Fiscal Receiverships and Charter Cities: 1904-29

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ABSTRACT: Paul Romer's "Charter City" concept proposes that governance can be improved in underdeveloped nations by contracting out state functions to foreign officials. We test a version of this proposal using the experience of the eight U.S.-led fiscal receiverships between 1904 and 1934. Under a fiscal receivership, U.S. officials took over the management of a foreign country's fiscal institutions, including personnel and administrative regulations but not tax or tariff rates. The country retained titular sovereignty. Using data on fiscal revenues and the volume and terms of trade, we find that revenue fell under receiverships. In order to eliminate the possibility of reverse causality, we employ a series of instruments for receivership: the findings hold.

"President Roosevelt has undertaken to give the island of Santo Domingo an honest government, economically administered. Philadelphia next!"

— *The Philadelphia Public Ledger, 1907*

Is it possible to improve a country's institutions from the outside? With the United States preparing to leave Afghanistan while French forces enter Mali, the question remains salient. Can Americans improve Afghan governance, leaving behind a more stable state? Is there a way for the French to mitigate Mali's chronic problems? In addition to "traditional" interventions in Asia and Africa, other forms of foreign-led institutional reform are gaining currency. Economist Paul Romer has called for the creation of "charter cities" within which foreign "rules"— monitored and administered by foreign officials— would apply. More broadly, political scientist Stephen Krasner has argued: "Shared sovereignty can offer hope for moving countries closer to democracy and decent governance. Shared sovereignty involves the creation of institutions for governing specific issue areas within a state— areas over which external and internal actors voluntarily share authority."[1] Other academics have held that institutional reform is possible: Larry Diamond strongly criticized the Bush Administration for failing to reform Iraq— implicit in his argument, of course, was that a foreign actor *could* improve Iraqi institutions.[2] The views of Krasner and Diamond are supported by an empirical literature that claims that institutions are not key factors

[1] Stephen Krasner, "The Case for Shared Sovereignty," *Journal of Democracy*, Volume 16, Number 1 (January 2005).
[2] Larry Diamond, "What Went Wrong in Iraq," *Foreign Affairs*, Volume 83, Number 5 (September/October 2004).

in economic growth: "Poor countries get out of poverty through good policies, often pursued by dictators."[3] Policies, of course, can be changed.

A countervailing view can be found in the literature on the path-dependence of economic institutions. In that view, countries' governing institutions are functions of their geography, initial factor endowments, and history.[4] Countries with agricultural endowments conducive the establishment of large-scale plantation agriculture, for example, will develop political and legal institutions to insure a supply of cheap labor and protect the plantation owners from landless and small-scale peasants. The resulting institutions, however, will persist even should plantation agriculture become less important or even disappear.[5] The implication is that "bad" rules are extremely hard to change.

The idea that the First World can export its governance to developing countries is not new. In the early 20th century, American administrations adopted the theory that insufficient government revenue was the root cause of insecure property rights in Latin America. They believed in turn that corruption and managerial inefficiency was the root cause of low government revenue. It followed from that analysis that placing U.S. officials in charge of Latin American fiscal institutions would decrease corruption. American officials would be outside the patronage and political networks that enabled corruption. With control over personnel decision and the ability to write administrative rules— and facing a very different set of incentives than their foreign counterparts— the American agents would increase collections. More revenue, in turn, would allow the local government to borrow at lower rates. The funds could then be used to provide public goods, increasing growth, and further increasing government revenue. The virtuous cycle would end with a stable government in charge of its own territory and with no need to default on debts or confiscate property for revenue.

Between the creation of the first fiscal receivership in 1904 and the onset of the Great Depression, the United States rolled out fiscal receiverships in eight different Latin American countries (and one African one): the Dominican Republic, Cuba, Nicaragua, Liberia, Haiti, Panama, Peru, Bolivia and Ecuador. In most cases, the Americans took control of customs; in

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[3] Edward Glaeser, Rafael La Porta, Florencio López-de-Silanes, and Andrei Shleifer, "Do Institutions Cause Growth?" *Journal of Economic Growth,* Vol 9, No. 4 (September 2004), pp. 271-303. Peter Henry and Conrad Miller similarly argued that policies, not intractable institutions, are what explain the difference in the post-1960 performance of Jamaica and Barbados. See Peter Henry and Conrad Miller, "Institutions vs. Policies: A Tale of Two Islands," NBER Working Paper No. 14604 (December 2008).

[4] See Engerman and Sokoloff 1997; Sokoloff and Engerman, 2000; Hibbs and Olsson 2003; Acemoglu et. al, 2001, 2002, 2005; 2008; Easterly and Levine 2003; Putterman 2007.

[5] See Engerman and Sokoloff, 1997; Sokoloff and Engerman, 2000. A related version of this view argues that European colonialists established extractive institutions in areas where they were unable to settle permanently. Such institutions create interest groups with a vested interest in their preservation and they can persist long after independence. Acemoglu, Johnson, and Robinson, 2001; 2002.

roughly half the cases (Cuba, Haiti, Panama, and Bolivia) they also took control of some or all internal revenues. In all cases the national government retained titular sovereignty and the ability to set customs and tax rates, although in the Cuban and Haitian cases American officials effectively took control of legislative functions. In the D.R., Peru and Ecuador, enthusiastic national governments invited in the United States; U.S. officials forcibly intervened in Cuba and Haiti. (The situation in the other countries fell between those extremes.)

If it is possible to change institutions by imposing foreign rules— "sharing sovereignty," in Stephen Krasner's phrase— then American fiscal intervention should have increased government revenues. If institutions are resistant to foreign intervention (regardless of the formal lines of authority) then the Americans should not have had an effect.

We find that revenues *fell* when U.S. officials took over fiscal institutions. The explanation seems to be that the presence of foreign officials within the state's chain-of-command disrupted existing informal institutions without effectively strengthening alternative ones. In at least two cases (Cuba and Panama), American officials appear to actively abetted corruption— in Cuba because the U.S. governor found it as useful to buy off opponents with patronage as did his Cuban predecessors, in Panama because he could at great benefit to himself and with little fear that his superiors in Washington would find sufficient evidence to proceed against him. (His superiors were, it should be said, aware of the situation.) In the Dominican Republic, American officials abandoned their posts when violence broke out; in Peru, the U.S. receiver found his orders routinely disobeyed and was threatened with violence when he attempted to push the issue. In short, shared sovereignty appears to have made institutions *worse*. (In fact, revenue fell even when the U.S. seized effective control of the *entire* executive branch, as it did formally in Cuba and somewhat less formally in Haiti.)

This paper proceeds as follows. Section 1 lays out a brief history of the U.S.-administered fiscal receiverships in Latin America. Section 2 explores the relationship between receiverships and fiscal revenues and discusses identification. Section 3 examines some case studies in detail and presents some supporting evidence. Section 4 concludes.

1. FISCAL RECEIVERSHIPS

"True stability is best established not by military but by economic and social forces. Financial stability contributes perhaps more than any other one factor to political stability."

— *Secretary of State Philander Knox, 1910*

Around the turn of the twentieth century, American political leaders believed they had identified poor fiscal conditions as *the* key factor destabilizing the nations of Latin America. The initial strategy was rolled out during the administration of Theodore Roosevelt. In 1904, the Dominican Republic was entering its fifth year of civil war. American sugar plantation and railroad owners put pressure on the Roosevelt Administration to do something to end the chaos. The plantation owners feared violence, of course, but they also feared that the Dominican government, under pressure from insurgents, would impose "capital levies" (i.e., expropriate their properties) or a confiscatory tax on sugar exports.[6] In addition, the administration feared that either the government or the insurgents might offer Germany the use of Dominican territory for a naval base in return for arms or financial support. In 1903, the U.S. consul reported on multiple occasions that the President Alejandro Woss y Gil's foreign minister supported such a scheme. Carlos Morales overthrew Woss y Gil on November 23, 1903, but that only shifted the locus of American concern: in February 1904, U.S. agents captured a letter from an insurgent general to the German consul openly requesting military aid.[7]

The problem was that with memories of the Philippine War (1898-1902) fresh in people's mind, there was little domestic support for intervention. Marines landed for five weeks in January-February 1904 and the U.S. Navy shelled insurgent positions from offshore, but Roosevelt was reluctant to order what could become an open-ended occupation.[8] The solution came from U.S. naval officials on the ground, but it took a great deal of imploring from President Morales to convince Washington to allow American officials take over the management of the customhouses.[9]

On January 20th, 1905, the U.S. and the D.R. concluded an agreement to place customs collection under American management. A group 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.[10] Roosevelt submitted the agreement to the Senate on February 7th. "It is supremely to our interest that all the communities immediately south of us

[6] Cited in J. Fred Rippy, "The Initiation of the Customs Receivership in the Dominican Republic," *The Hispanic American Historical Review*, Vol. 17, No. 4 (Nov., 1937), pp. 419-457: 420-23.
[7] Rippy, "Initiation," pp. 431-32.
8 Richard Grimmett, "Instances of Use of United States Armed Forces Abroad, 1798-2001," *Congressional Research Service*, February 5, 2002, p. 12.
[9] See 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, and Dawson to Hay, Oct. 6, 1904. in Diplomatic Instructions of the Department of State [INS], M77, roll 98, RG 59.
[10] Munro, p. 101.

should be or become prosperous and stable, and therefore not merely in name, but in fact independent and self-governing."[11] The Senate, however, rejected the measure. On March 24, therefore, the Dominican finance minister proposed that the United States take over customs without a treaty.[12] On March 31st a retired American colonel, George Colton, took over the administration of the country's customs agency.[13]

