



**INSTITUTO FIGUEROLA**  
DE HISTORIA Y CIENCIAS SOCIALES



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**Working Papers in Economic History**

2022-01

ISSN: 2341-2542

Serie disponible en

<http://hdl.handle.net/10016/19600>

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## Power politics and the expansion of U.S. exports, 1879-1938<sup>◇</sup>

Antonio Tena-Junguito/<sup>√</sup> and Maria Isabel Restrepo-Estrada/<sup>√√</sup>

### Abstract

In this paper we present for the first-time quantitative evidence of the effect of U.S. power policy on the expansion of its export market from the late-19th century to the eve of World War II. U.S. imperial policies were expressed through annexation, dominion, and gunboat policies, as did other empires, and exports to these markets grew more than three times faster than the rest of the territories. Our most relevant contribution to the discussion that power plays a critical role in international trade is based on a new geographically extensive database with information on bilateral trade flows, market size, trade costs and variables that capture U.S. political and military power. We first estimate a gravity equation to see the relationship between our political variables and U.S exports and then we present causal evidence of the role of the colonies and protectorates in the expansion of U.S exports through an event study and the estimation of a generalized difference-in-differences model.

**JEL Codes:** F13, F54, N40, N70

**Keywords:** Power politics and US exports, US Imperialism, 19<sup>th</sup> and 20<sup>th</sup> century, US international political activity.

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<sup>◇</sup> An earlier version of this paper has been presented in the Economic History Seminar of the University Pompeu Fabra on november 8<sup>th</sup> 2021. We acknowledge some comments of Enriqueta Camps, Albert Carreras and Fernando Guirao.

## Power politics and the expansion of U.S. exports, 1879-1938

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### INTRODUCTION

The view that power plays a critical role in international trade dates back at least to Hirschman (1945).<sup>1</sup> Economic history offers many examples of the use of political power to expand trade not only during the mercantilist period, but also in the modern era with the spread of free trade during the first globalization and the interwar years (Findlay & O'Rourke, 2007; Mitchener & Weidenmier, 2008; Ayuso & Tena, 2020). In the case of the United States, the historical debate reflects two opposing positions. On the one hand, Irwin, probably reflecting the general consensus among U.S. economic historians, notes that: "finally, we should note that the export expansion occurred without any significant government support. The federal government did not play a direct role in bringing the change in the composition of exports and was almost entirely passive when it came to promoting exports." (Irwin, 2017, p.302). On the other hand, Palen (2018, p.4), in line with other diplomatic historians, argued that: "Republican advocates of an American empire implemented the imperialism of economic nationalism by expanding U.S. imperial power through informal means of high tariff walls, closed U.S. controlled markets, and retaliatory reciprocity, if possible, by formal annexation when necessary."

Historically, the demand for infant industry protection after the Civil War emerged alongside the rapid industrial growth of the U.S. in the 1880s. Consequently, this growth provided both pressure and the opportunity to turn U.S. trade policy –an traditional protectionist policy, strongly influenced by domestic pressure groups– into a new policy that included trade restrictions in accordance with national interests but adjusted to new export opportunities through active international political activity.

Nevertheless, the significance of political economy determinants in the origins of the expansion of U.S. exports remained a strictly qualitative discussion at least prior to the undisputed world hegemony of the United States during the Cold War years (see Berger, Easterly, Nunn & Satyanath, 2013). To our knowledge, this paper is the first to quantitatively capture the relative importance of political power strategies in the expansion of U.S. exports between 1879 and 1938. We show how the expansion

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<sup>1</sup> Hirschman was more concerned with the effects of foreign trade on national power, but he also discussed the historical relevance of how a particular distribution of power influences trade relations. (Hirschman, 1945).

of exports was faster in formal and informal imperial regions and in those markets with lower income, especially in the American and Asian continents, than in the competitive and more complex European markets that demanded equal tariff treatment for their exports in the US market.

Our most relevant contribution to this discussion is based on a new geographically extensive database with information on bilateral trade flows, market size, and trade costs. Furthermore, we augment our database with new variables that capture the international political and military power of the United States, which we call "imperial" variables. These new variables are related to direct or indirect imperial interventions, such as territorial expansion through the establishment of colonies and protectorates or through military interventions. Other variables are related to the political and commercial bargaining instruments used to achieve the opening of export markets, including bilateral trade agreements and the promotion of diplomatic relations. We argue that formal imperialism of annexation, political control of protectorates and other military interventions, combined with the asymmetry of bargaining power in bilateral trade agreements in lower-income countries, was not negligible and considerably broadened U.S. export horizons.

Our empirical strategy is based on a gravity equation with several control variables and some temporal lags, since, for instance, military intervention does not follow the export expansion in the same year, but rather two years later. More importantly, we present causal evidence for the institution of colonies and protectorates in the expansion of U.S. exports through an event study and the estimation of a generalized difference-in-differences model. In this case we use as a counterfactual specific group of countries with similar characteristics but without interventions, such as Central America and the Caribbean, or a part of it, such as the islands of the British Caribbean.

The remainder of the paper is organized as follows. Our analysis begins with a presentation of the main geographical and compositional changes in the expansion of U.S. exports and investment abroad during the period analyzed. Secondly, we consider it necessary to explain, on the one hand, the historical context of imperial expansion by annexation, political or military intervention and, on the other hand, the trade agreement strategy between the domestic protectionist interests and the foreign trade interests, and the volume of trade involved in both interventions. We then present the gravity model and event study with the data we used to test the relationship between exports and our variables of interest. Subsequently, we further estimate the impact of the expansion of the colonies and protectorates on exports. We finish with some concluding remarks.

## THE EXPANSION OF U.S. EXPORTS AND INVESTMENT ABROAD

The acceleration of the U.S. industrialization process in the last quarter of the 19th century was supported, on the one hand, by the expansion of the domestic market thanks to economic and population growth, and, on the other hand, by an increase in productivity and the exploitation of comparative advantage in natural resource-intensive manufacturing, boosting access to foreign markets.<sup>2</sup> This process was parallel to the expansion of U.S. exports of raw cotton and bulk commodities, namely grains, meat and some minerals to the European market, driven by a rapid reduction in ocean freight costs. Manufactures accounted for a stable 20% of total exports for many decades, however, growth in manufacturing exports offset the rise in commodity exports from the early 1890s, and before World War I it accounted for almost half of all U.S. exports; meanwhile, it reached more than two-thirds of the total in the late 1930s.

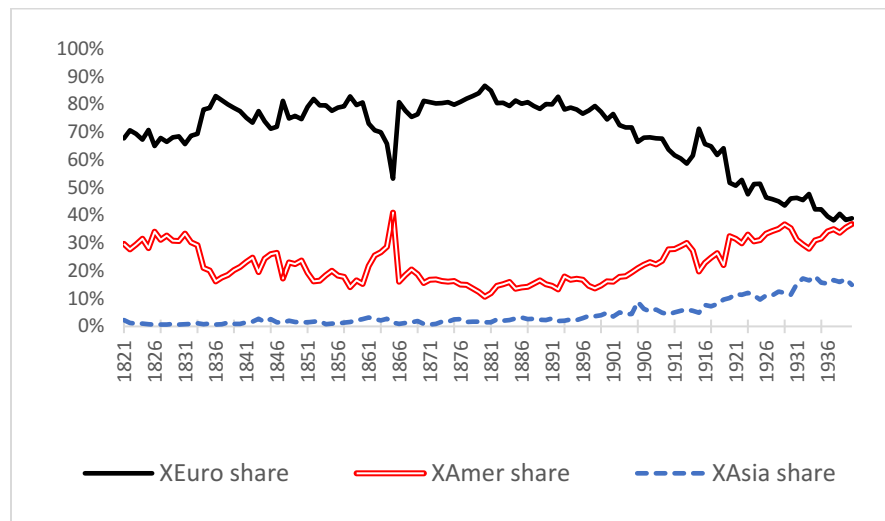
As shown in Figure 1, this was also evidenced in relevant changes in the geographical distribution of U.S. exports, from Europe –especially the United Kingdom– towards other markets, mostly in the American continent.<sup>3</sup> European industrial interests were better represented in their parliaments and demanded reciprocity for their exports of manufactures to the U.S. market. However, this was not acceptable for the industrial protectionist interest groups in the U.S. political environment. The need to find new markets for manufactures exports outside of Europe was conditioned by the fact that European markets were relatively more open to receiving cereals, meat, and raw cotton than manufactured products.<sup>4</sup>

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<sup>2</sup> See Wright (1990, p.652) and Irwin (2003, p.372), who argue that “taking the entire period from 1892 to 1913 into consideration, the growth of U.S. exports appears to be explained largely by productivity growth, to some degree by higher foreign demand, and to a lesser degree by lower iron ore prices and higher British export prices.”

<sup>3</sup> In 1885-1890, U.S. exports to Europe accounted for 80% of total exports, of which the United Kingdom was the main market (52.5%) followed by the rest of rich Europe (21.4%) and poor Europe (6.1%). By 1910-13, Europe had fallen to 61.2% of total exports, of which UK accounted for 25.9%, while the rest of rich Europe accounted for 27.7%, and poor Europe 7.5%.

<sup>4</sup> In 1906, U.S. manufactures exports accounted for only 26.8% of total exports to Europe and 23.1% to the United Kingdom. On the contrary, they accounted 61.8% of its exports to North and Central America, 86.1% to South America, 74.9% to Asia and 84.7% to Oceania. See U.S. Department of Commerce and Labor (1907, p.33).



**Figure 1: U.S. exports share by continental geographic destination (1821-1940)**

Sources: Appendix Database. Geographical distribution of exports

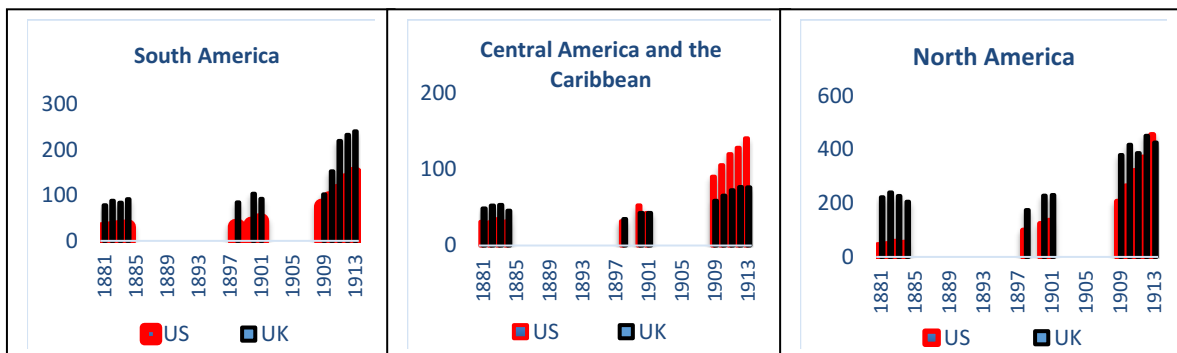
Most South, Central and Caribbean American countries, as well as Hawaii and the Philippines, were easily induced to negotiate reductions in their bilateral manufacturing tariffs in exchange for tariff reduction concessions on sugar, coffee and other primary products in the U.S. market.<sup>5</sup> The United States used retaliatory and reciprocity agreements enforced by political power to open new markets for its manufactures, crowding out European manufactures in many areas of the World but especially in the American continent. The United Kingdom was the main exporter to the Americas, more than tripling the United States' presence in the region in the early 1880s; nonetheless, that asymmetry narrowed very quickly to factors of 1.7 and 1.2 from the turn of the century to World War I, respectively.<sup>6</sup>

As Figure 2 shows, not all territories followed the same pattern. The United States was already hegemonic in the Central American and Caribbean markets at the beginning of the 20<sup>th</sup> century, but that was not the case for the South and North American markets. The United Kingdom proved to be more resilient to U.S. penetration in its well-established South American markets than in the U.S. border markets of Mexico and Canada, despite its Commonwealth link to the latter. The trade cost imposed by distance proved to be stronger than the trade bloc's advantage for the UK hegemony over Canada. Subsequently, the U.S. proved its ability to promote its hegemony throughout the region. In 1929, more than a third of the South

<sup>5</sup> "The senate Finance Committee accepted this recommendation. While keeping coffee, tea, hides, sugar, and molasses on the free list, it amended the House Bill to allow the president to suspend duty free treatment of imports from countries imposing "unequal or unreasonable" duties on US exports." See Irwin (2017, p.304).

