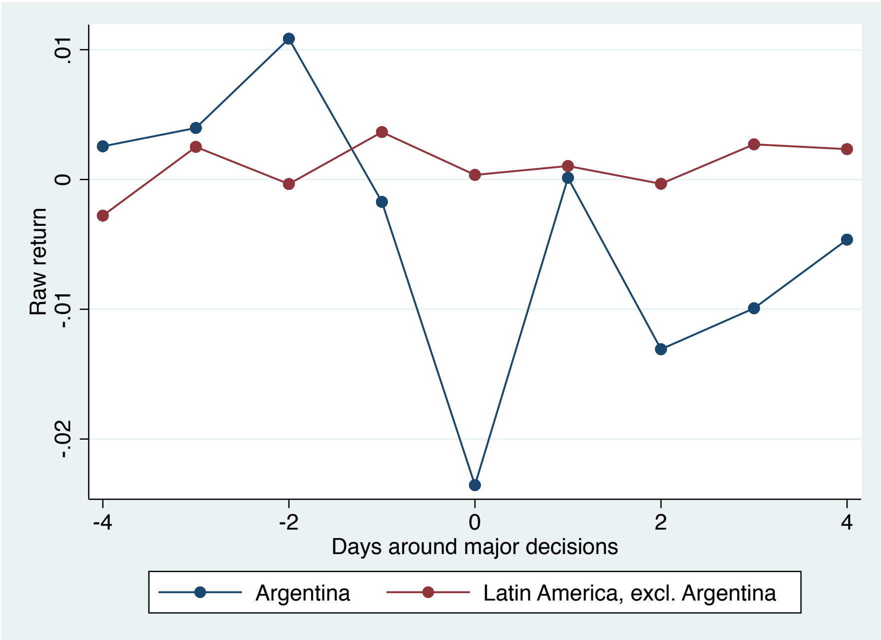

Figure 3 plots the average daily return in the EMBI+ in the 4 days before and after each decision.[41] In Argentina, the market reacts negatively to a decision as returns tend to be negative (on average) in the 4-day event window. In contrast, bond markets across to the rest of Latin America are not adversely affected after a major decision. On average, daily returns stay relatively constant after a legal decision involving Argentina. The trends in Figure 3

[40] These decisions are: Judge Griesa's finding that Argentina violates *pari passu* (December 7, 2011) and granting of injunctive relief against Argentina (February 23, 2012); the 2nd Circuit's primary ruling affirming Griesa's decision (October 26, 2012); Judge Griesa's order that Argentina compensate NML Capital and other plantiffs (November 21, 2012); the 2nd Circuit's final judgment that Argentina violated *pari passu* (August 23, 2013); and finally, the U.S. Supreme Court's ruling not to hear Argentina's case (June 16, 2014).

[41] Since decisions are not truly "exogenous" (i.e., since courts often indicate when a decision will be rendered), market participants might anticipate the outcome in the days before the likely decision date. Hence, we might observe *pre*-decision movements in returns.

corroborate our main finding that bond markets exhibit countervailing reactions to legal decisions in Argentina compared to the rest of Latin America.

6 IMPLICATIONS

The recent wave of litigation against sovereigns, in particular against Argentina, has generated substantial scholarly and policy interest (e.g., among legal scholars, international economists, policymakers at the IMF, World Bank, and within national governments). Much of this interest has centered on discerning the potential implications of litigation on current and future debt restructuring to the direct countries involved (or potentially involved in the future). That is, the arguments used in favor or against have largely focused on the direct benefits or costs to the litigated country and ignored any externalities on other countries. As we argue, the theoretical expectations are not clear ex-ante, as litigation may generate positive, negative, and/or neutral effects. Given these uncertain expectations, better understanding the effects of sovereign litigation on debt restructuring (and more broadly for sovereign borrowing), therefore, requires empirical scrutiny.

In this paper we do so by empirically evaluating the impact of sovereign litigation on sovereign debt markets in Argentina and neighboring countries (the rest of Latin America). Using an event-study methodology (that is prevalent in finance), we provide robust statistical evidence that litigation against Argentina has a negative effect on cumulative abnormal returns on Argentine sovereign bonds, but has the opposite effect in other Latin American countries. Our findings suggest that the presence of countervailing "spillover" effects in these neighboring countries.

