

Gunboats and Vultures: Market Reaction to the “Enforcement” of Sovereign Debt

Laura Alfaro
HBS and NBER

Noel Maurer
HBS

Faisal Ahmed
University of Chicago

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“When people ask me what I mean by stable government, I tell them, ‘money at six percent.’”

—General Leonard Wood

“We particularly condemn the perversity where vulture funds purchase debt at a reduced price and make a profit from suing the debtor country to recover the full amount owed — a morally outrageous outcome.”

—Prime Minister Gordon Brown

Three things are eternal: death, taxes, and sovereign default. The latter is particularly surprising in light of the fact that creditors continue to provide billions of dollars — more than \$130 billion in 2005¹ — of credits to the governments of developing countries, despite a long and dolorous history of sovereign default. Why do creditors continue to believe that sovereigns will repay their debts?² One might imagine that the threat of losing access to future credit might be enough to discourage default, but there are ample theoretical and empirical reasons to believe otherwise.³ Studies have found that investors do not deny credit to governments with a history of default, and the interest rate penalties which do arise are not sufficient to induce repayment. Current participants in the sovereign debt market confirm these observations: for them, “The markets have short memories” is practically a truism.⁴ Inasmuch as countries do repay their debts, it appears to be due either to their domestic political institutions (a hard thing to replicate) or the high output cost of defaulting.⁵

¹ World Bank, *Global Development Finance*.

² For overviews of the literature see Eaton, J. and R. Fernandez, “Sovereign Debt,” in *Handbook of International Economics* Vol. 3, (Amsterdam, New York and Oxford: Elsevier, North-Holland, 1995) edited by Gene Grossman and Kenneth Rogoff, pp. 2031-2077; Kletzer, K. 1994. “Sovereign Immunity and International Lending,” in *The Handbook of International Macroeconomics*, edited by Frederick van der Ploeg, United Kingdom: Basil Blackwell Publisher.

³ Alfaro and Kanczuk (2005) show that the interest rate penalties that actually materialize following default are not nearly enough punishment to cause countries to repay their debts and find that find that additional output costs of defaulting in line with are necessary to sustain the debt levels observed in emerging markets even in a model of contingent services. Alfaro, L., and F. Kanczuk, “Sovereign Debt as a Contingent Claim: A Quantitative Approach,” *Journal of International Economics* 65, no. 2 (2005): 297-314.

⁴ Lots and lots of cites here. [COMPLETE]

⁵ Alfaro and Kanczuk (2005).

In a world where markets have short memories, can sanctions play a role in improving *sovereign* debt markets? Legal sanctions, of course, play a key role in sustaining *private* debt markets. Defaulters face the threat of seizures or garnishments unless they can meet specific bankruptcy criteria. The possibility of sanctions makes debtors less likely to default, which has the salubrious effect of reducing the cost of capital and increasing the volume of lending. Sovereign governments are free, however, from any sort of supranational authority that might enforce debt contracts. In theory, however, applying sanctions to governments should decrease the perceived risk of lending to them, and therefore increase lending. In practice, sanctions against nominally-independent debtor governments appear to have played a role in sustaining sovereign debt markets before 1913. Mitchener and Weidenmeir, for example, found that between 1870 and 1913 defaulting governments ran *40 percent* chance of facing foreign intervention, either via gunboat-enforced blockades or, more commonly, the imposition of foreign control over their domestic finances under the *threat* of blockade.⁶ In the modern period, defaults are associated with declines in trade and output, but these do not appear to be the result of any deliberate policy by lenders. Rather, they are a haphazard and disorganized negative side-effect of default.⁷ A better-designed debt enforcement regime, therefore, hold out the possibility of making sovereign default more rare and less costly.⁸

This paper compares the effects on market expectations of a strong debt-enforcement regime at the beginning of the 20th century with the effects of a kinder, gentler private attempt to use U.S. and E.U. courts to recreate such a regime at the beginning of the 21st. Between 1905 and 1929, the United States imposed a debt-enforcement regime on Latin America. During this epoch of “dollar diplomacy,” the U.S. took control over the customhouses of the Dominican Republic, Haiti, and Nicaragua; conducted military interventions designed to stabilize governments (and insure the continuous repayment of obligations) in Cuba, the Dominican Republic, Haiti, Honduras, Mexico, Nicaragua, and Panama; and imposed American financial supervision or clauses calling for intervention in the event of default in Bolivia, Costa Rica, Ecuador, Peru,

⁶ Kris Mitchener and Marc Weidenmier, “Supersanctions and Sovereign Debt Repayment,” NBER Working Paper 11472, June 2005.

⁷ Alfaro and Kanczuk (2005).

⁸ Martinez and Sandleris have contested this result on two grounds: first, the mechanism causing the trade decline is hard to find, since no countries make sanctioning debtors a deliberate policy; and second, their interpretation of the data indicates that all trade with all countries declines after a default. ADD EXACT CITES

and Panama. The U.S. aimed to create a *stable* international regime: that is to say, the goal was the elimination of sovereign defaults rather than a continuing series of interventions.

Today, the so-called “vulture funds” have attempted to create a similar debt-enforcement regime. More properly known as “distressed funds,” vultures have taken advantage of legal changes that greatly weakened sovereign immunity for creditor countries in America and Europe.⁹ The way the vulture funds use the courts is as follows. The vultures first purchase defaulted sovereign debt on the open market. They then sue the defaulting governments. If successful, American and European enforce their decisions by attaching government revenues or other payments that pass through the U.S. or Europe, in effect imposing a “virtual blockade” that is very difficult for defaulting countries to avoid without incurring very high costs. In one infamous case, vulture funds attempted to attach VAT payments and landing fees from U.S.-based airlines to the government of Nicaragua, but vultures have also gone after oil sales, privatization revenues, and other financial flows passing through American and European payments systems.

Virtual blockades, in theory, can be serious indeed. In fact, the punishment from attachment can far exceed the monetary value of the attachments. In Peru, for example, the vultures went after the country’s interest payments on its Brady bonds. Had these payments been attached to pay the vultures, Peru’s Brady bonds would have gone into default. Why would the Peruvian government fear a default on its Brady bonds when it was already in default on so many other securities? The reason is that a default on Brady bonds would have made it impossible for privately-managed mutual funds to invest in any sort of Peruvian security under U.S. law — which would have forced fire sales of Peruvian securities of all sorts and prompted a severe financial crisis. This would have been quite a punishment from a virtual blockade.

The vultures have attracted a great deal of opprobrium for “taking advantage” of poor countries, given the limited capacity-to-pay of such countries. Activists, NGOs, journalists, and the Prime Minister of the United Kingdom have condemned the vultures for taking ad-

⁹ See Rogoff, K. and J. Zettelmeyer, 2002, “Bankruptcy Procedures for Sovereigns: A History of Ideas, 1976-2001,” IMF Staff Papers 49, 470—507; Alfaro, L. and I. Vogel. “Creditor Activism in Sovereign Debt: “Vulture” Tactics or Market Backbone?” Harvard Business School Case No. 706-057 (2007); Sturzenegger, F. and J. Zettelmeyer (2007), *Debt Defaults and Lessons from a Decade*, MIT Press.

vantage of poor countries. In Gordon Brown's words, "We particularly condemn the perversity where vulture funds purchase debt at a reduced price and make a profit from suing the debtor country to recover the full amount owed - a morally outrageous outcome." A more sophisticated critique has emerged from the IMF and World Bank: the vultures interfere with the orderly restructuring of sovereign debt.¹⁰ The reason is that the hope of legal restitution (via a "virtual blockade") provides the owners of defaulted debt with an incentive to hold-out and refuse to participate in the restructuring. In addition, if debtholders fear that some small subset of them — the vultures — may succeed in getting a claim on the debtor government's resources with a higher priority than their own. As a result, debtholders will fear that nothing will be left for them after the vultures receive their share. Debtholders will therefore be more likely to "run for the exits" and sell their debt holdings in the event of a crisis. "Running for the exits," however, will cause the interest rates faced by the borrower to rise, further decreasing the probability of repayment.

Vultures also have their defenders. In this view, the threat of successful litigation helps maintain the viability of sovereign debt markets by reinforcing creditor rights.¹¹ The vultures provide a market for otherwise illiquid assets. They make lending to developing country governments cheaper by increasing the sanctions such governments face in the event of default. Vulture fund managers believe that they provide a critical check on "willingness to pay" constraint on debt repayments. Jay Newman, for example, is clear that his fund does not go after countries that truly cannot pay, but corrupt, deadbeat countries that are "dragging our legal system down by disregarding the rule of law."¹²

The vultures depend on rich-country laws that allow countries to waive sovereign immunity for debt contracts, and on the willingness of the rich-country governments to allow for the imposition of virtual blockades. Vulture opponents are trying to change those laws, with the support of several rich-country governments. Vulture supporters, on the other hand, favor

¹⁰ Anne Krueger, "New Approaches to Sovereign Debt Restructuring: An Update on Our Thinking," speech delivered at International Monetary Fund Conference on "Sovereign Debt Workouts: Hopes and Hazards" Institute for International Economics, Washington DC, April 1, 2002, available at <http://www.imf.org/external/np/speeches/2002/040102.htm>, accessed October 24, 2006

¹¹ See Scott (2006). Hal S. Scott, 2006. "Sovereign Debt Defaults: Cry for the United States, Not Argentina," Washington Legal Foundation, Critical Legal Issues, Working Paper Series No. 140, September.