<sup>6</sup> "Latin America offered a vast potential market.... In 1883, for instance, ... In the region as a whole, Europeans outsold the United States by a factor of more than four to one." Coates (2014, p.29-30).

American market and almost two-thirds of the markets in Central America, the Caribbean and North America were supplied by U.S. producers.<sup>7</sup>



**Figure 2. United States and United Kingdom exports to the Americas by region**

Sources: U.S. and UK total trade to the territories mentioned in US\$ (UK Statistical Abstract (various years) and the U.S. Historical Statistics). North America includes Mexico, Canada and Newfoundland.

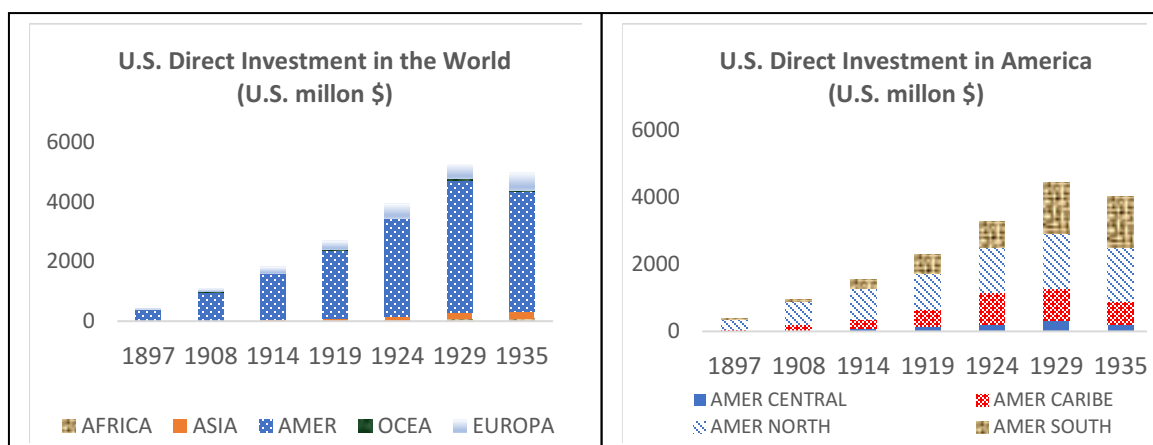
Another characteristic that emerged along with the expansion of U.S. industrial exports in the early 20<sup>th</sup> century was the opening of new opportunities for U.S. companies abroad.<sup>8</sup> Although the United States was a major importer of foreign capital for most of the 19<sup>th</sup> century, from the turn of the century its direct investment abroad increased from a few hundred million dollars in the 1890s to more than five billion dollars in 1929 (see Lewis & Schlotterbeck, 1938, pp. 575-596). In 1914, the U.S. already ranked second in the world, behind the United Kingdom<sup>9</sup>, as a direct supplier of capital investment, especially in the minerals and manufacturing sectors, which accounted for more than half of total U.S. investment before the Great War; followed by the railroads and the sugar, fruit and rubber agricultural companies, and later, in the 1920s, by utilities and oil companies.

<sup>7</sup> The UK's share in South America dropped from 27.9% to 11.2% from 1913 to 1929. In 1938, the United Kingdom and the United States' shares in this market were 14.1% and 26.5%, respectively. In addition, the United States' market share in Central America and the Caribbean increased from 54.7% to 63.2% and then to 62.7%. In North America, it went from 63.8% to 68.7% and later to 61.6% in the years 1913, 1929 and 1938, respectively. Unlike Figure 2, this data came from Latin American geographical Import records (see Online Appendix C.2.).

<sup>8</sup> Foreign Direct Investment (FDI) may have been related to U.S. exports in a complementary or substitutive manner. On the one hand, FDI and exports can be substitutes in the sense that in protected markets, U.S. investors producing and selling in the same market, can displace U.S. selling exports. On the other hand, FDI may be associated with more exports due to growing demand of technological complements or machinery.

<sup>9</sup> The U.S. Department of Commerce (1984, p.5) accounted for a total of 14.3 billion dollars of total FDI in the world in 1914, of which 45.5 % came from the United Kingdom, 16.5 % from the U.S., 12.2 % from France and 10.5 % from Germany. This figure is slightly below the one provided by Lewis *et al.* (1938).





**Figure 3: U.S. Foreign Direct Investment (US\$ millions)**

Sources: See Online Appendix B.6. and D.1.

In 1914, more than 90 % of U.S. investment abroad went to the American continent, mainly to Mexico and Canada, followed by Cuba, Honduras, Costa Rica, Guatemala, Chile, Venezuela and Colombia (see Online Appendix D.1.). U.S. investment diversified across the world after the Great War, but the American continent still absorbed about 70% of total investment in 1935 (See Figure 3). U.S. foreign investment represented a non-negligible share in some crucial sectors of the Latin American and Caribbean economies before and after the Great War.<sup>10</sup>

### EVIDENCE ON U.S. POWER POLITICS ON FOREIGN MAKETS

Some authors suggest that the U.S. empire relied more than its predecessor on institutional control and the use of non-state actors (Following Maier, 2007, cited by Bulmer-Thomas, 2018, p. 2). Formal and informal empire does not mean the accumulation of land abroad, but the use of political power to impose the national interest abroad. Historically, the conquest of northern Mexico, along with the acquisition of the Oregon Territory from Great Britain in 1846, effectively closed the western frontier, which had been a symbol of virtually endless opportunities for U.S. expansion. However, other power politics were soon put in place, following the British practice of “gunboat diplomacy”, due to the U.S strategic interest in Asian markets, forcing the emperor of Japan to sign a “treaty of friendship” in 1854 to facilitate U.S. access to the Japanese market.

Perhaps the best known and most crucial U.S. imperial intervention was the Spanish-American War, which was resolved by the Treaty of Paris, negotiated during the War and signed on December 10, 1898, whereby Spain renounced all

<sup>10</sup> Although we do not have data by sectors, according to country data provided by Lewis *et al.* (1938) and Maddison’s GDPs (2010), U.S. FDI in 1914 and 1924 could have represented 5.5% - 15%, 2.0% - 4.4%, 2.0% - 2.9%, 0.2% - 2.1%, and 1.3% - 1.9% of Cuba, Honduras, Chile, Venezuela, and Peru’s GDP, respectively.

claims of sovereignty and title over Cuba and ceded Puerto Rico, Guam, and the Philippines to the United States. As an indirect consequence of the Spanish-American War in the Philippines, the U.S. Congress passed the Newlands Resolution on July 4, 1898, and five weeks later, on August 12, Hawaii became a U.S. territory with a status like the one that Puerto Rico would later have.<sup>11</sup>

Due to the country's anticolonial constitution and history, US public opinion was very sympathetic to the movements of foreign countries resisting annexation, as was the case with the Philippines, when the U.S. decided to establish a different relationship of political control, in what president McKinley called a policy of "benevolent assimilation" with an autonomous government but U.S. sovereignty based on military control.<sup>12</sup> A similar status was also established for Cuba in 1898, when Congress passed the Teller Amendment prohibiting the annexation of Cuba by the U.S., under the pressure of protest from the Cuban population and opposition from U.S. sugar beet farmers.<sup>13</sup> The Philippines, Cuba as well as other territories such as the Dominican Republic, Haiti and Panama were also officially considered "insular areas" (protectorates),<sup>14</sup> and customs and civil affairs were administered by the Bureau of Insular Affairs.<sup>15</sup>

The expansion of U.S. imperial power in Latin America was driven by several additional international military interventions, which sent a signal to countries that the U.S. was willing to intervene, to use "big stick" diplomacy, and remove the sovereign if necessary. This strategy of informal imperialism culminates in the

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<sup>11</sup> Also, as an indirect consequence of the Treaty of Paris, in addition to Hawaii, Puerto Rico, and Alaska, other small islands were incorporated as "American Territories", as was the case of American Samoa, Guam and the Northern Mariana Islands (part of the Spanish Empire until 1899). Later, in 1917, the U.S. took formal possession of the Virgin Islands, purchased from Denmark in the Treaty of the Danish West Indies.

<sup>12</sup> Miller (1984).

<sup>13</sup> See Deere (1998, p.732). "Moreover, many of those from the sugar beet producing states were vehemently opposed to annexation of Cuba."

<sup>14</sup> At the end of the Spanish-American War of 1898, the Spanish colonies of Cuba, Puerto Rico, Guam, and the Philippines became administered by the United States. Of these four territories, only Cuba quickly became an independent republic, but with U.S. government supervision, including the installation of the Guantanamo Bay Naval Station (See Congressional Research Service, 2016, <https://fas.org/sgp/crs/natsec/R44137.pdf>). On April 20th of 1898, Congress passed the Teller Amendment prohibiting the annexation of Cuba by the United States. The Platt Amendment, signed in 1901, stipulated seven conditions for the withdrawal of U.S. troops remaining in Cuba. The debate over Cuba's annexation continued and in 1903 Cuba's formal independence was established by the Treaty of Reciprocity, as documented by Deere (1998).