The presence of these countervailing effects implies that market participants interpret litigation in different ways. In particular, investors seem to consider the effects of the enforceability of contracts to affect countries differently. For the country attempting to restructure its sovereign debt (or avoid payment), litigation generates a negative reaction from market participants. This adverse reaction may be due to short-term economic consequences in the litigated country, such as reductions in cross-border trade, loss of access to international credit markets, and lower performance in equities (Schumacher et al 2014; Hebert and Schreger 2015); all of which reduces economic activity (e.g., via the collection of sales and income taxes or the need to increase them further). To mitigate these adverse effects, market participants may therefore view litigation as drastically improving the enforceability of contracts and forcing countries to repay. Thus, litigation has a negative effect in the distressed country.

Yet in other neighboring countries, we document that market participants view litigation more favorably; litigation generates a positive return on sovereign debt instruments in these countries. This positive effect is *not* due to the release of "new" economic news (e.g., higher GDP growth, lower unemployment, etc.) that would influence investor perceptions about a country's future (good) economic performance. Rather, litigation affects investor perceptions about a sovereign's *willingness to pay* to its external obligations. In particular, market participants view litigation as strengthening creditor rights and contract enforcement in other countries. Thus, litigation generates "positive spillovers."

These countervailing effects point to a nuanced impact of litigation on sovereign debt markets. On the one hand, economists and policymakers are correct; litigation can generate negative market reactions by casting doubt on the enforcement of contracts and (at least in expectation) prolonging the restructuring process. Yet, on the other hand, lawyers are correct; litigation can generate positive effects by incentivizing governments to meet their external – and contractual – debt obligations. Our empirical findings show that whether litigation generates negative or positive effects depends on whether that country is a party to the case. Consequently, in evaluating the "net" welfare effects, our findings suggest that litigation has relatively limited negative effects (confined to the litigated country) and the effects on the broader international financial infrastructure are rather benign.

That said, our findings do offer broader substantive economic and legal implications. First, the existence of *any* market reaction to *new* case filings implies that litigation still tends to generate a lot of uncertainty in financial markets; and this uncertainty can be economically costly as demonstrated by Hebert and Schreger (2015). While it is not particularly surprising that financial markets would react to the 'novelty' of the first few "vulture" cases (i.e., those filed in the early 2000s), it is surprising that subsequent case filings, especially those after 2010, still generate market reactions. This suggests that the filing of new cases *does* reveal new information to market participants. And this new information tends to generate differential effects for the country that is a party to the lawsuit (negative effect) and those that are not (positive effect).

Second, despite the efforts to write contract clauses to establish greater credibility in the enforceability on sovereign bond issues (e.g., by specifying the conditions for *pari passu*), these efforts have largely been ineffective, at least in reducing uncertainty among market participants in the debt restructuring process. These clauses do not seem to offer much credibility; and if anything, as our results show, tend to complicate the renegotiation process and generate non-trivial uncertainty in international financial markets. Indeed, that the filing of new cases – often based on "new" legal arguments – illustrates the futility of writing contracts to account for different "states" of the world. Beyond problems of incomplete contracting, these clauses cannot be effectively enforced. Given this, and the unlikelihood of returning to world that ensures sovereign immunity, it might be prudent for lawyers to retreat from writing these types of clauses in sovereign debt contracts. Of course, our findings may be particular to litigation against Argentina; although, Argentina has faced the most "vulture" litigation to date. Indeed, despite a December 2016 ruling by Judge Griesa limiting the applicability of earlier *pari passu* decisions against Argentina[42], we encourage future research to evaluate whether sovereign litigation faced by both developed (e.g., Ireland) and developing (e.g., Zambia) countries generates spillover effects as well.[43]

Notwithstanding our findings, and the lack of consensus on how to reform the international financial architecture, a coordinated international approach might be warranted since it is not clear that courts in "rich" countries should be making decisions about which defaults are allowable and which are not due to capacity versus willingness to pay problems. It is difficult to keep politics out of the decision, which has also led to Europe and the United States tending to take an ambiguous/ambivalent approach to the problem of attachment.

