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**INCOMPLETE AND PRELIMINARY**

**The colony strikes back: The case of Colombia, Jersey Standard  
and the United States**

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Abstract

Why do empires subsidize home firms to enter into their colonies? We examine entry of Jersey Standard (JS) to Colombia. Using archival and econometric analysis we document that 1) U.S. support to Panama's secession from Colombia in 1903 created an unlikely political asset for U.S. firms entering Colombia, 2) Colombia's government induced JS to organize a coalition within the U.S. senate to compensate Colombia for Panama's loss, and 3) U.S. was better off facilitating JS entry.

Compensation was an implicit subsidy for JS to open Colombian oilfields, induced by Colombia, and the outcome of redistributive conflict within the empire.

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## INTRODUCTION

Why do empires subsidize home firms to enter into their colonies? An empire's firms, particularly in informal empires, are exposed to opportunistic behavior and expropriation when performing foreign direct investment in a colony. Recent studies have pointed out that subsidies to a home firm in a colony, in the form of an imperial action, are frequently the result of an empire's special interest group pressure and, at least in short run, reduce risk of expropriation and improve performance.<sup>2</sup> However, these studies frequently assume imperial actions are disconnected between each other and the colony plays a passive role, if any, in the political process within the empire allocating subsidies in the form of an imperial action. These two issues are particularly interesting in the case of imperial power that functions as an informal commercial empire and its political process is guided through the democratic rule.

We examine a paradigmatic case of American informal commercial imperialism. In 1921 the U.S. senate ratified the Urrutia-Thomson Treaty and ordered payment to Colombia of \$25 million as reparations for U.S. support to the secession of the Colombian province of Panama in 1903. Jersey Standard (JS) played a key role in this process. The oil company, induced by Colombia's government, used Panama's secession and influenced U.S. government and congress to pay reparations to obtain oil contracts from Colombia's government. The event represents a case of informal commercial imperialism because, although the U.S. did not have to pay reparations to Colombia, it preferred to do so to promote entry of JS to Colombia's oilfields. It amounts to an implicit subsidy from the empire for a home company to enter a colony market.

The case represents a unique window to observe social decision making over imperial action within the empire. Rather than investing on an opaque military intervention to destabilize Colombia's government, the U.S. preferred to pay Colombia. The decision to pay Colombia, in turn, has two important consequences: 1) it takes the decision out of opaque military action decision processes and brings it to the more transparent democratic rule decision making process at the U.S. senate in the form of a vote of a foreign relations

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<sup>2</sup> Cain and Hopkins (1993), Dube, Kaplan and Naidu (2011), Berger, Easterly, Nunn and Satyanath (2013), Maurer (2013)

treaty and 2) it highlights the direct benefit and cost of imperial action and the redistributive conflict it generates within the empire. The vote of the treaty therefore represents a unique window to observe the role of different special interest groups in the conflict over the distribution of the direct costs and benefits it implied in the context of American informal commercial imperialism. Furthermore, the case sheds light on the possibilities of a colony to behave strategically to build a coalition with a special interest group within the empire and achieve to reduce net transfer to the empire.

The results indicate that JS built a coalition with other oil refiners to influence senators to pass the Treaty, while many oil derivatives consumers and taxpayers in states contributing more federal taxes than receiving expenditure influenced their senators to oppose to the Treaty. The oil coalition joined forces with railroads and iron and steel industries and was large enough to pass the Treaty. JS project in Colombia attained high profits, and it could have even paid voluntary taxes in the U.S. to compensate foregone taxes paid in the Treaty to Colombia and still remain profitable. The U.S. overall benefited because crude oil prices dropped with Colombia's entry to the oil market.

The rest of the paper is organized as follows. The risks faced by an empire's firm entering into a colony and the role the political economy plays in this process is discussed initially. The historical background and key archival research findings connecting explicitly Colombia's government to JS and implicitly to oil lobbying activities to influence the U.S. cabinet and senate decisions are presented first. Next, the Urrutia-Thomson Treaty vote in U.S. congress is examined to identify special interest groups that supported and opposed its ratification and infer their motives for support and opposition. The fourth and fifth sections estimate the profits JS derived from the project and the U.S. gains derived from the imperial action, respectively. Finally, conclusions are put forward.