<sup>15</sup> *The Bureau of Insular Affairs* was created on December 13, 1898, to administer customs and civil affairs on the islands acquired by the United States in the Spanish-American War. "It briefly had oversight of the Panama Canal. Administered the customs and supervised the civil affairs of the Philippine Islands, 1898-1939; Puerto Rico, 1898- 1900, 1909-34; and Cuba, 1898-1902, 1906-9. Supervised the Dominican Customs Receivership, 1905-39, and Haitian Customs Receivership, 1920-24." See: <https://www.archives.gov/research/guide-fed-records/groups/350.html>

“Roosevelt Corollary” proclaimed on December 4th, 1904, which declared the right of the United States to intervene in conflicts between Europe and America and justified the expansion of U.S. military interventions in the Americas (for an extensive discussion of “Roosevelt Corollary” implications, see Mitchener & Weidenmier, 2005).<sup>16</sup>

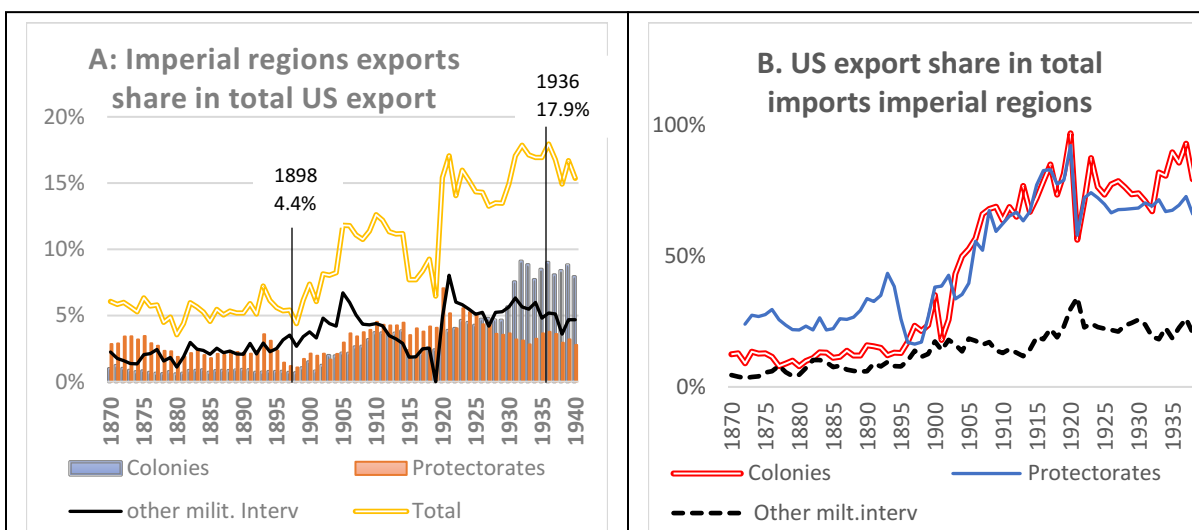
We wonder first whether all these territories that became colonies or protectorates and those involved in other U.S. military interventions were only a negligible part of the formidable expansion of total U.S. exports. We consider the territories that were part of the formal and informal U.S. empire fluting our period in Figure 4.A. On the one hand, we classify as formal empire those officially annexed territories such as Hawaii, Puerto Rico and the Virgin Islands plus the ambiguous case of “benevolent assimilation” of Philippines. The share of exports to these territories was almost negligible in 1880-1885 (0.75%) but not in 1934-38 (8.3%). On the other hand, we interpret informal empire (which we call protectorates) in a very narrow sense, as defined by the U.S. Bureau of Insular Affairs as “insular territories,” that expanded from 2% to 3.5% during the same period.

Finally, the rest of the territories where there were persistent U.S. military interventions before and after World War I (China, Honduras, Mexico, Nicaragua, Turkey)<sup>17</sup> are also included in our informal empire separately and we confirm that they were also fast-growing foreign markets for the U.S. (from 2.1% to 4.9%). In total, these formal and informal imperial markets grew more than three times faster (from 4.9% to 16.8%) than the rest of the foreign market, at a time of extraordinary expansion of U.S. exports to the world. Furthermore, those market, especially colonies and protectorates, boost mainly by crowding out other competitors than wider the market opportunities by exceptional growth of those territories. As proved by Figure 4.B that shows how US exports in colonies and protectorates territories follow a similar path of hegemony of US exports from around 20% of US market share at the turn of the century to more than two thirds in 1913.

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<sup>16</sup> The list of U.S. military interventions in the American continent is very extensive before and after 1904: Cuba (1898, 1906-09, 1912, 1917-22, 1933); Dominican Republic (1903, 1904, 1914, 1916-1924); Guatemala (1920); Haiti (1888, 1891, 1914, 1915-1934); Honduras (1903, 1907, 1911, 1912, 1919, 1924, 1925); Mexico (1913, 1914-1917, 1918-19); Nicaragua (1894, 1896, 1898, 1899, 1910, 1912-25, 1926-33); Panama (1903-1914, 1918-1920, 1921, 1925); Puerto Rico (1898); also outside the American continent (see Online Appendix F.1.).

<sup>17</sup> We only consider countries in which the United States unilaterally intervened militarily before and after 1913 (not considering World War I) (see Online Appendix). China (1911,1912, 1913,1916,1917,1920,1924,1926,1927,1932,1934); Honduras (1903,1911,1912,1919,1924,1925); Mexico (1873,1896,1914,1917,1918,1919); Nicaragua (1896,1898,1899,1910,1911,1913,1925,1926,1933); Turkey (1913,1919,1922).



**Figure 4. Imperial regions export share in US total exports and US exports share in total imports of imperial regions.**

Note: A. US bilateral exports on total US exports shares. B. US bilateral exports on total Imports respective countries. Sources: Appendix Database. Colonies: Hawaii, Puerto Rico, Philippines (Virgin Islands only for A); Protectorates: Cuba, Dominican Republic, Haiti, (Panamá only for A) Other military interventions: China, Honduras, Mexico, Nicaragua, Turkey.

A more debatable use of political power to expand exports abroad was the use of trade agreements.<sup>18</sup> In the 1880s and 1890s, Secretary of State, James G. Blaine, encouraged a more aggressive Pan-Americanism with the intention of giving U.S. exports privileged access to Latin American markets by establishing reciprocal retaliatory trade in the McKinley Tariff of 1891. The Dingley Tariff Act of 1897 extended the reciprocity strategy to some European countries, Argentina, and Central American countries in response to the preferential agreements established in the British Empire.<sup>19</sup> For those countries that did not accept concessions to reduce tariffs on U.S. manufacturing products, bilateral tariff retaliation was increased by the Dingley Tariff, which was later reinforced with the Payne-Aldrich Tariff Act of 1909.<sup>20</sup>

The Fordney-McCumber Tariff of 1922 raised the average tariff from 16.4 percent in 1920 to 38.1 percent in 1922. Nevertheless, a new aspect of trade policy in the early 1920s was the adoption of the unconditional most favored-nation clause in trade

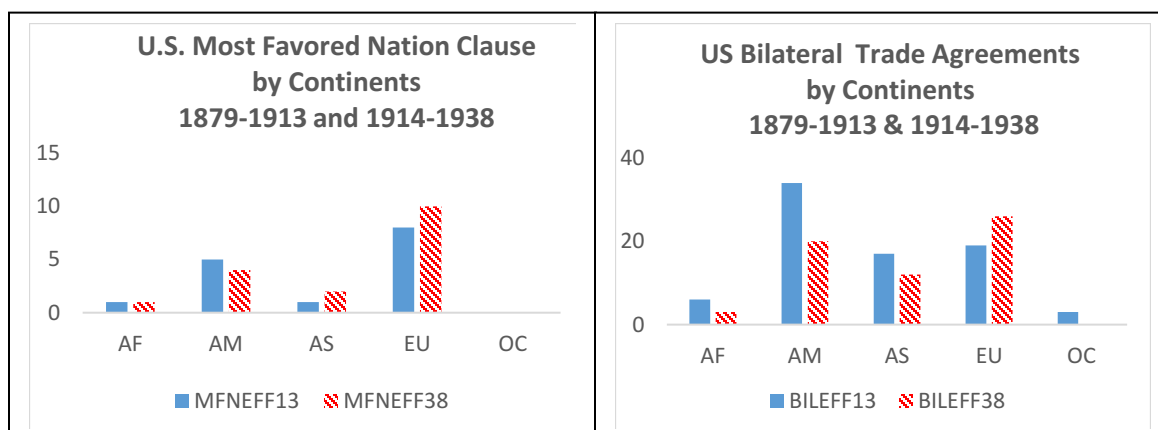
<sup>18</sup> Rodrik (2018, p. 75) claims that “trade agreements are shaped largely by rent-seeking, self-interested behavior on the export side. Rather than reining in protectionists, trade agreements empower another set of special interests and politically well-connected firms, such as international banks, pharmaceutical companies, and multinational corporations”.

<sup>19</sup> “Calls for imperial trade preference would be picked up and acted upon throughout much of the British world; the settler colonies of Canada, New Zealand, South Africa, and Australia would unilaterally establish preferential imperial trade policies in 1897, 1903, 1904, and 1907, respectively.” Palen (2018, p.10).

<sup>20</sup> “The new act lowered the duties on 650 items, raised them on 220 and left 115 untouched. The average tariff on dutiable imports fell slightly, from 46 to 41 percent.” (See Irwin, 2017, p.326).

agreements.<sup>21</sup> With inflexible tariff rates set by Congress, the U.S. engaged in a growing number of international tariff disputes and conflicts regarding clause negotiations. However, Europe enjoyed a greater number of trade agreements and especially MFN concessions than the American continent, as was the case before the War (see Figure 6). Later, the Hawley-Smoot Tariff, passed on June 17, 1930, came at a critical time, effectively undermining the delicate efforts to rebuild previous multilateral trade policies. Canada, which absorbed almost a fifth of all U.S. exports, raised its tariffs on U.S. products while lowering tariffs on products from the British Empire. This preceded the new preferential tariff of the British Empire established at the Ottawa Conference in August 1932.<sup>22</sup>

Although the Reciprocal Trade Agreements Act (RTAA) was passed easily in 1934, it proved more difficult to implement in the second half of the 1930s.<sup>23</sup> Trade agreements with rich markets were difficult to negotiate, and in 1936 only Canada, France and the Netherlands secured a new trade agreement. In contrast, trade agreements were more successful with Latin American countries whose raw material exports did not pose a threat to U.S. domestic industries. By the end of the decade, the United States had signed RTAs with 29 countries representing almost two-thirds of U.S. trade, of which only one-third were European countries (see Irwin, 2017, pp. 439), which, according to some authors, had a positive effect on the expansion of United States exports during the period.<sup>24</sup> Which provides support for our hypothesis of the existence of an asymmetric political power bias in U.S. bilateral trade negotiations with lower-income countries.<sup>25</sup>



**Figure 5: Number of U.S. Trade Agreements in effect 1879-1913 and 1914-1938**

Sources: Online Appendix E.1.

<sup>21</sup> See Viner (1924).

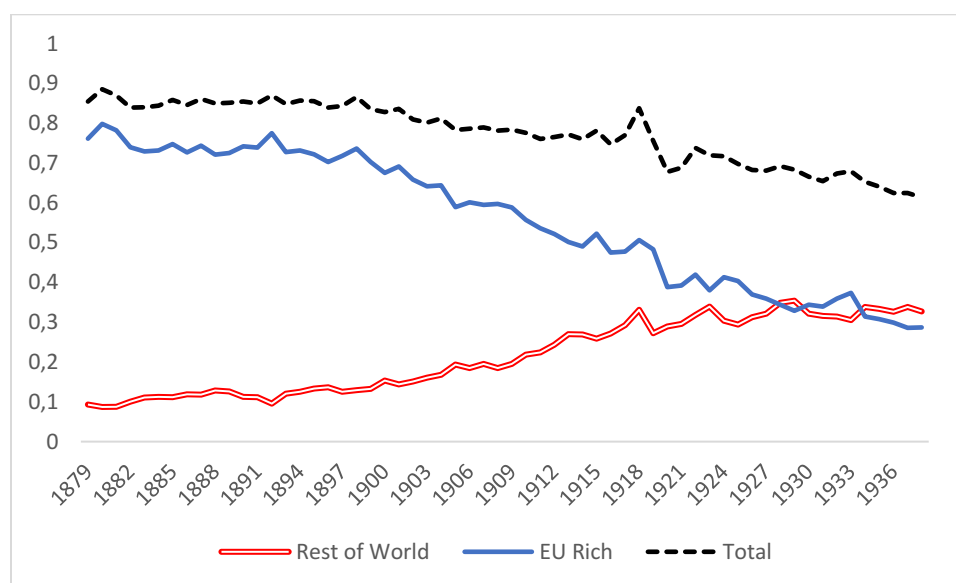
<sup>22</sup> See Irwin (2017, pp.390-91)

<sup>23</sup> See Irwin (2017, pp.414-16).

<sup>24</sup> See Durand (1937).

<sup>25</sup> See Rodrik (2018, p.75) "one can ask whether a formal agreement on its own can prevent opportunistic behavior on the part of sovereign nations" or Gowa and Masfield (1993): "We argue that the play of power politics is an inexorable element of any agreement to open international markets because trade produces security externalities", see also Lewis (2011) and Drahos (2003).