[42] Sullivan and Cromwell LLC, 12/29/16. "District Court Opinion Limits the Applicability of Previous *Pari Passu* Decisions in the Argentine Debt Litigation", Accessed: January 15, 2017. Available: https://www.sullcrom.com/siteFiles/Publications/SC_Publication_Sovereign_Debt_Litigation_12_29_16.pdf

[43] At least twenty heavily indebted poor countries have been threatened with or have been subjected to legal actions by commercial creditors and vulture funds since 1999 including Sierra Leone by Greganti Secondo and ARCADE, and by Industrie Biscoti against Cote d'Ivoire and Burkina Faso. Other countries that have been targeted include Angola, Cameroon, Congo, Democratic Republic of the Congo, Ethiopia, Liberia, Madagascar, Mozambique, Niger, Sao Tome and Principe, Tanzania, and Uganda.

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DATA APPENDIX

Table A.1: Litigation against Argentina

Name of plaintiff	Type	Filed
GMO	fund	12/12/01
Lightwater Corporation	fund	5/17/02
Old Castle Holdings, Ltd.	fund	5/17/02
Latinburg S.A.	fund	10/29/03
Denchu Invest. Corp.	fund	12/1/03
Million Air Corp	other commercial	2/9/04
NML Capital, Ltd.	fund	2/10/04
Mazoral. S.A.	fund	4/30/04
Banca Arner S.A.	bank	1/12/05
FFI Fund Ltd., et al.	fund	3/29/05
Capital Ventures Int'l	fund	4/25/05
Greylock	fund	4/28/05
Montreux Partners, L.P.	fund	4/28/05
Meridian Invest. & Bus. Corp.	fund	6/1/05
Los Angeles Capital	fund	12/5/05
Bliway Int'l S.A.	fund	4/25/06
Cordoba Capital	fund	8/3/06
Teachers Ins. And Annuity Ass'n of America	insurance	8/16/06
Ivelo Holding Corp.	fund	9/15/06
Vegas Game Import/Export S.A.S.	fund	11/9/06
Claren Corp.	fund	12/1/06
Capital Markets Financial Services	fund	12/19/06
Caronte Ltd.,S.A.	fund	12/19/06
Wilton Capital	fund	3/1/07
Macrotecnic Int'l Corp.	fund	3/27/07
Aurelius	fund	4/3/07
Dralli LLC et al.	fund	4/6/07
Andrarex Ltd.	fund	6/12/07
Banca Nazionale Del Lavoro	bank	9/12/07
HWB Victoria Strategies Portfolio, et al.	fund	11/28/07
Gramercy	fund	12/21/07
Zylberberg Fein LLC	fund	12/21/07
Amber Reed Corp., et al.	fund	1/17/08
EM Ltd.	fund	9/15/08
Drawrah Ltd.	fund	9/30/09
Blue Ridge Investments, L.L.C.	fund	1/8/10
Applestein TTEE FBO D.C.A. Grantor Trust, et al.	fund	2/16/10
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	2/26/10
Aurelius Capital Partners, LP, Aurelius Capital Master, Ltd., Blue Angel Capital I LLC and ACP Master Ltd.	funds	3/11/10
Blue Angel Capital I LLC	fund	3/11/10
Aurelius Capital Master, Ltd. and ACP Master Ltd.	funds	3/11/10
Aurelius Capital Partners, LP, Aurelius Capital Master, Ltd., Blue Angel Captial I LLC and ACP Master, Ltd.	funds	3/11/10

