

State Building in the Era of International Finance

Didac Queralt

Yale University

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Book Abstract

External finance offers countries unlimited opportunities to overcome barriers to economic growth but it also allows autocrats to leapfrog key stages in institution building and political development. To gain better understanding of the consequences of external finance for state building, I reach back to the Bond Era, 1815–1914, a period in which new countries outside Europe came to exist and capital markets grew global. I argue and show evidence that readily available external funds allowed rulers in the developing world to bypass investment in tax capacity, causing persistent state weakness and democratic deficit.

I organize the argument and book in two parts: First, I document the rise of public finance with original historical data and I introduce the notion of *extreme conditionality*—namely the confiscation of public assets by foreign bondholders in case of external default—to explain why developing nations accessed cheap capital from their earliest stages despite having weak economic fundamentals. I show that extreme conditionality lies at the bottom of state weakness in parts of the developing world today. Second, I advance a political economy of public finance to shed light on the negative consequences of cheap external capital for fiscal and political reform. Qualitative and statistical evidence shows that external finance weakened rulers’ incentives to strengthen the state and preempted democratization all the way from the nineteenth century to the present day.

In sum, a combination of exceptionally cheap credit in the early stages of state building and the universal desire of rulers to accumulate power shed light on the causes of state weakness in large parts of the developing world.

Chapter 4

Extreme Conditionality in International Lending

4.1 Summary

The previous chapter argued that the price of external capital in the Bond Era responded to supply or “push factors:” capital surplus in Europe, fraud, and low domestic returns. In this chapter I revisit the so-called demand or “pull factors,” namely country-specific characteristics that attracted foreign capital. Along with standard explanations—the gold standard, reputation, and empire—I articulate a complementary hypothesis, namely foreign financial control by bondholders in case of default, or *extreme conditionality*. I elaborate on the conditions under which private bondholders took over local assets and test the hypothesis against an augmented version of the historical interest rate data that includes newly collected information on loan pledges.¹ Results suggest that pledging public assets reduced interest rates of emerging economies but exposed them to foreign control (and looting). The chapter is organized in three parts: I begin by reviewing leading explanations of the spread in the nineteenth century. Then, I articulate the extreme conditionality hypothesis and test some of its empirical implications. Finally, I discuss the risks of pledging national assets for long-term state building.

4.2 Bond Yield in the Nineteenth Century

The expansion of European capital exports in the nineteenth century is responsible for the drop in the average cost of external finance, also for countries with weak fundamentals. Push factors are not unique to the nineteenth century: Frieden (1991), Mosley (2003), and Ballard-Rosa, Mosley and Wellhausen (2019) find similar results in studying external finance in emerging economies from World War II to date. When capital is abundant, even borrowers with weak and undemocratic institutions access international finance in favorable terms; in other words, in good credit cycles, investors are risk-tolerant (Ballard-

¹I use pledges, securities, collateral, and hypothecation interchangeably.

Rosa, Mosley and Wellhausen, 2019)

A long tradition of economists and economic historians shows that country-specific characteristics also shape the terms of external finance: that is, demand matters. Existing accounts specific to the Bond Era focus on the borrower’s record of default, institution-induced credibility, and empire membership.² I review these explanations before introducing the notion of extreme conditionality.

4.2.1 Reputation

Why do countries service debt? They might do so because they want to cultivate a good reputation (Tomz, 2007) or because they want to avoid credit exclusion (Eaton and Gersovitz, 1981). The notion of reputation incorporates the beliefs that bondholders have about the type of government with which they are dealing. Governments (countries) with good reputations are expected to do everything in their power to service debt in good or bad times (e.g., implement an austerity policy if needed). Default, although occasionally justified from the investor’s point of view, tends to hurt the country’s reputation and thus is to be avoided. Good reputation is rewarded by investors with easier access to credit because they perceive the borrower as the reliable type (Tomz, 2007).

Tomz’s (2007) cooperative theory of lending through reputation contrasts with Eaton and Gersovitz’s (1981) noncooperative version. According to this model, lenders compel countries to cultivate their reputations—hence service debt—by threatening them with *credit exclusion*, the practice of refusing quotations of securities to governments that fail to fulfill their obligations or come to terms with their creditors (Jenks, 1927, p.284). The principle of exclusion was enshrined in the Rules of the London Stock Exchange (LSE) as

²This list does not exhaust all explanations: Some emphasize local economic conditions (Flandreau and Zumer, 2004), issue linkage (Lipson, 1985; Kelly, 1998), and central banks (Poast, 2015). The analysis of these hypotheses requires macroeconomic and institutional data that exist only for a selected group of countries or only for the later decades of the nineteenth century.

early as 1826.³

Figure 3.2 in Chapter 3 showed that massive defaults occurred with regularity in the Bond Era, yet effective interest rates decreased over time, bringing some scholars to question the notion of reputation. Lindert and Morton (1989) study the conditions of access to capital from 1850 to 1985. Drawing on a sample of ten emerging economies, they find that countries in default are not systematically punished by international lenders. In some cases, Lindert and Morton (1989) claim, the prospect of continued business with large borrowers is enough to regain market access in a short period of time.⁴ Eichengreen (1987) and Jorgensen and Sachs (1988) find that countries interrupting debt service during the interwar period were not excluded or penalized in the postwar era because markets attributed default to unforeseen external shocks and rendered the debtor's abrogation of contracts excusable. Instead of initiating an arduous negotiation, investors understood that a quick settlement would accelerate the borrower's recovery and ultimately benefit themselves. Reinhart and Trebesch (2016) find support to this conjecture by analyzing forms of debt relief between 1920 and the 2000s.

If countries can default without cost, why would they ever service? Tomz (2007) addresses this puzzle by advancing a dynamic model of reputation that relaxes the assumption of complete information about the preferences of foreign governments and that allows preferences to change over time, resulting from a change in an incumbent or in the populace. In this model, investors continually update their beliefs about the type of government they are confronting. Analyzing bond yields in secondary markets at different points in time as early as 1770, Tomz (2007) shows that investors offered worse credit to unproven governments than to better-known or "seasoned" countries, that reputation

³Article 62 of the Rules of the LSE reads as follows: "62. The Committee will not recognize new bonds, stock, or other securities, issued by any foreign government that has violated the conditions of any previous public loan raised in this country, unless it shall appear to the Committee that a settlement of existing claims has been assented to by the general body of bondholders. Companies issuing such securities will be liable to be excluded from the official list" (Melsheimer and Gardner, 1891, p.164).

⁴This argument is similar to the one made by Drelichman and Voth (2011) for Spain during the reign of Philip II.

was built by servicing debt punctually over a number of years, and that regular defaulters struggled to raise new capital in international markets. To this date, Tomz (2007) offers the strongest evidence for the argument of reputation.

4.2.2 The Gold Standard

The incentive to cultivate a reputation might conflict with short-term political survival. Opportunistic policy (e.g., print money to cover a budget deficit) might damage the macroeconomy and put debt service in jeopardy. To credibly commit to honor debt, rulers might peg currency to a precious metal or major currency. In a world of open capital markets, the adoption of a fixed exchange rate puts monetary and fiscal policy at the service of the exchange rate.⁵ This policy bundle is expected to preclude political–business cycles and secure debt service.

Bordo and Kydland (1995) argue that adherence to the gold standard sent a strong signal of resolve to international markets, serving as a “good housekeeping seal of approval.” Drawing on secondary market bond yields from 1870 to 1914, Bordo and Rockoff (1996) show that the terms of access to external finance fared better among gold standard adopters. To their surprise, Bordo, Edelstein and Rockoff (1999) find supportive evidence for the gold standard in the interwar period despite the turbulence in international markets. Obstfeld and Taylor (2004) size adherence to the gold standard at about 30 basis points before 1914, but they find no effect during the interwar period.