In Figure 6, based on information from our database on U.S. trade agreements, we provide a first general answer on the size of the U.S. bilateral agreements in export share, in force dividing the world between rich countries and the rest of the world. Following our strategy of accountability by accumulation, we have excluded from the series the group of countries with trade agreements that were included in Figure 4 as colonies, protectorates or militarily intervened countries. As Figure 1 shows, U.S. exports were shifting from Europe to the rest of the world. In Figure 6 we can see that this change coincides with the greater number of trade agreements that countries in the Americas and Asia signed before 1913.



**Figure 6. US export share with bilateral trade agreements in effect 1879-1938**

Note: We include only countries with Bilateral Trade Agreements in effect in both periods. In the group “Rest of World” we exclude all the countries included in Figure 4 (Colonies, Protectorates and Military intervened in both periods). “EU Rich” are the European countries with BTA in effect in both periods. Rich implies to have more than half GDP pc of UK in 1870. “EU Rich” countries included are: Belgium, Denmark, France, Germany, Netherland, Switzerland and United Kingdom.

In the 1880s, more than 85% of U.S. trade was with countries with trade agreements in effect, but only 10% was with non-rich European countries. From the early 1890s, the share of U.S. bilateral exports with bilateral trade agreements in force was shifting from rich European countries to the rest of the world. Figure 6 shows, on the one hand, how U.S. exports to rich European countries with bilateral trade agreements fell from 80% in 1880 to 74% in 1898, and then to 50% in 1913 and 28% in 1938. On the other hand, exports to the rest of the world with bilateral trade agreements, mostly independent American countries, but also Asian and peripheral European countries, increased from 8.7% to 13%, and then 27% and 33% respectively. That is, overall, from 1890 onwards an increasing share of trade, that arrived to cover in the 1930s around half of total exports, was the subject of US direct international political activity over counties sovereignty in different forms: on the

one hand, by annexation, “benevolent assimilation” or military pressure, on the other hand by asymmetrical political power agreements mainly by indirect reciprocity or retaliatory trade negotiation.

## GRAVITY MODEL AND DATA

To test whether political power was an important determinant of the United States’ export flows from 1879 to 1938, our empirical analysis relies on the gravity model of trade. As it is well known, there is a vast empirical literature on the gravity model in economics and, in the field of international trade, it has been adopted as the conceptual framework for estimating the determinants of bilateral trade flows. The structural gravity system can be expressed as in Equation 1:<sup>26</sup>

$$X_{ij} = \frac{Y_i E_j}{Y} \left( \frac{t_{ij}}{\pi_i P_j} \right)^{1-\sigma} \quad (1)$$

where  $X_{ij}$  are the export flows from country  $i$  to destination  $j$ ,  $E_j$  is total expenditure in  $j$ ,  $Y_i$  refers to total output in country  $i$  and  $Y$  is the production in the global economy,  $t_{ij}$  is the bilateral trade cost between  $i$  and  $j$ . Finally, the terms  $P_j$  and  $\pi_i$  are called inward and outward multilateral resistance terms (Anderson & van Wincoop, 2003). As has been extensively established in the literature on the gravity model, the multilateral resistance terms –MRTs– capture the fact that bilateral trade does not depend only on accessibility between two countries but on their relative position to the rest of the world, although they are unobservable theoretical constructs.

To address this issue, we use Baier and Bergstrand’s (2010) approach, where the MRTs are obtained through the first-order Taylor series expansion of the nonlinear system of price equations within the theoretical gravity setting developed by Anderson and van Wincoop (2003). This way of approaching MRTs has been used by Egger and Nelson (2011); Berger, Easterly, Nunn and Satyanath (2013); Ehrlich and Mangelsdorf (2018); and Kareem and Martinez-Zarzoso (2020).<sup>27</sup> We assume that bilateral trade costs are given by distance, common language, landlocked status and, in the absence of bilateral tariff data, the average tariff. Additionally, we include another specification with country fixed effects to control for time-invariant observables and unobservables which affect the volume of exports from U.S. to country  $j$  but also to lessen the probability of potential endogeneity.

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<sup>26</sup> “The gravity equation poses that bilateral trade, after controlling for size, depends on the bilateral trade barrier between  $i$  and  $j$ , relative to the product of their multilateral resistance indices”. (Anderson and van Wincoop, 2003, p.176).

<sup>27</sup> Egger and Nelson (2011) explain in detail the implementation of this approach.



Our model is specified in Equation 2, which includes, besides market and trade costs variables, a set of variables that capture political power, which we name imperial.

$$X_{US*j,t} = \exp \left[ \beta_1 \text{LnGDP}_{j,t} + \beta_2 \text{GDPperc\_dif}_{US*j,t} + \beta_3 \text{LnDist}_{US*j} + \beta_4 \text{Lang}_{US*j} + \beta_5 \text{Llock}_j + \beta_6 \text{Aver\_tariff}_{j,t} + \sum_{n=7}^{13} \beta_n \text{Imperial}_{US*j,t} + \eta_j + \lambda_t \right] \times \varepsilon_{ij,t} \quad (2)$$

Where  $j$  is importer subscript and  $t$  represents the time period. The dependent variable  $X_{US*j,t}$  is U.S. exports to country  $j$  in millions of current U.S. dollars.  $\varepsilon_{ij,t}$  is the error term and,  $\eta_j$  and  $\lambda_t$  capture the country and year fixed effects.

$\text{LnGDP}_{j,t}$  is the natural logarithm of gross domestic product of country  $j$  in time  $t$  in millions 1913 dollars and  $\text{GDPperc\_dif}_{US*j,t}$  are the GDP per capita differentials, measured as the absolute difference between the logarithms of per capita GDPs. Difficulties in estimating accurate productivity data for enough countries made us consider GDP per capita differentials as a rough proxy of differences in absolute productivity. Hence a negative sign in this variable would support the idea that the lower the income differential, the higher the exports, possibly of products of similar quality in the form of intra-industrial trade.  $\text{LnDist}_{US*j}$  denotes the natural logarithm of the geodesic distance between US and country  $j$ ,  $\text{Lang}_{US*j}$  and  $\text{Llock}_j$  are dummy variables for common language and if country  $j$  is landlocked.  $\text{Aver\_tariff}_{j,t}$  is the average tariff, measured as the rate of customs revenue on total imports.

The imperial variables in our model include *military intervention*, measured as an indicator variable taking the value of one if there was an intervention from U.S to country  $j$  at time  $t + 1$  and  $t + 2$ , that is, we seek to see the effect of the military intervention on exports in the first and second years after the intervention. Since the interventions in many cases were of short duration and could be at any time of the year, doing so allows us to make a more uniform comparison across countries to see the influence of military pressure in obtaining reductions in trade barriers to U.S. exports. Therefore, we expect a positive effect of this variable on exports in the two consecutive years following the intervention.

For our most relevant imperial variable, *colonies and protectorates*, we use an indicator variable taking the value of one in the case of Hawaii (1898-1938), Puerto Rico (1898-1938), Philippines (1898-1938), Virgin Islands (1917-1938), Cuba (1901-1934), Dominican Republic (1916-1924), Haiti (1915-1934), and Panama (1903-1938), following the periodization, mentioned in section 2, of United States' colonization and political control of these territories. However, in the case of Cuba, we took into account the Platt Amendment, which implied post-pacification U.S. intervention in that country.



We also include other variables that imply political intervention to reduce trade barriers: *Diplomatic relations*, which is an indicator variable taking the value of one if there were diplomatic relations with country  $j$  at time  $t$ , and zero otherwise. *Bilateral trade agreement* and *MFN status*, which are two indicator variables taking the value of one if there was a MFN clause and a bilateral trade agreement between U.S and country  $j$  at time  $t$ . Finally, we include the previously mentioned direct investment variable, measured in millions of current dollars, to see if it fostered or substituted exports.

The data used in this study span from 1879 to 1938 for the United States of America and 94 trading partners. Bilateral trade data were sourced from the annual report on commerce and navigation of the United States. In the general U.S. official foreign trade statistics, the Philippines is treated as a foreign country, but Puerto Rico and Hawaii from 1901 and Virgin Islands from 1935 onwards are treated as integral parts of United States territorial borders. In this work, bilateral exports to those colonial territories are included as foreign territory along the analysis period. We use only domestic exports (not re-exports) and general imports and, due to the large number of trade partners included in our database, we assume that the bilateral trade record of the United States is the best information available despite potential transit trade and geographical assignment bias.

Most GDP data were taken from Maddison Project Database (2018); data from Federico and Tena-Junguito (2017) and Prados de la Escosura (2012) were also used to impute GDP data from trading partners in some years or to assign the data when no data was available, mostly for many trading partners from Africa, Latin America and the Caribbean. Data on distance were obtained from Mayer and Zignago (2011). Information on military intervention was obtained from Torreon (2015) and Martínez-Fernández (1998).

For U.S. bilateral trade agreements<sup>28</sup>, including MFN status, we used especially United States., Bevans (1968-76), but also other sources that are described in the Appendix.<sup>29</sup> For information on the diplomatic relations of the United States., Department of State., *Office of the Historian* (2020) was used, and for U.S. foreign direct investment the information comes mainly from Lewis and Schlotterbeck (1938), among other sources. Likewise, for the average tariff, data from Clemens and Williamson (2004) and Bulmer-Thomas (2012) were used, among many other sources. The various sources employed, and the construction of our database, are explained in detail in the online appendix.

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<sup>28</sup> We have information on the years in which the bilateral trade agreements were signed and the years they were in force, and whether they were extended or replaced by another agreement. We then measured the influence on exports during the period in which the trade agreement was in force.

<sup>29</sup> We would like to thank professor Robert Pahre for sharing his database with us.

Due to the presence of zero trade flows, we estimate Equation (2) with the dependent variable in levels rather than in logarithmic form, using the Poisson Pseudo-Maximum Likelihood (PPML) estimator (Santos Silva and Tenreyro, 2006). This estimator is also robust to the heteroskedasticity usually present in trade data. Furthermore, to assess whether the results are robust, we test different specifications with fixed effects per year and country. Columns (1) and (2) of Table 1 contain the estimates of Equation 2 with annual data from 1879 to 1938, but in column 1 there are only fixed effects per year, where time invariant trade costs are estimated using the Baier and Bergstrand (2010) approximation, while column 2 includes fixed effects by year and by country. In addition, column 3 contains the estimate of the same model as column 2 but with an interval of three years, since trade flows may require time to adjust to trade policy changes (Olivero and Yotov, 2012). The overall adequacy and explanatory power of the model is supported by the Pseudo  $R^2$  and RESET statistics, although the model estimated in column 1 does not pass this last test, therefore we will not interpret the results of this estimate.