The new administrators found that the 150-mile Haitian border was entirely unpatrolled, "leaving, as it were, the back door open."[14] The Americans therefore organized a new customs and frontier service. The new service consisted of 118 armed and mounted Dominican servicemen under five American commanders. The guards doubled as a postal service in the frontier area. The Americans also constructed a small border post and began construction of a second post at a cost of $5,750 ($117,000 in 2011 dollars).[15] The total expense of the guard came to $103,923 ($2.12 million in 2011 dollars) in its first twenty months of operation.[16] Enlisted personnel (100 out of the force's complement of 150) received $300 per year ($7,910 in 2011 dollars[17])— more than soldiers in the Dominican Army or police officers, who received only $97 and $133 per year respectively.[18] (Sugar plantations offered one dollar a day, but only during the harvest.)[19] Customs service duty could be dangerous: two Americans died in an incident in Las Matas, when they engaged armed smugglers.[20]

The Americans also needed to create a Dominican revenue-cutter service. They contracted for four gasoline-powered 75-foot cutters from New York, each armed with a Hotchkiss rapid-fire weapon to the front and an automatic 30-caliber rifle to the rear.[21]

The Americans revamped the system for verifying cargoes. They ordered deputy receivers to immediately send samples of all cargoes to the central office for verification. Under Dominican law, importers who objected to their assessments were entitled to an automatic appeal to the tariff court. They could then withhold their payments until the verdict. Since the court usually took six

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11 *FRUS*, 1905, pp. 334-342.
12 *FRUS*, 1905, p. 358.
13 *FRUS*, 1905, p. 366.
14 General Receiver, "Report," p. 11.
15 FRUS, 1907, vol. 1, p. 337.
16 General Receiver, "Report," p. 11.
17 Using the U.S. Consumer Price Index.
18 Calculated from data in Moore, Case, pp. 88 and 92. Data from the 1902–3 fiscal year.
19 Frank Moya Pons, History of the Caribbean: Plantations, Trade, and War in the Atlantic World (Princeton, N.J.: Markus Wiener Publishers, 2007), p. 301.
20 The smugglers escaped into Haiti, where two of them were apprehended and turned over to the United States. The wife of one of the dead Americans received $5,563 in compensation from the Dominican government; she returned to her parents' home in Puerto Rico with their three children. FRUS, 1907, vol. 1, p. 338.
21 The cost of constructing, transporting, and readying the boats came to $73,489 ($1.36 million in 2011 dollars). FRUS, 1907, vol. 1, p. 339.

months to a year to render decisions, and the amounts owed accrued no interest, there was an obvious incentive to delay payment. The new system turned out not to speed payments, but it increased the prevalence of positive decisions: of thirty-six rulings in the first twenty months of the receivership, only one went against the American administration.[22]

The markets and the press reacted positively to the intervention. The United States appeared to have stabilized a failing state without serious commitments in men or money. The press, however, overlooked one factor: during the Dominican civil war, a key insurgent strategy was to seize a customhouse in order to use it to generate revenue. Once American officials were stationed in the customhouses (with heavily-armed American gunboats patrolling the littoral waters), these attacks halted. It was not clear, therefore, how much of the increase in revenue was due to better American management rather than simple deterrence against armed attack. If the latter, then the Dominican experience might not be replicable. (See Figure 1.)

FIGURE 1 AROUND HERE

The Americans rolled out the receiverships on multiple occasions. The circumstances, however, varied dramatically. In Cuba and Haiti, American control over customs was forced upon the countries involved. In Nicaragua, Peru, and Ecuador, the local governments (as in the D.R.) provided the main impetus. Panama and Bolivia were intermediate cases, where the U.S. government leaned on the local authorities to accept foreign managers. The receivership varied along a second metric: in Cuba, Haiti, Ecuador, and Bolivia the Americans gained some control over rate setting, although that authority was only exercised in the latter two.

In Cuba in 1906, protests against Tomás Estrada's fraudulent re-election rapidly morphed into armed rebellion. Roosevelt dispatched Secretary of War William Howard Taft to investigate; when Taft discovered that the Cuban government had essentially lost control of everything save a few cities, he printed up his own letterhead reading "Office of the Governor, Republic of Cuba, under the Provisional Administration of the United States." and ordered the marines to land.[23] Taft handed off to Charles Edward Magoon, who remained in charge until January 28, 1909. The Cuban intervention proved to be unique, because the U.S. took over the entire government rather than just the administration of customs or internal revenues.

The next receivership came in Nicaragua. In 1909, at the request of American direct investors, the United States overthrew President José Santos Zelaya. The new Nicaraguan government requested aid from the United States, including a customs receivership. The impetus for the re-

22 FRUS, 1907, vol. 1, p. 342.
23 See Lars Schoultz, That Infernal Little Cuban Republic (Chapel Hill: University of North Carolina Press, 2009), pp. 25–28.

ceivership came largely from the Nicaraguan side, which went so far as to loosely threaten "capital levies" against American properties should it prove unable to raise more revenue. On June 6, 1911, a loan treaty was signed in Washington and quickly ratified by the Nicaraguan National Assembly. The treaty, however, stalled in the U.S. Senate due to Democratic opposition. The Nicaraguan assembly readily agreed to the creation of an American-run customs receivership sans treaty. President Taft followed Roosevelt's 1905 precedent and authorized it via executive order. Clifford Ham became collector of customs. The convention allowed Ham to issue new customs regulations, but he could not change tariff rates.[24]

The fiscal receiverships that followed in Peru and Ecuador were both desired by the local government. In Peru, President Augusto Leguía told the American embassy, "My hope is to put an American in charge of every branch of our government's activities."[25] On June 7, 1921, Leguía asked Ambassador William Gonzales to have the United States appoint somebody to take the over control of customs, giving the U.S. State Department carte blanche to decide the powers of the office.[26] Leguía pestered the State Department through September, when Secretary of State Charles Evans Hughes— having received word from Standard Oil of New Jersey that it believed more Peruvian revenue *from sources other than oil taxes* was vital to protecting its investments in that country— announced that the United States would nominate William Cumberland, an economics professor from the University of Minnesota, to take over customs.[27] Leguía guaranteed that Cumberland would have the power to reform the administration and collection of customs as he saw fit, as well as recommend changes in the tariff structure. He also promised Cumberland a weekly meeting with the president, a seat on the board of the central bank, and a salary of $16,000— a bit more than $201,000 in 2011 dollars.[28] The final contract gave Cumberland the authority to "revise the present system of collecting the revenues and covering them into the public treasury ... study the present system of import and export duties and suggest modifications thereof ... propose the appointment, promotion, demotion, transfer or dismissal of employees in the customs service ... [and] assure the lawful collection and safeguarding of the customs revenues by proper police protection." He would be "consulted in advance of administrative action or recommendations in regard to all financial policies ... and shall become a director of any government financial fiscal agency which the Republic of Peru may establish." He also received the authority

24 Munro, Intervention, pp. 192–99.
25 Drake, Money Doctor, p. 217.
26 Ambassador Gonzales to Secretary of State, June 7, 1921, FRUS, 1921, vol. 2, p. 656, and Gonzales to Secretary of State, May 16, 1921, Record Group 59, 823.51/179, NA.
27 Secretary of State to Gonzales, September 7, 1921, FRUS, 1921, vol. 2, p. 657.
28 Ambassador Gonzales to Secretary of State, September 20, 1921, FRUS, 1921, vol. 2, pp. 657–58.

to hire four American citizens to serve as auditor, customs inspector, statistician, and private secretary.[29]

The Ecuadorean government was not quite as enthusiastic as the Peruvians, but the idea of a receivership came from Quito, not Washington. On July 10, 1925, a group of young military officers overthrew the government. The Coolidge Administration responded by withdrawing American recognition. The junta decided to invite a reform mission headed by Edwin Kemmerer in the hope that the acceptance of its recommendations would prompt Washington to change its mind about the legitimacy of the government in Quito. Ultimately, the new government appointed William Roddy, a veteran of the Nicaraguan customs receivership, as director-general of customs. The U.S. extended recognition on August 13, 1928.[30] Perhaps unsurprisingly, the Ecuadoreans introduced a new constitution in 1929 which removed Roddy's authority, although he stayed on as an advisor to the customs service.

The creation of the the American-run Permanent Fiscal Commission in Bolivia followed an intermediate course between the reluctance in Haiti and the enthusiasm in Peru.[31] Extensive graft prompted the American fiscal intervention in Bolivia. State Department officials reported that the finance minister "personally retained"— that is, stole— 20% of all taxes collected in-country.[32] The Bolivian head of customs estimated that 25% of customs revenue disappeared between collection and delivery to the central government.[33] American investors in the Bolivian tin industry worried about Bolivia's finances, as did American bankers desirous of underwriting future Bolivian debt issues. With the backing of the Harding administration, Bolivia agreed to a 1922 loan for $33 million ($361 million in 2011 dollars) that mandated that Bolivia place much of its revenue under the control of an organization called the Comisión Fiscal Permanente (CFP).[34] The CFP gained the power to administer parts of the tax system and, within limits, alter tax rates. Three officials constituted its governing board: one appointed by the Bolivian government and two by New York banks.[35]

When the Bolivian government showed some reluctance to sign, Secretary of State Hughes weighed in directly. He wrote the American minister in La Paz: "Representatives of Equitable

29 Contract between the Republic of Peru and William Cumberland, October 31, 1921, FRUS, 1921, vol. 2, pp. 659–62.

30 Secretary of State to the Minister in Ecuador (Bading), Aug. 13, 1928, 822.01/64a, *FRUS, 1928*, vol. 2, p. 742.

31 Margaret Marsh, *The Bankers in Bolivia: A Study in American Foreign Investment*. Vanguard Press, New York: 1928.

32 Manuel Contreras, "Debt, Taxes, and War: The Political Economy of Bolivia, c. 1920–1935," *Journal of Latin American Studies*, vol. 22, no. 2 (May 1990), pp. 265–87: 274.

33 Carmenza Gallo, *Taxes and State Power: Political Instability in Bolivia, 1900–1950* (Philadelphia: Temple University Press, 1991), p. 100.

34 Only $29 million in bonds were actually issued; the remaining $4 million for a railroad between Sucre and Potosí was left pending until Bolivia balanced its current budget. Contreras, "Debt," p. 269.