Other scholars are more critical of the gold standard. Ferguson and Schularick (2006, 2012) argue that the gold standard is insufficient to credibly commit to stable macroeconomic policy and debt service. Some countries adopted the gold standard only *de jure*. Far from blind, international investors looked “behind the thin film of gold,” penalizing defectors with higher premiums. Comparing spreads five years into adherence between

⁵This trade-off is known as the Mundell-Fleming trilemma.

1880 and 1914, Mitchener and Weidenmier (2009) find that emerging markets in which the gold standard had been adopted still paid a 285 basis-point premium.

4.2.3 The Empire Effect

Grants-in-aid from the metropole were uncommon in the nineteenth century. Instead, British, French, Ottoman, and Spanish colonies floated loans in international capital markets on a regular basis (see Vignette 3.1 in chapter 3). These loans were marketed in the metropole and occasionally in other financial capitals; for example, Tonkin, a French colony, floated a loan in London in 1896 to finance the construction of a new railway. Private investors did not discriminate in favor of contracting public debt from the empire (Davis and Huttenback, 1988; Feis, 1930; Platt, 1968). Most of the lending went to sovereign nations (refer to chapter 3).

Most research on colonial loans has focused on the British Empire, the largest and best documented and the only one hosting the financial capital of the world.⁶ The so-called empire effect, the notion that colonies are treated favorably by investors, was challenged by Obstfeld and Taylor (2004) and Flandreau and Zumer (2004). By assembling a substantially larger dataset, Ferguson and Schularick (2006) revived the empire effect, estimating that membership in the British Empire decreased the spread by 150 basis points between 1880 and 1914. Accominotti, Flandreau and Rezzik (2011) confirm Ferguson and Schularick's (2006) results while articulating a novel causal mechanism: British colonies were neither better run nor enjoyed better macroeconomic stability. Simply put, investors anticipated that "strategic default would not be an option because underlying assets could be seized with support of imperial courts" (Accominotti, Flandreau and Rezzik, 2011, p.402).

⁶French and German capital flows to colonial dominions have been examined by Esteves (2011) and Esteves (2008), respectively.

4.3 Empirical Validation of Existing Explanations

In light of the mixed results from existing hypotheses of the bond spread, I seek to test them anew by exploiting a novel dataset that includes more political units than any previous test—as many as 92 and extending back to 1816. For reference, Ferguson and Schularick (2006), the most comprehensive dataset to date, sample 62 political units from 1880 onward.

The outcome variable in this analysis is the effective interest rate at issue (N=803), and the unit of observation is the country–year.⁷ Some countries issued more than one loan in a given year. For these cases, I compute the average yield per year, reducing the sample size from 803 to 693 year-country observations between 1816 to 1914.

I draw on conventional measures of the three explanations of the spread. For the *Gold Standard*, I include a time-varying indicator variable drawn from Meissner (2005). I completed this variable with data collected by Officer (2008) and Reinhart, Rogoff, Trebesch and Reinhart (2018). Note that the gold standard was adopted by both sovereign states and dependencies. For reference, 30 percent of loans in the sample were floated while the local currency was pegged to gold.

I account for reputation arguments twofold: The most common measure is the record of external default, information drawn from Reinhart and Rogoff (2009). The original variable indicates the onset of default and the restructuring years that followed. Chile, for instance, interrupted debt service between 1826 and 1842 and between 1880 and 1884. The default indicator is 1 for every year in both intervals, 0 otherwise. To test for reputation, I establish whether an external default took place in the last ten years (Ferguson and Schularick, 2006).

Second, Tomz (2007) shows that countries borrowing from international markets for the first time paid a premium for lacking a reputation. The indicator variable *Unseasoned*

⁷The effective interest rate at issue is measured as the ratio of the coupon to the price. See chapter 3 for details.

Borrower takes the value 1 for the first loan issued by any given country after 1816.

Finally, I produce a time-variant categorical variable, *Empire*, to indicate the British, French, Spanish, and Ottoman colonial status of any given territory: For instance, Morocco is treated as an independent country until 1912 and as a French colony in 1913–1914.⁸ With these data at hand, I model the effective interest rate at issue with an OLS model:

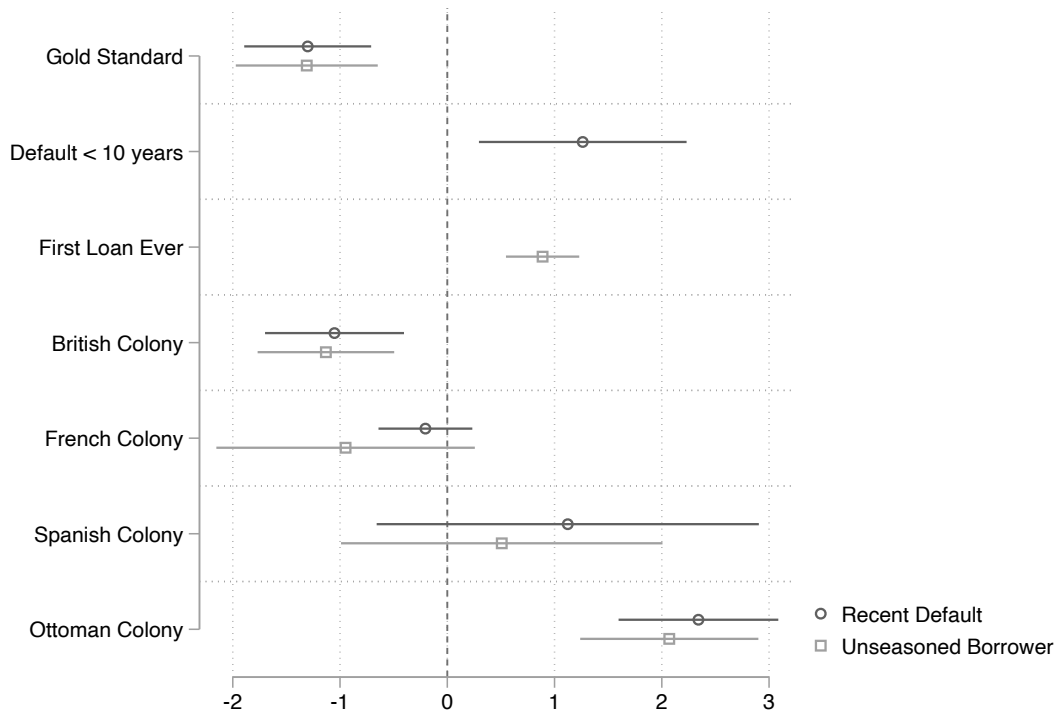
$$\text{Yield at Issue}_{it} = \alpha + \beta_1 \text{Gold Standard}_{it} + \beta_2 \text{Reputation}_{it} + \beta_3 \text{Empire}_{it} + \epsilon_{it} \quad (4.1)$$

Results plotted in Figure 4.1 confirm the three hypotheses in the existing literature while extending the sample size in both geographic and temporal scope. Data availability for covariates slightly reduces the sample size; nevertheless, a 95% confidence interval adherence to the gold standard decreases premiums by 130 basis points, approximately the same as membership in the British Empire. French and Spanish colonies were charged premiums similar to that of sovereign nations, but confidence intervals are large, suggesting internal heterogeneity. Ottoman colonies, by contrast, paid a significant mark up. Holding colony fixed effects constant, results suggest that reputation matters. Countries in default at least one year during the previous ten were charged a 127 basis-point premium when they issued a new loan in London. First-time borrowers were charged an additional 88 basis points, everything else held constant.