**Table 1.** Gravity estimation results

	<i>Exports</i>		
	(1)	(2)	(3)
Colonies and protectorates	1.349*** (.1947)	.5841*** (.2247)	.6875*** (.2405)
Military intervention $t + 1$	-.0042 (.1862)	-.0042 (.0963)	-.7224*** (.2507)
Military intervention $t + 2$	.3306** (.1487)	.3164*** (.0923)	.3950*** (.1202)
Bilateral trade agreement	.6808*** (.2147)	.3011** (.1445)	.3234** (.1518)
MFN status	.2977 (.1962)	-.3092** (.1541)	-.2382 (.1624)
Diplomatic relations	.6671*** (.2435)	.3047** (.1425)	.3855** (.1866)
Foreign Direct investment	-.0004** (.0001)	-.0005** (.0002)	-.0007** (.0003)
Ln GDP	.5153*** (.0650)	1.287*** (.2520)	1.274*** (.3041)
GDP per capita differentials	-.3927** (.1610)	.7751*** (.2976)	.7936** (.3867)
Average tariff	-.0239** (.0093)	-.0304*** (.0061)	-.0275*** (.0060)

Ln Distance	-0.8432***		
	(.1431)		
Landlocked	-1.818***		
	(.3385)		
Common language	1.051***		
	(.1621)		
Country fixed effects	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Pseudo R2	0.8679	0.9404	0.9375
Observations	3,079	3,077	1,019
RESET test (p-value)	0.0044	0.7694	0.4705

Notes: Clustered robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

The results in Table 1 show that the standard gravity variables have the expected signs and are statistically significant. However, the importer's GDP coefficient is above the GDP average estimates of destination countries predicted by gravity models (Head and Mayer, 2014). In addition, the positive sign of the GDP per capita differentials variable, would imply that the higher the income differential, the higher the exports. This result would be consistent with the change in the geographical pattern of U.S. exports, which had been increasing its participation mainly in the Americas, but also in Asia, from the first part of the 20th century. Also, the average tariff had a rather small effect on reducing U.S. exports, suggesting that perhaps the bilateral tariff is different than the overall average tariff that was used here.

We also find that the diplomatic relations and foreign direct investment variables are consistent across specifications. On the one hand, the establishment of diplomatic relations abroad appears to have promoted trade relations in association with the boost in U.S. exports during the period, and although the diplomatic relationship is also considered part of the conventional government effort to promote exports, it is not necessarily an expression of asymmetric imposition of power. On the other hand, the negative result of the FDI variable would be consistent with the idea that U.S. multinationals sold part of their production in the foreign markets where they produced, showing an apparent substitution effect for U.S. exports; however, its magnitude was quite small. These findings would support the premise that direct investment abroad is a method by which multinational firms compete for market shares in host countries (see Lipsey and Weis 1981 p. 494).

Our results also provide evidence on the role of bilateral trade agreements as an important policy mechanism used by the U.S. government to expand markets for its exports abroad. Bilateral treaties expanded in lower-income countries from the 1890s onwards and covered about one third of total exports in the 1930s (see Figure 6) and we assume a higher probability of using asymmetric political power in these negotiations according to the literature. While, in our model, the MFN variable

appears to be quite weak in the estimates and is negative in the second specification. This would be consistent with the geographical change of U.S. exports towards the American continental market and the fact that this continent enjoyed very few concessions from the most-favored-nation clause in relation to the long-standing ones enjoyed by Europe. As mentioned in section 3, the rich countries of Europe denounced these treaties with the United States because of their protectionist policies and non-recognition of their MFN commitments.

A positive effect on exports was also detected in the imperial variables, especially in the colonies and protectorates and with those countries involved in military interventions from the second year after the intervention. The colonies and protectorates, which were initially a marginal market for U.S. exports in the early 1880s (1880-85: 2.8%), came to represent a non-negligible market share at the end of our period of analysis (1935-1940: 11.8%). This increase was driven by the displacement of other competitors apparently by the instruments of political power used by the United States, as found in the literature and data (see Figure 4.B). The expansion of U.S. exports in these politically controlled territories is not negligible and is unequivocally explained by imperial power. These findings provide evidence of the influence of U.S. political power and military involvement to gain future political and economic advantages, in this case through exports.

#### **FURTHER ASSESSMENT OF IMPERIALIST POLITICAL STRATEGY**

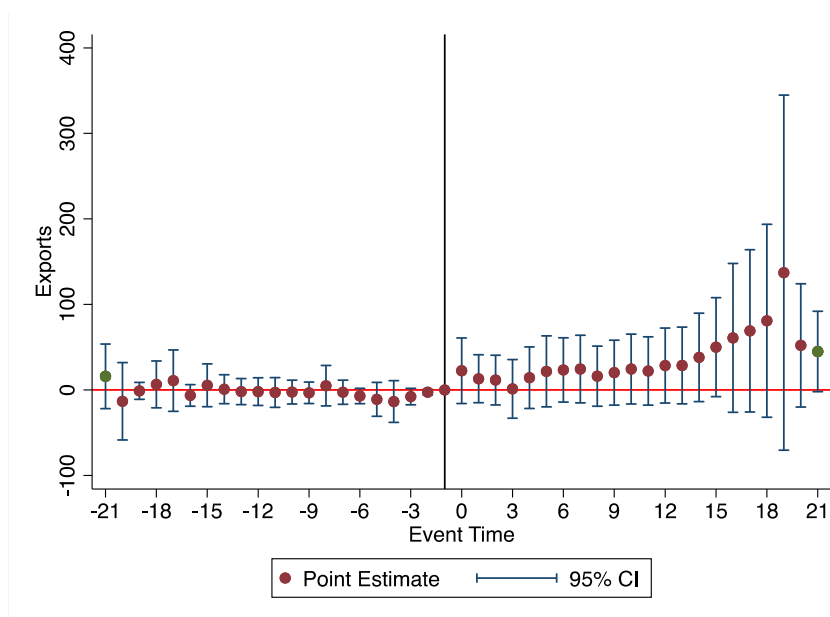
The main challenge with estimating the causal effect of any variable measuring U.S. government initiatives to use political power to expand its exports is that they are not randomly assigned. In this section we want to address this issue by analyzing the effect of our most important imperial variable, the institution of colonies and protectorates, on U.S. exports. Our identification strategy must consider that the units,  $i$ , were intervened at different points in time,  $t$ , i.e., that the countries that became colonies or protectorates in some cases did so in the same year and in others did not. For this purpose, we use a quasi-experimental design, a generalized Difference-in-Differences model –DD–, where the adoption of the intervention occurs in certain units and certain time periods.

In this case the treated group will be the one defined in the previous section for the variable of colonies and protectorates, while the untreated or counterfactual group are the rest of countries of Central America and the Caribbean. Our untreated countries share some common characteristics with our treatment group, especially three: first, they were European colonies, mostly Spanish, so they had similar institutions; second, they had similar geographic conditions and therefore similar factor endowments; and third, their industries were incipient, therefore they were net importers of manufactured goods.

To assess whether the two groups, treated and untreated, were comparable outcome dynamics pre-treatment (Cunningham, 2021), which is an important step for validating the estimation of the DD model,<sup>30</sup> we resorted to event analysis. An event study seeks to estimate the impact of an event on an outcome  $y_{it}$ , which in our case are U.S. exports. Following Clarke & Schythe (2020), this model allows for the estimation of dynamic lags and leads for the event of interest, as specified in Equation 3.

$$y_{it} = \alpha + \gamma_i + \lambda_t + \sum_{j=-m}^{-1} \beta_j (Lag\ j)_{it} + \sum_{k=0}^n \delta_k (Lead\ k)_{it} + x'_{it}\Gamma + \varepsilon_{it} \quad (3)$$

Where  $y_{it}$  is the U.S. exports to country  $i$  in period  $t$ ,  $\alpha$  is a constant,  $x_{it}$  are two controls, for the size of the market and trade costs, the natural logarithm of GDP and the average tariff, and  $\varepsilon_{it}$  is an unobserved error term. Fixed effects for country and time period are included as  $\gamma_i$  and  $\lambda_t$ .  $Lag\ j$  and  $Lead\ k$  are indicator variables which measure the time relative to the event year. The event occurs in year 0 and we omitted the year prior to the event.<sup>31</sup> Therefore, lags and leads capture the difference between treated and untreated countries, compared to the prevailing difference in the omitted base period (Clarke & Schythe, 2020). Figure 7 report coefficients from the estimation of Equation 3.<sup>32</sup>



**Figure 7: Event study plot, point estimates and their 95% confidence intervals.**

Figure 7 shows that from the first year of the event ( $t = 0$ ) there is a positive effect on exports to the colonies and protectorates relative to the control group. In addition,

<sup>30</sup> “The full set of event leads allows for the inspection of parallel trends in the pre-treatment period” (Clarke & Schythe, 2020, p.6).

<sup>31</sup> A single lag or lead variable is omitted to capture the baseline difference between countries where the event does and does not occur (Clarke & Schythe, 2020).

<sup>32</sup> All periods beyond 20 are accumulated into final lag and lead points (in green).

the pre-treatment coefficients are almost zero in the point estimate and the standard errors are relatively small. Although this is not a direct test of the parallel trend assumption, fundamental in the DD design, this may suggest that the two groups were comparable on outcome dynamics pre-treatment (Cunningham, 2021).

The generalized DD is often analyzed by using a two-way fixed effects regression model as in Equation (4):

$$y_{it} = a_i + b_t + \delta D_{it} + \Gamma x'_{it} + \varepsilon_{it} \quad (4)$$

Where  $a_i$  is a country-fixed effect,  $b_t$  is a time-fixed effect,  $x_{it}$  are the same covariates used to estimate Equation 3 and  $\varepsilon_{it}$  is an unobserved error term.  $\delta$  is the treatment effect parameter which captures the average impact of the expansion of colonies and protectorates on U.S. exports.  $D_{it}$  is an indicator variable denoting colonies and protectorates during the post period. In addition to estimating the model with our control group, we estimated the model with only the British Caribbean islands as the control group.

Goodman-Bacon (2021) shows that the two-way fixed effects DD estimator can be biased when units receive treatment at different periods in time. This can occur if already-treated units act as controls for later-treated units. Thus, in Table 2, in addition to the results of the estimation of Equation 4, we present Bacon's decomposition in the regression without covariates and show that most of the parameter estimate comes from comparing the treated vs. the never treated countries. On the other hand, since in a setting with a small number of clusters the cluster-robust standard errors are downwards biased (Cameron, Gelbach & Miller, 2008), we use cluster bootstrap to obtain consistent estimates of standard errors.

**Table 2.** DD estimation results

<i>Exports</i>					
Control countries	British Caribbean islands		Central America and the Caribbean		
Colonies and protectorates $\times Post_t$	20.44** (10.21)	46.98** (22.44)	18.39* (10.68)	37.01* (20.16)	
Ln GDP		9.545* (5.192)		18.28** (7.396)	
Average tariff		-1.901* (1.067)		-1.355 (1.071)	
Country fixed effects	Yes	Yes	Yes	Yes	
Year fixed effects	Yes	Yes	Yes	Yes	
R-squared	0.5291	0.6329	0.5462	0.5966	
Observations	900	608	1,260	633	
DD comparison	Weight	Avg DD Est	Weight	Avg DD Est	
Earlier T vs. Later C	0.097	15.768	0.058	15.768	

Later T vs. Earlier C	0.114	-40.338	0.068	-40.338
T vs. Never treated	0.789	29.834	0.874	23.158

*Notes:* Cluster bootstrap standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. T = Treatment; C = Comparison

In all cases we find a positive and statistically significant effect of the institution of colonies and protectorates on the expansion of U.S. exports in our sample. The average treatment effect when the control group is the British Caribbean Islands, and the covariates are not included, was an increase in exports of 20.44 in millions of U.S. dollars, while when the control group is the countries of Central America and the Caribbean, the effect was an increase in exports of 18.39 million. Both average treatment effects are larger when covariates are included, although the number of observations is smaller.