## IMPERIALISM AND FOREIGN DIRECT INVESTMENT

Why do empires subsidize home firms to enter into their colonies? Empires use force to allocate resources between the empire and a colony, and the colony effectively

performs a net-transfer of resources to the empire.<sup>3</sup> An empire's firm entering into a colony faces a general subsidy, the "empire effect", and specific difficulties to extract surplus from the colony.

On the one hand, home firms operating in and exchanging with empires benefit from public goods. Formal and informal empires invest to provide public goods including common law, language and currency, and lower trade and capital flow restrictions - the "empire effect".<sup>4</sup> (Fergusson and Schularick (2006), Mitchener and Weidenmier (2005, 2008)).

However, on the other hand, home firms face specific risks when operating at colonies. In a formal empire, a home firm entering into a colony and performing foreign direct investment faces opportunistic behavior from the colony. Even under lawful or de facto territorial control, we know that empires cannot observe directly the action of the colony inhabitants. The colony's workforce does not need to perform high effort or transfer all surplus resources to the empire's firm. An empire's firm is subject to agency from the colony inhabitants.<sup>5</sup> Although most opportunism is managed directly by an empire's firm in a colony, sometimes these firms do receive help from the empire in form of an imperial action – use or threat of use of force, or resource transfer.<sup>6</sup> The imperial action is an implicit subsidy to the home firm, beyond the "empire effect".

In an informal empire, a home firm entering into a colony and performing foreign direct investment faces a further challenge from colonies to extract surplus: expropriation. Since informal empires do not have lawful or de facto territorial control, an empire's firm investing in a colony is exposed to outright or creeping expropriation of the assets sunk in the colony. A long history of imperial actions that are motivated either as preemptive to an expected expropriation or that revert previous expropriations has been documented. These imperial actions represent an implicit subsidy to specific firms. In turn, these firms

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<sup>3</sup> Marx (1867), Lenin (1916), Baran (1957), Gunder-Frank (1966) suggest net transfer takes place. O'Brien (1982), O'Brien and Prados de la Escosura (1999), Maurer (2011), Berger, Easterly, Nunn and Satyanath (2013) provide quantitative evidence of net transfer. The large and important literature on the effects of empire's institutions or foreign direct investment on the colony's long term performance is not directly connected to the determinants of an empire's investment in a colony or why it may subsidize these investments.

<sup>4</sup> Fergusson and Schularick (2006), Mitchener and Weidenmier (2005, 2008)

<sup>5</sup> Austin (2003), Berman and Lonsdale (1979), Frankema (2010), Maurer (2010, 2011)

<sup>6</sup> Imperial actions that reduce opportunism are documented Bucheli and Aguilera (2010) document home firms building alliances with colony elites to reduce opportunism.

increased their capital market value or exports with each imperial action, at least in the short run.<sup>7</sup>

Noel Maurer (2013) has developed a more dynamic and explicit theoretical framework connecting an empire's foreign direct investment and imperial actions, particularly for American informal imperialism.<sup>8</sup> An empire's entrepreneur enters a new country to start operation, and sinks investment. Next, at some point, the potential benefits of expropriation for the colony government increase; the entrepreneur faces an increased risk of expropriation. In turn, the entrepreneur requests support from the empire to prevent expropriation – an imperial action.<sup>9</sup> Maurer argues that empires are likely to perform the requested imperial action, even though the capital exposed is minuscule compared to total domestic capital investment within the empire. A failure in collective action facilitates successful lobbying from special interest groups to the executive branch of government. The failure lies in the asymmetry of benefits and costs of the imperial action. The special interest group captures the lion share of the gains from foreign direct investment, while those paying the costs of the imperial action are dispersed, uncoordinated and face small individual losses from execution of the imperial action. And the more entrepreneurs perceive that their own empire will protect them at the colony; the more entrepreneurs will perform foreign direct investment in the colony, and the more complicated it will become for the empire to resist providing the expected protection. In short, Maurer has developed an argument on the political economy of an empire's foreign direct investment protection.<sup>10</sup>