¹² Bosco, p. 38.

strengthening the ability of private creditors to sue sovereign governments and make good on their claims via the imposition of a virtual blockade.

Absent in this debate are two clear questions. First, are the vultures effective? In other words, is the *threat* of a virtual blockade increase sovereign incentive to repay enough to increase investor confidence in the security of sovereign debt? If the vultures *decrease* investor confidence in a large and sustained way, then their opponents have a strong argument that the vultures interfere with sovereign debt restructurings and their activities should be curtailed. On the other hand, if the vultures do not matter, then their opponents are making a mountain out of a molehill.

Second, if vultures do increase investor confidence, against what do we benchmark them? That is, even if the vultures are effective at increasing market perceptions about the security of sovereign debt, one might still argue that the world needs more of this good thing. Legal and policy reforms that allow for even stronger debt enforcement might further increase investor perceptions of security and by extension further lower the cost of capital faced by developing country governments. On the other hand, in the absence of evidence about the effectiveness of stronger debt-enforcement regimes, this may be nothing more than a nirvana thesis.

We therefore benchmark the vultures against the dollar diplomacy of the early 20th century. We begin by following Mitchener and Weidenmeir's study of the declaration of the Roosevelt Corollary, and compare the effect of the beginning of both the dollar diplomacy and the vulture regimes. Did the initial action that started each regime — Teddy Roosevelt's action to stabilize the Dominican Republic in 1905 and Elliott Associates suit against Perú in 1993 — generate a large and sustained drop in investor perceptions of the risk of Latin American sovereign debt? (For comparison's sake, we limit our study to Latin American issues.) In order to determine whether the initial event created a regime, we examine the effect on investor perceptions regarding issues *other* than those of the intervened country. That is, we want to know whether the initial event changed investor expectations about sovereign debt in general.

We then examine the effect of later interventions. (In the dollar-diplomacy regime, interventions are U.S. actions to stabilize governments or take control of their finances. In the vulture regime, interventions are decisions by American or European courts to attach fund flows to

sovereign debtors.) In an effective and credible debt-enforcement regime, later interventions should reveal unanticipated information. That is, the fact the U.S. *needed* to intervene in one country should reveal negative political and economic information to investors. After all, in a perfect regime, no intervention should be necessary beyond the first one. If the regime retains its credibility, however, then the negative effect of later interventions should be short-lived as investors regain their confidence that the regime can cope with the shock. In a credible debt-enforcement regime, therefore, investor expectations of repayment should improve markedly and sustainedly when the regime begins, and later interventions should produce small and short-lived drops in investor expectation when negative information is revealed.

In an effective but non-credible debt-enforcement regime, the first intervention should produce a small and short-lived positive effect. Investors will take the fact of a successful intervention or attachment as a sign that the probability of repayment has risen, but much uncertainty should remain about the effects of later interventions. Later interventions should have the same effect as the initial one.

In an *ineffective* but credible debt-enforcement regime, investors should react *negatively* to successful interventions. That is, the regime should provoke a “run for the exits” not just for the intervened country’s debt but for all sovereign debt subject to the regime.

Finally, in an ineffective and non-credible regime, interventions should have no discernable effect on investor perceptions. If interventions are ineffective at raising the probability of repayment and non-credible in their effects, then they reveal no information and will be ignored.

We find that dollar diplomacy created an effective and credible regime. In line with the results from Mitchener and Weidenmeir, the initial intervention under the regime generated a large and sustained fall in investor perceptions of the default risk of the bonds of the Latin American countries subject to the regime. This drop in default risk was sustained until the late 1920s, despite statements by the U.S. government that it intended to get out of the debt-enforcement business.

Vultures, conversely, do not appear to have created a credible debt-enforcement regime. Most of our specifications show no effect, although we have been able to find a statistically-significant but small and transient negative effect on investor expectations of default risk. The

implication is that neither the fears of the vultures' opponents nor the hopes of their supporters are justified by the data: in the eyes of investors, we have seen neither a return to the halcyon days of Teddy Roosevelt (without the violence) nor a pernicious interference in the ability to restructure the debts of poor countries that find themselves unable to make payments. We note that our analysis does not comment directly on the welfare implications associated with the enforcement of sovereign debt. Indeed, our results are consistent with many of the findings in the literature, and should be interpreted as positive statements, not as normative ones.

GUNBOATS

"If a nation shows that it knows how to act with reasonable efficiency and decency in social and political matters, if it keeps order and pays its obligations, it need fear no interference from the United States. Chronic wrongdoing, or an impotence which results in a general loosening of the ties of civilized society, may in America, as elsewhere, ultimately require intervention by some civilized nation, and in the Western Hemisphere the adherence of the United States to the Monroe Doctrine may force the United States, however reluctantly, in flagrant cases of such wrongdoing or impotence, to the exercise of an international police power."

—President Theodore Roosevelt, 20 May 1904

On December 6th, 1904, President Roosevelt declared that the United States would exercise an "international police power" across the Western Hemisphere in order to insure that countries kept order and paid their obligations. The initial reason for Roosevelt's decision to announce the new policy was the fear that chronic disorder would lead to debt defaults, which would in turn provide a pretext for European intervention.

European intervention was not a distant theoretical abstraction. In 1899, Cipriano Castro seized power in Venezuela after a brief civil war. Castro's government confiscated foreign-owned property, levied "voluntary" contributions on resident Europeans, occupied a disputed island between Venezuela and Trinidad, seized "dozens" of British-flagged fishing vessels, and interfered with British shipping in the Caribbean.¹³ In addition, Castro defaulted on the country's foreign debts. As a result, a British-German-Italian coalition blockaded Venezuelan ports and seized the country's customhouses in December 1902. Castro backed down in February 1903, and the Hague Tribunal granted first preference on Venezuelan debt until the Venezuelan government paid 30 percent of the total claims against it.

¹³ A.M. Lowe, "Venezuela and the Powers," *The American Monthly Review of Reviews*, January-June 1903, p. 42.

The Venezuelan intervention set two bad precedents from the American point of view. First, it indicated that European powers would intervene in this hemisphere to protect the security of their investments. Second, such interventions could have the insalubrious effect of privileging European bondholders over American ones. Much as modern holders of defaulted debt worry that the vulture fund's virtual blockades will give the vultures' debt priority and leave other debtholders with nothing, U.S. creditors feared that European military actions would give the Europeans priority and leave American debtholders with nothing.

Dollar Diplomacy Begins

The Roosevelt Corollary worked to forestall European interventions by committing the United States to insure that Latin American debtors would be able to pay their obligations. The U.S. reluctantly implemented the Corollary in 1904 as a result of the situation in the Dominican Republic. The D.R. had been in a state of civil war since 1899, and the country defaulted on its debts. Amid signs of a possible European intervention, the U.S. Navy selectively bombarded rebel-controlled towns in February 1904 and demanded that the warring factions sit down to work out their differences. Roosevelt simultaneously ordered a special presidential commission to undertake a "full, impartial, searching account" of the Dominican situation.¹⁴ In March, the commission recommended that the United States assume control of Dominican customhouses and pay the Dominican government \$1m for the use of a (strategically unnecessary) naval base in Samaná Bay. With limited support for intervention in the United States — memories of the 1898-1902 Philippine War were still fresh — Roosevelt demurred, preferring to "put off the action until the necessity became so clear that even the blindest can see it."¹⁵

Unfortunately, the necessity of action soon became clear. American agents in Santo Domingo urged the U.S. to take over Dominican customhouses, fearing that if the U.S. did not, European governments would blockade, possibly worsening the chaos on the island which had already killed several Americans.¹⁶ (In fact, they went so far as to suggest to their superiors that

¹⁴ Roosevelt to George Dewey, 20 February 1904, in Morison, *Letters of Theodore Roosevelt* 4: 734.

¹⁵ Roosevelt to Charles W. Eliot, in Morison, *Letters of Theodore Roosevelt* 4: 770.