35 Contreras, "Debt," p. 274.

Trust have informed the Department that ... the President of Bolivia has declined for the present to grant the power of attorney [to the Bolivian minister in Washington to sign the bonds]. ... Orally and informally bring the bankers' views in the matter to the attention of the President of Bolivia."[36] When that proved insufficient, Hughes stepped up the pressure. "You will say," he told the minister, "that this government, speaking as a sincere well-wisher of Bolivia, recommends most earnestly and strongly that he carry out immediately the terms of the contract, and that the collapse of Bolivia's credit would appear to be the only alternative."[37] Under pressure from the United States Bolivia signed.

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."[38] As a result of the 1918 discovery, the State Department pressured Panama City into accepting an American "fiscal agent" who would have complete "control and charge of the national treasury." Addison Ruan, who had been the American financial adviser to Haiti and the disbursing officer for the American government in the Philippines, received the job.[39]

Fiscal receiverships were proposed in a number of countries where they failed to materialize. 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.[40] In 1913, Guatemala rejected a receivership as part of a debt settlement.[41] In 1911, Costa Rica signed loan agreements that stipulated that the United States would take over internal tax collection in the event of a default, but the clauses were never implemented.[42] In 1921, El Salvador agreed to accept a fiscal agent who would oversee customs collection, but he would only gain managerial authority in the event of a default. [43]

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[36] Sec. of State to the Minister in Bolivia (Cottrell), 3 Apr. 1923, 824.51/174a, *FRUS, 1923*, vol. 2, pp. 442–43.
[37] Sec. of State to the Minister in Bolivia (Cottrell), 9 Apr. 1923, 824.51/174a, *FRUS, 1923*, vol. 2, pp. 443–44.
[38] Major, *Possession*, pp. 139-40.
39 Major, Prize Possession, pp. 139–40.
[40] Munro, p. 235.
[41] Rosenberg, "From Colonialism to Professionalism," in Drake, p. 70.
[42] Costa Rica signed a second agreement in 1926 that would place internal tax collection under the control of American authorites in the event of default. 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.
[43] 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.

Customs receiverships, it should be noted, were not necessary to collateralized sovereign loans. First, they could be easily terminated by the local government— the USMC did not stand ready to swoop down upon a country that did so. Second, other mechanisms existed to achieve that purpose. For example, a 1926 loan contract with Honduras required the country to impose a dedicated 3 percent export tax. The loan was collateralized by collecting the 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. government agreed not to admit Honduran imports unless they had paid the tax.[44]

2. EMPIRICAL ANALYSIS

Receiverships and fiscal performance

To determine the influence of receiverships on fiscal performance, we look at the evolution of the fiscal accounts from a sample of 18 Latin American and Caribbean countries during the period 1899-1931. Of the 19 countries in our sample, eight were under a receivership for part of this period (see Figure 2).[45] In particular, we evaluate the impact of receivership on total revenue and customs revenue. For most countries, customs was the main source of revenue, on average representing 56% of the total.[46] Of the eight receiverships in our sample, three (Nicaragua, Ecuador, and Peru) controlled only customs collection for their entire duration, whereas two (the D.R. and Haiti) controlled only customs for most of their existence.

FIGURE 2 AROUND HERE

How do receiverships influence fiscal revenue? OLS estimations

Table 1 provides the summary statistics for the main variables used in the analysis for the entire sample and for the non-receivership and receivership groups. In addition to the indicator variable receiverships, we have compiled an array of key variables to take into account the effect World War I and the changes in export and import prices. World War I prompted an economic boom in many Latin American countries. In addition, with highly export-dependent economies and fiscal system geared around trade taxes, changes in commercial conditions would be expected to have large effects on fiscal revenue. We therefore included export prices, import prices, and the terms of trade.

TABLE 1 AROUND HERE

[44] Chester Jones, *The Caribbean Since 1900*, Prentice-Hall: New York, 1936, pp.432-33.
[45] Liberia is excluded due to data constraints.
[46] The correlation between total revenue and customs revenue is 0.90.

Tables 2 and 3 present the ordinary least squares (OLS) estimations of the log of total revenue and log of customs revenue and the receivership variable. The equation estimated takes the following form:

$$F_{it} = \gamma_{it} + \beta R_{it} + X'_{it}\mu + \varepsilon_{it}$$

where F_{it} is the log of total revenue or the log of customs revenue for country i at time t, R_{it} is the indicator variable for the existence or absence of a receivership in country i at time t, X'_{it} is an array of covariates, and ε_{it} is a random error term. β will allow us to establish the influence of receivership on fiscal revenue. In all specifications, we include time and country fixed effects.

TABLES 2 AND 3 AROUND HERE

In all specifications, β is significant and negative. When adding other covariates, the coefficient gets smaller but remains significant. These results suggest that the presence of a receivership in a Latin American or Caribbean country was actually detrimental for fiscal performance! A comparison between the results using total revenue and customs revenue yields conclusions consistent with the general operation of the receiverships: the β coefficients in the total revenue regressions are smaller than those of the customs revenue.

It could be argued that the establishment of a receivership was an effect of falling revenue. Countries with deteriorating fiscal conditions might have been more likely to ask for a receivership (or have the U.S. thrust one upon them). Table 4, therefore, includes a three-year pre-receivership trend variable to control for the possible negative fiscal performance. After including this variable, our results hold.

TABLE 4 AROUND HERE

Nevertheless, a skeptical reader could still argue that receiverships are endogenous to falling revenues. It is true that at two receiverships— Cuba and Haiti— were implemented because both countries were sliding into political chaos. It is quite possible that forward-looking governments requested receiverships (or had them thrust upon them) before they entered periods of political or economic upset that negatively impacted revenues. The American receivers, in other words, might have been preventing fiscal revenues from falling even further.

Given the possibility of a causal link from fiscal performance to receivership, we have used instruments to solve the reverse causality problem. We have devised a collection of instruments to identify the existence of a receivership in the different Latin American and Caribbean countries over time. These instruments, to different degrees, can account for the variability of receivership experiences in these countries over time and have no effect on the performance of revenue.

Identifying receiverships

A suitable instrument would capture the likelihood of the U.S. agreeing to set a receivership in a given country without relation to changes in government revenues. Washington was more likely to set up a receivership the more its citizens dominated the local economy. As the U.S. economic presence in the region was strongest in Central America and the Caribbean and weakest in the Southern Cone, the instruments should represent the degree of economic connection of the U.S. with each country over time.

We use four instruments for receiverships: sailing distance to New York, shipping costs to New York, a dummy for the issuance sovereign debt purchased or underwritten by a major U.S. bank, and a dummy for the presence of strategic U.S.-owned direct investments in the country. Our first instrument is sailing distance from the Northeastern core of the United States.[47] The closer to the main centers of American economic power (proxied by New York City) the more likely the U.S. was to set up a receivership. Fortunately for our purposes, sailing distance varied over time: the opening of the Panama Canal to commercial traffic in 1921 reduced the distance to the U.S. for all countries on the Pacific coast, including Nicaragua, whose main ports faced west. Similarly, we also use shipping costs as an instrument, "Freights", as a monetized representation of geographical distance. We obtained shipping costs from an index compiled by Noel Maurer and Carlos Yu for their study of the Panama Canal.[48]

The third instrument, "US debt" reflects the fact that politically-connected American banks were often instrumental in establishing customs receiverships. Several of the receiverships were in fact administered by American bankers and they generally lobbied strongly for their establishment. Since financiers were highly influential in the American political system at the time (particularly under Republican administrations), this lobbying likely had some effect. New debt issuances, however, were rarely made on the expectation that the recipient of the funds was about to experience a severe decline in their income.

Finally, our fourth instrument, "Strategic FDI" is a dummy variable that takes on a value of "1"with the presence of American-owned investments in hard-rock natural resources (including petroleum) or plantation agriculture. One of us has argued elsewhere that as an empirical matter, U.S. administrations were generally more responsive to the demands of investors in natural resources than the holders of foreign debt. Moreover, in several cases (including Cuba, the Domini-

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[47] For Bolivia, we used the Chilean port of Antofagasta, which was Bolivia's main sea outlet at the time. See Bureau of Foreign and Domestic Commerce, *Bolivia: A Commercial and Industrial Handbook* (Washington, D.C.: GPO) p. 56.

[48] See Maurer and Yu.

can Republic, Nicaragua, and Peru) direct investors were the loudest domestic voices in favor of U.S. involvement.

Navies and revolution

The Southern Cone countries— or at least Argentina and Brazil— were never at risk for an American customs receivership. This was *not* because three countries were not free from political or default risk. All three had histories of default, most recently in the aftermath of the Barings crisis.[49] Rather, they were different on two fronts. First, their domestic politics was strongly nationalistic: no politician in either country ever called for outsourcing the management of their domestic institutions to foreign officials.