The difficulties faced by an empire's firm entering a colony, namely opportunistic behavior and expropriation, are certainly important. And the political mechanism underlying the allocation of subsidies to an empire's firm entering into a colony is an intuitively sound and empirically plausible mechanism. However, there are two important issues that require further thought, particularly in the context of an informal and democratically organized empire. 1) The literature, particularly the econometric one, tends to examine imperial actions as disconnected actions between each other. It is possible that

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<sup>7</sup> Dube, Kaplan and Naidu (2011), Berger, Easterly, Nunn and Satyanath (2013)

<sup>8</sup> Cain and Hopkins (1993) propose a similar argument applied to the British Empire.

<sup>9</sup> Hopkins (1973) provides evidence of this process for British, French and German entrepreneurs before the African scramble.

<sup>10</sup> Note that the argument does not imply home companies are always successful in convincing the executive branch to intervene to favor their interests (Bucheli (2005)).

imperial actions performed within one imperial government are coordinated and thought through in a strategic manner, and it is also likely that the history of imperial actions imposes constraints and opportunities on the set of strategies and activities considered by an empire's firm in a specific colony. 2) The literature presumes that colonies cannot influence the political economy of an imperial action within the empire. The case of JS entry to Colombia and U.S. reparation to Colombia discussed in this paper highlights the importance of these two issues in improving our understanding of imperialism and foreign direct investment.

## PANAMA, OIL, AND THE U.S. REPARATION TO COLOMBIA

On April 20 1921 the U.S. senate ratified the Urrutia-Thomson Treaty and effectively offered to pay \$25 million to Colombia. In this section we 1) explain why in 1921 the U.S. offered to pay reparations to Colombia, 2) document the crucial role that JS played in this process, and 3) identify the U.S. the minimum willingness to pay to implicitly subsidize JS and the oil refining industry.

Popular belief suggests that the Urrutia-Thomson Treaty was offered by the U.S. cabinet and ratified by the U.S. senate because of ideological reasons. At the beginning of the 20<sup>th</sup> century Republican Party led by President Theodore Roosevelt developed a hawkish policy towards Central and South America. Colombia's province of Panama seceded with the support of America, and other countries like Cuba experienced strong influence from the U.S. The more dovish government of the Progressive-Democrat coalition led by President Woodrow Wilson preferred to acknowledge an unfair action had been performed by the U.S. regarding Panama and pay reparations to normalize the relationship with Colombia to gain good-will with Colombia and the rest of Central and South America.<sup>11</sup> In the narrative presented below the strong influence of JS and the oil industry in the ratification of the Urrutia-Thomson Treaty is documented. We are not the first to argue the influence of the oil industry was important in this process.<sup>12</sup> But we are the first to document directly with archival evidence and quantitative analysis the connection

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<sup>11</sup> See Randall (1992), Rivas (1961) for academics arguing this explanation.

<sup>12</sup> See Dent (2005), De la Pedraja (1985), Rippy (1976), Lael (1987), Parks (1935).

between JS and the ratification of the Urrutia-Thomson Treaty, and provide a rationale for the U.S. senate decision.

### *U.S. interest in Panama and in Colombia*

In the 19<sup>th</sup> century the U.S. developed growing commercial exchange with the Pacific Ocean, and, in turn, interest to build a transport project to communicate with this part of the world. In the mid-nineteenth century America annexed California, and China and Japan opened to trade, creating increasing transport demand. The U.S. government signed in 1844 the Mallarino-Bidlack Treaty that guaranteed access to America to any transport project built in Panama, and American entrepreneurs completed the Panama railroad in 1855, and the transcontinental railroads, 1869-1880s.<sup>13</sup>