¹⁶ Munro, *Intervention and Dollar Diplomacy*, 93-94. Powell to Hay, 16 and 18 April 1904, and Powell to P. Castillo, 17 and 19 April 1904, in DD, M93, roll 11; Hay to Powell, 4 May 1904, in *Diplomatic Instructions of the Department of State [INS]*, M77, roll 98, RG 59.

they be allowed to take over the customs of their own accord, giving Washington plausible deniability.)¹⁷ Even in the absence of a blockade, the U.S. worried that European powers might attempt to secure their financial interests by supplying weapons to various factions in the civil war.¹⁸ These worries were not unfounded: in April, President Carlos Morales settled his debts with Italian creditors — using funds pledged to French and Belgium bondholders.¹⁹

On May 20th, 1904, Roosevelt officially proclaimed the Corollary. U.S. naval officers and diplomatic personnel brokered a peace agreement between the warring factions signed a peace agreement in June.²⁰ President Carlos Morales's government promised to restart payments on its debts in November.²¹ Unfortunately, with annual revenues of \$1.85 million against \$0.9 million in arrears and obligations of \$1.7 million coming due in 1905 (not including annual expenses of \$1.3 million, rather important considering the need to pay the army in the midst of an ongoing insurgency), it seemed highly unlikely that the Dominican Republic would be able to comply.²² Morales asked the U.S. to take control of the country's customhouses, as long as it could guarantee enough revenue to keep the government operational.²³ Roosevelt resisted Morales's entreaties until the Italian government sent a blunt request to Washington on December 24th, 1904, demanding that the U.S. either assume the obligation to pay Italian claims or permit Rome to "collect the quota due her directly from the customhouses of the Republic."²⁴

On January 20th, 1905, the U.S. and the D.R. concluded an agreement to place Dominican custom collection under American management. A layer of American officials would assume control over the customs agency, reporting directly to the Dominican president. The U.S. would use a maximum of 55 percent of the revenues to make debt payments, and remit the remainder to the Dominican government. The agreement also prevented Santo Domingo from issuing new debt or changing tariff rates without American approval.²⁵ Roosevelt submitted the agree-

¹⁷ Dillingham to SN, 18 April 1904, CCR, entry 40, p. 137.

¹⁸ Dillingham to SN, 19 April 1904, SDCG, entry 305, pp. 1-2.

¹⁹ Dawson, "Chronology of Political Events," 595; MacMichael, "United States and the Dominican Republic," 164. Hollander, *Debt of Santo Domingo*, 127. Dillingham to SN, 19 April 1904, SDCG, entry 305, pp. 1-2.

²⁰ Rippey, *HAHR*, Vol. 17, Nov 1937, p. 419.

²¹ Dawson to Hay, September 12, 1904.

²² Dawson to Hay, September 12, 1904.

²³ Dawson to Hay, Oct. 6, 1904.

²⁴ Roosevelt to Bishop, February 23, 1904, in Joseph Bishop, *Theodore Roosevelt and His Time Shown in His Own Letters*. Volume: 1. C. Scribner's Sons, New York, 1920, p. 431, and Munro, p. 98.

²⁵ Munro, p. 101.

ment to the Senate on February 7th. "It is supremely to our interest that all the communities immediately south of us should be or become prosperous and stable, and therefore not merely in name, but in fact independent and self-governing."²⁶ The Senate, however, rejected the measure. On March 24, therefore, the Dominican finance minister submitted a proposal to have an American take over management of Dominican customs without a treaty.²⁷ Roosevelt accepted, and on March 31st a retired American colonel, George Colton, took over the administration of the country's customs agency.²⁸

Roosevelt explained the new policy in a speech in Chautauqua, New York: "This country would certainly not be willing to go to war to prevent a foreign government from collecting a just debt or to back up one of our sister republics in a refusal to pay just debts, and the alternative may in any case prove to be that we shall ourselves undertake to bring about some arrangement by which so much as is possible of the just obligations shall be paid."²⁹

Bondholders reacted positively to the Corollary. On April 5th, 1905, James Cooper, the secretary of the Corporation of Foreign Bondholders reported, "The securities of South and Central American republics ... which a short time ago were spoken of as rubbish and to be carefully avoided by all but the most hardened speculators are now apparently regarded as rapidly approaching the position of gilt edged securities." Cooper went on to attribute the rise to U.S. debt-enforcement. "The rises that have occurred appear to be largely due to the idea that the United States is going to intervene in some way so as to make all these defaulting countries pay their debts ... the recent action of the United States executive in Santo Domingo was regarded as confirmation of this idea."³⁰

Dollar Diplomacy in Action

How did the United States continue to enforce financial stability in Latin America after 1905? Figure 1 shows that Circum-Caribbean bond spreads remained low until the late 1920s.

²⁶ *FRUS*, 1905, pp. 334-342.

²⁷ *FRUS*, 1905, p. 358.

²⁸ *FRUS*, 1905, p. 366.

²⁹ "Trusts Must Submit to Law—Roosevelt," *NYT*, 12 August 1905, p. 3.

³⁰ "South American Bonds up Over 100 Per Cent," *NYT*, 5 April 1905.

The U.S. exercised its power in three ways. First, the U.S. used its diplomatic influence to facilitate debt settlements. Following its intervention in the Dominican Republic, the U.S. helped broker settlements with Colombia and Venezuela in 1905.³¹ In 1913, after a worrisome visit by a British warship, the U.S. government arranged a deal in which Guatemala would start paying interest on its defaulted debts, but accrued arrears would be forgiven.³² In 1923, the State Department sent a mission to Bogotá to propose reforms to Colombia's banking system, tax collection, and public administration. The Colombian legislature passed all of the proposed reforms, and two members of the mission stayed on as employees of the Colombia government. In return, Blair and Company underwrote a new loan to the Colombian government.³³ Later missions ranged outside the Circum-Caribbean to visit Chile, Bolivia, Ecuador, and Peru.

Second, the U.S. arranged "controlled loans," in which the debtor country pledged to allow the U.S. to take over the country's customs collection in the event of a default. In two cases (not including the 1905 intervention in the D.R.), the U.S. was forced to follow through on its pledge: Nicaragua in 1911 and Haiti in 1915. (The U.S. also arranged a controlled loan with Costa Rica in 1911. An additional Costa Rican loan in 1926 stipulated that the U.S. would take over the country's internal tax collection in the event of a default.³⁴ In four other cases, the U.S. took control of other aspects of fiscal policy before default occurred. El Salvador signed a controlled loan in 1912 which allowed the lenders to appoint a fiscal agent to oversee customs collection.³⁵ In 1918, after Panama used the proceeds from a railroad loan to meet current expenses, the U.S. pressured the Panamanian government into allowing an American "fiscal agent" to take "control and charge of the national treasury."³⁶ In 1926, a loan contract with Honduras required the country to impose a dedicated 3 percent export tax to collateralize the loan. The loan was col-

³¹ Mitchener, "Empire," p. 686.

³² Laughlin to Knox, Jan. 28, 1913. *FRUS*, 1913, p. 565.

³³ Rosenberg, "From Colonialism to Professionalism," in Drake, p. 72.

³⁴ In addition, the contract stipulated that any disputes would be submitted to the Chief Justice of the Supreme Court of the United States for binding arbitration. *La Republica de Costa Rica and Central Union Trust Company of New York as Trustee, Trust Agreement*, November 1, 1926.

³⁵ The Salvadorean contract gave the lenders the power In the event of default, the fiscal agent would nominate two people to take control of the custom services. The Salvadorean government would then select one of them after running the decision "through the office of the Secretary of State of the United States ... any disagreement, question or difference of any nature whatever" would be referred to the binding authority of the U.S. Chief Justice. Juan Francisco Paredes to Charles Evans Hughes, Oct. 20, 1921, 816.51/176.

³⁶ Major, *Possession*, pp. 139-40.

lateralized by collecting the tax revenue in New York: exporters needed to purchase special stamps equal to the tax due in order to export, and such stamps were sold exclusively by the National City Bank of New York. The U.S. agreed not to admit Honduran imports unless they had paid the tax.³⁷ Finally, in 1926, Perú agreed to appoint an American to head the country's custom service as a condition for a loan from the Guaranty Trust Company.³⁸

Third, the U.S. used military force to prevent conflict from forcing governments into default. The intervened nations included Costa Rica, Cuba, the Dominican Republic, Haiti, Honduras, Mexico, Nicaragua, and Panama. In three of those nations — Cuba, the D.R., and Haiti — the U.S. went so far as to occupy and administer them when the local governments collapsed. The U.S. ran Cuba in 1906-09 (and again in 1912 and 1917-22), Haiti in 1915-34, and the D.R. in 1916-24. In Nicaragua, the U.S. never formally took over the government, but U.S. Marines actively fought anti-government insurgents in 1912 and 1926-33. In addition, the U.S. worked to promote interstate peace in the region, particularly in Central America. The U.S. brokered the 1907 Central American Peace Conference which led to the establishment of the Central American Court of Justice. It later intervened when expansionist governments in Nicaragua threatened the peace and landed troops on the Costa Rica-Panama border in 1925 to forestall conflict.