Second, they were all modern states, with modern militaries. Argentina in 1912 possessed a navy consisting of nine armored cruisers of various types, seven destroyers, 21 torpedo boats, and a submarine. Argentina in fact had two battleships under construction in Quincy, Massachusetts, and 12 more destroyers being built in yards divided between Britain, France, and Germany.[50] Brazil began a large naval build-up in 1904: within six years, the country had procured two dreadnoughts, two scout cruisers, and 10 destroyers, all British-built.[51] The Chilean navy consisted of two battleships, one armored cruiser, two torpedo cruisers, seven destroyers, and five torpedo boats. The Chilean battleships dated from the 1890s, but as of 1912 the country had two dreadnoughts, six destroyers, and two submarines under construction.[52]

None of the Southern Cone countries could defeat the United States in a straight-up naval conflict, but any attempt to use gunboats to protect the rights of foreign investors would have involved a real *war*, with all the risks that entailed.[53] American wars with any of those countries would almost certainly have the effect of pushing them into an alliance with Germany. The United States was particularly worried about German intentions in Brazil, which had experienced significant German immigration.[54] The United States, therefore, was not "practically sover-

49 For an excellent treatment of the causes and consequences of the Barings Crisis, see Kris Mitchener and Marc Weidenmier, "The Baring Crisis and the Great Latin American Meltdown of the 1890s." *Journal of Economic History* 68 (June 2008), 462-500,
50 Frank Colby and Allen Churchill, eds., *The New International Year Book: A Compendium of the World's Progress* (New York: Dodd, Mead and company, 1913), p. 51.
51 Robert Scheina, *Latin America's Wars: The age of the professional soldier, 1900-2001* (Washington, DC: Brassey's, 2003), p. 38.
52 Colby and Churchill, *Year Book*, p. 145.
53 For data on relative fleet sizes during this period, including discussion of the logistical problems and technological limitations faced by the various navies, see Robert Gardiner, ed., *Conway's all the World's Fighting Ships, 1906-1921* (London: Naval Institute Press, 1985).
54 Mitchell, *Imperialism*, pp. 126-32.

eign" in the Southern Cone of the American continent the way that it was on the lands and islands north of the equator.[55]

We therefore excluded observations for new loans or strategic investments in countries that possessed a modern navy, dating from the year of their first acquisition of a modern battleship or dreadnought. We also excluded Mexico during the peak years of instability. The U.S. did in fact occupy Veracruz and invade northern Mexico, but it is not possible to place state institutions under foreign management when there is no functioning state.

We test whether these instruments are a good predictor of receivership using this regression:

$$R_{it} = \alpha_{it} + \delta I_{it} + X'_{it}\mu + \epsilon_{it}$$

where R_{it} is the indicator variable for the existence or absence of a receivership in country i at time t, X'_{it} is an array of covariates, and ϵ_{it} is a random error term. In all specifications, we include time and country fixed effects. Given the abundance of instruments available, we present a selection of them: "Distance", "New loans", and "Strategic FDI."[56] Table 5 shows the results for the first stage estimations. The instruments are significant at 1% level in all specifications, including those with pre receivership trends. As expected, "distance" is negatively correlated with receivership. The results also show that there is a positive association between industries of interest (represented by "New loans" and "Strategic FDI") and the likelihood of a receivership.[57]

TABLE 5 AROUND HERE

We then estimated the second stage using the three instruments described above. Table 6 and 7 report the results. The negative relationship between receivership holds even with the addition of pre-receivership trends. Of the three instruments, "New loans" generates coefficients comparable in magnitude to the OLS regressions.

TABLES 6 AND 7 AROUND HERE

Finally, we use the volume of trade with the United States (using U.S. statistics) as a placebo. The receiverships (and the instruments used) may be identifying trade trends. Less trade— a counterintuitive but certainly possible result— would lead almost directly to lower revenues. Hence, our instruments and receiverships would not be truly causal but a consequence of the effect on trade. We therefore used a "placebo" regression where we estimate the effect of receivership on trade. In particular, we look at US trade with these countries using official statistics gen-

55 Mitchell, *Imperialism*, p. 153.
56 Outputs for the remaining instruments are available upon request.
57 We have also estimated two-stage least squares with multiple instruments. The results hold and we gain precision, as the standard errors are smaller.

erated by US institutions.[58] Table 8 presents these "placebo" regressions. The coefficients are negative but not significant. Therefore this potential channel of causality appears to be unfeasible: however the arrival of the American caused revenue to decrease, it was not via reductions in the amount of revenue that could be collected.

TABLE 8 AROUND HERE

THE FAILURE OF FISCAL RECEIVERSHIPS

Every fiscal intervention failed to raise revenues, save the first one in the Dominican Republic. In addition, the Dominican success was due to the fact that rebel forces regularly sacked customhouses for revenue before the arrival of the Americans. Once U.S. officials were on the ground, rebel factions ceased most of their attacks on the customhouses. Moreover, the increase in government revenue failed to generate any of the hypothesized positive political effects. Greater revenue did not produce less corruption or greater political stability. Deprived of access to the customhouses, Dominican insurgents proved quite capable of raising revenues from the countryside. In 1912, the country relapsed into civil war, and the United States was forced to choose between allowing the Dominican state to collapse and a full-fledged occupation.

In Cuba, the new American administrators failed to increase customs revenue. (See Figure 3.) Rumors of corruption swirled around the American governor, Charles Magoon. There is little convincing evidence that Magoon profited personally from corruption; what is known, however, is that "in his zeal to forge social peace among contending political factions following the 1906 disturbances, Magoon caved in to patronage demands, relaxing administrative discipline and legitimizing the granting of sinecures (popularly referred to as *botellas*)."[59] In other words, Magoon could not disturb the underlying institutional dynamic without risking a return to violence: formal control over the state structure was not enough.

FIGURE 3 AROUND HERE

In Nicaragua the customs receivership also failed to increase revenue. Nicaraguan customhouses had not been subject to regular attack before the receivership: there was therefore no increase to be had. (See Figure 4.) The United States was forced to find other ways of channeling resources to its client regime in Managua: among them payments for the rights to a new Canal

[58] For details, see appendix. The US was the main trading partner of many Latin American and Caribbean countries. However, the UK, Germany, and France also had a sizable share of trade during this period. To address this problem we estimated the same regressions using bilateral trade data from Barbieri (2002). While the results still hold, we do not present them here as the dataset has important gaps for many countries.

[59] Sergio Díaz-Briquets and Jorge Pérez-López. *Corruption in Cuba: Castro and Beyond* (Austin: Univ. of Texas Press, 2006), pp. 63-64.

route (never used), a naval base at Corinto (never built), and a lease on the Corn Islands off the Atlantic coast (never occupied). The U.S. also dispatched a brigade of Marines to support the government. The result could, at best, be called disappointing.

FIGURE 4 AROUND HERE

In Haiti, mob violence erupted in 1915, confronting the Wilson Administration with the horrible specter of mobs carrying out the dismembered body of the former president on spikes — and strident demands by American investors to restore order. The Marines intervened, and in 1915 the United States signed a treaty with the new government stipulating that U.S. officials would collect Haitian custom revenues, supervise Haiti's budget, manage Haiti's sanitation and establish public health programs, and organize an American-commanded constabulary — the *Gendarmerie* — on the Philippine model until enough Haitian officers became qualified. Under the agreement, the United States continued to enforce the 1905 customs code. Any gain would be due to greater efficiency and less corruption, not a change in tariff rates.[60] Unfortunately, the Americans proved little better at running the country's fiscal institutions than had the Haitians.

FIGURE 5 AROUND HERE

In 1918, the United States pressured Panama into accepting an American fiscal agent after U.S. officials discovered that Panamanian officials were misusing the proceeds of a railroad loan. Fiscal revenues did reverse their decline after Addison Ruan arrived on the scene, fresh from duty in Haiti. (See Figure 6.) The problem is that Ruan's arrival coincided with the end of World War 1, and Panama was one of the few Latin American countries to be hurt by the war. (Because its economy relied on transshipments, it was hurt by the decline in trade volumes with no compensation from high wartime prices.) In fact, revenues did not really begin to recover until the Panama Canal opened to full commercial operation in the middle of 1920.

FIGURE 6 AROUND HERE

Why did American intervention fail in Panama? The Panamanian government found ways to evade American control. In 1919, for example, President Belisario Porras obtained a loan of $150,000 from United Fruit using Panama's banana export tax revenue as collateral. Porras then passed a bill allowing the Panamanian treasury to cash drafts made by cabinet members, circumventing the fiscal agent entirely. When the American legation protested, Porras declared the fiscal agent's office unconstitutional, although Porras had signed it into law himself.[61] U.S. pressure quickly forced Porras to reverse that decision, but Panamanian officials continued to cir-

[60] Munro, *Intervention*, p. 364.
[61] Major, *Prize Possession*, pp. 144-145

cumvent American wishes.[62] In late 1922, a frustrated Addison Ruan — a man who had organized *Haiti's* chaotic finances — resigned his position.[63] His replacement as fiscal agent, Walter Warwick, in the words of the United States minister to Panama, "sat back and allowed the [Panamanian] government to do practically as it has seen fit, even to the extent of purchasing new, expensive automobiles for the use of the President and his cabinet, including one for the Fiscal Agent himself."[64] One must wonder where Warwick drove his new, expensive automobile in a country with so few paved roads. In 1925, the frustrated Americans simply gave up, admitting that Warwick had been compromised but not in a way that they could find actionable.

In Peru, customs receipts did not increase over their previous peak, despite rapid growth in the government revenues *not* under American control. (See Figure 7.) Revenues did rise from their 1921-22 nadir, but it was a consequence of trade's recovery from the 1921 recession in the United States. Cumberland failed to reform the customs administration. As he later wrote, "Graft was rampant; very few people paid duties in accordance to what the tariffs called for — it was a matter of bargaining with Peruvian officials."[65] When Cumberland fired a corrupt official who had been caught taking bribes, the official challenged him to a duel.[66] (Academic politics was a vicious thing, then as now, but dueling was not standard operating procedure at the University of Minnesota.)

FIGURE 7 AROUND HERE

In fact, because Cumberland refused to participate in corruption, he actually managed to worsen the situation. Rather than bargain with him, corrupt politicians simply ignored him. Cumberland and his appointees failed to gain control lower-level officials; fired bureaucrats simply stayed on the job, collecting bribes instead of their salaries. More egregiously, officials siphoned off revenues by illegally cutting the silver content of the coinage. Cumberland discovered the scheme, but could do nothing about it.[67] He was most horrified by a voucher scheme used to pay schoolteachers. The teachers would exchange their vouchers for cash with their local congressmen, who took a 25-percent cut of the proceeds. "This was one of the major sources of graft in Peru and one of the principal motivations for men wanting to be a Senator or Representative. Each collected a substantial part of the salaries of the schoolteachers in his district." When Cum-

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[62] *New York Times*, April 1, 1921, "Panama Reappoints American as Agent; Choice of Fiscal Officer Thought Significant".
[63] USNA State Department, 1910-1945, 819.51A/24, Addison Ruan to Secretary of State, Dec. 18, 1922.
[64] USNA State Department, 1910-1949, 819.154/115, Minister John South to Secretary of State, Apr. 11, 1924.
[65] Cumberland, William Wilson. *The Reminiscences of William Wilson Cumberland: Result of Interviews Conducted by Wendell H. Link, April-May, 1951.* (New York : Oral History Research Office, Columbia University, 1972), p. 125.
[66] Cumberland, *Reminiscences*, p. 135.
[67] Cumberland, *Reminiscences*, p. 127.

berland discovered the scheme, the Peruvian politicians involved responded by offering him a cut.[68] Cumberland eventually couldn't take any more. In his words, "[Leguía] wrecked the finances of Peru just as thoroughly as if he had himself been a grafter."[69] He left in 1924, preferring to run *Haiti's* finances instead.