The magnitude of the point estimates in Figure 4.1 is arguably modest. Take the worst-case scenario: an Ottoman colony off gold, recently experiencing default. The predicted premium is 450 basis points, a number far from trivial yet significantly below modern-day premiums. Why were embarrassed governments not penalized at higher rates? I suggest we pay attention to the fine print of loan contracts and what was negotiated in default settlements.

⁸No territory floated a loan in London while a part of the Dutch or German empire, but some did so after gaining independence, for example, Belgium and Tasmania, respectively.

Figure 4.1: A Test of Existing Explanations of the Bond Spread: Reputation, the Gold Standard, and the Empire Effect.



Note: Period covered: 1816–1914. The *Recent Default* model samples 69 countries and that for *Unseasoned Borrower*, 82. The reduction in the sample size is attributable to data availability for two controls: Default History and the Gold Standard. Sources: Effective interest rate: Calculated by Author; Gold Standard: Meissner (2005), Officer (2008), Reinhart, Rogoff, Trebesch and Reinhart (2018); Default during the previous ten years: Reinhart and Rogoff (2009); Colonial Status: Hensel (2018) and Author.

4.4 Loan Contracts and Default Settlements in the Bond Era

International lending in the nineteenth century took place almost exclusively under municipal law, that is, the law of that land where the loan was floated, for example, London if a bond were quoted at the London Stock Exchange.⁹ Until the passage of the Foreign Sovereign Immunity Act in the United States in 1973, countries in default invoked the principle of sovereign immunity to escape municipal jurisdiction. Before the restriction imposed by this principle, to sue a sovereign debtor was almost impossible for individual investors (Mauro, Sussman and Yafeh, 2006, p.132). In the absence of a clear legal framework, other methods were necessary to protect bondholders' interest. Military coercion, also known as gunboat diplomacy, was exceptional.¹⁰ Most often the resolution of default involved ad hoc negotiation and compromise between bondholders and debtors (Frieden, 1994). Default settlements in the Bond Era included debt relief, fresh loans to refinance old debt, and eventually debt–equity swaps and receiverships. That the latter did not take place in the abstract but was based on assets previously pledged in loan contracts will remain clear.

4.4.1 Debt Relief

A standard default settlement in the Bond Era was accompanied by a cut in the outstanding debt, a reduction in interest rate, and the conversion of arrears of interest to new debts.¹¹ From 1821 to 1871, reduction of standing debt was small, 3 percent of face value on average, but increased to 23 percent in the period from 1870 to 1925. Interest

⁹See Waibel (2011) for an illuminating treatment of international private law.

¹⁰The two prominent cases are Mexico in the 1860s and Venezuela in 1902. Refer to Tomz (2007, ch.6) for a systematic analysis of gunboat diplomacy.

¹¹The content of this paragraph borrows from Stone (1992, p.94-5).

rate cuts were frequent and in the range of 15 percent during both periods.¹² Because settlement could take years to materialize, arrears of interest frequently exceeded the face value of defaulted bonds and often became the lion's share of settlement negotiations. On average, arrears were converted at 75 percent into new bonds issued at low interest rates; the remaining 25 percent was written off by the bondholders. Debt relief, in other words, was substantial in the Bond Era.

4.4.2 Foreign Financial Control

Even if desirable, debt write-offs weakened incentives to enact fiscal reform to service external debt, for instance, disconnecting war efforts from state building—the Ricardian equivalence of war—yet debt condonation was not the main obstacle to state strengthening reform. Debt relief had more important strings attached: It was often granted as part of a larger debt readjustment that included foreign financial control (Suter and Stamm, 1992, p.659), namely the exchange of external debt for debt–equity swaps and receiverships.

Debt–equity swaps. In order to regain access to international capital markets without paying back loans with tax money, borrowers may lease state-owned monopolies (e.g., a copper mine), key infrastructure (e.g., a railway), and land to foreign bondholders, who exploited the asset until the debt was liquidated. Exchanges of debt for assets are currently known as debt–equity swaps.

A textbook example of a debt–equity swap is Peru in 1886 (see Vignette 2.3 in chapter 2 for details). In a default settlement negotiation with British bondholders, Peru exchanged its extant debt for the creation of the Peruvian Corporation, owned and managed by the same foreign bondholders. Under the *Grace Contract*, Peru ceded its state railways to this private company for a period of 66 years, turned over to it guano deposits up to a maximum of two million tons, guaranteed it a subsidy from customs revenue, and endowed

¹²See Borchard (1951, pp.326-8) for a detailed list of interest rate cuts.

it with a land grant of five million acres. In return, Peru regained access to capital markets without having expanded its capacity to tax. Dependence on external finance persisted.

Debt–equity swaps were a fairly common practice in debt settlements in Latin America as well as in Eastern and Southern Europe: They had occurred earlier in Peru (1865, guano), but also in Bulgaria (1904, tobacco), Colombia (1861, land), Costa Rica (1871 and 1885, railways), the Dominican Republic (1893, railways), Ecuador (1885, land; 1897–98, railways), El Salvador (1899, railways), Greece (1893, salt, petroleum, and cigarette paper, among others), Paraguay (1855, land; 1877, railways and land), Portugal (1891, tobacco), and Venezuela (1886, railways).¹³

Receiverships. Instead of state-owned monopolies, borrowers could lease parts of the tax administration to foreign investors, often customshouses in key ports. Setting up a receivership required the creation of a parallel bureaucracy or debt administration council to monitor or take control of tax collection. Receiverships could be operated by private foreign investors (e.g., the OPDA in the Ottoman Empire) or be under the direct supervision of a foreign power (e.g., the US in the Dominican Republic). By creating a receivership, borrowers surrendered power over the portion of revenue that became the property of the bondholders or the collecting agency and distributed it in accordance with the loan agreement (Borchard, 1951, p.93). The receivership was terminated when external debt was liquidated.

Receiverships were relatively frequent despite the breach in national sovereignty. They were established in China (1911), Costa Rica (1911), Dominican Republic (1905–13), Egypt (1881–1913), Greece (1898–1913), Liberia (1912–3), Morocco (1905–11), Nicaragua (1912), Serbia (1895–1913), Tunisia (1870–1881), Turkey (1882–1913), Uruguay (1903), and Venezuela (1902–1903) among others. Mitchener and Weidenmier (2010) find that 28% of default episodes ended up in receivership.¹⁴ As valuable and meaningful as this

¹³Borchard (1951), Mauro and Yafeh (2003), Suter (1992), and Wynne (1951).

¹⁴Technically, Mitchener and Weidenmier’s (2010) estimate includes receiverships *and* military inter-

estimate is, Mitchener and Weidenmier's (2010) data do not account for preemptive revenue control clauses like the one imposed in Portugal in 1892 (Wynne, 1951, p.371-382) or in the 1902, 1904, and 1907 French loans to Bulgaria (Tooze and Ivanov, 2011) or in China in 1898, when European bondholders gained monitoring powers over customs revenue as a precondition to issue three new loans to pay war indemnities to Japan (Feis, 1930; van de Ven, 2014).

Mitchener and Weidenmier (2010) do not list debt–equity swaps either. This is meant not as a criticism but as a call to attention to the underestimated ability of bondholders to seize foreign assets upon sovereign default. Next, I offer a framework for the study of foreign financial control and its implications for both the spread and state capacity building in the Bond Era.