There were gaps in American dollar diplomacy. Three attempts at arranging controlled loans failed during the period. In 1910, a United Fruit-backed coup ousted President Miguel Dávila of Honduras. Dávila's successor, Miguel Bonilla, backed out of a 1909 agreement to place customs administration under U.S. control. (Bonilla then cancelled various American-owned railroad and wharf concessions, and United Fruit offered to refinance the country's debt in return for them. Opposition from the U.S. government, however, meant that the new loan was never made.³⁹) In 1913, the U.S. failed to persuade Guatemala to include an explicit sanctioning mechanism in its debt settlement. Finally, in 1922 a controlled loan to Bolivia provoked a firestorm of opposition (particularly when the size of the nine-point spread that the underwriters would earn became public) and the Bolivian government backed out of the deal.⁴⁰ Ar-

³⁷ Chester Jones, *The Caribbean Since 1900*, Prentice-Hall: New York, 1936, pp.432-33.

³⁸ Rosenberg, "From Colonialism to Professionalism," in Drake, p. 71.

³⁹ Munro, p. 235.

⁴⁰ Rosenberg, "From Colonialism to Professionalism," in Drake, p. 70.

gentina, Brazil, and Chile (and presumably Uruguay and Paraguay), meanwhile, were never considered targets for American debt-enforcement, partially because they were considered more “responsible,” but mostly because those countries were considered able to defend themselves against European intervention.

Was the American regime in the circum-Caribbean credible? Investors had reasons to doubt the U.S. commitment to debt enforcement. American governments often publicly proclaimed that the United States was no longer in the debt enforcement business. Warren Harding, in fact, promised to withdraw U.S. troops from the Dominican Republic in his 1920 campaign. (He did not follow through.) On the other hand, the State Department insisted on vetting all proposed Latin American sovereign bond issues in U.S. markets, which many observers interpreted as an unofficial guarantee, and Calvin Coolidge proclaimed in a 1927 speech:

“While it is well-established international law that we have no right to interfere in the purely domestic affairs of other nations in their dealings with their own citizens, it is equally well established that our Government has certain rights over and certain duties toward our own citizens and their property, whatever they may be located. The person and property of a citizen are a part of the general domain of the nation, even when abroad. On the other hand, there is a distinct and binding obligation on the part of self-respecting governments to afford protection to the persons and property of their citizens, wherever they may be. This is both because it has an interest in them and because it has an obligation toward them. It would seem to be perfectly obvious that if it is wrong to murder and pillage within the confines of the United States, it is equally wrong outside our borders. The fundamental laws of justice are universal in their application. These rights go with the citizen. Wherever he goes these duties of our government must follow him.”⁴¹

Empirical Analysis

In order to analyze market perceptions of default risk, we analyze the effect on the perceived market risk in *non-intervened* (or “spillover”) Latin American countries following intervention in the period 1900 to 1929. That is to say, we exclude debt issued by the intervening government itself.

We end our analysis in 1929, when the Depression prompted Herbert Hoover to disavow dollar diplomacy. Bolivia was the first Latin country to default, in January 1931, in the wake of a 28 percent fall in tax revenues and a subsequent military coup. American advisors to the Bo-

⁴¹ John T. Woolley and Gerhard Peters, *The American Presidency Project* [online]. Santa Barbara, CA: University of California (hosted), Gerhard Peters (database). Available from World Wide Web: (<http://www.presidency.ucsb.edu/ws/?pid=419>).

livian government had called a default “inevitable” as early as 1928 and tacitly agreed to allow the default. Peru, Chile, and Ecuador soon followed.⁴² In October, the era of debt-enforcement officially came to an end when the U.S. administrators in charge of Dominican finances agreed to allow the country to default in the face of a massive decline in export revenues.⁴³

We use spreads as our measure of perceived market risk. We calculate government bond yield rates from the monthly opening bond prices as listed in editions of the Investor’s Monthly Manual for various Latin American countries. We subtract the monthly values of the U.S. long-term interest rate from each country’s yield rate to calculate the spread. The source of the U.S. long-term rate is the Global Financial Database. Table 1 presents main summary statistics for our yield series.

TABLE 1 AROUND HERE

Kris Mitchener and Marc Weidenmeir confirmed that bondholders reacted positively to the Corollary. In order to maintain consistency with our later analysis, we replicated their result using a slightly different data set and methodology.⁴⁴ We tested the significance of the May 1904 date with our gunboats data for various episode windows: one month, three months, six months, and one year after the announcement.

FIGURE 1 AROUND HERE

We begin by testing the hypothesis that the declaration of the Roosevelt Corollary in May 1904 caused a change in regime and had a lasting effect on Latin American bond spreads. Following Mitchener and Weidenmeir, we consider the effects on the Latin American countries as a whole and a smaller subset of Circum-Caribbean countries which fell under American protection. (Colombia, Costa Rica, Guatemala, Nicaragua, Honduras, and Venezuela.)

TABLES 2 AND 3 AROUND HERE

In the very short-term (1 and 3 month windows) there is a small and insignificant positive effect on bond spreads following the declaration of 0.0 to 0.3 percentage points. In the longer-

⁴² On U.S. fears of a Bolivian default, see State Department Records (Record Group 59), National Archives, *Memorandum from the Economic Adviser of 9 May 1928*, NA 824.5 11449. On the U.S. government’s decision to prevent a restructuring of the Bolivian debt, see ... FIND CITE IN CONTRERAS

⁴³ US Customs Receivership Reports.

⁴⁴ Mitchener and Weidenmeir used weekly sovereign debt bond prices from the London Stock Exchange and test for “abnormal returns” following the declaration. We use monthly frequency data and calculate yields and then estimate the effect of the declaration on bond yields. When a bond was in default, we used the notional yield; the defaulted coupon over the actual market price.

term, however, the effect of the Corollary on spreads becomes *negative* and significant, consistent with the hypothesis that the Corollary changed investor expectations. The effect is larger for the Circum-Caribbean countries most subject to debt-enforcement, and quite small (very close to zero) in magnitude for Argentina, Brazil, and Chile.⁴⁵ In addition, we tested for a 1904 structural break in the time series on the spreads of Circum-Caribbean bond series using a conventional Wald test for a 1, 3, 6, and 12 month window of the declaration.⁴⁶ For all the windows the F-test is significant at the .01 level indicating the presence of a structural break after May 1904. The result confirmed Mitchener and Weidenmeir (and the eyeball econometrics in Figure 1) — after 1904, Circum-Caribbean bond spreads were significantly lower than before.

We code U.S. military interventions in Latin American countries for the period 1900-1929. These dates were compiled from various War Department reports at the National Archives and Benjamin Beede, ed., *The War of 1898 and U.S. Interventions, 1898-1934: An Encyclopedia*.

TABLE 4 AROUND HERE

Figure 1 presents spreads for 3 sets of countries: all countries (Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay, and Venezuela); Circum-Caribbean countries (Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Nicaragua, and Venezuela); and the ABC countries (Argentina, Brazil and Chile). We use the ABC countries as a baseline, since they were considered better risks than the Circum-Caribbean countries at the beginning of the dollar diplomacy period, and never at risk of American intervention for both practical and political reasons.

We attempted to isolate “spillover” effects where we have excluded intervened-country observations in a 12-month window around the intervention.⁴⁷ For the most part the spillover series and our complete series move together, but there are as expected, some differences in the series around the intervention dates. The average monthly spread for our baseline countries is lower than those for the Circum-Caribbean countries. To gauge whether U.S. gunboat diplomacy had any effect on investor perceptions, we use event regression.⁴⁸

⁴⁵ Our coefficient results do not change when we also control with year-trend*country dummies.

⁴⁶ Basically, we interact all RHS variables with a dummy for the date of the break and use a joint F-test to determine the significance.

⁴⁷ The figure was constructed by excluding data for the “intervened” countries for T months before and after the intervention, with T [1=... 12]. We present results for T=1

⁴⁸ CITATIONS

Methodology

Our first step was to construct the relevant event window. Suppose country i is intervened in date t . Measuring the impact of the event on the “spillover” countries would require regressing the spread on a constant, a set of controls and a dummy that would pick up the effect of the invasion at t . The shorter the event window, the lower the chance that the results are driven by other events. We are limited, however, by the fact that our bond data is monthly.⁴⁹ Nevertheless, given lags in market reaction, a one month window may not fully pick up the market reaction to the invasion. As such we present also results for windows of one month to 12 months. (The 12-month window has the further advantage of allowing us to incorporate macro controls: exports, the terms of trade (where available), and government revenues.)