In Bolivia, revenue rose under the Americans— but almost entirely due to tax rises, not administrative efficiency or reduced corruption. On November 30, 1923, the CFP replaced the mining profits tax with a 9 percent tax on gross mining revenues.[70] The switch to a revenue tax was intended to be revenue-neutral, but congress (under CFP prodding) also raised taxes on the transfer of mineral properties and the sales and profit tax on commerce and industry. This was soon followed by increases in the mining export tax.[71] In 1927-28, on the recommendation of a visiting American commission led by the economist Edwin Kemmerer, the legislature congress reversed the increases on export taxes, lowering them by a quarter, but compensated for that with a 35 percent hike in import tariffs.[72]

The CFP followed up the implementation of the new code with aggressive enforcement. It immediately began annual audits of the major mining companies. Between 1923 and 1926, annual mining tax revenues rose from $557,000 to $2.0 million in nominal terms.[73] Effective tax rates almost doubled from 6.5 percent of mining export revenues in 1920-23 to 12.8 percent in 1924-28.[74]

Did the CFP raise revenues by reducing corruptions or by raising taxes? We can observe how much of the revenue increases in 1923 and 1924 were due to windfall revenues or rate hikes. 32.8% of the revenue increase came from the incorporation of Patiño Mines and Enterprises Consolidated, which generated large transfer tax revenues. An additional 17.8% came from the switch to a gross revenue tax on mining. Finally, 18.2% of the rise was due to increases in export taxes.[75] In short, at least two-thirds of the revenue increases were due to tax increases.

We can also observe how much the CFP collected from its corporate audits. Between 1923 and 1930 the CFP audited the books of the country's largest commercial firms (in practice, the mining industry). It claimed 9.7 million bolívares in back taxes, of which it collected 5.2 million ($18.2

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[68] Cumberland, *Reminiscences*, p. 135.
[69] Cumberland, *Reminiscences*, p. 132.
[70] See data in Margaret Marsh, *The Bankers in Bolivia: A Study in American Foreign Investment.* Vanguard Press, New York: 1928, p. 209.
[71] Contreras, "Debt," p. 275.
[72] Contreras, "Debt," p. 275.
[73] $b1.8 million and $b6.0 million, , respectively, at current exchange rates.
[74] Contreras, "Debt," p. 269.
[75] Contreras, "Debt," p. 278.

million in 2009 dollars).[76] Aggressive auditing produced only 2.4% of the total revenues collected by the CFP in 1923-30.

Finally, it appears that the revenue under CFP jurisdiction was headed upwards *before* the commissioners actually took control of the fiscal apparatus. (See Figure 8.) This is consistent with the fact that Bolivia was beginning a long tin-driven commodity boom. It is not consistent with the hypothesis that outsourcing management to American officials begat an administrative revolution that increased revenue by reducing corruption.

FIGURE 8 AROUND HERE

CONCLUSION

Paul Romer's "charter cities" concept entails transplanting the institutions of one country to another. In the view of the charter city proponents, economic development depends on efficient and impartial rules. In particular, it depends on rules that limit the ability of the rulers to arbitrarily alter the rules. The hope is that by importing foreign formal rules (monitored and enforced by foreign administrators) without importing foreign sovereignty or foreign settlers, countries can create zones of good governance that will attract investments and migrants and ultimately enable the country to overcome its institutional heritage.

The charter city is not pie in the sky. In 2012, the Honduran congress created an enabling law that would have placed a section of the country under the administrative authority of a "Transparency Commission" made up two American economics professors, the former head of a Costa Rican business school, a former Singaporean general, and the American head of a prominent development NGO. The charter city would remain under the authority of the Honduran state and be populated almost entirely by Hondurans. The difference is twofold: (1) The Transparency Commission can (with Congressional approval) impose new laws and regulations within the city, with appeals to by foreign courts; (2) The Transparency Commission stands between the highest levels of the Honduran executive and lower-level officials. Paul Romer pulled out of project weeks before the Honduran supreme court declared the law unconstitutional in October 2012, but the idea retains currency— on January 24, 2013, the Honduras congress approved a series of constitutional amendments intended to address the court's reservations by a vote of 110-13.[77] Paul

[76] Comisión Fiscal Permanente, *Tercera Memoria*, pp. 33-9, 104; *Septima Memoria*, p. 46.
[77] Faustino Ordóñez, "Congreso Nacional aprobó a matacaballo las "ciudades modelo," *El Heraldo*, January 24, 2013. Available at http://www.elheraldo.hn/Secciones-Principales/Pais/CN-aprobo-a-matacaballo-ciudades-modelo, accessed February 28, 2013.

Romer was reported to be in discussions with Moroccan and Tunisian authorities over the possibility of implementing a charter city in those countries.[78]

Our results suggest that the importation of foreign institutions may be far more difficult than the proponents of charter cities believe. The United States inserted American officials directly into the governance structure of eight Latin American states, in an area where success— revenue generation— was fairly easy to measure. In almost every case, they failed. Where they did not, as in the Dominican Republic, the Americans at best acted like a modern U.N. peacekeeping mission; at worst they piggybacked on an existing upward trend. When American officials confronted head-on the political constraints of the societies in which they operated, they either backed down (Magoon in Cuba), were co-opted (Warrick in Panama), or became irrelevant (Cumberland in Peru). There is, in short, little reason to believe that future attempts to export First World institutions to Third World countries will be successful in the future short of an explicit and total transfer of sovereignty.

Appendix

Sources and methodology for terms of trade

<u>Argentina</u>

Ferreres, O., *Dos siglos de economia argentina, 1810-2004*. Buenos Aires: Verlap, 2005.

<u>Brazil</u>

IBGE, *Estatisticas do Seculo XX*, Rio de Janeiro: IBGE, 2006

<u>Chile</u>

Braun, Juan, Matias Braun, Ignacio Briones, and Jose Diaz, Economia chilena 1810-1995: Estadisticas historicas, Documento de Trabajo de IEUC, 187, 2000.

<u>Colombia</u>

Mcgreevey, William P., Exportaciones y Precios de Tabaco y Café in Urrutia, Miguel and Mario Arrubla, *Compendio de estadisticas historicas de Colombia*, Bogota: Universidad Nacional de Colombia, 1970.

<u>Cuba</u>

Ward, Marianne and John Deveraux, The Road Not Taken: Pre-Revolutionary Cuban Living Standards in Comparative Perspective, *The Journal of Economic History*, 72(1), 2012.

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Arroyo Abad, Leticia and Amelia Santos-Paulino, Trading development? The Dominican Republic in historical perspective," mimeo.

<u>Mexico</u>

1899-1924: Edward Beatty. The Impact of Foreign Trade on the Mexican Economy: Terms of Trade and the Rise of Industry 1880-1923. *Journal of Latin American Studies*. 32(2), May 2000, p. 399-433.

[78] Jason Dearen, "Can 'charter cities' help abolish global poverty?" *SmartPlanet* (CBS Interactive), February 26, 2013. Available at http://www.smartplanet.com/blog/big-story/can-8216charter-cities-help-abolish-global-poverty/274, accessed February 28, 2013.

1924-1929: Sandra Kuntz Ficker*, El comercio exterior de México en la era del capitalismo liberal, 1870-1929,* México: El Colegio de México, 2007.

Peru

Export prices: Hunt, Shane J., "Price and Quantum Estimates of Peruvian Exports, 1830-1962," *Woodrow Wilson School Discussion Papers*, 33, 1973.

For import prices, we followed the same methodology as for Central America using the same sources.

Uruguay

Baptista, B. and Bértola, L*., Uruguay 1870-1913: Indicadores de Comercio exterior*

Bértola, L., The manufacturing Industry of Uruguay, 1913-1961, (Stockholm: Institute of Latin American Studies of Stockholm University, Monograph No 20), table IV.12.

Venezuela

Baptista, Asdrúbal, *Bases cuantitativas de la economía venezolana 1830-1995*, Caracas: Fundación Polar, 1997.

For the five Central American countries, Bulmer-Thomas (1987) published series of terms of trade are starting in 1920. To extend the series back to 1899, we analyzed the composition of exports and imports during that period choosing weights for the main export and import goods accordingly (Tables X and XI). Given that the main trade partners were either the US or Britain, we used then used their import and export prices depending on availability. The export and import composition comes from Munro (1918).

Export goods

Good	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua
Bananas	X		X	X	X
Coffee	X	X	X	X	X
Hides		X	X	X	X
Precious metals	X	X		X	X
Sugar		X	X		
Share of total exports	**95%**	**95%**	**95%**	**85%**	**91%**

Import goods

Good	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua
Coal	X				
Chemicals					X
Electrical materials	X				
Iron and steel			X	X	X
Rice	X				
Textiles		X	X	X	
Wheat flour	X	X			X
Share of total imports	**67%**	**71%**	**82%**	**64%**	**76%**

Export and import prices:

Barrantes, Emmanuel, Hilda Maria Bonillay Olga Marta Ramirez, Costo y condiciones de vida: la canasta de subsistencias en Costa Rica, in *Pobreza e historia 1914-1920 en Costa Rica*, ed. By Ronny J. Vailes Hurtado, San Jose: Editorial de la Universidad de Costa Rica, 2005.