4.5 Extreme Conditionality

In chapter 2, I introduced the notion of extreme conditionality, that is, severe sanctions resulting from interrupting debt service, that is, foreign financial control by foreign bondholders. The concept of extreme conditionality resonates with the notion of supersanctions in Mitchener and Weidenmier (2010), under whose framework supersanctions were imposed on borrowing nations manifesting bad behavior, namely *ex post*, and on a case by case basis. I argue instead that the possibility of imposing foreign financial control was gradually enshrined in the norms of international lending. It became a practice of debt collection mutually recognized by investors and borrowers and agreed upon at time of issue, or *ex ante*. Access to foreign funds was conditional on the hypothecation of public assets, which were the focal point of foreign control in case of default. By pledging key sources of revenue, emerging countries accessed international credit markets at

vention but the latter is anecdotal.

unprecedented low rates.¹⁵

Handing over domestic assets to foreign bondholders was considered a national humiliation. By raising the domestic cost of default for a given sitting incumbent, extreme conditionality was meant to minimize the likelihood of default. It did not, however, always prevent default; and when that happened, financial foreign control followed. How were private bondholders capable of imposing extreme conditionality on sovereign states?

4.5.1 Enforcement

Far from easy tasks, seizing assets and establishing receiverships required first and foremost the approval of the local government. Receiverships were often unpopular with governments because they were interpreted as an improper delegation of power (Hyde, 1922, p.535).¹⁶ The first impulse of an embarrassed government was to oppose seizure and invoke the principle of sovereign immunity to prevent investors from suing them.

In the first half of the nineteenth century, foreign bondholders organized into ad hoc committees to negotiate settlements bilaterally with governments in default (Flandreau, 2013). In order to extract favorable concessions, bondholders would deny new bonds to countries in default, a practice known as *credit exclusion*. This practice was officially adopted at the London Stock Exchange soon after the 1820s debt crises (Neal and Davis, 2006, p.288).

Although credit exclusion allowed bondholders to negotiate favorable terms in default settlements, it was hardly enough to enforce swaps and receiverships. These required coercive power, which bondholders lacked. The ability to seize collateralized assets accelerated in the last decades of the nineteenth century for two reasons: Investors improved their coordination capacity, and creditor governments became more interventionist in capital

¹⁵Refer to Vignette 2.2 in chapter 2 for a formal derivation.

¹⁶In some other instances, receiverships were welcome by local authorities, for instance, in Honduras (Hyde, 1922, p.536). One may safely assume that this was the exception.

markets, raising the bargaining power of bondholders to unprecedented levels.

1. Bondholders' Coordination. In the late 1860s, bondholders in Europe put in motion encompassing associations that specialized in negotiating default settlements and in lobbying their home governments for diplomatic support. The leading association, the Corporation of Foreign Bondholders (CFB), founded in London in 1868, was a non-governmental organization representing private holders of foreign securities quoted in the London Stock Exchange. Similar associations were formed in other financial capitals.¹⁷

The history of the **CFB!** (**CFB!**) is one of success (Eichengreen and Portes, 1986, 1989; Kelly, 1998; Mauro, Sussman and Yafeh, 2006). I was involved in the negotiation of every single settlement involving British interest.¹⁸ It was organized into country-specific committees that negotiated bilaterally with governments in default over readjustment conditions. These committees retrieved detailed information on the defaulting government and disseminated it among its members. Creditors were more likely to agree on a common strategy if they based their decisions on similar data and analysis (Mauro, Sussman and Yafeh, 2006, p.143). By providing these services, the CFB enhanced the bargaining power of its members vis-à-vis embarrassed governments (Lipson, 1985). Consistently, the number of default settlements and the rapidity of the settlement of defaulted bonds were the highest in history after the creation of the CFB (Stone, 1992, ch.6).

2. Great Powers' Rivalry. An enhanced bondholder organization was insufficient to take control over collateralized assets following default. Debt-equity swaps and receiver-ships were unwelcome by local governments.¹⁹ To overcome resistance, foreign bond-

¹⁷The Vereeniging voor den Effecthandel was founded in Amsterdam in 1876, the Association Nationale des Porteurs Français de Valeurs Mobilières in Paris in 1898, the Association Belge pour la Défense des Détenteurs de Fonds Publics in Belgium in 1903, and the Spezial-Organisation zur Vertretung der schweizerischen Finanzinteressen im Ausland in Switzerland in 1913.

¹⁸The one exception was the negotiation of the Brazilian default of 1898 (Esteves, 2007, p.25).

¹⁹To minimize public contestation, governments in default asked foreign bondholders not to disclose the full content of default settlements. This was, for instance, one of the demand of Portugal in negotiating the settlement of the default in 1902 (Wynne, 1951, p.378).

holders' organizations reached for the assistance of their home governments. European governments took various approaches to capital markets and settlements. Officially, the British government interpreted defaults as the consequence of imprudent investment and preferred to stay away from what was considered a private matter (Lipson, 1985, p.187), but British foreign policy changed over time as a result of imperial expansion and Great Power competition (Cain and Hopkins, 2016; Feis, 1930).

In the absence of international law that supported government intervention on behalf of private matters, British government action was initially guided by the Palmerston Doctrine of 1849. Responding to bondholders' supplication for assistance, Foreign Secretary Palmerston issued a circular to the House of Commons on March 2, 1849, in which he enshrined the British government policy upon sovereign default of private capital. The spirit of this policy may be summarized in one paragraph:²⁰

It is simply therefore a question of discretion with the British Government whether this matter should or should not be taken up by diplomatic negotiation and the decision of that question of discretion turns entirely upon British and domestic considerations.

This circular was "sufficiently broad to permit the British Government to justify any course it chose to take" (Feis, 1930, p.103). In practice the British government intervened on behalf of British investors when preexisting geostrategic considerations were in place (Lipson, 1985; Platt, 1968). Those grown with the intensification of imperial competition between great powers in the second half of the nineteenth century.

Driven by conviction or dragged by other great powers' push for empire, British diplomatic intervention accelerated in the 1870s: "[I]t proved impossible [for the Foreign Office] to remain entirely inflexible on non-intervention, especially in cases where political interest were likely to be damaged" (Platt, 1968, p.17). The revised doctrine was enshrined

²⁰House of Commons, March 2, 1849. *State Papers British and Foreign*. XLII, 385.

in an interview with Lord Salisbury in 1889:

The Foreign Office judged each case on its particular circumstance. In cases of simple default due to misfortune or necessity, it would be improper for H.M. Government to exact payment; but where unfair discrimination had been exercised between equal creditors, or where the preferential rights and securities of British subjects [read bondholders] were unjustly denied, ground would exist for special sympathy from the Foreign Office.” (Platt, 1968, p.39-41)

The new doctrine broadened the set of scenarios in which government intervention was justified. In general, the Foreign Office would limited diplomatic intervention to “good offices.” These, “when exercised by such men as Consul General Chatfield in Central America or Consul-General Wilson in Chile, must have been difficult indeed to distinguish from unqualified diplomatic intervention” (Platt, 1968, p.42). In counted occasions, the Foreign Office managed firsthand loan contracts and default settlement negotiations. For instance, it played a leading role in negotiating loans, securities, and receiverships in China (1898–1911), Greece (1898), Persia (1889), and Turkey (1875).²¹

Last but not least, the change of course of the Foreign Office with regard to government intervention in capital markets did not result from bondholders’ lobbying only. The alignment between financial and “national interest” reflected a fundamental change in the prominence of traded and financial classes in British politics. In the second half of the nineteenth century, a gradual replacement in the composition and socioeconomic extraction of high-ranking government officials took place. Gradually, members of the landed aristocracy in key government positions were replaced by individuals who had vested interests in foreign trade and finance, facilitating the alignment between national foreign policy and investors’ goals (Cain and Hopkins, 2016, ch.4).²²

²¹See surveys by Cain and Hopkins (2016) and Wynne (1951).