The magnitude and statistical effect on spreads of the “spillover” countries following the intervention of country are evaluated by estimated the following panel regression:

$$\text{Spread}_{it} = \alpha_i + \gamma \text{Invasion}_{it} + \beta \text{Controls}_{it} + \lambda_t + \varepsilon_{it} \quad (1)$$

where Invasion_{it} is a dummy variable that takes on the value of 1 on or after the episode (i.e., month of and months after intervention) for $T=1 \dots 12$ and Spread_{it} is measured in percentage points. We exclude data for the intervened country for T periods (i.e., months) before and after the intervention, with $T [1 \dots 12]$. α_i refers to country dummies which capture time invariant country specific factors which may drive cross-country differences in spreads. λ_t is a vector of time dummies included to control for cross country correlation over time due to common world shocks and ε_{it} is an error term.⁵⁰ Some specifications include also country-specific period trends. Perceived default risk or/governments desire to pay are intricately linked with the macro-economy, hence, when using yearly events (due to data restrictions), we also add a set of country-specific macroeconomic control variables to account for other variables that may affect differ-

⁴⁹ In addition, control data is generally not available at higher frequencies (most is available only yearly). In the modern context, Errunza and Miller (1998) and Henry (2000) argue in favor of broader windows in emerging markets as there might be widespread information leakage prior to many events. Also, as we argue later in the text, even if we had higher frequency data it is hard to control for many political events which span for more than one day, weeks or even months.

⁵⁰ We performed some simple tests to check for non-stationary variables in the data (in particular spreads). Several unit root tests have been extended to panel data, and in particular to large N panel data sets such as the one used in this paper. (See Baltagi (2001) for an overview of non-stationary panels). Data limitations (in terms of obtaining data for all countries all periods as to construct a balanced panel) limited the use of many of these tests. We performed Dickey-Fuller (DF) and Augmented Dickey-Fuller (ADF) test on the average spread data as a check on stationarity. Under different specifications (e.g., number of lagged terms, the inclusion of a time trend, etc) we consistently found that no unit root was present in the average monthly Caribbean and Latin American spreads.

ence in spreads. The estimation procedure uses White’s correction for heteroskedasticity in the error term and errors are clustered at the country level.⁵¹

Results

Table 5 presents main results for the sample of Caribbean countries Column (1) presents results controlling for country and time period effects while column (2) We include country specific time trends as well as country and period fixed effects. We find a positive and significant effect on spreads following U.S. gun boat intervention. This result suggests that markets tend to assign great default risk in nearby countries. Our results are also economically significant in terms of the implied impact on spreads before and after intervention.⁵² Estimates in column (1) imply a 0.165 percentage point increase in spread one-month following an intervention (annualized this is $12 \times 0.165 = 1.98$ percentage points). The coefficient estimates in columns (2) and (3) are similar in magnitude and significance.

TABLE 5 AROUND HERE

Timing of Effect and Dynamics

An important concern from the previous analysis is whether the dates are a clear demarcation between distinct periods. A related issue is whether there are potential trends in the data (rendering our results spurious). Table 6 compares spread one month before and after spread suggesting that there is indeed a change in spread following intervention.

TABLE 6 AROUND HERE

To further address this concern, we explore the dynamics of the relationship illustrated in the initial regressions. In particular, we run the following regression:

$$(\text{Spread}_{it}) = \alpha_i + \lambda_1 \text{PreInv3}_{it} + \lambda_2 \text{PreInv2}_{it} + \lambda_3 \text{PreInv1}_{it} + \gamma_0 \text{InvDate}_{it} + \gamma_1 \text{PostInv1}_{it} + \gamma_2 \text{PostInv2}_{it} + \gamma_3 \text{PostInv3}_{it} + \gamma_3 \text{PostInv12}_{it} + \beta \text{Controls}_{it} + D_t + \varepsilon_{it}$$

⁵¹ One concern that emerges from these results is that the estimation of equation (1) is that our standard errors may be biased downward due to the fact that the dependent variables may be positively serially correlated. In addition, our main independent variable is by construction highly serially correlated, exacerbating the downward bias in standard errors. We follow the solutions proposed in BHL and Bertand, Duflo, and Mullainathan (2004), performing a series of tests to address this issue. As Bertand, Duflo, and Mullainathan (2004) emphasize, other solutions typically employed to address serial correlation issues are not appropriate for the type of panel data used in this study. Hence all specifications adjust standard errors allowing for country clustered heteroskedasticity and autocorrelation

⁵² We present results excluding T periods of intervened country data. Result are robust to excluding one year of observations (around intervention date) for intervened country—as a way to make sure results are not driven by events in such country.

where $PreInv1_{it}$, $PreInv2_{it}$, and $PreInv3_{it}$ take the value of one respectively in the first, second, and third periods before country i is invaded and zero otherwise, $InvDate_{it}$ takes the value of one in the period in which country i is invaded dates and zero in every other period; $PostInv1_{it}$, $PostInv2_{it}$, $PostInv3_{it}$, and $PostInv12_{it}$ take the value of one respectively in the first, second, third and twelve period (month) after invasion and zero otherwise. The results in Table 7 use White’s correction for heteroskedasticity in the error term and clustered errors at the country level.⁵³

TABLE 7 AROUND HERE

Could there be a third factor correlated with, but independent of, American intervention that changed market confidence? We believe reserve causality not to be as an important concern — it is hard to believe that the *future* spread on sovereign bonds prompted U.S. policymakers to decide to intervene. Omitted variables, on the other hand, are a concern. In particular, it may be the case that recessions caused both increases in bond spreads and prompted military interventions. We have controlled for variables that might influence the policy maker’s timing in opening up the markets, including lagged GDP growth.

In conclusion, the evidence from bond yields is consistent with the hypothesis that U.S. dollar diplomacy provided a credible debt-enforcement regime. The beginning of the regime saw a large and sustained drop in the bond spreads of the countries most subject to American debt enforcement. Later interventions revealed information about negative shocks to investors—if governments provoked a U.S. intervention (either by “misbehaving” or threatening to collapse), then the threat to the value of their bondholdings must be very serious.

VULTURES

“The compact between borrowers and lenders is that debt contracts are enforceable. If a sovereign is held to a different standard of enforceability, it vitiates the contract and erodes both the rule of law and confidence in the U.S. judicial system. In the long run, what is more important to the U.S. economy: enforcing contracts in accordance with their terms or permitting a small self-interested group of defaulting regimes to redefine our system of contract law?”

—Jay Newman of Elliot Associates

Gunboat diplomacy of the sort that the U.S. engaged in during the early 20th century is almost certainly not coming back. There may be, however, a kinder and gentler way of accomplishing

⁵³ Results exclude similar data for intervened country; results robust to excluding one year of data of intervened country.

the same result: the vulture fund. The vulture funds use American and European courts to enforce sovereign debt contracts. They purchase defaulted sovereign debt in the secondary market. The vultures then sue the defaulting country in the U.S. or E.U. The court system then enforces decisions that favor the vultures by attaching assets or flows of funds of the defaulting government that pass under its jurisdiction. The emergence of modern vulturing, therefore, required two preconditions: first, the creation of an active secondary market in emerging market sovereign debt issues; and second, that American and European courts relax the doctrine of absolute sovereign immunity.

Secondary Markets and Sovereign Immunity

The Great Depression and Second World War killed off the market for Latin American sovereign debt securities. When private lending once again began to flow to Latin America (and to a lesser extent to the newly-independent countries of Asia and Africa) in the 1960s, it took the form of lending by banks or consortiums of banks. The 1982 debt crisis, however, left the banks with billions of dollars of nonperforming sovereign debt on their books. The 1989 Brady Plan, named after U.S. Treasury Secretary Nicholas Brady, arranged for the banks and their debtors to write down their outstanding loans in arrears, and then exchange them for newly-issued long-term dollar-denominated bonds, with principal and one year's worth of interest payments secured by U.S. Treasury notes. In total, Brady deals restructured \$202.8 billion of debt for 18 countries. The result was \$63.7 billion of debt relief—and the creation of an active secondary market in bonds issued by developing-country governments.

Modern vulture funds required one other condition, however: the ability to use American and European courts to sanction sovereigns. Under the doctrine of absolute sovereign immunity, which held in most countries until Second World War, states cannot be sued in the courts of another sovereign state. Absolute sovereign immunity held even the during the Dollar Diplomacy period. In fact, in the absence of absolute sovereign immunity there would have been no need to include special arbitration and punishment provisions in the controlled loans.