As the U.S. won the Spanish war at the end of the 19<sup>th</sup> century, it acquired new territories on the Pacific Ocean, the Philippines and Guam, and required appropriate defence. Communication between the Atlantic Ocean, where most of defence activities were located, and the Pacific Ocean became strategic. At the end of the 1890s the U.S. government became increasingly interested in a canal through Central America, the Panama Isthmus being the preferred route.<sup>14</sup>

Initially, the U.S. tried to acquire through diplomatic means the necessary land to build the canal. With the Herran-Hay Treaty the U.S. offered Colombia a \$10 million one-off payment and an annual payment of \$250,000 for 14 years once the canal was operating. The Herran-Hay Treaty was rejected by Colombia's congress. The U.S. government's reaction was to support secession of Colombia's province of Panama on November 4<sup>th</sup> 1903. Next the American government negotiated construction of the canal with Panama's new government. The canal was finished by 1914. Thus, during the events of 1902 the U.S. revealed willingness to pay Colombia a net present value (NPV) of \$12.4 million for the right to build and operate a Panama Canal.<sup>15</sup>

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<sup>13</sup> Whitney (1849), Degrand, Firsk and Derby (1849), Lubbock (1916) pp. 36-108, Hutchins (1941) pp. 287-96, Russel (1948) pp. 46-61, Evans (1964) p. 33, Maurer (2011) pp. 26-38, Randier (1968) pp. 161-163, Lotchin (1974) pp. 3-6, Mercer (1982) pp. 119-139, Jones (1995) pp. 117-187, Duran (2010) pp. 71-104.

<sup>14</sup> Maurer (2011) pp. 26-38

<sup>15</sup> McCulloh (1977) pp. 320-370, Maurer (2008) p. 686, Maurer (2011) pp. 39-68

After Panama's secession the relationship between Colombia and America became sour. The U.S. showed little interest to normalize the relationship with Colombia, let alone pay reparations. Between 1903 and 1913 only the Root-Cortez agreement was formalized. In 1909 the cabinets of the two countries settled the U.S. would pay Colombia \$2.5 million reparations. The small reparation the agreement involved caused fury in Colombia's congress. Rafael Reyes, Colombia's president, who had negotiated the agreement, was accused of treason, resigned and left the country into exile.<sup>16</sup>

### *Oil in America, in Colombia and the Urrutia-Thomson Treaty*

At the same time the U.S. was uninterested in Colombia, the oil market was experiencing important changes in the U.S. and worldwide. America produced more than 88% of worldwide crude oil in 1875 and remained by far the largest crude oil producer and net exporter during the rest of the second half of the nineteenth century. As technological change to use oil developed, supply and demand of oil increased fast. In 1910 America produced 64% of world crude production, American entrepreneurs produced in Mexico and Rumania an additional 3%, and Russia produced 21%. The U.S. consumed about 90% of its domestic production.<sup>17</sup> An American company, the Standard Oil Holding Company, was the world's largest crude oil producer and refiner during the last part of the 19<sup>th</sup> century and the first decade of the 20<sup>th</sup>. But in 1911 the U.S. Supreme Court broke up the Standard Oil Holding Company into 34 independent firms, and JS was one of them. The company was allocated assets that represented about 25% of worldwide refining capacity, but its oil fields only produced a quarter of its demand for crude oil. JS had to stealthily look for new oil fields abroad because anti-trust inhibited it from expanding in the local market and European imperial powers blocked access to their own colonies.<sup>18</sup>

In 1913 Weetman Pearson, a large British oil and infrastructure firm, proposed Colombia a concession contract to explore for oil. The project passed the first round in congress and the Supreme Court did not object to it; by the end of the year the contract was

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<sup>16</sup> Bushnell (2007) pp. 234-235