²²See also Aydelotte (1977) and Fresh (2018).

French and German foreign ministers were open about government intervention in capital markets (Feis, 1930, chs. 5 and 6). The French government exerted tight control on the loans floated at the Bourse and refused a quotation when disapproving the nature or direction of a loan (Platt, 1968, p.7). Often, French and German governments brokered loans on behalf of private investors, particularly in arms trade (Grant, 2007), and exerted diplomatic pressure on default settlement negotiations (Feis, 1930, chs. 5 and 6). Once a receivership was set in motion, the governments left its daily administration to private bondholders, who managed or supervised the debt administration council and redirected revenue to debt service until it was liquidated.

The United States also became more interventionist in the negotiations of default settlement of Latin American and African countries (Maurer, 2013). Following the Monroe Doctrine, the U.S. government pursued a “debt-enforcement empire” in Central and South America (Ahmed, Alfaro and Maurer, 2010). The U.S. government sponsored “controlled loans,” in which the debtor country agreed to allow the US or a US-appointed agent to take over tariff or internal tax collection in the event of default. This eventually happened in the Dominican Republic in 1905, Cuba in 1906, Nicaragua in 1911, and Haiti in 1915.

In sum, bondholders’ capacity to take control over local resources in case of default grew over time for two reasons: First, organizations for new bondholders elevated their bargaining power in default negotiations with embarrassed governments as well as their ability to lobby home governments for diplomatic support. Second, the acceleration of imperial competition in the last three decades of the nineteenth century made the creditors’ governments more receptive to the demands of diplomatic support.

The language of loan contracts gradually reflected the increased bargaining power of bondholders. Most often, loans required the hypothecation of assets with the understanding that these would be subject to foreign confiscation in the case of default (see empirical evidence below). At other times, loan contracts explicitly incorporated debt–equity swaps and receiverships if service were interrupted, solidifying investors’ expectations.

For instance, Bulgaria secured a new loan in 1892 upon a mortgage on the Kaspitshan-Sofia-Kyustendil and Rustchuk-Varna railway state railroads plus the revenues and dues of the two harbors. In case of default, foreign bondholders were entitled after six months to take over the railroads and sell them if necessary after two years. Explicit references to swaps and receiverships in case of default were introduced in the loan contracts of China (1898, 1911, 1913), Costa Rica (1911), El Salvador (1922), Liberia (1906), Morocco (1904), Poland (1920), Portugal (1891), and Serbia (1902, 1906, 1909, 1913), to name a few.

4.6 An Empirical Investigation of Extreme Conditionality

In this section I assess a key aspect of extreme conditionality: the relationship between pledges and the spread. If pledges are credible—read seizable—collateralized bonds should be rewarded by investors with a lower premium. Asset seizure did not occur in the abstract. The legal base for debt–equity swaps and receiverships comprised pledges made at the time of contracting a new loan. Law scholars recognize that pledges in the Bond Era had intrinsic legal value: First, collateralized loans received priority in the negotiation of default settlement. Loans with pledges would be repaid first and subject to lower interest reduction and principal haircuts (Irmscher, 2007). Second, lenders of loans that were pledged had priority in the control or administration of those resources in case of financial intervention (Borchard, 1951, p.98-100). If investors anticipated the ability to enforce swaps or receiverships as part of default settlements—hence minimizing risk—and pledged assets served as focal points of those negotiations, loans containing pledges can be expected to carry a lower interest rate.

4.6.1 Coding Pledges

To test the effect of pledging on credit price, I coded all pledges included in loan contracts of sovereign loans floated in London. In order to produce a complete sample, I digitized the entire collection of loan prospectuses held by the Guildhall Library in London, where the archives of the London Stock Exchange are stored. This collection includes prospectuses for every bond floated in London between 1858 and 1914. Secondary sources, including Borchard (1951), Wynne (1951), Fishlow (1985), and Feis (1930), identify pledges prior to 1858; however, none of those sources offer a complete collection of loans, a necessary condition to estimate the effect of pledges on the spread.

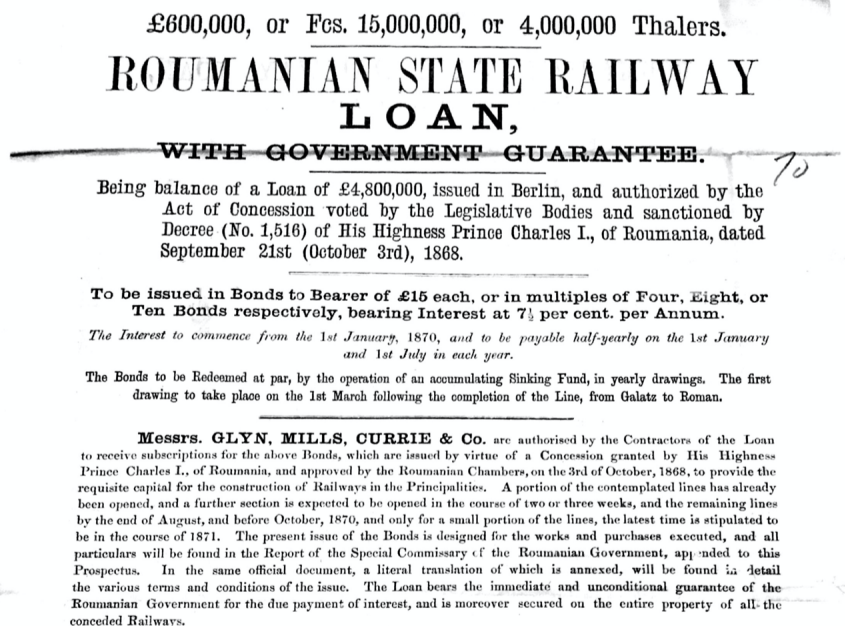
The Guildhall prospectus collection lists a total of 707 sovereign loans for 90 countries for the period between 1858 and 1914.²³ In coding pledges I dismissed general statements, for example, loans secured upon the “general revenue of the country”—a frequent rhetorical recourse—and focused on specific pledges, for instance, a tobacco monopoly or the customs receipts in a major port. A total of 169 prospectuses, or 27% percent of the sample, include one or more specific pledges, the vast majority of bonds with pledges involving sovereign countries, not colonies (more below).

To minimize coding assumptions, I set *Pledge* to 1 whenever a country includes a specific pledge in a loan contract (0 otherwise). I offer three examples in Figures 4.2-4.4: In 1870, the Romanian government issued a loan in various financial capitals of Europe to build a state railway (Figure 4.2). This particular loan was “secured on the entire property of all the conceded Railways” (last line of excerpt).

Figure 4.3 shows a second type of security: control over the tax administration in case of default, or receivership. In this example, the Government of Santo Domingo (modern-day Dominican Republic) agreed to hand over the tax administration to the Council of Foreign Bondholders in London in case of default. As reflected in the loan, tax collection

²³I discarded subnational units: for instance, Argentinian provinces after unification or Indian states are not considered.