Absolute sovereign immunity became a problem after the Second World War, as governments and government-owned companies increasingly engaged in cross-border commercial ac-

tivities. Private firms complained that sovereign immunity put them at a disadvantage when dealing with state-owned competitors. Belgium and Italy were the first countries to deny sovereign immunity in such cases. Switzerland, France, Austria, and Greece followed.⁵⁴

The U.S. joined the bandwagon in 1952, when State Department declared that the U.S. no longer accepted absolute sovereign immunity in the Tate Letter. The Letter stated that states were not immune “with respect to claims arising out of activities of the kind that may be carried on by private persons.” The U.S. issued the letter for two reasons. First, “the widespread and increasing practice on the part of governments of engaging in commercial activities makes necessary a practice which will enable persons doing business with them to have their rights determined in the courts.” Second, “the granting of sovereign immunity to foreign governments in the courts of the United States is most inconsistent with the action of the government of the United States in subjecting itself to suit *in* these same courts *in* both contract and tort.”⁵⁵

Unfortunately, the State Department interpreted the Tate Letter in a confusing and contradictory manner, usually allowing political considerations to guide its decisions.⁵⁶ Other governments acted equally inconsistently. The resulting uncertainty surrounding sovereign immunity led the Council of Europe to negotiate a convention on the issue in 1963. The result was the 1972 European Convention on State Immunity, which codified the circumstances under which sovereign immunity did not apply.⁵⁷ Austria, Belgium, Cyprus, and the Netherlands ratified the Convention almost immediately.⁵⁸ The U.S. did not ratify the Convention, but Congress passed the Foreign Sovereign Immunity Act (FSIA) in 1976, which wrote most of its stipulations into American law.⁵⁹ The FSIA waived sovereign immunity in nine situations: (1) waiver; (2) commercial activity; (3) expropriation; (4) property in the United States; (5) tort injury occurring in the United States; (6) arbitration; (7) torture, extrajudicial killing, sabotage, or kidnapping; (8) enforcement of a maritime lien; and (9) foreclosure of a maritime mortgage.⁶⁰ Britain adopted

⁵⁴ Jack Tate to James McGranery, May 19, 1952, *Department of State Bulletin* 24.

⁵⁵ Jack Tate to James McGranery, May 19, 1952, *Department of State Bulletin* 24. Italics in the original.

⁵⁶ Tom McNamara, *A Primer on Foreign Sovereign Immunity*, Davis Graham & Stubbs LLP, March 8, 2006 - Colorado, USA.

⁵⁷ John O'Brien, *International Law*, Routledge Cavendish 2001, p. 290.

⁵⁸ <http://conventions.coe.int/Treaty/Commun/ChercheSig.asp?NT=074&CM=8&DF=&CL=ENG>.

⁵⁹ “A key feature of the FISA is that it permits countries to waive sovereign immunity in many commercial transactions. Most developing-country government debt contracts after 1976 have contained explicit waivers of sovereign immunity.] OR p. 353

⁶⁰ Tom McNamara, *A Primer on Foreign Sovereign Immunity*, Davis Graham & Stubbs LLP, March 8, 2006 - Colorado, USA.

European Convention with the State Immunity Act of 1978, and by 1990 Australia, Canada, Germany, Luxembourg, Pakistan, Singapore, South Africa, and Switzerland, had either adopted the European Convention or passed similar laws embodying its precepts.

The FSIA did not mention sovereign debt, but U.S. courts eventually brought it under the purview of the law. Allied Bank became the first creditor to use the 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.⁶¹ 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. Two Panamanian corporations and a Swiss bank sued in New York. In 1992, the U.S. Supreme Court decided ruled in their favor in *Weltover v. Republic of Argentina*: sovereign bond issues in the United States qualified as commercial activities, and states immunity did not automatically apply.⁶²

Weltover ushered in the age of modern vulturing. 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 next year, Brazil settled, paying the Darts \$77 million in past-due interest. The Darts then sold the debt for \$1.1 billion; less than the face value of the debt, but more than that received by the participants in the Brady restructuring. The Dart case confirmed the vulture's right to litigate on the basis of a claim acquired in the secondary market. It also confirmed that vulture funds did not violate Section 489 of the New York 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.⁶³

The courts enforced decisions in favor of the vultures by attaching assets or flows of funds that passed through their jurisdictions. In 1997, for example, Elliott Associates successfully sued Panama for the full face value of \$70 million of defaulted debt, for which it had paid \$17.5

⁶¹ Sturzenegger and Zettlemeyer, *Debt Defaults and Lessons from a Decade of Crises*, p. 65.

⁶² *Republic of Argentina v. Weltover, Inc.*, 504 U.S. 607 (1992).

⁶³ Sturzenegger and Zettlemeyer, *Debt Defaults and Lessons from a Decade of Crises*, p. 69.

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. Two years later, 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.⁶⁴

The vultures' success engendered strong opposition. The strongest came on humanitarian grounds. Liana Cisneros, head of the Latin American Campaign of Jubilee 2000 — an activist organization that sought to convince leaders of G-7 countries to forgive the debt of the world's poorest countries — argued: "These people are trading in human misery. Elliott Associates, L.P., are picking over the bones of the Peruvian economy like a pack of vultures. It may be just business to them, but to the Peruvians it represents schoolbooks, medicine, and clean water. The U.S. Treasury must investigate this case as a matter of urgency and take immediate steps to stop these scandalous practices." Gordon Brown and other major Western politicians agreed.

More surprisingly, perhaps, the IMF also agreed that the vultures were pernicious, albeit for a different reason. Anne Krueger denounced Elliott directly. "The more recent success of an aggressive legal strategy employed against Peru by a vulture company called Elliott Associates underlines the power that holdout creditors retain. The threat of disruption remains likely to deter countries from seeking a necessary restructuring for longer than is desirable either for the country itself or for the international community. . . . It is not clear if Elliott's strategy would survive legal challenge in future cases. But this case — and the possibility that rogue creditors will open other legal avenues — shines a spotlight on what is a missing element in the international community's current approach to the roles of the public and private sectors in debt restructuring."

Anne Krueger feared that the vultures might provoke "creditor runs." In a creditor run, individual creditors decline to participate in a proposed restructuring of an unsustainable sovereign debt burden in the hope that they could get the courts to attach payments ahead of other

⁶⁴ Alfaro, p. 9.

creditors. In extremis, such creditor runs could provoke the very default that the creditors hoped to avoid, and wind up with fewer resources for everyone.⁶⁵

Absent in this debate, however, is one key question: does vulturing work? Our null hypothesis is that vultures are perceived by investors to be ineffective, certainly compared to dollar diplomacy. In other words, our null hypothesis is that there is no vulture regime in the way that there was a gunboat regime. In the next section we test this hypothesis.

Empirical Analysis

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. EMBI spreads are 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).⁶⁶ EMBI data is available for a large number of emerging markets in Asia, Africa, Europe, and Latin America but for comparability to our historic gunboats analysis we look at bond spreads from Latin American countries. We examine the available spreads from December 1993 until May 2007 for Brazil, Colombia, Ecuador, Mexico, Panama, Peru, and Venezuela.⁶⁷

Perhaps one of the most challenging features in ascertaining the economic effects from “vulturing” activity is *correctly* identifying the appropriate event dates. There is no central database documenting the legal history of vulture activity. One of the most widely cited documents in the literature containing a list of recent vulture cases is by Singh (2003). However, upon verification of the dates listed in that paper we discovered that many of them were incorrect. In fact, many of them were not even cases involving vulturing, although the document was useful in identifying the actors in some of the major vulture legal disputes.

We compiled our own original data set of case filing and settlement dates, and if available dates of attachment. We used the “Jury Verdicts, Settlements & Judgment” directory in the Lexis-Nexis Research Software 7.2 database and read through the relevant case histories to dis-

⁶⁵ Barnett, Galvis, and Gouriage 1984.

⁶⁶ Mauro, Mauro, Nathan Sussman and Yishay Yafeh. 2002. “Emerging Market Spreads: Then Versus Now.” *The Quarterly Journal of Economics*, May: 695-733.

⁶⁷ Not all of these countries have traded/issued EMBI bonds since December 1994. Table YY lists the data coverage for our set of South American countries.

cern the case dates. Unfortunately, this database did not contain all the relevant dates. We therefore searched through the Westlaw database and newspaper and law journal articles to identify the remaining case dates.⁶⁸ We were able to identify and verify the filing and settlement/attachment dates – year, month, and day – for five Latin American vulture cases (i.e., a total of 10 events, listed in the top of Table 8), thus our results should be taken as very preliminary.⁶⁹ In most instances, the date of attachment coincides with the settlement date. We believe these five cases are a good first-pass in evaluating the impact of vulture lawsuits on investor perceptions in the Latin American EMBI market as they have been the most widely documented vulture cases in the existing literature and have received the most public media attention (Singh, 2003; Sturzenegger and Zettelmeyer, 2007). Moreover, the amount sued has not been trivial – the Dart family, for example, sued Argentina for over \$750 million.

TABLE 8 AROUND HERE

We identified the Peruvian case to be the first one. Was the court’s 1996 decision in *Pravin v. Peru* the modern equivalent of Teddy Roosevelt’s decision to take over the finances of the Dominican Republic? We know that the Roosevelt Corollary produced a huge and long-lasting change in perceived risk from holding the sovereign debt of the Circum-Caribbean countries. Did the same thing happen to Latin American countries when Elliott tried to inaugurate a kinder and gentler debt enforcement regime? The answer seems to be “no.”