## CONCLUSIONS

In the early 1880s, the United States was already the world's largest economy, and by 1913 it had more than twice the GDP of Germany or the United Kingdom. During this period, expanding U.S. industry competed with European industry in its consolidated international markets around the world. The United States struggled to penetrate European markets demanding reciprocal tariffs and enjoyed limited success. Despite this, it saw an opportunity to displace Europe as the main supplier of manufactured goods to Latin America and East Asia both by offering tariff concessions on tropical commodities and exerting political and military pressure. In 1929, the world's largest economy widened the gap with the major industrial powers and consolidated its expansion in the American and Asian markets much faster than in Europe, while increasing its leadership in international political activity.

Many authors have debated the influence of political power on the United States' expansion in foreign markets, which was accompanied by its rapid industrialization process before and after World War I. To some authors, there was no government influence in the U.S. manufacturing export boom: manufacturing exports expanded exclusively on economic grounds, such as increasing productivity and comparative advantage. Other authors, however, concur with the point of view of this work: increasing productivity was a necessary but not sufficient condition in a context of strong national and international protectionist markets. The United States developed an international trade strategy to open new markets through free trade-based political negotiation strategies; government political and military pressure, when possible; and formal annexations, when necessary. Formal and informal imperialism extended the political, economic, and cultural influence of the United States over significant areas beyond its borders. Depending on the author, this may

include military conquest, gunboat diplomacy, unequal treaties, or the establishment of corporations abroad.

To our knowledge, this article is the first to quantitatively prove the impact on export expansion of U.S. early imperial intervention in territories defined as colonies and protectorates. U.S. imperial policies were expressed through annexation, dominion, and gunboat policies, as did other empires, and exports to these markets grew more than three times faster (from 4.9% to 16.8%) than the rest of the territories. We prove, on the one hand, those direct imperial interventions impact on exports are consistent in a gravity equation with multiple control variables, on the other hand, that using different specific control group of countries with similar characteristics but not interventions, by event studies DD estimations, we capture the causality between event imperial interventions and exports. We believe that most of this export expansion was achieved by displacing other competitors using political power.

In addition, we highlighted the role of trade policy strategy, as a complement of imperial interventions, in enhancing U.S. success in the geographical expansion of its exports before World War II. We show that the negotiation of bilateral trade agreements with lower-income countries, where we assume asymmetric bargaining power, played a relevant role in the growth of U.S. exports, especially in the Americas and Asia. We recognize that the bilateral trade agreements variable may be endogenous in the gravity model, but it gives us important information on the direction of the association of this variable and exports. This article reasonable prove the relevance of US international political activity to promote their exports from the end of 19<sup>th</sup> century, nevertheless, more case studies by market, sector and specific policy events should be developed in the future.



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## Online Appendix

### A. Sources of US official bilateral trade records and accuracy

#### A.1. Accuracy of U.S. bilateral trade data

U.S. international trade data could be considered reliable as of 1821. Moreover, as in many other historical international trade statistics, the accuracy of geographic allocation is subject to a variety of statistical problems in determining the actual country of origin and destination, due to transit trade or the existence of landlocked countries (see Federico-Tena (1991)).

In addition, as Simon (1960) points out: trade with neighboring countries such as Mexico and Canada had been undervalued before 1893. Prior to that year, exports to Canada and Mexico were largely underestimated<sup>33</sup>. Also, a large amount of U.S. goods has been shipped to the UK and then re-exported to other markets, as can be seen from the difference between general and retained imports in the UK's trade record with the United States. (Irwin, 2006).

Despite these caveats and the difficulties in establishing any clear geographic adjustment, we assume that the official U.S. bilateral trade record is the best information available to us. We have been careful to be consistent with standard procedures. We use domestic exports (not re-exports) and general imports. We use separate duty-free and duty-paid import records since 1879.

#### A.2. U.S. Foreign Trade Data Sources

United States. Bureau of the Census., United States. Dept. of the Treasury. Bureau of Statistics., United States. Dept. of Commerce and Labor. Bureau of Statistics., United States. Bureau of Foreign and Domestic Commerce. (1865/1866-1902/1903; 1903/1904-1910/1911; 1911/1912-1940; 1941).

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<sup>33</sup> "it was not until April 1, 1893 that a law requiring exporters to clear goods shipped by railroads and other land vehicles was enacted ...Thus discrepancies between reported exports and actual exports became considerable in the late nineteenth century. The extension of the American rail net to the Canadian and Mexican borders and the growth of their railroad systems increased the volume of overland trade and aggravated the situation." Simon (1960) p.631

### A.3. Coverage of United States trading partners in the dataset

Our sample includes the following 94 trading partners recorded as domestic exports and general imports in the United States customs records from 1879 to 1938.

Country	Continent	Direct investment	Military intervention (dummy)	Diplomatic relations (dummy)	Colonies and protectorates (dummy)	MFN status (dummy)	Bilateral TA (dummy)	GDP	GDP per capita	Distance	Common language (dummy)	Landlocked (dummy)	Average tariff
Canada	AMN	✓	0	1	0	0	1	✓	✓	✓	1	0	✓
Hawaiian Islands	AMN	0	1	1	1	1	1	✓	*	✓	1	0	0
Mexico	AMN	✓	1	1	0	1	1	✓	✓	✓	0	0	✓
Miquelon	AMN	0	0	1	0	0	0	✓	✓	✓	0	0	*
Newfoundland and Labrador	AMN	✓	0	1	0	0	0	✓	✓	✓	1	0	✓
Virgin Islands	AMN	0	0	0	1	0	0	✓	✓	✓	1	0	✓
Barbados	AMCA	0	0	1	0	0	0	✓	✓	✓	1	0	✓
Belize	AMCA	0	0	1	0	0	0	✓	✓	✓	1	0	✓
Bermuda	AMCA	0	0	1	0	0	0	✓	✓	✓	1	0	✓
Costa Rica	AMCA	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Cuba	AMCA	✓	1	1	1	0	1	✓	✓	✓	0	0	✓
Dominican Republic	AMCA	✓	1	1	1	1	1	✓	✓	✓	0	0	✓
El Salvador	AMCA	✓	0	1	0	0	1	✓	✓	✓	0	0	*
Guatemala	AMCA	✓	1	1	0	1	1	✓	✓	✓	0	0	*
Haiti	AMCA	✓	1	1	1	1	1	✓	✓	✓	0	0	✓
Honduras	AMCA	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Jamaica	AMCA	✓	0	1	0	0	0	✓	✓	✓	1	0	✓
Nicaragua	AMCA	✓	1	1	0	1	1	✓	✓	✓	0	0	*
Panama	AMCA	✓	1	1	1	0	0	✓	✓	✓	0	0	✓
Puerto Rico	AMCA	0	1	0	1	0	1	✓	✓	✓	1	0	✓

Trinidad y Tobago	AMCA	✓	0	0	0	0	0	✓	✓	✓	1	0	✓
Argentina	AMS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Bolivia	AMS	✓	0	1	0	0	1	✓	✓	✓	0	1	✓
Brazil	AMS	✓	1	1	0	1	1	✓	✓	✓	0	0	✓
British Guiana	AMS	0	0	1	0	0	0	✓	✓	✓	1	0	✓
Chile	AMS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Colombia	AMS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Curacao	AMS	0	0	1	0	0	0	✓	✓	✓	1	0	✓
Ecuador	AMS	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Falkland Islands	AMS	0	0	1	0	0	0	✓	✓	✓	1	0	✓
French Guiana	AMS	0	0	1	0	0	0	✓	✓	✓	0	0	*
Paraguay	AMS	✓	0	1	0	0	1	✓	✓	✓	0	1	✓
Peru	AMS	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Surinam	AMS	0	0	0	0	0	0	✓	✓	✓	0	0	*
Uruguay	AMS	✓	0	1	0	0	0	✓	✓	✓	0	0	✓
Venezuela	AMS	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Albania	EU	0	0	1	0	0	0	✓	✓	✓	0	0	*
Austria-Hungary	EU	0	0	1	0	1	1	✓	*	✓	0	0	✓
Austria	EU	✓	0	1	0	1	1	✓	✓	✓	0	1	✓
Belgium	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Bulgaria	EU	✓	0	1	0	1	0	✓	✓	✓	0	0	✓
Czechoslovakia	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Denmark	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Estonia	EU	✓	0	1	0	0	1	✓	*	✓	0	0	*
Finland	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
France	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Germany	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Greece	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓

Hungary	EU	✓	0	1	0	1	1	✓	✓	✓	0	1	✓
Ireland	EU	✓	0	1	0	0	0	✓	✓	✓	1	0	✓
Italy	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Latvia	EU	✓	0	1	0	1	1	✓	*	✓	0	0	*
Lithuania	EU	✓	0	1	0	1	0	✓	*	✓	0	0	*
Netherlands	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Norway	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Poland	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Portugal	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Romania	EU	✓	0	1	0	1	0	✓	✓	✓	0	0	✓
Spain	EU	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Sweden	EU	✓	0	1	0	1	1	✓	✓	✓	0	0	✓
Switzerland	EU	✓	0	1	0	1	1	✓	✓	✓	0	1	✓
United Kingdom	EU	✓	0	1	0	1	1	✓	✓	✓	1	0	✓
Algeria	AF	✓	0	1	0	0	0	✓	✓	✓	0	0	✓
Cameroon	AF	0	0	0	0	0	0	✓	✓	✓	1	0	*
Cape Verde	AF	0	0	0	0	0	0	✓	✓	✓	0	0	*
Egypt	AF	✓	1	1	0	0	0	✓	✓	✓	0	0	✓
Ghana	AF	0	0	0	0	0	0	✓	✓	✓	1	0	✓
Liberia	AF	✓	0	1	0	0	1	✓	✓	✓	1	0	*
Madagascar	AF	0	0	1	0	0	1	✓	✓	✓	0	0	*
Morocco	AF	0	1	1	0	0	1	✓	✓	✓	0	0	*
Mozambique	AF	✓	0	0	0	0	0	✓	✓	✓	0	0	*
Nigeria	AF	0	0	0	0	0	0	✓	✓	✓	1	0	✓
South Africa	AF	✓	0	1	0	0	0	✓	✓	✓	1	0	✓
Tunisia	AF	0	0	0	0	0	1	✓	✓	✓	0	0	*
China	AS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Hong Kong	AS	0	0	0	0	0	0	✓	✓	✓	1	0	✓

India	AS	✓	0	0	0	0	0	✓	✓	✓	1	0	✓
Indochina	AS	0	0	1	0	0	0	✓	*	✓	0	0	✓
Indonesia	AS	✓	0	1	0	0	0	✓	✓	✓	0	0	✓
Iran	AS	✓	0	1	0	1	1	✓	✓	✓	0	0	*
Iraq	AS	✓	0	1	0	0	0	✓	✓	✓	0	0	*
Japan	AS	✓	0	1	0	0	1	✓	✓	✓	0	0	✓
Korea	AS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Malaysia	AS	✓	0	0	0	0	0	✓	✓	✓	0	0	✓
Palestine	AS	✓	0	0	0	0	0	✓	✓	✓	0	0	*
Philippines	AS	✓	1	0	1	0	1	✓	✓	✓	1	0	✓
Russia	AS	✓	1	1	0	0	1	✓	✓	✓	0	0	✓
Saudi Arabia	AS	✓	0	0	0	0	1	✓	✓	✓	0	0	*
Sri Lanka	AS	0	0	0	0	0	0	✓	✓	✓	0	0	✓
Syria	AS	✓	1	0	0	0	0	✓	✓	✓	0	0	*
Thailand	AS	0	0	1	0	0	1	✓	✓	✓	0	0	✓
Turkey	AS	✓	1	1	0	1	1	✓	✓	✓	0	0	✓
Australia	OC	✓	0	0	0	0	0	✓	✓	✓	1	0	✓
New Zealand	OC	✓	0	0	0	0	0	✓	✓	✓	1	0	✓

Sources: A.2, B.1, B.2, B.3, B.4, B.5, B.6, B.7

Notes:

1. AMN = North America; AMCA = Central America and the Caribbean; AMS = South America; EU = Europe; AF = Africa; AS =Asia; OC = Oceania.
2. For the dummy variables all have a data, either zero or one. When there are values of 1 in any year in the period, 1 is assigned in this table and zero in any other case.
3. For continuous variables and distance, the symbol ✓ is assigned if there are data for some or all years and \* otherwise. When the value of the continuous variable is zero in all the data we have available, it is assigned that value.
4. We initially built our trade database from 1821, but for reasons of reliability and availability of other information we decided to take the data for our analysis from 1879.