<sup>17</sup> Fanning (1945) p. 14-16, Day (1922) p. 347

<sup>18</sup> Atack and Passell (1994) pp. 481-489, Granitz and Klein (1996) pp. 1-47, Hidy (1952) pp. 222-223, Gibb and Knowlton (1956) pp. 77-78, p. 87, p. 106



ready for the second and final round in congress. JS noticed Weetman Pearson's interest in Colombia's oil and decided to compete for the concession contract. It sent W. Doyle, who previously worked at the U.S. State Department, and C. Thomson, who worked for JS, to Colombia. Doyle and Thomson initiated a press campaign and raised doubts about the convenience of Weetman's project for Colombia. On September 24, presumably under the influence of JS through W. Doyle, the U.S. Department of State offered \$20 million in reparations to Colombia. A few days later Weetman Pearson withdrew its interest for the contract. On April 6 1914 the Urrutia-Thomson Treaty was signed by the U.S. and Colombian cabinets. It offered Colombia \$25 million reparation for the loss of Panama (3.5% of U.S. federal expenditure and 9% of Colombia's GNP, 1913) and privileges for Colombian ships to use the Panama Canal. Colombia's congress ratified the Treaty on June 9 1914, and expected the U.S. senate to ratify it.<sup>19</sup>

Archival research by this project has revealed that during the next five years intermediaries legalized the oil concession contract, created the Tropical Oil Company (TROCO) to manage oil production in Colombia, and invested about \$39 million to develop the infrastructure to extract crude from the oil fields. At the same time JS directly verified the great potential of Colombian oil fields. On August 1920 the intermediaries transferred ownership to International Petroleum Company, an affiliate company of JS. The conglomerate was now ready to pump-out Colombian oil.<sup>20</sup>

Note the role of JS in the offer of U.S. reparation to Colombia highlights an important and interesting point. A previous imperial action, the U.S. support to Panama's secession, an action that negatively affected Colombia's welfare and its relationship with the U.S., was used by JS as a strategic asset to out-compete other firms interested in the oil contract. In the face of JS's success in achieving a U.S. offer to repair done damage, the only way Weetman Pearson could have bargained effectively with Colombia's government is if it had offered to put on the table \$25 million from its own pocket as an additional clause in the concession contract.

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<sup>19</sup> Bell (1921) p. 120, Diego Martinez's attorney (1923) p. 10, Mendoza and Alvarado (1939) p. 24, Isaza and Salcedo (1991) p. 90, Ripoll (2009) pp. 97-99, Duran (2011) p. 9, El Tiempo, Bogota, September 4 1913, October 1 1913, Rivas (1961) p. 619, Lael (1987) p. 98, Bucheli (2008) pp. 437-548

<sup>20</sup> Bell (1921) p. 120, p. 128, Gibb and Knowlton (1954) p. 85, Santiago (1986) pp. 23-27, pp. 29-32, Isaza and Salcedo (1991) p. 154, Boletín Minas y Petróleo, Bogota, 1929, No. 8, pp. 90-92, New York, October 8 1920, Gibb and Knowlton (1956) pp. 108-109, New York Times, January 7 1920, January 20 1920, August 14 1920, August 23 1920, Wall Street Journal, August 23 1920

But JS still faced another hurdle. Colombia's oil field was located in the centre of the country. A 300 mile oil pipeline was necessary to transport oil to the Caribbean coast, where it would be loaded to tankers and thence delivered to JS refineries in New Jersey or Canada. Consequently, JS assigned James Flannagan, a trusted officer who had been key in foreign operations, and with successful experiences in the Mexico and Peru, to lead the project to request Colombia's government a concession contract and build the oil pipeline.<sup>21</sup>

#### *U.S. Senate ratification of the Urrutia-Thomson Treaty*

The situation was complex. The pipeline concession contract ended up meddled by the U.S. senate opposition to ratify the Urrutia-Thomson Treaty. And the U.S. political and economic situation made the senate's decision even more intricate.

The oil market had continued growing fast. The First World War made it clear that oil was a key input for mobilizing armies, navies and air forces and pressed its supply. In the U.S. alone production increased by more than 35% during the four war years, while worldwide production increased by almost 25%. In 1918 the U.S. now produced more than 70% worldwide production, American companies abroad produced another 10% and the U.S. now consumed 16% more than what it produced domestically. America was producing more oil, but demand growth turned it into a net-importer. And, as important, Britain developed an aggressive policy to acquire oil reserves abroad. The dominant and new comer empires feared at some point they may be staged to fight each other. The Coolidge Conservation Commission Board was still almost a decade away, but the U.S. was already developing policies to set control over oil reserves abroad, preparing for an eventual war.<sup>22</sup> The political and economic developments of the oil market probably benefited JS and facilitated ratification of the Treaty.