FIGURE 2 AROUND HERE

Table 10, Panel A presents our main results. In all the specifications, our dependent variable is the daily value of the ‘EMBI plus’ spread for each country measured in percentage units. As we have EMBI spreads at the daily frequency, we redefine the relevant episode-windows as 4 weeks, 2 weeks, 1 week, and 1 day after the date of vulturing activity. In this context, defining smaller event episodes allows us to better pinpoint the market effect – if any – of vulturing activity.⁷⁰ Our regressions exclude observations for the “intervened-country episodes” for the

⁶⁸ We were able to identify (and confirm) most of our dates in the Wall Street Journal and the New York Times.

⁶⁹ Narrowing down the actual day of filing and settlement proved especially tedious. Most of the existing literature lists at most the year and month of filing and settlement. The current version of the paper has the cases for which we could verify information.

⁷⁰ As a robustness check, we also estimated our regressions using the average monthly EMBI spread for 1,3, 6, and 12 month windows and find very little effect of vulturing activity (the coefficient signs are positive, but not statistically significant). The results with longer windows are consistent with the results reported in the text.

relevant event-window, thus we are capturing the spillover effects in the Latin American EMBI market following vulturing activity. As seen in Table 9, Panel A an event study analysis of the perceived effect of attaching on Peru has a negative albeit not significant effect.

TABLE 9 AROUND HERE

A skeptical reader may argue that this particular Peru case did not create a regime, but perhaps the cumulative effect of later successful attachments created a regime. Hence we analyzed the market perception of the different successful attachments (known to us to date) and found a very weak result. As seen in Table 9, Panel B, we find a negative effect, but the results are not significant at conventional levels.

An even more skeptical reader might argue that it might be the case that information was revealed *before* the actual attachment date.⁷¹ That is to say, perhaps investors could identify which vulture cases were going to obtain favorable rulings *before* the rulings were made. In that case, the relevant event date would not be the date the judge ruled in favor of attachment, but the *date when the case was filed*. If the IMF is correct and investors feared that successful vulturing would reduce their chance of obtaining a settlement with the sovereign, then the value of the debt should decrease at the date of filing, and the EMBI should correspondingly increase. On the other hand, if the vultures were recreating a dollar diplomacy regime, then one would expect the value of debt to increase, and the EMBI to fall.

In Panel C of Table 9 we report the results of testing the effects on the EMBI spread for Latin American countries using the filing date of cases that eventually resulted in successful attachments. We are able to tease out, on average, a one percentage point drop in the EMBI spread. The result is significant at ten percent when we open the window to one week up to 4 weeks, but small in magnitude.

Table 10 considers the short-run dynamics. We find a small and statistically significant drop in spreads following the event, but the effect does not seem to be long lasting effect. Our results suggest that vulturing in Latin America produced *at best* a short-lived and relatively small reduction on Latin American EMBI spreads.

⁷¹ Of course, one drawback of the traditional event study methodology is the incapability to detect the impact when the event date is uncertain (or information protracts for a long period).

Did other, unsuccessful attachments produce a similar rise in the prices of Latin American sovereign debt? That is, do our previous findings hold only for cases that succeeded, or are they true for cases that failed or have not yet materialized? We have not so far obtained the full universe of vulture filings, but we have obtained the dates for various litigation cases including the Argentine cases that outside observers believe are unlikely to succeed, and we do not find a significant effect.

CONCLUSION

Our preliminary evidence suggests that there may be a vulture regime, but it is very weak at best compared to the dollar diplomacy of the early 20th. To some extent, this result should not be surprising. The activities of the vulture funds have received little support from governments in the rich world. Belgium, for example, altered its law after Elliott succeeded in attaching Peruvian payments that passed through the Euroclear system. The World Bank has also strongly come out against the vultures, declaring on May 31, 2007, “We call on all official and commercial creditors to provide their share of debt relief to HIPC [High Indebted Poor Countries] countries and to avoid selling their claims on HIPC countries to other creditors who do not intend to provide debt relief.”⁷² The Paris Club group of creditor governments followed suit.⁷³ In the U.S., Congressman John Conyers has introduced bills to prevent U.S. courts from contradicting the country’s foreign policy — e.g., in this case allowing vultures to collect debts from poor countries to whom the U.S. has granted debt relief.⁷⁴ U.S. Treasury Department spokespeople have stated, “Secretary [Henry] Paulson has said that he ‘deplores’ what vulture funds are doing,” and the department has filed amicus briefs in several suits where the funds could undermine IMF policy.⁷⁵

If one believes that a credible sanction regime would be “desirable” for developing countries, then the current legal framework needs to be considerably tightened. On the other hand,

⁷² “World Bank to Increase Support to Curb Vulture Fund Actions,” Press Release No:2007/415/PREM, <http://go.worldbank.org/I2FE061OIQ>.

⁷³ “Press release of the Paris Club on the threats posed by some litigating creditors to heavily indebted poor countries,” May 22, 2007. [PR Paris Club Lit HIPCmay2007.PDF](http://www.parisclub.org/PR_Paris_Club_Lit_HIPCmay2007.PDF).

⁷⁴ <http://www.guardian.co.uk/business/2007/oct/17/debt.law>.

⁷⁵ <http://thehill.com/leading-the-news/vulture-funds-targeted-2007-11-01.html>.

if one believes that the vultures have overall negative consequences, then our results imply that this fear is misplaced. There is no evidence of a “run for the courthouse;” nor is there evidence that vulturing systematically increases the perceived risk of holding Latin American sovereign debt.

In short, we have seen a credible debt-enforcement regime in the early 20th century.⁷⁶ In theory, the features of this regime should be replicable in the early 21st using a legal framework and without recourse to the Marines. There seem to be few practical reason why virtual blockades cannot be as effective (and at less cost) than real ones. In practice, however, we have not replicated this regime, and without an explicit political decision to do so, there is no sign of such a regime spontaneously emerging as a result of judicial action.

⁷⁶ More generally, the threat of litigation and attachment or the lack of orderly debt workouts could be an important incentive for debt repayment. As Dooley (2000) and Rogoff (2003) note, if private financial arrangements depend on the threat of costly defaults and output losses, mechanisms that allow for swift resolutions may reduce international lending, because such proposals might weaken the confidence of international investors and the incentives that make international debt possible. Dooley, Michael. (2000). “Can Output Losses Following International Financial Crises be Avoided?” NBER Working Paper W7531.

Table 1: Summary of Spread (by Country), 1900-1929

Country	Mean	Std. Dev.	Freq.
Argentina	1.59	0.98	352
Brazil	2.67	1.12	352
Chile	1.33	0.83	352
Colombia	0.10	2.85	352
Costa Rica	3.87	3.06	352
Cuba	0.89	0.79	292
El Salvador	4.23	1.91	250
Guatemala	7.59	5.15	352
Honduras	6.39	3.69	352
Mexico	3.79	2.65	352
Nicaragua	3.28	1.11	352
Paraguay	5.30	4.34	352
Peru	1.68	0.55	203
Uruguay	1.73	1.16	352
Venezuela	2.15	2.76	352
All	3.15	3.37	4969

**Table 2: The Effects of the Declaration of the Roosevelt Corollary, May 1904
All Latin American countries**

Latin Countries	Dependent variable: Spread (Percent)			
	1 month	3 months	6 months	12 months
Corollary	0.48 [0.30]	0.07 [0.11]	-0.69 [0.31]**	-0.20 [0.11]*
No. obs	4969	4969	4969	4969
R-sq	0.52	0.52	0.52	0.52
Country dummies	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y

Robust standard errors, clustered by country. * significant at 10%;** sig-
Macro variables are: one year lagged real GDP growth, one year lagged

**Table 3: The Effect of the Declaration of the Roosevelt Corollary, May 1904,
All Latin American countries,
Pre-, During, and Post-Declaration**

Latin Countries	Dependent variable: Spread (Percent)			
	1 month	3 months	6 months	12 months
Pre-Corollary	1.09 [0.50]**	1.43 [0.65]**	1.11 [0.58]*	0.88 [0.44]*
Corollary	0.74 [0.41]*	1.11 [0.57]*	1.03 [0.58]*	1.01 [0.58]
Post-Corollary	0.45 [0.30]	0.44 [0.26]	0.06 [0.15]	0.15 [0.20]
No. obs	4969	4969	4969	4969
R-sq	0.52	0.52	0.52	0.52
Country dummies	Y	Y	Y	Y
Year dummies	Y	Y	Y	Y

Robust standard errors, clustered by country. * significant at 10%;** signif.