## B. Summary sources of main variables

### B.1. GDP

We change the base year of GDP per capita from the Maddison Project Database (2018 version) to 1913 and calculate GDP in levels using population data. Besides, we took data for countries which there was no information in that database from: Federico and Tena-Junguito (2017) for some countries in Latin America and the Caribbean and in Asia and, from Prados de la Escosura (2012) for Africa. In addition, we took data from Broadberry & Klein (2012) for Austria-Hungary and from Schmitt (1977) for Hawaii.

Two missing data imputation techniques were used: linear interpolation and growth rates. The former was used for missing information between two points and the latter for cases where little data was available.

Since Federico & Tena's GDP data are up to 1870, the authors' total export growth rates were used to impute GDP up to 1938 when GDP data were not available from another source, basically for some smaller trading partners. Here we assumed that the economic activity of small countries was highly dependent on exports.

Population data were taken from Maddison Project Database and Federico and Tena-Junguito (2020).

In addition, as some territories changed over time and in other cases, we did not have any data, the following additional adjustments were made:

Country	Data used
Miquelon	St.Pierre e Michelon
Newfoundland and Labrador	Newfoundland
Virgin Islands	Danish Virgin Island
Curacao	Dutch Antilles
Trinidad and Tobago	Windward Island
Estonia	We use the GDP data of Finland and weight it with the Estonia-Finland population factor.
Latvia	We use the GDP data of Finland and weight it with the Latvia-Finland population factor.
Lithuania	We use the GDP data of Finland and weight it with the Lithuania-Finland population factor.
Indochina	We use the GDP data of Thailand and weight it with the Indochina-Thailand population factor. The population of Indochina was taken as the sum of Cambodia, Lao People's Democratic Republic and Vietnam

### **B.2. Distance**

We use the geodesic distances from the Centre d'Etudes Prospectives et d'Informations Internationales – CEPII –, (Mayer and Zignago, 2011).

### **B.3. Trade agreements**

For bilateral trade agreements, including MFN status, we use mainly data from United States., Bevans, C. I. (1968-76), as many other sources: Fray, Spar, & Yale Law School (1996); United States., Davis (1873); United States, Tariff Commission (1919); United States, Tariff Commission (1959); United States. Department of State. Treaty Affairs Staff (2019); Pahre (2007); Viner (1924). The criteria considered in the construction of this variable are in section E below.

### **B.4. Military intervention**

For this variable the information was taken from Torreon (2015) and Martínez-Fernández (1998). For this variable, the military intervention in a country in a given year is assigned, regardless of the duration of the intervention.

### **B.5. Diplomatic relations**

We constructed a variable indicating the establishment, interruptions and re-establishment of diplomatic relations, when there has been an interruption in the period, with information from: United States. Department of State, *Office of the Historian* (2020).

### **B.6. Direct investment**

For direct investment we had information for some specific years: 1897, 1908, 1914, 1919, 1924, 1929, 1930, 1935 and 1936. In this case we impute the missing data between two points by linear interpolation. In order not to lose more information in the estimation of the gravity model, the remaining missing data were assigned a quantity equal to zero. Most of the data come from Lewis and Schlotterbeck (1938) but we have used other sources: Dickens (1931); Sammons and Abelson (1942).

### **B.7. Average tariffs**

In the case of the average tariff variable, only the information available (or constructed by us from primary sources) was used and no imputation of missing data was performed. Colonies are assigned an average tariff value of zero for the year in which they become part of the United States. The sources used were: Clemens & Williamson (2004); Bulmer-Thomas (2012); Ayuso-Díaz & Tena-Junguito (2020); CEPAL (1991); Drake (1989); Great Britain. Board of Trade (1892, 1897, 1903, 1905, 1916, 1926, 1935, 1938); Keltie (1884); McSpadden (1913); Mitchell (2013) and Peres-Cajías (2017).

## C. United States and United Kingdom trade shares in the Americas

### C.1. United States and United Kingdom exports records in the Americas (US millions \$)

	South America		Central America and the Caribbean		North America	
	US	UK	US	UK	US	UK
1881	24,6	77,9	31,2	48,8	45,3	222,6
1882	26,5	88,2	30,6	52,6	48,9	240,5
1883	28,9	83,9	34,7	53,4	57,6	227,1
1884	30,4	91,3	31,7	45,7	54,0	205,9
1885						
1886						
1887						
1888						
1889						
1890						
1891						
1892						
1893						
1894						
1895						
1896						
1897						
1898	31,6	84,8	31,9	34,7	99,2	174,9
1899						
1900	36,5	103,6	52,7	43,0	123,9	228,7
1901	43,9	92,3	42,8	42,7	135,7	230,7
1902						
1903						
1904						
1905						
1906						
1907						
1908						
1909	76,0	101,8	90,3	58,6	206,7	380,1
1910	92,5	152,8	105,5	65,3	264,0	417,4
1911	108,4	219,1	119,9	72,6	321,3	386,6
1912	131,8	232,5	128,3	76,8	371,5	451,5
1913	145,7	240,6	140,7	76,3	455,3	426,8

Sources: United States of America. *Historical Statistics of the United States* (2006). Millennial Edition. Eds. Richard Sutch and Susan Carter, Cambridge University Press. United Kingdom. *Annual statement of the trade and navigation of the United Kingdom with foreign countries and British possessions in the year ...* (1884, 1898, 1901, 1913) Board of trade, Statistical Department. London: His Majesty Stationery Office.

**C.2. Americas imports records from United States and United Kingdom by countries of origin (US millions \$)**

	1913	1913	1913		1929	1929	1929		1938	1938	1938
	UK	US	Total		UK	US	Total		UK	US	Total
Argentina	151.4	71.8	487.7		144.4	216.1	820		85.9	74.6	428.2
Bolivia	4.3	1.6	21.3		4.3	8.7	25.9		1.8	6.6	25.0
Brazil	79.3	50.9	324.0		80.0	125.6	416.6		30.7	71.5	295.4
Chile	36	20.1	120.3		34.8	63.3	196.9		10.4	28.7	103
Colombia	5.6	17.6	27.6		17.6	56	122		9.9	44.4	89.1
Ecuador	2.6	2.8	8.9		2.9	6.9	17		0.8	3.6	10.5
Paraguay	2.3	0.5	7.9		1.6	2.5	13.2		0.7	0.7	7.6
Perú	7.6	8.4	29		11.4	31.8	75.9		5.9	20	58.3
Uruguay	12.9	6.7	52.8		15.3	27.8	92		12.6	7.3	61.9
Venezuela	19.9	25.5	77.8		11.5	48.2	87.4		6.9	54.9	97.5
<b>South America</b>	<b>27.8%</b>	<b>17.8%</b>	<b>1157.3</b>		<b>11.2%</b>	<b>31.4%</b>	<b>1866.9</b>		<b>14.1%</b>	<b>26.5%</b>	<b>1176.5</b>
Costa Rica	1.3	4.5	8.8		2.6	9.7	20.2		0.4	6.2	12.6
Cuba	17.3	75.3	140.1		12	127.1	216.2		4.5	75.2	106
Dom Republic	0.7	5.8	9.3		1.4	13.5	22.7		0.6	6.1	11.3
El Salvador	1.7	2.4	6.1		2.6	9.2	17.9		0.8	4.3	9.1
Guatemala	1.7	5.1	10.1		2.3	13.5	23.8		1	7.5	16.8
Haiti	0.6	5.9	8.1		1.2	12	17.2		1.2	4.1	7.6
Honduras	0.8	3.5	5.1		0.8	11.6	14.9		0.3	5.9	9.5
Nicaragua	1.2	3.2	5.8		1.3	7.4	11.8		0.4	3.1	5.1
Panama	2.5	6.3	11.4		1.6	13.2	19.3		0.8	10.1	17.7
<b>Central &amp; Caribbean</b>	<b>13.6%</b>	<b>54.7%</b>	<b>204.8</b>		<b>7.1%</b>	<b>59.7%</b>	<b>364</b>		<b>5.2%</b>	<b>62.7%</b>	<b>195.7</b>
Mexico	10.7	48.9	90.7		12.4	127.2	184.2		4.5	63	109.3
Canada	138.7	436.9	671.2		193.8	883.9	1287.5		118.22	414.01	664.94
<b>North America</b>	<b>19.6%</b>	<b>63.8%</b>	<b>761.9</b>		<b>14%</b>	<b>68.7%</b>	<b>1471.7</b>		<b>15.9%</b>	<b>61.6%</b>	<b>774.2</b>

Sources: Latin America from Pan American Union (1952,p 38): The Foreign Trade of Latin America since 1913. Washington DC. Canada from Historical statistics Canada (1983) 2nd edition (F. Leacy editor), Statistics Canada. Historical Statistics of Canada (<http://www.statcan.gc.ca/pub/11-516-x/>) Statistics Canada ([www.statcan.gc.ca](http://www.statcan.gc.ca)).

## D. America's Direct Investments Abroad

### D.1. Estimates of America's Direct Investments Abroad (millions \$)

Countries	Continents	1897	1908	1914	1919	1924	1929	1929	1930	1935	1936	1940
Africa OTHER	AF							9,849			18,81	28,66
Algeria	AF								3,2			
Angola & Mozambique (Portugal AF)	AF							9			10,5	1,7
British Africa	AF							76,8				
Canary Island	AF						1,5			3,0		
Egypt	AF							6,5	6,5		8,3	22,8
Liberia	AF					0,5	8,0			8,0		
Marruecos	AF					3	6,7			7,0		
South Africa	AF		2	4	11	20	53,5			60,0	55,1	72,9
Aruba	AMCA					25	45,0			45,0		
Costa Rica	AMCA	3,5	17	21,6	17,8	13	24,7	22,2	22,4	17,4	13,3	24,7
Cuba	AMCA	31,5	149,1	236,6	508,6	908,7	912,5	919,0	935,7	620,0	666,3	559,8
Guatemala	AMCA	6	10	35,8	40	47	61,8	70,0	70,7	56,2	50,4	68,2
Jamaica	AMCA								21,9			
El Salvador	AMCA		1,8	6,6	12,8	12,2	24,8	29,5	29,5	22,4	17,2	11,2
Trinidad y Tobago	AMCA	1	2	3	5	7	7,0			7,0		
West Indies (Other)	AMCA							51,3			36,5	59,8