Aurelius Capital Partners, LP, Aurelius Capital Master, Ltd. and Blue Angel Captial I LLC	funds	3/11/10
Aurelius Capital Partners LP, Aurelius Capital Master LTD, ACP Master Ltd., Blue Angel Capital 1 LLC and Aurelius Opportunities Fund II LLC	funds	4/9/10
EM Ltd. and NML Capital, Ltd.	fund	4/20/10
EM Ltd. and NML Capital, Ltd.	fund	4/21/10
NML Capital, Ltd.	fund	4/21/10
EM Ltd. and NML Capital, Ltd.	fund	4/21/10
EM Ltd.	fund	4/21/10
NML Capital, Ltd.	fund	4/22/10
EM Ltd. and NML Capital, Ltd.	funds	4/22/10
EM Ltd.	fund	4/22/10
EM Ltd. and NML Capital, Ltd.	funds	4/22/10
EM Ltd. and NML Capital, Ltd.	funds	4/22/10
Aurelius Opportunities Fund II, LLC and Aurelius Capital Master, Ltd.	funds	4/27/10
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	5/13/10
Blue Angel Capital I LLC	fund	5/19/10
NW Global Strategy, et at.	fund	6/15/10
Blue Angel Capital I LLC	fund	6/18/10
EM Limited	fund	7/14/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/16/10
EM Ltd.	fund	7/16/10
EM Ltd. and NML Capital, Ltd.	funds	7/16/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/16/10
NML Capital, Ltd.	fund	7/19/10
NML Capital, Ltd.	fund	7/19/10
NML Capital, Ltd.	fund	7/19/10
NML Capital, Ltd.	fund	11/1/10
EM Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
EM Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
EM Ltd.	fund	11/2/10
NML Capital, Ltd.	fund	11/2/10
Capital Ventures International	fund	11/3/10
Capital Ventures International	fund	11/4/10
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	fund	11/4/10

Abel Amoroso, Andrea Paleari, Gamatown Corporation S.A., Norfolk Investment Trade Co. Ltd., Eduardo Raul Garrido, Claudia Beatriz Rizzo and Ignacio Eduardo Garrido Rizzo	funds and individuals	11/4/10
Olifant Fund Ltd	fund	12/23/10
Blue Angel Capital I LLC	fund	12/24/10
ARTAL Alternative Treasury Management	fund	12/25/10
Hillside Ltd.	fund	12/26/10
NML Capital, Ltd.	fund	1/26/11
Silvia Seijas, Heather M. Munton, Thomas L. Pico Estrada, Emilio Romano, Ruben Weiszman, Anibal Campo, Maria Copati, Cesar Raul Castro, Hickory Securities Ltd., Elizabeth Andrea Azza, Claudia Florencia Valls, Rodolfo Vogelbaum, Eduardo Puricelli and Ruben Daniel Chorny	company and individuals	4/29/11
NML Capital, Ltd.	fund	5/5/11
NML Capital, Ltd.	fund	5/9/11
Hickory Securities Ltd.	fund	8/16/11
Elizabeth Andrea Azza, Claudia Florencia Valls and Hickory Securities, Ltd.	individual and company	8/17/11
Elizabeth Andrea Azza, Rodolfo Vogelbaum and Hickory Securities, Ltd.	individual and company	8/17/11
NML Capital, Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/6/11
EM Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/6/11
NML Capital, Ltd.	fund	10/7/11
NML Capital, Ltd.	fund	10/7/11
EM Ltd.	fund	10/11/11
NML Capital, Ltd.	fund	10/17/11
EM Ltd.	fund	10/17/11
NML Capital, Ltd.	fund	10/17/11
NML Capital, Ltd.	fund	10/17/11
NML Capital, Ltd.	fund	10/18/11
NML Capital, Ltd.	fund	10/18/11
NML Capital, Ltd.	fund	10/18/11
NML Capital, Ltd.	fund	10/18/11
EM Ltd.	fund	10/18/11
NML Capital, Ltd.	fund	10/19/11
NML Capital, Ltd.	fund	10/19/11
VR Global Partners, LP	fund	12/2/11
VR Global Partners, LP	fund	12/30/11
NML Capital, Ltd.	fund	1/12/12
NML Capital, Ltd.	fund	1/12/12
NML Capital, Ltd.	fund	1/12/12
Aurelius Opportunities Fund II, LLC and Aurelius Capital Master, Ltd.	funds	1/13/12
Aurelius Capital Master, Limited and Aurelius Opportunities Fund II, LLC	funds	1/13/12