Table 4: Dates U.S. Military Invasions in Latin American Countries (1900-1929)

Date	Event
February, 1904	U.S. bombard Dom Rep.
September, 1906	U.S. takes control of Cuba
April, 1907	U.S. marines land in Honduras
June, 1912	U.S. gunboats dispatched to Cuba
August, 1912	U.S. marines land in Nicaragua
January, 1914	U.S. begin period landings in Haiti to protect US property
April, 1914	U.S. occupies Veracruz, Mexico
August, 1915	U.S. marines occupy Haiti
May, 1916	U.S. bombards Santo Domingo, Dom Rep.
March, 1917	U.S. marines land in Cuba to protect U.S. property owners
August, 1921	U.S. marines intervene on the border between Panama & Costa Rica
December, 1926	U.S. marines land in Nicaragua

Table 5: Gunboats (Spillover Effects)

Dependent variable: Spread (1 Month Window)

Latin Countries	(1)	(2)
Episode	0.15 [0.05]**	0.14 [0.05]**
No. obs	4953	4953
R-sq	0.52	0.69
Country dummies	Y	Y
Period dummies	Y	Y
Period Trend*Country dummies	N	Y

Robust standard errors, clustered by country. * significant at 10%;** signif. at 5%;*** signif. at 1%

Table 6: Gunboats, Caribbean Countries (Spillover Effects), Pre-, During, and Post Invasion

Dependent variable: Spread (1 Month Window)

Caribbean Countries	(1)	(2)
Pre-Invasion	0.006 [0.04]	-0.001 [0.05]
Invasion	0.13 [0.07]*	0.13 [0.07]
Post-Invasion	0.19 [0.08]**	0.19 [0.08]**
No. obs	2982	2982
R-sq	0.53	0.73
Country dummies	Y	Y
Period dummies	Y	Y
Period Trend*Country dummies	N	Y

Robust standard errors, clustered by country. * significant at 10%;** signif. at 5%;*** signif. at 1%

Table 7: Gunboats, Caribbean Countries (Spillover Effects)

Dependent variable: Spread		
	(1)	(2)
T-3	-0.02 [0.02]	-0.009 [0.03]
T-2	-0.004 [0.02]	-0.002 [0.01]
T-1	-0.04 [0.04]	-0.04 [0.04]
T	0.008 [0.02]	0.02 [0.02]
T+1	0.04 [0.02]*	0.05 [0.02]**
T+2	0.05 [0.03]*	0.06 [0.03]*
T+3	0.04 [0.02]	0.05 [0.02]**
T+12	0.02 [0.02]	0.02 [0.02]
No. obs	2639	2639
R-sq	0.51	0.8
Country dummies	Y	Y
Period dummies	Y	Y
Period Trend*Country dummies	N	Y

Robust standard errors, clustered by country. * significant at 10%;** signif. at 5%;*** signif. at 1%

Table 8: Vulture Dates

Case: Creditor vs. Debtor	Case filed	Summary judgment
<i>SUCCESSFUL ATTACHMENT:</i>		
Pravin vs. Peru	1-Feb-93	19-Jan-96
CBIC vs. Brazil	29-Jun-94	16-Mar-96
Elliot vs. Panama	15-Jul-96	16-May-97
Elliot vs. Peru	8-Oct-96	29-Sep-00
Dart vs. Argentina	10-Apr-03	12-Sep-03
<i>SETTLEMENT, NO ATTACHMENT:</i>		
LNC Investments vs. Nicaragua	21-Aug-96	2-Apr-99
GP Hemisphere vs. Nicaragua	22-Jul-97	30-Oct-98
Urban vs. Argentina	20-Nov-02	9-Mar-06
Lightwater vs. Argentina	6-May-02	14-Apr-03
Old Castle vs. Argentina	6-May-02	14-Apr-03
Macrotecnic Intl Corp vs. Argentina	18-Jun-02	14-Apr-03
Fontana vs. Argentina	29-Oct-03	24-May-04
Latinburg vs. Argentina	29-Oct-03	24-May-04
NML vs. Argentina	7-Nov-03	10-May-06

Sources: Court briefings (identified using Lexis-Nexis Legal), newspaper articles (through Factiva), Singh (2003), and Sturzenegger and Zettelmeyer (2006). Note: most of the Argentine cases, save Dart, were settled. Only the first five cases resulted in attachments.

Table 9: Vulturing, Latin Countries (Spillover Effects)

Dependent variable: EMBI				
	Day	1 week	2 weeks	4 weeks
<u>Panel A</u>				
Regime Change	-0.73 [1.23]	-1.28 [0.92]	-1.26 [0.93]	-1.15 [0.99]
No. obs	24087	24082	24077	24067
R ²	0.54	0.54	0.54	0.54
<u>Panel B</u>				
All Attachments	-0.99 [0.60]	-0.70 [0.57]	-0.64 [0.38]	-0.63 [0.45]
No. obs	24085	24070	24055	24025
R ²	0.54	0.53	0.53	0.53
<u>Panel C</u>				
Successful Filing	-0.981 [0.57]	-0.907 [0.41]*	-0.87 [0.39]**	-0.84 [0.44]*
No. obs	24087	24082	24077	24067
R ²	0.54	0.53	0.53	0.53

Robust standard errors, clustered by country. † significant at 20%; * signif. at 10%; ** signif. at 5%; *** signif. at 1%. Results include country, time, country*time dummies. Regime Change refers to the attachment of the Peru case; All attachments refers to all successful attachments; Successful filings refers to the filing of lawsuits that result in successful attachments. See Table 9 for a complete list of cases.

Table 10: Vultures, Successful Filing, (Spillover Effects)

Weeks Before and After the Event	
Dependent variable: EMBI	
Latin Countries	EMBI (Percent)
<i>T</i> -3	0.38 [0.37]
<i>T</i> -2	0.27 [0.20]
<i>T</i> -1	0.099 [0.13]
<i>T</i>	-1.05 [0.55]*
<i>T</i> +1	-0.56 [0.39]
<i>T</i> +2	-0.49 [0.40]
<i>T</i> +3	-0.38 [0.45]
<i>T</i> +4	-0.53 [0.48]
No. obs	24087
R ²	0.54

Robust standard errors, clustered by country. † significant at 20%; * signif. at 10%; ** signif. at 5%; *** signif. at 1%.

Results include country, time, country*time dummies, controls.

Figure 1: Average Monthly Spreads for All Countries, Caribbean Countries, Baseline Countries (Argentina, Brazil and Chile) and Invasion Dates

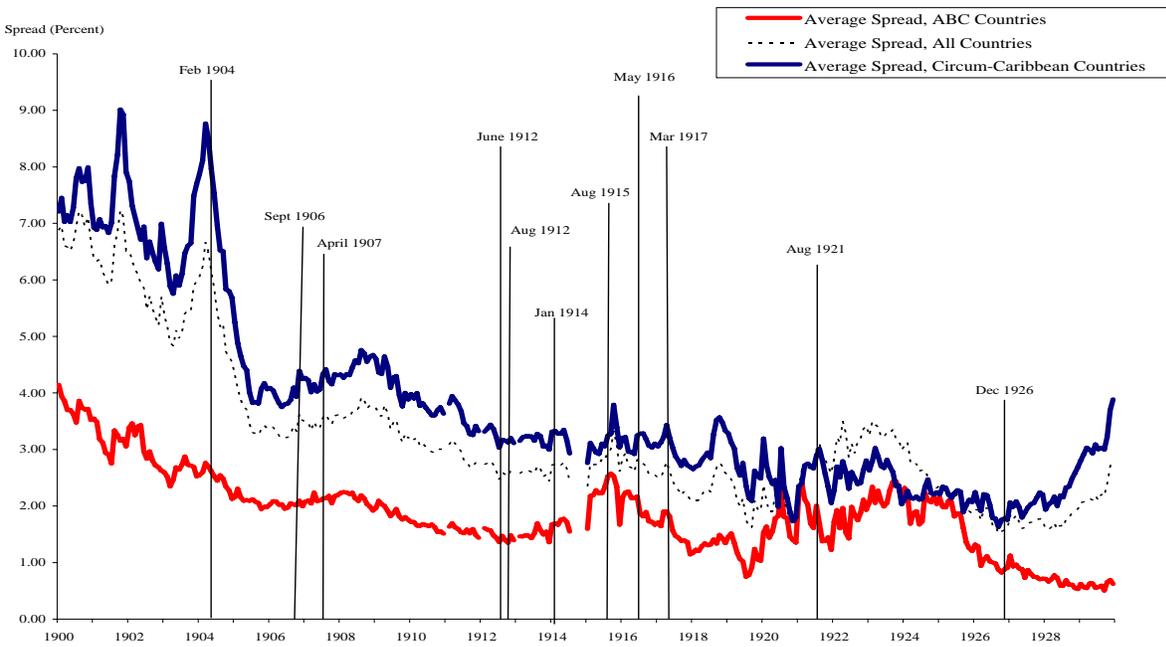


Figure 2: Average Daily EMBI for Latin Countries and Legal Dates