Figure 4.2: Pledge in the 1870 Romanian Loan (Excerpt of Prospectus)

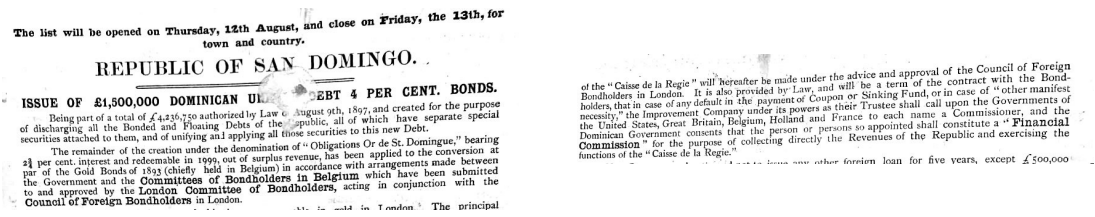


had already been externalized to an American firm a few years earlier, a sign of low fiscal capacity.²⁴ The loan required the agreement of the Dominican Republic, the CFB, the American firm, and the American government. The effective rate at issue for this loan was 6.1 percent, 230 basis points above the average rate in 1897—a nontrivial yet modest premium considering the dire fiscal position of the country. Unsurprisingly, the Dominican Republic suspended debt service two years later. As part of the default settlement negotiations, an American receivership was installed in Santo Domingo (1905–1941), railways were put in hands of American bondholders, and a monthly installment by the Treasury to an agent nominated by the European bondholder based in Santo Domingo was to be deposited until the debt was liquidated (Wynne, 1951, p.224-69).

The final example in Figure 4.4 shows that foreign intervention clauses were agreed upon with large countries as well—China in this case. The loan of 1910, for instance, allowed foreign bondholders to seize key sources of revenue in case of default. To float

²⁴Santo Domingo's had defaulted on a loan floated in 1869 to purchase munition and new equipment for a cruiser (Wynne, 1951, p.207). In 1888, the American firm had replaced a Dutch *régie* created for the purpose of debt collection.

Figure 4.3: Pledges in the 1897 Santo Domingo's Loan (Two Excerpts of the Prospectus)



in the era of high imperialism:

[John] Jordan [Her Majesty’s Envoy Extraordinary and Minister Plenipotentiary to China] believed that the [European] banks [...] rel[ie]d on the belief that the powers were prepared to use gunboat diplomacy to recover their money. He wrote that “lending money to China is a mild form of gambling. The lenders trust to her great natural resources and to political pressure or intervention,” adding, “the recovery of all this money will be an unpleasant task for our successors.” (van de Ven, 2014, 170)

This example sheds light on the investors’ calculations at the time and the anticipated diplomatic (when not military) intervention of European governments on behalf of their nationals. Pledges were not mere scraps of paper: They shaped expectations, and I argue these were reflected in the price of capital.

4.6.2 Analysis

The ability of bondholders to seize pledged assets grew over time as a result of organizational advances and the growing interventionism of creditors’ governments. To account for the the time-varying credibility of pledges, I first run a linear interaction between pledging and time:

$$\begin{aligned} \text{Yield at Issue}_{it} = & \alpha + \beta_1 \text{Pledge}_{it} + \beta_2 \text{Year}_t + \beta_3 \text{Pledge}_{it} \times \text{Year}_t \\ & + \mathbf{X} \beta_4 + \eta_i + \epsilon_{it} \end{aligned} \tag{4.2}$$

where \mathbf{X} denotes a vector of time-varying country-level controls. I expect β_1 to be positive and β_3 negative. At the beginning of the nineteenth century, the expectation of asset seizure in case of default was remote. Bondholders were good at denying credit if needed but government interventionism on behalf of private investors was unlikely. In those times,

the presence of a pledge in a loan contract could reveal a lemon; that is, only countries that anticipated difficulty paying back their debt would have pledged their assets to overcome creditors' doubts, hence $\beta_1 > 0$.

As time passed, bondholders became better organized. By creating encompassing investors' organizations, lenders improved their ability to negotiate with embarrassed government and lobby the home government for diplomatic support. By then, European governments were themselves involved in a colonial-imperial race, making them more receptive to bondholders' requests. In that context, I expect pledges to be deemed credible, that is, seizable in case of default. Accordingly, investors would revise downward their priors about the risk lending to an emerging economy. Empirically, I expect interest rates to decrease in the presence of pledges, $\beta_3 < 0$.

Pledges are not randomly assigned. To minimize selection, I include a battery of country fixed effects η_i . These capture time-invariant characteristics that make countries more likely to issue a loan and pledge national wealth, for example, weak economic fundamentals. Substantially, the *within estimator* captures the effect of pledging relative to not pledging for the same country.

The analysis is limited to loans for which I can compute the effective yield at issue. This brings the sample size from 707 to 643 units. As I did for the analysis in Figure 3.5, I compute the average yield at issue for any year in which a given country floated more than one loan. Within the same year some loans might come with a pledge, but others do not. I compute the share of total issue amount for any given year. If 50 percent or more derives from a pledged loan, I assign value 1 to *Pledge* for that country–year observation. The final the sample comes from 643 down to 567 country–year observations.

Column 1 in Table 4.1 reports results for the simplest specification, including country fixed effects and no other covariate. The estimates are consistent with expectations: By the midnineteenth century, pledges were hardly seizable. Collateral was read by investors as a signal of poor macroeconomic performance, hence $\hat{\beta}_1 > 0$. As time passed, pledges

Table 4.1: Bond Yield and Pledging: 1858–1914

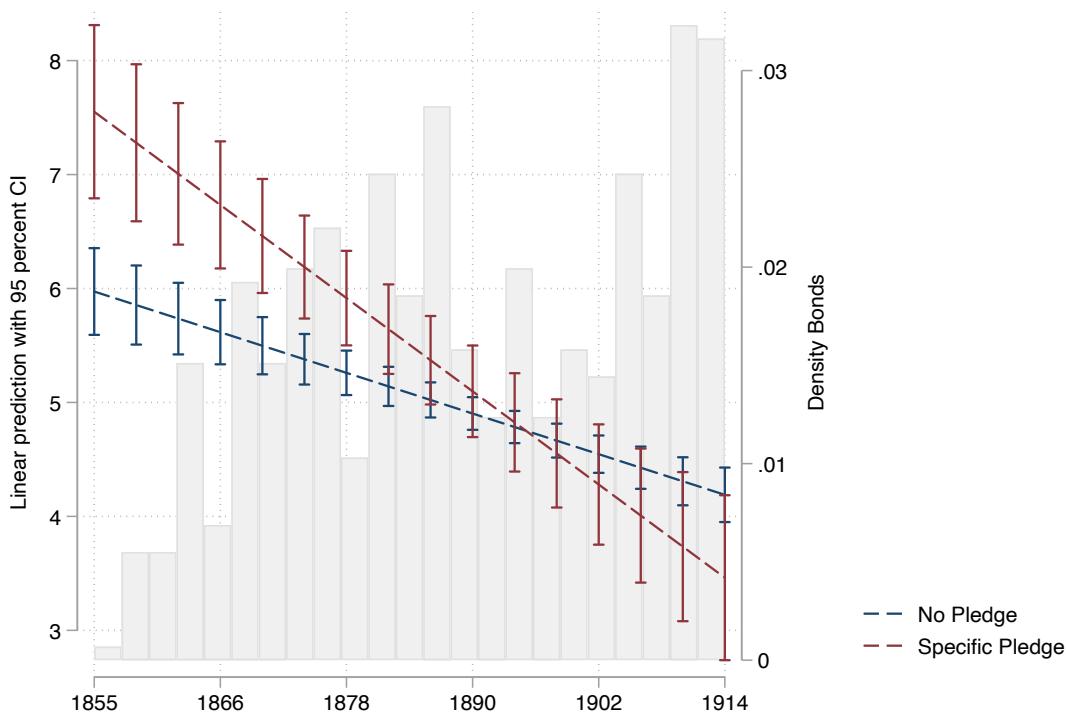
	(1)	(2)	(3)	(4)	(5)	(6)
Pledged \times Year	-0.039*** (0.012)	-0.030*** (0.009)	-0.025*** (0.009)	-0.033*** (0.012)		
Pledge \times After CFB					-0.732* (0.420)	-0.761* (0.443)
Pledge	74.056*** (22.833)	56.336*** (17.840)	46.392*** (16.933)	62.293*** (22.854)	0.773** (0.381)	0.715* (0.376)
Year	-0.030*** (0.005)	0.046*** (0.004)	0.047*** (0.007)	-0.013** (0.006)		
After CFB					2.544*** (0.250)	2.584*** (0.426)
Gold Standard			-0.233 (0.284)			-0.233 (0.309)
Default within the last 10 years			0.360** (0.165)			0.400** (0.199)
Public Debt–Revenue ratio				0.027 (0.034)		
ln(per Capita Exports)				0.183 (0.153)		
Fiscal Deficit–Revenue ratio				0.037 (0.049)		
Constant	62.075*** (8.828)	-82.391*** (8.304)	-84.667*** (13.584)	28.644** (12.005)	2.180*** (0.149)	2.321*** (0.169)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	Yes	Yes	Yes
Colonial Status	No	No	Yes	No	No	Yes
Observations	567	567	492	286	567	492
R-squared	0.888	0.938	0.917	0.873	0.934	0.914