However, on the macroeconomic front the situation was severe. The U.S. experienced a post First World War economic boom that generated high inflation and ended up in an acute recession. The Federal Reserve tightened monetary policy on

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<sup>21</sup> Congressional investigation against Andian (1925) p. 24, Gibb and Knowlton (1956) pp. 86, 101, 378-380, 649

<sup>22</sup> Fanning (1945) p. 17, Day (1922) p. 347, Denny (1928) p. 16-18.

November 1919, and the recession began half-way into 1920 and continued until mid-1921. Gross National Product fell by 15%, industrial production by 23%, unemployment increased by 8% and aggregate prices fell by 20%.<sup>23</sup> In this context, reparations to Colombia were probably seen as unpopular and government expenditure could better be spent elsewhere than in a transfer to a foreign country.

The mood in Colombia completed the complex situation. In 1914 Colombia's congress had ratified the Treaty with the expectation the U.S. senate would do it rapidly. In 1919, after several years waiting for the Treaty to be ratified, Colombia's government expedited JS's acquisition of TROCO's concession contract and enacted legislation relaxing the rules of oil exploitation in Colombia, to facilitate ratification of the Urrutia-Thomson Treaty by U.S. senate. But in 1921 the U.S. senate still had yet to ratify the Treaty. Colombia was frustrated and at the same time JS was requesting its government a concession contract to build an oil pipeline.<sup>24</sup>

An important discovery during archival research is a cable that reveals that, under these circumstances, Colombia's government decided to use the pipeline contract to press JS and the U.S. senate to ratify the Treaty. On January 25 1921, knowing that JS could not exploit the existing TROCO concession without the pipeline, Laureano Garcia Ortiz, Colombia's minister of foreign affairs, indicated via cable Carlos Urueta, the minister (ambassador) to the U.S. "(The U.S.) ... wants approval of (Urrutia-Thomson) treaty to depend on other matters not connected to the original agreement. Unfair, irregular, is to hold ratification of previously recognized right to subsequent demands of different interests. Colombia agreed to adapt its legislation to such oil interests, until they were satisfied in solemn declaration by the (U.S.) Senate. Today it pretends to defer and further amend the Treaty. My Government does not threat, it just suspends resolutions on oil concessions, because public opinion does not allow its approval anymore. Country tired in their expectation ... . These considerations should be communicated to whom you consider appropriate, especially Flanagan".<sup>25</sup>

Note Garcia Ortiz explicitly indicates Urueta to reveal the information to Flannagan. Garcia Ortiz calculation was that Flannagan would exert the influence of JS to press the

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<sup>23</sup> Bordo and Landon-Lane (2010) p. 5-7.

<sup>24</sup> Randall (1992) p. 123, p. 129, p. 144

<sup>25</sup> Congressional investigation against Andian (1925) p. 18

U.S. senate to ratify the Urrutia-Thomson Treaty. The scheming was accurate. Flanagan had discussed the matter with senators Fall, Lodge, Hitchcock and Underwood of the foreign relations committee of the U.S. senate, and with newly elected President Harding by late 1920 probably foreseeing the coming difficulties for the oil pipeline concession contract. And he continued his lobbying efforts.<sup>26</sup>