Dominican Republic	AMCA	1,5	1	11	21,5	58,2	65,2	69,3	69,8	42,2	40,7	41,9
Honduras	AMCA	2	3	10,5	19,4	41,2	81,3	71,5	71,7	30,7	36,4	38,3
Nicaragua	AMCA		1	3,4	7,3	6,8	17,3	13,0	13,0	8,4	4,5	8,9
Panamá	AMCA	9,7	4,6	11,2	13,2	19,3	35,7	28,5	28,7	21,4	26,7	36,8
Haiti	AMCA		5,5	10,4	17,3	17,9	13,8	14,2	15,2	7,5	9,7	12,5
Newfoundland	AMN										15,4	3,8
Canada & Newfoundland	AMN	130,7	362,4	481,4	721,3	943,5	1264,5	2010,3		1299,3	1936,2	2098,9
Mexico	AMN	180,6	320,8	437,4	355,9	397,7	355,8	682,5	694,8	315,0	479,5	357,9
Bolivia	AMS			2	22	29,5	44,2	61,6	61,6	44,2	18,3	26,8
Brazil	AMS	1	2	9	28	52,5	138,8	193,6	210,2	144,4	194,3	240,1
Chile	AMS	1	31	170,8	311	339,5	464,4	422,6	440,8	445,7	483,7	414,0
Colombia	AMS		7,8	12	33	71	169,7	124,0	130,0	160,6	107,5	111,6
Paraguay	AMS							12,6	12,6		5,1	5,0
Peru	AMS	6	23	58	112,5	144,5	169,0	123,7	124,7	157,0	96,1	81,6
Venezuela	AMS	1	2,5	5,5	19,5	101,5	243,3	232,5	247,2	243,3	186,3	262,4
Argentina	AMS	0,7	1	1,2	22,5	34,5	270,8	331,8	358,5	308,0	348,3	387,9
Ecuador	AMS	4	6	8,6	7,6	7,6	11,1	11,8	11,8	11,1	4,9	5,1
Guianas	AMS				0,5	0,5	0,5	5,7	5,7	0,5	7,5	6,0
Uruguay	AMS						3,1	27,9	27,9		13,9	10,9
British Malaya	AS					10	12,5		27,1	11,0		

China	AS		0	0	1	14,4	81,1	113,8	129,8	81,6	90,6	46,1
Dutch East Indies	AS			8	23,5	26	30,0			27,5		
India	AS		0,0	0,0	0,0	0,0	3,3	32,7	39,2	6,5	29,7	48,8
Indonesia (Netherland Indies)	AS							66,0			69,8	71,3
Iraq	AS						4		6,21	14		
Iraq, Palestine, Syria, Cyprus	AS							13,3			29,6	31,3
Japan	AS							60,7	61,5		46,7	37,7
Korea	AS		1	2,5	2,5	3	6,0			6,0		
Palestine	AS						2,0			7,0		
Palestine, Syria and Cyprus	AS								7,1			
Persia (Iran)	AS								1,1			
Philippines	AS		20,7	39,5	48,2	72,8	83,3	79,9	81,4	85,1	92,2	90,7
Syria	AS						1,0			4,0		
Turkey	AS							8,5	13,8		13,7	12,0
Arabia (incl Bahrein)	AS						1,0	1,1		10,0	17,8	57,3
Austria	EU							14,3	17,4		5,7	
Belgium	EU								65,2			
Belgium & Luxemburg	EU							64,2			34,9	17,0
Bulgaria	EU								0,8			
Czechoslovakia	EU							4,9	4,87		4,7	7,7

Denmark	EU							15,8	15,9		13,8	19,7
Estonia & Latvia & Lithuania	EU							10,1			1,7	1,3
Finland	EU							1,0	1,2		1,6	5,5
France	EU	7,0	0,0	0,0	0,0	0,0	27,3	145,0	161,8		145,7	117,2
Germany	EU	14,0	3,0	4,0	0,0	3,0	82,3	216,5	243,9		227,8	349,4
Great Britain	EU	24,0	88,1	156,1	285,0	272,9	92,7	485,2	497,3		474,1	540,7
Greece	EU							5,1	10,1		8,5	6,0
Hungary	EU							7,87	9,5		9,306	13,07
Irish free state	EU							2,1	3,1		0,3	2,1
Italy	EU							113,2	121,2		70,2	75,5
Netherlands	EU	0,0	24,7	54,7	0,0	0,0	0,0	43,2	44,0		18,8	18,2
Norway	EU							23,0	23,5		26,7	30,9
Poland	EU							51,2	53,2		33,5	29,0
Portugal	EU	0,0	0,0	0,0	0,0	0,0	7,7	11,5	17,5	13,1	5,7	7,1
Rumania	EU	0,0	2,5	5,0	7,5	12,0	20,0	14,6	15,8	75,1	44,0	51,2
Russia	EU		1	3								
Spain	EU	0	0	1	0	186,9	259,0	72,2	91,5	254,2	80,5	73,4
Sweden	EU							19,2	19,2		25,5	26,4
Switzerland	EU							16,8	17,8		8,6	23,9
Yugoslavia (Serbia)	EU	0,0	0,0	0,0	0,0	0,0	0,0	6,9	8,1	2,2	3,2	5,2



Australia	OC	0,5	6	10	16	26	55,8	149,2		56,0	89,0	97,7
New Zealand	OC										22,0	22,6
TOTAL		425,7	1101	1824	2691	3929	5261,5	7481,8		4735,5	6608,0	6905,5

*Sources: B.6*

## E. United States trade agreements

As Pahre (2007, p. 157) suggests, trade cooperation is a dichotomous, non-continuous concept, and here it is necessary to account for transnational and intertemporal variations in cooperation. We do not exclude any type of commercial agreement, except for shipping treaties, granting only the reciprocal right of establishment. We include any form of treaty understanding as a trade agreement if the states grant each other a tariff concession or grant each other MFN status (also as suggested by Pahre, 2007). This definition of trade cooperation includes both temporary agreements made during the negotiation of a treaty and treaties observed without being legally in force (this implies that there is a desire to cooperate despite political problems in getting legally signed). Most of these temporary treaties in the 1870s became permanently renewed treaties, so Pahre (2007, p. 164) suggests making no relevant distinction between permanent and temporary.

The other type are MFN treaties that do not establish a line of tariff concessions. For example, Britain explicitly recognizes that in 1886 a simple MFN treaty with Spain would imply duty reductions in practice (Marsh 1999, 164). A new aspect of U.S. trade policy in the early 1920s, according to Viner (1924), was the adoption of the unconditional most-favored-nation clause in trade agreements. We will assume the conditional or unconditional MFN clause as an additional positive bilateral trade cooperation, so we will consider all treaties as bilateral treaties with or without MFN clause. In addition, following Pahre (2007), we label treaties by year signed or year in effect, for Figure 5 of our paper, although in the gravity model we do not make that distinction.

- a) **Initiation of the treaty.** The year the two nations signed the agreement not the year the treaty entered in effect.
- b) **Treaties in effect.** Counts the number of treaties a country has in effect at a given time. If it has been in effect for at least six months or even if it was in effect provisionally while a new one was being negotiated.

Studying trade cooperation involves many types of equal or unequal cooperation. Some treaties supported tariff increases and reciprocal tariff reductions at the same time. For the United States after 1870 we assumed a good bargaining power to promote their exports while defending their imports. So, we assume that more bilateral agreements signed or trade agreements in force mean more U.S. bilateral exports. We cannot measure how many treaties are based on asymmetric bargaining power. Many of the treaties between rich and poor countries were notoriously unequal. This is the case of the unequal European treaties with Africa and Asia (as was notorious with the European and U.S. cases with China and other places such as Latin America).

The list of U.S. bilateral trade agreements we use are listed below and are based on a multitude of legal forms. We do not exclude any type of legal agreement affecting trade. Being the legal forms most used by the U.S.: a) "The Treaty of peace, friendship, commerce, and navigation", b) "The Bilateral Agreement", c) "Reciprocal commerce agreement", d) The U.S. also included or did not include the MFN clause.

### E.1. Bilateral agreements and MFN status

	N° of Bilateral in effect	N° of Bilateral signed	N° of Bilateral in effect	N° of Bilateral signed	N° of MFN in effect	N° of MFN signed	N° of MFN in effect	N° of MFN signed
	1879-1913	1879-1913	1914-1938	1914-1938	1879-1913	1879-1913	1914-1938	1914-1938
COUNTRIES	BILEFF13	BILSIG13	BILEFF38	BILSIG38	MFNEF13	MFNSIG13	MFNEFF38	MFNSIG38
ETHIOPIA	1	1	1					
LAGOS	0	0						
LIBERIA	1		1					
MADAGASKAR	2	1						
MOROCCO	1	1	1					
ORANGE FREE STATE					1		1	
TUNISIA	1							
CUBA	5	5	2	1				
DOMINICAN REPUBLIC		1			1		1	
HAITI	2	1	1	1	1	1		1
NEW GRANADA	2	2	2					
PUERTO RICO	4	4						
WEST INDIES (Caribbean British)	1	1						
COSTA RICA	1		1	1				
EL SALVADOR	3	1	3	1				
GUATEMALA			1	1		1	1	1

HONDURAS	2	1		1	2			
NICARAGUA	2	1	2	1			1	1
CANADA	1		2	2				
MEXICO	1		1		1	1	1	
ARGENTINA	1	0	1	0	0	0	0	0
BOLIVIA	1		1					
BRAZIL	2			2				1
CHILE	0			1				
COLOMBIA	1			1				
ECUADOR	2		1	1			1	
PARAGUAY	1		1					
PERU	1							
URUGUAY	0	0						
VENEZUELA	1		1					
BRUNEI	1							
CHINA	3	1		1				
IRAN(PERSIA)			1	1	1		1	
JAPAN	2	1	1					
KOREA	1	1						
OMAN	1		1					
OTTOMAN EMPIRE	1		1					

PERSIA (SEE IRAN)	1		1					
PHILLIPHINES	2	2						
SAMOA	1	1						
SAUDI ARABIA			1	1				
SIAM	1		1					
THAILAND	2		3	1				
TURKEY			1	1			1	1
UNITED ARAB REPUBLIC	1	1	1					
AUSTRIA_HUNGARY	0	1	0	0	1	0	0	0
AUSTRIA			2	2				
BELGIUM	1		1	1			1	
BULGARIA					1	1		
CZECHOSLOVAKIA			2	2				
DENMARK	1	1	1		1			
ESTONIA						1	1	
FINLAND			2	2			1	1
FRANCE	2	1	2	1				
GERMANY	2	2		1			1	
GREECE	1						1	1
HUNGARY				1	1			
ICELAND	0	0	0	0	0	0	0	0

ITALY	2	2	2	1	1			
LATVIA			1	1		1	1	
LITHUANIA						1	1	
NETHERLANDS	2		3	1				
NORWAY			1	1				
POLAND			1	1			1	1
PORTUGAL	3	2	1					
ROMANIA							1	1
RUSSIA	1			1	1			
SERBIA	1	1	1					
SPAIN	1	1	2	3				
SWEDEN	1		2	1				
SWEDEN- NORWAY						1		
SWITZERLAND			1	1				
UNITED KINGDOM	1		1		1		1	
HAWAII	3	1						

Sources: B.3.

## F. Military interventions abroad

### F.1. United States military interventions abroad

Military Interventions 1879-1938		
COUNTRY	1879-1913	1914-1938
	Nº Months	Nº Months
ETHIOPIA (ABYSSINIA)	6	
ARGENTINA	1	
BRAZIL	1	
CHILE	1	
CHINA	35	22
COLOMBIA	3	
COSTA RICA		1
CUBA	18	26
DOMINICAN REPUBLIC	5	40
GUATEMALA		1
HAITI	3	46
HAWAII	5	
HONDURAS	7	7
KOREA	19	
MEXICO	30	34
NICARAGUA	8	96
PANAMA	54	1
PHILIPPINE ISLANDS	15	
PUERTO RICO	5	
RUSIA (Bering Strait)	1	20
SAMOA	8	
SYRIA	1	
TURKEY	2	3
YUGOESLAVIA (DAMATIA)		1

Sources: B.4.

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