Aurelius Capital Master, Limited and Aurelius Opportunities Fund II, LLC	funds	1/13/12
Blue Angel Capital I LLC	fund	1/13/12
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	1/13/12
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	1/13/12
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	1/17/12
Ble Angel Capital I LLC	fund	1/17/12
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	3/7/12
NML Capital, Ltd.	fund	3/7/12
NML Capital, Limited	fund	3/7/12
Blue Angel Capital I LLC	fund	3/7/12
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	3/7/12
Blue Angel Capital I LLC	fund	3/7/12
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	3/7/12
Olifant Fund, LTD.	fund	3/7/12
NML Capital, Ltd.	fund	3/7/12
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	3/8/12
Aurelius Opportunities Fund II, LLC and Aurelius Capital Master, Ltd.	funds	3/8/12
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	3/8/12
Repsol YPF, S.A. and Texas Yale Capital Corp.	oil and gas company, fund	5/15/12
Repsol YPF, S.A.	oil and gas company	5/21/12
NML Capital, Ltd.	fund	8/7/12
NML Capital, Ltd.	fund	8/16/12
NML Capital, Ltd. (interested party: ConocoPhillips Company)	fund	8/17/12
NML Capital, Ltd. (interested party: ExxonMobil Corporation)	fund	8/21/12
NML Capital, Ltd.	fund	8/23/12
NML Capital, Ltd.	fund	9/6/12
NML Capital, Ltd.	fund	9/7/12
NML Capital, Ltd.	fund	9/11/12
Blue Ridge Investments, L.L.C.	fund	10/17/12
NML Capital, Ltd.	fund	11/28/12
NML Capital, Ltd.	fund	12/7/12
NML Capital, Ltd.	fund	12/12/12
NML CAPITAL, LTD.	fund	12/13/12
NML Capital, LTD. (movant: Dow Chemical)	fund	6/28/13
Repsol YPF, S.A.	fund	9/23/13
EM Ltd. and NML Capital, Ltd.	funds	10/3/13
EM Ltd. and NML Capital, Ltd.	funds	10/3/13
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	10/25/13
Blue Angel Capital I LLC	fund	10/25/13
NML Capital, Ltd. and EM Ltd.	funds	10/25/13
NML Capital, Ltd.	fund	10/25/13
EM Ltd.	fund	10/25/13
NML Capital, Ltd.	fund	10/25/13
NML Capital, Ltd. (Intervenor: Bank of America, N.A.)	fund	10/25/13

Blue Angel Capital I LLC	fund	10/25/13
NML Capital, Ltd. (Intervenor: Bank of America, N.A.)	fund	10/25/13
NML Capital, Ltd. (Intervenor: Bank of America, N.A.)	fund	10/25/13
NML Capital, Ltd.	fund	10/25/13
NML Capital, Ltd.	fund	10/25/13
Aurelius Opportunities Fund II, LLC and Aurelius Capital Master, Ltd.	funds	10/25/13
Blue Angel Capital I LLC and NML Capital, Ltd.	funds	10/25/13
NML Capital, Ltd.	fund	10/25/13
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	10/25/13
NML Capital, Ltd.	fund	10/25/13
Blue Angel Captial I LLC	fund	10/25/13
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	10/25/13
NML Capital, Ltd.	fund	10/25/13
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	10/25/13
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	10/28/13
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	11/4/13
Aurelius Opportunities Fund II, LLC and Aurelius Capital Master, Ltd.	funds	11/4/13
Blue Angel Capital I LLC	fund	11/4/13
Aurelius Capital Master, Ltd. and Aurelius Opportunities Fund II, LLC	funds	11/4/13
NML Capital, Ltd.	fund	11/4/13
Olifant Fund, LTD.	fund	11/4/13
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	11/4/13
Aurelius Capital Master, Ltd. and ACP Master, Ltd.	funds	11/5/13
Blue Angel Capital I LLC	fund	11/5/13
NML Capital, Ltd.	fund	11/15/13
Tortus Capital Master Fund, LP	fund	12/3/13
NW Global Strategy, Ofelia Nelida Garcia and Ricardo Pons	fund and individuals	12/16/13