The Treaty's discussion in the senate indicates the efforts by Flanagan and JS to influence the senators were successful. Senator James Reed, D clearly pointed out the case put forward by the oil interests on April 19 1921 when he stated that "... an attorney for these oil companies, and parties in interest, came to Washington and stated that if the treaty was not ratified it would involve the entire oil situation; that the present administration (in Colombia) might be overthrown and that the oil interests of these (U.S.) people lost. The substance of the talk was that the treaty must be ratified in order to protect the (U.S.) oil interests."<sup>27</sup> And Republican senators decided to change their position. For instance, Senator Henry Cabot Lodge, who had been part of the foreign relations committee since 1911 and consistently opposed to the ratification of the Treaty, indicated "the ratification of this treaty will lead to a prompt additional treaty of amity and commerce with Colombia which will improve our opportunities there making secure the concessions we now have".<sup>28</sup> And he read a letter sent by ex-senator and now secretary of interior Albert Fall who also had been part of the foreign relations committee and consistently opposed the Treaty that included "I have every assurance ... short of actual written agreement that the present Colombian government and prominent Colombians, favouring this policy, will immediately, upon ratification of the present Treaty, ... enter into a supplemental treaty ...".<sup>29</sup> And Senator Porter McCumber and who originally opposed to the Treaty indicated "I am voting to stake \$25m on the effort of the president to secure without an additional donation a supplemental agreement that will be worth to this country many times that sum".<sup>30</sup> Some Senators understood perfectly the nature of the negation taking place, but thought accepting Colombia's pressure on the U.S. political process was equivalent to blackmail and, on top, a political and economic opportunity cost existed. Senator William

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<sup>26</sup> Gibb and Knowlton (1956) p. 379.

<sup>27</sup> Congressional Record, 67th Congress, 1st sesión, p. 314.

<sup>28</sup> Congressional Record, 67th Congress, 1st sesión, p. 116, 163.

<sup>29</sup> Congressional Record, 67th Congress, 1st sesión, p. 116, 163.

<sup>30</sup> Congressional Record, 67th Congress, 1st sesión, p. 116.

Kenyon, R indicated “I wonder what these gentlemen who have raised their voice so loudly about (the advantages to the Urrutia-Thomson Treaty for the U.S.) economy are going to say when the soldier bonus bill comes here, and they have the record of voting away \$25 million in a blackmail proposition”.<sup>31</sup>

It is not possible to know precisely what actions JS performed to convince Republican senators who originally opposed the Treaty to favour it, but the fact is that the Treaty was ratified on April 20 1921. The U.S. cabinet granted in 1913 what amounted to an implicit subsidy for JS to gain access to Colombian oil fields. The U.S. senate in 1921, under pressure from the Colombian government and JS, finally ordered its payment.<sup>32</sup>

The decision is fascinating but not surprising. The First World War increased demand for oil and set American companies to look for oil abroad and made them important players in American foreign policy. And, the oil special interest became a major theme during the Harding administration. Former senator and now secretary of interior Albert Fall, played an influential role in changing the position of the foreign relations committee and the senate to facilitate ratification of the Urrutia-Thomson Treaty, also played a key role in the Teapot Dome scandal. He received bonds in exchange of oil leases, and was the first American cabinet minister to end up in jail for accepting bribes.<sup>33</sup>

In a sequence of events Flannagan acted to secure the concession contract for JS. On October 1 1923 the Colombian government awarded the Andian Company a concession contract to build and operate a pipeline between the oil wells in TROCO’s concession and Cartagena, on Colombia’s Caribbean coast.<sup>34</sup>

Early in 1925 JS sent to Colombia its pipeline construction expert, D. O. Towl, and Andian’s ownership was passed to the International Petroleum Company. The transaction centralized ownership and control of JS activities in Colombia into a single company, the International Petroleum Company, and made explicit six years after the close connection between Andian, TROCO and JS. On March 6 1926 Andian completed the oil pipeline and

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<sup>31</sup> Congressional Record, 67th Congress, 1st sesión, p. 472.

<sup>32</sup> Gibb and Knowlton (1956) p. 379

<sup>33</sup> Denny (1928) p. 273 and Werner and Starr (1959) 9-87

<sup>34</sup> Congressional investigation against Andian (1925) p. 27, p. 41, Boletín de Minas y Petróleo, Bogotá, 1929, Vol 2, No. 8, pp. 99-110, Gibb and Knowlton (1956) pp. 378-380, Rippey (1976) p. 121, Villegas (1969) chapter 2, de la Pedraza (1985) pp. 191-193

on July 3 the first tanker set off to America. JS extracted and transported Colombian oil and by 1928 Colombia was the eighth largest oil producer in the world.<sup>35</sup>