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Haines, Michael R., " Wholesale prices of selected commodities: 1784–1998." Table Cc205-266 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006.
Hanes, Christopher, "Wholesale price indexes, by commodity group: 1890–1951 [Bureau of Labor Statistics]." Table Cc84-95 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006.
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Costa Rica
Statesman's Yearbook, various years.
Cuba
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El Salvador
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INEGI, Estadísticas Históricas Mexicanas, México, 1985.
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Ministerio de Hacienda y Comercio. *Extracto Estadístico del Peru*, Lima: Imp. American, 1937.
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López Campaña, Perfecto, *El libro del Centenario, 1825-1925*, Montevideo: Agencia Publicidad Capurro, 1925.
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Statesman's yearbook, various years
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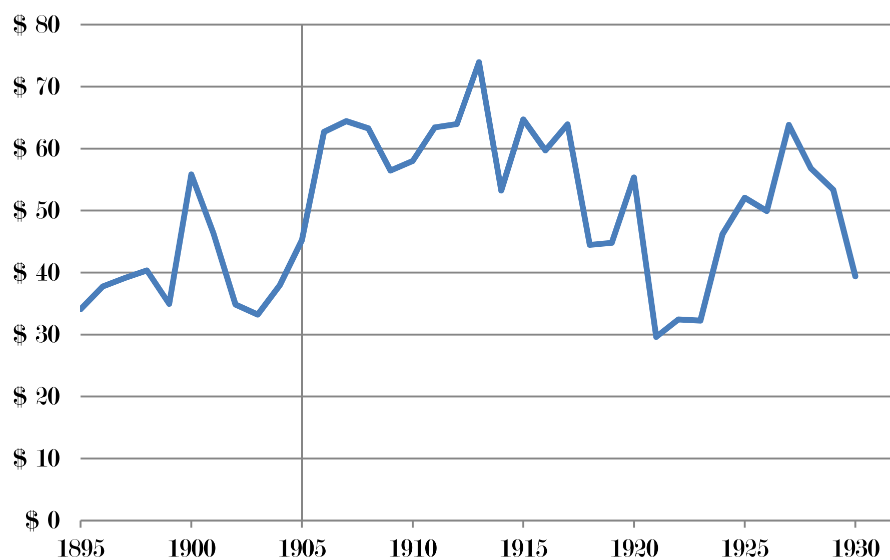
Baptista, Asdrúbal, *Bases cuantitativas de la economía venezolana 1830-1995*, Caracas: Fundación Polar, 1997.
Statesman's Yearbook, various years

Sources for controls
Distance: sea-distance.com
Strategic foreign direct investment
Navy
New US loans
Freight costs: Noel Maurer and Carlos Yu. *The Big Ditch: How America Took, Built, Ran, and Ultimately Gave Away the Panama Canal*, Princeton: Princeton University Press, 2011.

FIGURE 1: DOMINICAN CUSTOMS REVENUE, MILLIONS OF 2011 DOLLARS



Source: Maurer and Mitchener, "Customs Receiverships and Crown Agents," unpublished working paper.

FIGURE 2: DURATION OF FISCAL RECEIVERSHIPS

Country	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Argentina																												
Bolivia																												
Brazil																												
Chile																												
Colombia																												
Costa Rica																												
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Ecuador																												
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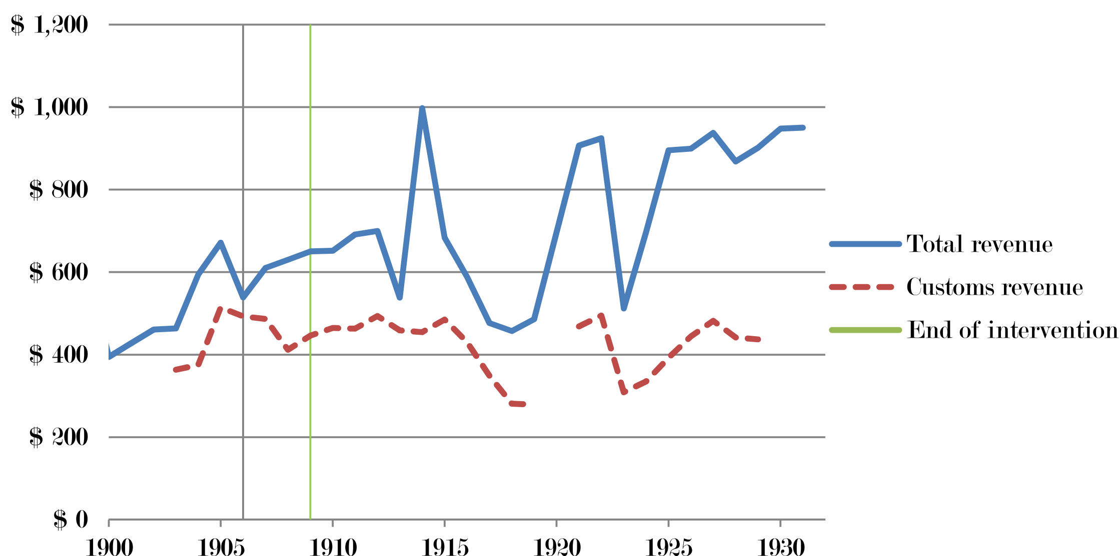
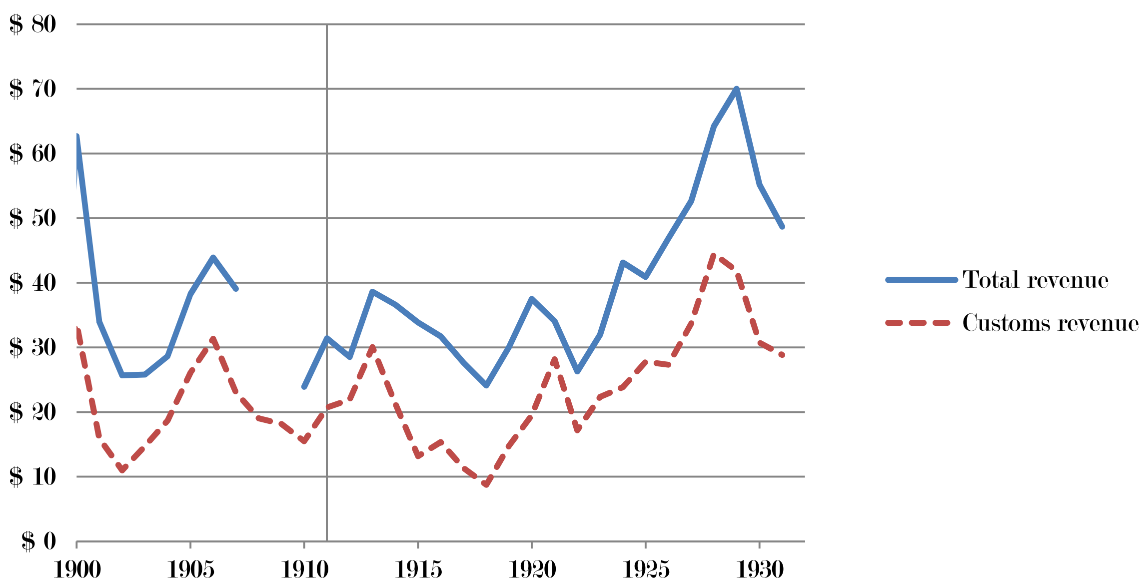
Mexico																												
Nicaragua																												
Panama																												
Peru																												
Uruguay																												
Venezuela																												

FIGURE 3: CUBAN REVENUE, MILLIONS OF 2011 DOLLARS



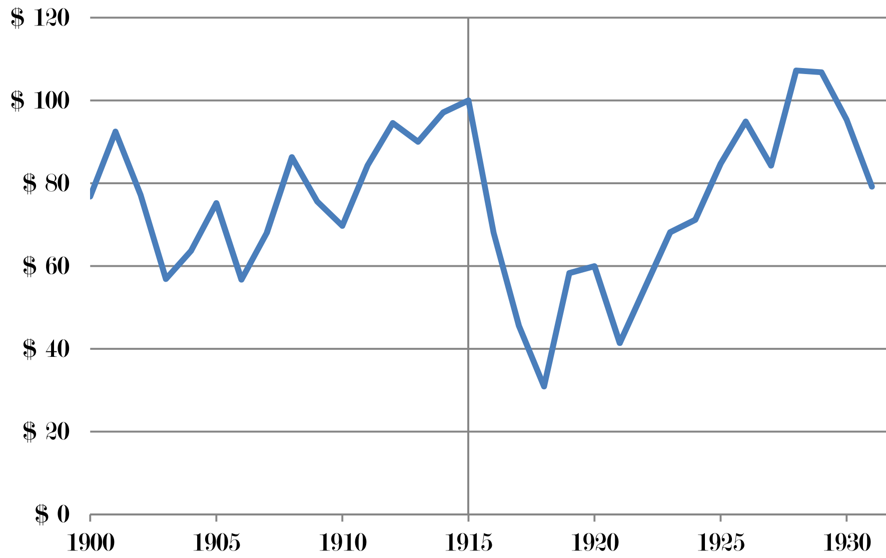
Source: *The Stateman's Year Book* (various); Charles Edward Magoon, *Report of Provisional Administration from October 13th, 1906 to December 1st, 1908* (Havana: Rambla and Bouza, printers, 1908), pp. 38-41; Charles Edward Magoon, *Annual Report of Charles E. Magoon, Provisional Governor of Cuba, to the Secretary of War [Dec. 1] 1907* (Washington: G.P.O., 1908), pp. 33-35; Charles Edward Magoon, *Report of Provisional Governor of Cuba from December 1, 1907, to December 1, 1908* (Washington: G.P.O., 1909), p. 114.