Bond yield is measured at issue. Source: Pledges and Sinking Funds coded by the author. See chapter 3 for sources for the Gold Standard and External Default. Sovereignty status is drawn from Reinhart and Rogoff (2009). Country-clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

became credible and interest rate premiums decreased accordingly, $\hat{\beta}_3 < 0$.

Figure 4.5 offers a visual of the main result. Two patterns are worth mentioning: First, observe a secular decline in effective interest rates. Despite repeated episodes of default in this period (Reinhart and Rogoff, 2009), markets offered credit at increasingly lower rates as years passed. Second, one way lemons' rates converged with those of seasoned borrowers, I argue, was by pledging precious public assets and sources of revenue. At the outset of the period of study, pledges were interpreted as empty promises, hence they led to no premium cut. As time passed and bondholders became more effective in negotiating settlements and seizing collateral, the gap between these curves narrowed. The spread at issue vanished in approximately 1880, soon after the establishment of the CFB.

Figure 4.5: The Effect of Pledges on Bond Yield Over Time (95% CI)



Note: Bond yield is computed at issue (refer to chapter 3 for details). The density superimposed shows the distribution of bonds issued over time.

Thus far, I assumed that the ability to seize pledged assets by international bondholders grew over time because of the increased bargaining power of bondholders; however, the

secular increase could coincide with other unobserved trends (e.g., a sustained increase in capital supply), making the relationship in column 1 in Table 4.1 biased if not spurious. In order to account for any secular trends in international capital markets, I fit a battery of year fixed effects in column 2. As expected, the effect of pledges over time weakens once we control for the common secular trend; however, it does not vanish.

Columns 3 adds controls for standard explanations of the spread examined earlier in this chapter: the *Gold Standard*, *Recent Default*, and *Colonial Status*.²⁶ Including these covariates decreases the magnitude of the pledging, as expected, but the effect is still negative and is statistically different from zero.

In column 4, I add a series of economic controls agreed to guide investors' decisions in the Bond Era (Accominotti, Flandreau and Rezzik, 2011, p.392): *Public Debt as a proportion of Revenue*, *Fiscal Deficit as a Proportion of Revenue*, and *Trade Openness* (measured as logged per capita exports).²⁷ These controls, drawn from Ferguson and Schularick (2006), are available for 1880 onwards only. Despite the significant reduction in sample size, results for the interaction terms in column 4 are similar to previous specifications.

Thus far I have assumed that the bargaining power of bondholders increased linearly over time; however, the creation of the CFB in 1868 was arguably a game changer in debt renegotiation. In column 5 I interact the pledge variable with a time indicator, *After CFB*, which equals 0 until 1868 and 1 afterwards. This indicator is meant to estimate any significant change in the effect of pledging on the effective interest rate before and after the official creation of the CFB—a difference-in-difference estimator. Because the dataset begins in 1858, little statistical power exists before the 1968 cutoff; and results may be assessed accordingly. The interaction *Pledge* \times *After CFB* in column 5 is negative and

²⁶I do not include an indicator for *First Loan Ever* because it is collinear with country fixed effect.

²⁷*Interest Services as a Proportion of Revenue* is also an important control (Flandreau and Zumer, 2004); however, this variable has many missing values. Because it correlates strongly with *Debt as Proportion of Revenue*, I choose the latter. Results are identical, nonetheless.

statistically significant at 90 percent. This coefficient means that, everything else constant, a loan including a pledge would have an effective interest rate 0.73 points lower after the CFB (a 15% decrease relative to the average interest rate in the sample), arguably because of the heightened capacity of bondholders to execute asset seizure in case of default. In column 6 I repeat the exercise by adding institutional controls. Results, if any, strengthen the working hypothesis. Because macroeconomic data are available only after 1880 (after the CFB was created), I cannot include those controls in this specification.

Accominotti, Flandreau and Rezzik (2011) and Ferguson and Schularick (2006) show abundant evidence of the so-called “empire effect,” that is, the systematic lower spread for colonies relative to other economies with similar fundamentals. Accominotti, Flandreau and Rezzik (2011) argue that investors perceived colonies as an extension of the national territory—provinces. If colonies defaulted, investors could resolve the dispute under imperial jurisdiction; that is, investors could bring the embarrassed colonial government to (British) court. If this is true, we should observe few pledges in colonial bonds to begin with. Second, pledges should help reduce the spread among foreign countries, not colonial dependencies. Imagining that the British government would allow a debt–equity swap in any given colony is difficult because doing so would reduce the empire tax base.

Pledges were indeed uncommon among colonies: Only 8 percent of colonial bonds had one compared to 40 percent of bonds of sovereign countries. In order to test the differential effect of pledges in and outside the empire and over time, a three-way interaction is required. Table 4.2 reports results. For ease of interpretation, I report two paired comparisons, namely the effect of pledges over time for the British empire and sovereign countries, separately. In column 1, I report the interaction with *Year* (following Expression 4.2) and in column 2 with the indicator variable *After CFB*. Results confirm that pledges reduced the price of external finance for sovereign countries, not colonies, but they did so only once bondholders gained the ability to seize pledged assets in case of default, that is, in the final decades of the nineteenth century.

Table 4.2: Pledging and Empire Effect

	(1)	(2)
Pledge \times Year \times Sovereign	-0.028** (0.011)	
Pledge \times Year \times Empire	0.019 (0.015)	
Pledge \times After CFB \times Sovereign		-0.824* (0.467)
Pledge \times After CFB \times Empire		1.092 (0.679)
Constant	-77.480*** (11.263)	2.377*** (0.210)
Country FE	Yes	Yes
Year FE	Yes	Yes
Observations	567	567
R-squared	0.939	0.936

Empire and *Sovereign* are mutually exclusive. *Empire* = 1 if unit is a member of British empire. *Sovereign* = 1 if unit is not a member of British Empire. All models include all constituents parts of the the three-way interaction but only some are reported. Country-cluster standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Finally, in Appendix 4.10, I run the equivalent of a placebo test. Loan contracts often included pledges as well as *sinking funds*. The latter forced borrowers to set aside capital periodically to repurchase a portion of the existing bonds and gradually reduce the face value of the loan. Sinking funds were created to dissuade borrowers from renegeing on the outstanding principal at the end of the credit term. Before 1914 debtor countries could pay the sinking fund to an agent, usually the underwriter of the bond instead of the creditors directly (Tunçer, 2015, p.20). From the investors' point of view, the presence of sinking funds should reduce risk and, arguably, that should translate into lower interest rates. A sinking fund, however, did not secure a stream of future income unlike taking control of a state monopoly or a receivership.