FIGURE 4: NICARAGUAN CUSTOMS REVENUE, MILLIONS OF 2011 DOLLARS



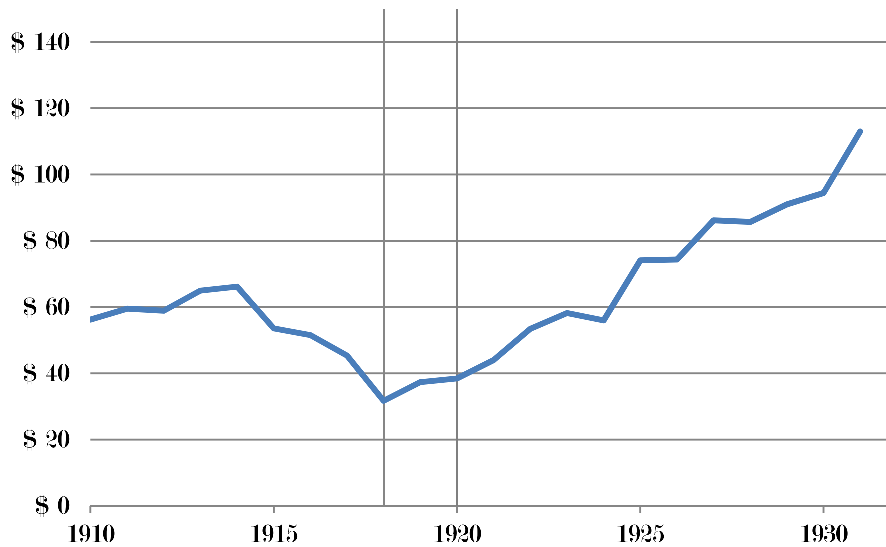
Source: *The Stateman's Year Book* (various); *Kimber's Record of Government Debts* (1922), pp. 645-46; *Latin-American Year Book for Investors and Merchants for 1918* (1919), p. 455; and the *Memoria del Recaudor General de Aduanas por 18 Diciembre 1911 a 30 Junio 1913*, (GPO: 1913), pp. 44-46, 63, and 74.

FIGURE 5: HAITIAN CUSTOMS REVENUE, MILLIONS OF 2011 DOLLARS



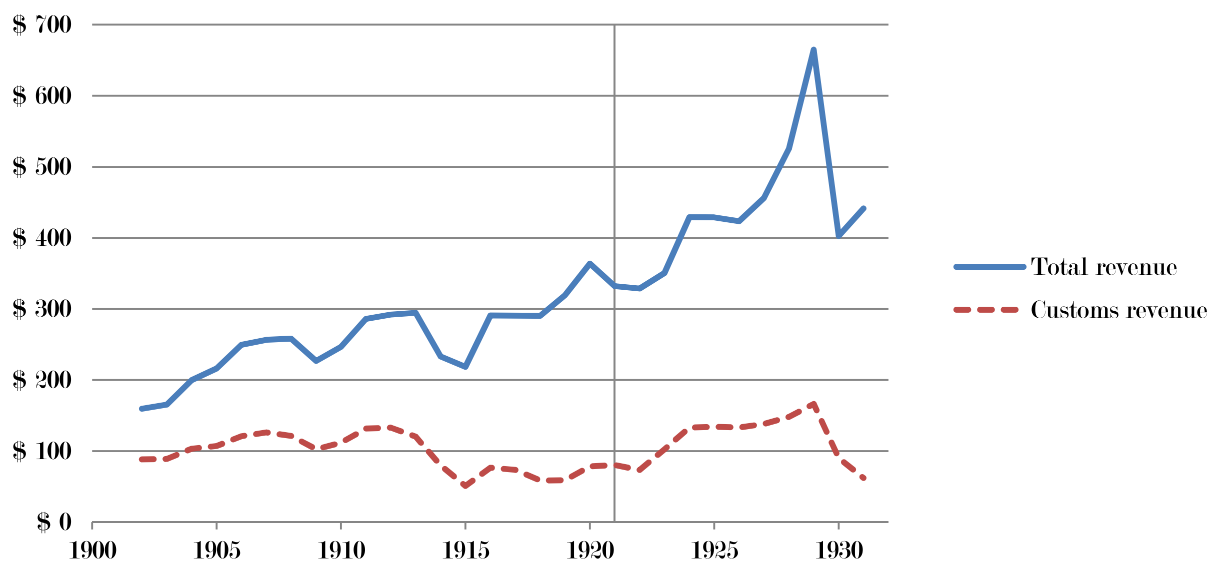
Source: *The Stateman's Year Book (various) and Haiti, Annual Report of the Fiscal Representative for the Fiscal Year October 1933-September 1934 (Port-au-Prince: Im-primerie de l'Etat, 1935), p. 120.*

FIGURE 6: PANAMANIAN REVENUE, MILLIONS OF 2011 DOLLARS



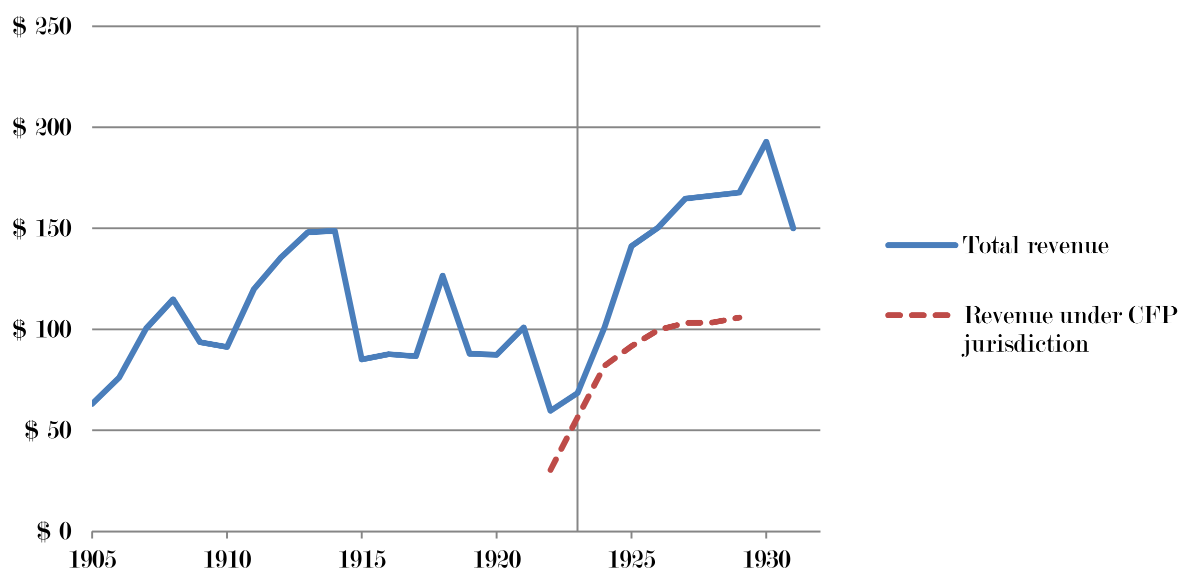
Source: *The Stateman's Year Book* (various).

FIGURE 7: PERUVIAN REVENUE, MILLIONS OF 2011 DOLLARS



Source: *The Stateman's Year Book* (various).

FIGURE 8: BOLIVIAN REVENUE, MILLIONS OF 2011 DOLLARS



Source: Comision Fiscal Permanente, *Sexta Memoria presentada al Ministerio de Hacienda, 1928-29* (La Paz, 1929), pp. 3 and Table 3; pre-1920 data from *Oxford Latin American Studies Database*.

0.1 Table 1 - Summary statistics

Table 1: Summary statistics

	(1) Full sample			(2) No receivership			(3) Receivership		
Variable	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
Log customs	9.605	1.617	341	10.28	1.621	184	8.814	1.205	157
Log revenue	9.950	1.496	498	10.488	1.489	281	9.253	1.189	217
Receivership	0.165	0.371	576	0	0	320	1	0	95
WWI	0.156	0.363	576	0.156	0.364	320	0.156	0.364	256
ToT	105.905	34.841	558	108.076	40.106	313	103.143	26.508	246
Px	112.013	72.429	558	100.988	79.045	313	125.984	60.379	247
Pm	111.993	64.034	558	99.66	68.309	313	127.684	54.362	246
Distance	4224.05	3208.205	576	4025.416	2401.356	320	4472.344	3985.418	256
Freights	285.07	232.796	459	301.72	218.72	270	261.284	250.219	189
US debt	0.599	0.491	451	0.51	0.501	300	0.858	0.349	240
New loans	0.305	0.461	558	0.071	0.257	310	0.597	0.492	248
Strategic FDI	0.677	0.468	558	0.658	0.475	310	0.702	0.458	248

Sources: see appendix
Notes: *Log Revenue* and *Log Customs* are the log of total revenue and customs revenue respectively in 1902 constant prices. *Receivership* is an indicator variable that equals one in the case of US receivership, *WWI* is an indicator variable for World War I, *ToT* is terms of trade, *Px* is export prices, *Pm* is import prices, *Distance* is the sea distance in nautical miles from New York the main country port using the Panama Canal from 1921 onwards, *Freights* is the freight costs in 1902 constant prices, *US debt* is an indicator variable with one when a new loan for a Latin American or Caribbean (LAC) country is underwritten by a US bank, *New loans* is an indicator variable that interacts *US Debt* with the existence of a modern navy in a LAC country while excluding Mexico during the revolutionary period,*Strategic FDI* is an indicator variable with the value of one when a LAC country received FDI in strategic sectors such as mining and oil.

0.2 Table 2: OLS estimations Log of customs revenue

Dependent variable: *Log of customs revenue*

	(1)	(2)	(3)	(4)	(5)	(6)
receivership	-1.9720***	-1.9720***	-2.0788***	-1.3767***	-1.1141**	-1.1123**
	(0.5182)	(0.5182)	(0.5302)	(0.4179)	(0.3914)	(0.3891)
wwi		0.8977	1.3828	1.7178**	2.2626**	2.1788**
		(0.7854)	(0.7891)	(0.7425)	(0.9357)	(0.9290)
tot			-0.0046			
			(0.0046)			
px				0.0105**		-0.0029
				(0.0045)		(0.0021)
pm					-0.0140**	-0.0112
					(0.0063)	(0.0065)
constant	9.5134***	9.5134***	9.4472***	9.7062***	10.0025***	10.0013***
	(0.7414)	(0.7414)	(0.8551)	(0.6871)	(0.6730)	(0.6780)
r2	0.397	0.397	0.411	0.554	0.595	0.599
N	341	341	337	337	337	337

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is natural log of total revenue in real terms. tot: terms of trade,
px = price of exports, pm = price of imports, wwi= indicator variable for World War I.

0.3 Table 3: OLS regressions Log of total revenue

	Dependent variable: *Log of total revenue*					
	(7)	(8)	(9)	(10)	(11)	(12)
receivership	-1.4360***	-1.4360***	-1.4482***	-1.1547***	-0.9419**	-0.9538***
	(0.4167)	(0.4167)	(0.4296)	(0.3865)	(0.3310)	(0.3289)
wwi		1.2310***	1.2328***	1.9513***	2.8410***	2.7576***
		(0.3752)	(0.3819)	(0.3949)	(0.5695)	(0.5789)
tot			-0.0000			
			(0.0042)			
px				0.0113**		-0.0027
				(0.0040)		(0.0036)
pm					-0.0165***	-0.0139**
					(0.0036)	(0.0049)
constant	9.2565***	9.2565***	9.2601***	10.1190***	10.5667***	10.5645***
	(0.4433)	(0.4433)	(0.6373)	(0.4833)	(0.3909)	(0.3931)
r2	0.249	0.249	0.256	0.505	0.597	0.602
N	498	498	493	494	493	493

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is natural log of total revenue in real terms. tot: terms of trade,
px = price of exports, pm = price of imports, wwi= indicator variable for World War I.

0.4 Table 4: OLS regressions with pre-trends

Dependent variable: *Log of customs revenue* (columns (13)-(15)) & *Log of total revenue* (columns (16)-(18))

	(13)	(14)	(15)	(16)	(17)	(18)
receivership	-1.9819***	-1.9819***	-1.1168**	-1.4344***	-1.4344***	-0.9502**
	(0.5194)	(0.5194)	(0.3912)	(0.4182)	(0.4182)	(0.3309)
pre-trend	-0.0001*	-0.0001*	-0.0000	0.0000	0.0000	0.0000***
	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
wwi		0.8987	2.1768**		1.2307***	2.7607***
		(0.7887)	(0.9322)		(0.3756)	(0.5802)
px			0.0030			0.0027
			(0.0022)			(0.0036)
pm			-0.0111			-0.0139**
			(0.0066)			(0.0049)
constant	9.5153***	9.5153***	9.9989***	9.2565***	9.2565***	10.5665***
	(0.7437)	(0.7437)	(0.6787)	(0.4438)	(0.4438)	(0.3932)
r2	0.400	0.400	0.599	0.250	0.250	0.603
N	341	341	337	498	498	493

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is natural log of total revenue in real terms. tot: terms of trade,
px = price of exports, pm = price of imports, wwi= indicator variable for World War I.

0.5 Table 5: First stage estimations

	Instrument:					
	Distance		Strategic FDI		New loans	
	(1)	(2)	(3)	(4)	(5)	(6)
wwi	-4.534***	-4.533***	-5.012***	-5.014***	-4.461***	-4.461***
	(-26.13)	(-26.09)	(-23.23)	(-25.97)	(-38.68)	(-39.75)
tot	-0.00142*	-0.00142*	-0.00191**	-0.00191**	-0.00133*	-0.00133*
	(-2.14)	(-2.14)	(-2.78)	(-2.78)	(-2.46)	(-2.46)
instrument	-0.0000439***	-0.0000440***	0.272***	0.273***	0.613***	0.612***
	(-7.64)	(-7.65)	(7.70)	(7.70)	(13.39)	(13.36)
pre-trend		-0.0000273*		-0.0000298**		-0.00000497
		(-2.28)		(-2.71)		(-0.63)
constant	720.5	720.4	782.1***	782.4	700.0	700.0***
	(.)	(.)	(141.27)	(.)	(.)	(143.62)
N	337	337	333	333	333	333

Robust standard errors clustered by country.
Country and time fixed effects included. t statistics in parentheses.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is natural log of total revenue in real terms. tot: terms of trade,
wwi= indicator variable for World War I, pre trend accounts for the revenue trend before the receivership.

0.6 Table 6: Second stage regressions Customs revenue

Dependent variable: *Log of customs revenue*

	(1)	(2)	(3)	(4)	(5)	(6)
receivership	-2.5994***	-2.5911***	-3.4033***	-3.3751***	-2.1866***	-2.2037***
	(0.4203)	(0.4183)	(0.5834)	(0.5794)	(0.2310)	(0.2317)
wwi	-0.6176	-0.7038	-0.6686	-0.5170	-0.6551	-0.6279
	(0.5881)	(0.5876)	(0.6499)	(0.6533)	(0.5772)	(0.6681)
tot	-0.0054***	-0.0054***	-0.0067***	-0.0066***	-0.0049***	-0.0049***
	(0.0020)	(0.0020)	(0.0022)	(0.0022)	(0.0018)	(0.0018)
pre-trend		-0.0001***		-0.0001***		-0.0001***
		(0.0000)		(0.0000)		(0.0000)
constant	14.6679	28.1773	23.9070***	0.0000	19.5984	15.3399
	(.)	(.)	(8.6768)	(12.3194)	(.)	(42.0896)
			Instrument			
distance	X	X				
strategic FDI			X	X		
New loans					X	X
r2	0.395	0.398	0.312	0.321	0.412	0. 415
N	337	337	333	333	333	333

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is the log of customs revenue in real terms. tot: terms of trade,
px = price of exports, pm = price of imports, wwi= indicator variable for World War I,
pre trend accounts for the revenue trend before the receivership.

0.7 Table 7: Second stage regression Total revenue

	Dependent variable: *Log of total revenue*					
	(7)	(8)	(9)	(10)	(11)	(12)
receivership	-5.0711***	-5.0952***	-3.8206***	-3.8214***	-1.7925***	-1.7871***
	(0.7388)	(0.7409)	(0.6952)	(0.6957)	(0.2339)	(0.2340)
wwi	-0.9053	-2.1408***	-0.9142*	-0.9178	-0.7509*	-0.7533*
	(0.6324)	(0.6335)	(0.5140)	(0.5677)	(0.4300)	(0.4379)
tot	-0.0033	-0.0033	-0.0022	-0.0022	-0.0004	-0.0004
	(0.0022)	(0.0022)	(0.0017)	(0.0017)	(0.0013)	(0.0013)
	(0.6663)	(0.6679)	(0.5308)	(0.5347)	(0.4101)	(0.4105)
pre-trend		0.0000		0.0000		0.0000
		(0.0000)		(0.0000)		(0.0000)
constant	0.0000	194.6207	14.3099	14.8517	9.6512**	10.0817
	(.)	(.)	(.)	(20.3602)	(3.8863)	(8.2859)
			Instrument			
distance	X	X				
strategic FDI			X	X		
New loans					X	X
r2	-0.504	-0.513	-0.073	-0.073	0.249	0.250
N	493	493	486	486	486	486

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is the log of total revenue in real terms. tot: terms of trade,
px = price of exports, pm = price of imports, wwi= indicator variable for World War I,
pre trend accounts for the revenue trend before the receivership.

0.8 Table 8: Placebo tests Trade with the US

Dependent variable is: *Log of trade with the US*

	(1)	(2)	(3)	(4)	(5)	(6)
receivership	-0.0880	-0.0880	-0.1133	-0.1424	-0.0910	-0.1244
	(0.1391)	(0.1391)	(0.1640)	(0.1515)	(0.1327)	(0.1456)
wwi		2.3456***	2.5761***	1.8896***	2.2065***	2.2155***
		(0.2766)	(0.2233)	(0.2684)	(0.4658)	(0.4506)
tot			0.0106***			
			(0.0020)			
px				0.0067***		0.0074***
				(0.0014)		(0.0011)
pm					0.0013	-0.0034
					(0.0035)	(0.0033)
constant	10.3817***	10.3817***	9.2944***	10.4651***	10.3967***	10.4368***
	(0.1404)	(0.1404)	(0.2012)	(0.1283)	(0.1426)	(0.1261)
N	517	517	516	517	516	516

Robust standard errors clustered by country. Country and time fixed effects included.
Coefficients that are significantly different from zero are denoted as * 10%, ** 5%, and *** 1%.
The dependent variable is the log of trade (exports + imports) in real terms. tot: terms of trade, px = price of exports, pm = price of imports, wwi= indicator variable for World War I.

Table 8: Borrowing Costs, Adjusted for Maturity

	Dec-14	**May-15**	**Jun-26**	**May-28**
United States	3.6%	3.6%	3.6%	3.5%
Costa Rica	6.8%	7.6%	4.1%	3.7%
Cuba	4.7%	5.1%	4.9%	4.6%
Colombia	6.0%	6.0%	6.5%	6.3%
Dominican Republic	na	na	5.6%	5.5%
El Salvador	6.1%	7.0%	7.5%	6.4%
Guatemala	8.4%	8.9%	8.3%	7.0%
Honduras	12.2%	26.7%	14.3%	10.5%
Nicaragua	7.7%	9.4%	6.9%	6.6%
Panama	5.2%	5.6%	6.3%	5.2%
Venezuela	5.5%	5.5%	3.6%	3.5%

Source: Maurer and Yu, *Financial Times* and *Wall Street Journal*, various editions. Note: Honduran and Panamanian debts were not publicly traded. Honduran interest rates based on short-term bank lending.