Along with pledges, I coded sinking funds from every loan in the Guildhall Prospectus series: 52 percent of loans floated in the LSE had a sinking fund. In Appendix Table 4.10, I report results for Expression 4.2 once pledges are replaced by the presence of a *Sinking Fund* in a loan contract. The effect of the interaction coefficient is zero no matter the specification, suggesting that sinking funds were not strong enough risk-reduction mechanisms. By the same token, it implies that pledges were not mere scraps of paper. The possibility of confiscating state assets and tax revenues changed investors' incentives to lend to otherwise risky borrowers. The consequences for the latter could be deleterious for long-term state building.

4.7 Extreme Conditionality and State Building

The prevalence of foreign economic control in the Bond Era is critical to understanding why external finance was unlikely to contribute to state building. Swaps and receiverships reduced the risk of lending to economies with weak economic fundamentals. Lower risk meant lower interest rates, making external finance appealing to emerging economies in need of revenue. Weak fundamentals would make emerging economies vulnerable to

default. If that occurred, a default settlement would be negotiated with foreign investors, plausibly allowing for some debt relief plus a debt–equity swap or a receivership or both.

Foreign economic control would allow an embarrassed government to regain access to capital markets without having exerted any significant fiscal effort to expand the tax base. Arguably, by surrendering assets and tax revenue at the source to borrowers, the tax base available to the local government shrank, leaving emerging economies in precarious fiscal positions. Revenue shortage would soon require new loans (possibly agreed upon as part of the debt readjustment). Following this path, emerging economies could easily fall into a “debt trap” (Fishlow, 1985, p.400), characterized by high indebtedness and weak state capacity.

Why would incumbents of emerging economies assume such a risk? Why would they float loans if swaps and receiverships in case of default were anticipated? One reason, formalized in chapter 2, is that external finance allowed rulers to dodge the immediate costs of alternative sources of revenue, key among them, taxation. Higher or new taxes may give rise to demands for power-sharing over fiscal policy by taxpayers—namely some say about how tax revenue is spent. Alternatively, power-sharing institutions may be required to induce quasi-voluntary compliance from taxpayers. Either way, taxation was likely to limit the incumbent’s discretion over spending decisions. By contrast, foreign loans allowed rulers to accumulate power in the short run while shifting the political costs of servicing external finance (either foreign control or power-sharing institutions) to future leaders.

The search for yield by foreign investors combined with myopic political calculations of unconstrained rulers would be conducive to high indebtedness, default, and foreign financial control—the opposite of state building.

4.8 Betting on Default?

Was confiscation of public assets the ultimate goal of international finance? Did investors bet on default? Fishlow (1985) admits that

“[d]efault could become for [international bankers] a source of gain rather than of loss, but only when some implicit guarantee of intervention [i.e., financial control] promised to bring order to the financial chaos of mismanaged states and lead to refunding of prior debt.” (Fishlow, 1985, p.401)

Flandreau (2016, p.93-101) suggests that British investors entertained the idea a “default–colonization nexus,” and to that effect, requested the hypothecation of land in expectation of debt interruption. The “scramble for concessions” (Cain and Hopkins, 2016) in loans to China could be viewed under a similar lens.

More generally, the use of international lending for political and economic advantage resonates with the Hobson-Lenin hypothesis of financial imperialism (Frieden, 1994). Cain and Hopkins (2016) offer abundant evidence that the Foreign Office entertained this idea;²⁸ however, my reading of extreme conditionality and supersanctions is that the confiscation of assets was a second-best outcome for private investors, not a deliberate goal. Foreign bondholders were in a dominant position, and they profited from regular debt service and also default; however, to date I have found insufficient evidence to sustain that default and foreign control were the ultimate causes of the lending frenzy. More importantly, my argument attributes shared responsibility for foreign control to home rulers, who often preferred to assume the risks of external finance to the certainty of political costs associated with tax reform.

²⁸“The more we get [Persia] into our debt, the greater will be our hold and our political influence over her government,” said the British Minister in Tehran in 1903 (qtd. in Cain and Hopkins 2016:328).

4.9 Summary and Implications

This and the previous chapter show evidence of the favorable terms of external finance for economies with weak fundamentals in the Bond Era. Standard explanations of the spread have been tested and confirmed with an original dataset that covers the longest period and largest number of political units to date. Along with standard explanations I argue that the low spread resulted from foreign bondholders' ability to seize key assets and sources of revenue in case of default. Foreign financial control did not take place in the abstract: It often built on previously pledged assets and sources of revenue. Consistently, I show that pledges decreased the spread conditional on bondholders gaining organizational capacity and creditors' governments becoming more interventionist in lending markets. The role of pledges in shaping investors' beliefs is novel because collateral is often considered "irrelevant" (Bulow and Rogoff, 1989, p.156).

The conditions under which developing nations accessed (cheap) external finance are crucial to understanding the persistence of limited state capacity in emerging economies. The expectation of asset–revenue takeover and preemptive appropriation of foreign assets help explain the historically low spread for emerging economies despite repeated default episodes in the Bond Era. Incumbents in the borrowing countries, far from victims, might have preferred to push war (and other major) bills to future generations while gaining access to cheap credit in the short run and bypass the political costs of taxation. In the case of default, responsibility fell to some future leader to raise new taxes to service debt, negotiate debt relief, or agree upon a temporary debt–equity swap or receivership.

Easy access to money followed by default and foreign control of domestic assets—possibly sweetened with some haircut—contributed to break the connection between war finance and state making. Instead of expanding fiscal capacity to service debt after war, borrowers cancelled their debt by leasing their national assets and sources of revenue to foreign powers. Under such conditions war efforts would hardly capitalize into state building. Most

likely, war finance would “hollow out” the state (Suryanarayan, 2019), specific evidence of which I will show in chapters 7 and 8.

An important caveat accompanies the hollowing-out interpretation. Bondholders’ temporary control of local tax administrations may be good for state building. Well designed, foreign financial control could exert positive influence and externalities over the local bureaucratic apparatus. In the next chapter I evaluate this possibility. The evidence suggests, however, that the tax administrations did not improve under control of foreign bondholders.

4.10 Appendix

In this Table 4.10, I report results for a placebo test. Sinking funds were meant to reduce risk; however, they did not bring to investors the profits associated with seizing foreign assets and tax branches. Hence, sinking funds may not compensate for the risk of lending to unseasoned countries and potential lemons.

I report three results: Because sinking funds were easily enforceable—at least relative to asset seizure—I report a model without a time interaction in column 1. Immediately after, I report an interaction with *Year* and *After CFB* in columns 2 and 3, respectively. Results are null across specifications.

Table 4.3: A Placebo Test: Sinking Funds and the Spread

	(1)	(2)	(3)
Sinking Fund	-0.043 (0.086)	-11.294 (12.596)	-0.075 (0.539)
Sinking Fund \times Year		0.006 (0.007)	
Sinking Fund \times After CFB			0.034 (0.555)
Year		0.040*** (0.007)	
After CFB			2.634*** (0.611)
Gold Standard	-0.251 (0.326)	-0.234 (0.326)	-0.252 (0.326)
Default < 10 years	0.336* (0.196)	0.329* (0.190)	0.335* (0.193)
Constant	2.293*** (0.182)	-71.915*** (13.268)	2.323*** (0.526)
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Colonial Status	Yes	Yes	Yes
Observations	492	492	492
R-squared	0.912	0.912	0.912

Bond yield is measured at issue. Source: Pledges and Sinking Funds coded by the author. See chapter 3 for sources for the Gold Standard and External Default. Sovereignty status is drawn from Reinhart and Rogoff (2009). Country-clustered standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

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