The U.S. paid the \$25 million reparation to Colombia 1923-1926, most of it after the Andian concession contract had already been allocated in 1923, assuring the deal the U.S. senate signed in for was completed before most money was paid. Most of the reparation was invested in financial and transport infrastructure. A commission of economic advisors led by Princeton's Edwin Kemmerer to improve Colombia's banking sector and create the central bank received about \$6 million. Finishing several railroads and transport projects whose construction was delayed received about another \$19 million.<sup>36</sup>

The events documented in this section reveal three important points. First, the events illustrate how an informal colony can influence the political process within the empire to reduce its net-transfer to the empire. Colombia, an informal commercial colony, suffered an imperial action, lost Panama and the benefits derived from the construction and operation of the Panama Canal and experienced a deteriorated relationship with America, the empire. The loss of Panama, however, was transformed into a strategic asset by JS and Colombia. In 1913, during the competition for Colombian oil with Weetman Pearson, JS transformed the loss of Panama into a \$25 million asset that gave it advantage in the competition for the oil concession contract and could not be easily matched by the British firm. In 1921, during the senate discussions to consider another imperial action, Colombia used \$40 million sunk investment of JS and future access to its oil reserves to induce the oil firm, and in turn, the U.S. senate to ratify the Urrutia-Thomson Treaty, and effectively reduce the negative effects of the loss of Panama. In effect, the colony and a special interest group within the empire built a coalition. The coalition served to create what amounted to an implicit subsidy for JS, the special interest. And the coalition also served for Colombia, the colony, to negotiate payment of reparations and reduce the losses due to the secession of Panama, out of an empire that showed little interest to pay reparations up to 1921. The case shows how an informal commercial colony and special interests within the empire can behave strategically, build a coalition, influence the empire's internal political process

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<sup>35</sup> Oil and Gas Journal, Tulsa, 1925 January 22 p. 22, February 5 p.120, May 7 p. 68, Gibb and Knowlton (1956) pp. 379-380, p. 659, Santiago (1986) pp. 41-42, Petroleum Facts and Figures, Baltimore, 1929 p. 4

<sup>36</sup> Memoria de Hacienda (1926).

reducing its net-transfer to the empire and creating an implicit subsidy for the empire's special interest.

Second, a negative past imperial action can create a future opportunity or constraint for the empire's firms operation in that colony. The point is that imperial actions cannot always be considered as independent actions. An American imperial action created an opportunity for American firms entering to Colombia in the future, and JS used it to gain an oil contract. Imperial actions are connected to each other through history, via the memory, emotions and perceptions of those who experienced the original imperial action and who will later shape the future feasible imperial actions acceptable to the informal colony, and create opportunities and constraints for the empire firm future behaviour.

Third, the events reveal the magnitude of the implicit subsidy to JS. In 1902 the U.S. revealed willingness to pay Colombia \$12.4 million for the right to build and operate the Panama Canal. Once Panama became independent, America did not have to pay Colombia for the Canal and its willingness to pay reparations for its role in the secession of Panama was low, \$2.5 million at most. However, the interest of JS to exploit oil in Colombia raised the U.S. willingness to pay reparations to \$25 million. Thus, it is possible to infer that at least \$12.6 million were a transfer to Colombia to facilitate the activities of JS in Colombia, in what amounts to an implicit subsidy to that firm.

## THE TREATY, THE EXECUTIVE, POLITICAL PARTIES, AND OIL

The U.S. senate considers such decision as the ratification of the Urrutia-Thomson Treaty per request of either the U.S. president or a senator. In both cases, the request is channeled to the senate's foreign relations committee that examines the proposal and decides whether to take it to plenary vote. One round of plenary debate and one vote is required to pass the proposal into law. The decision to ratify requires two thirds positive votes. We examine the U.S. president requests, the composition of the foreign relations committee, and the U.S. senate's roll calls. Next we examine the senate's plenary vote to ratify the Urrutia-Thomson Treaty.

*The presidents and the Treaty*

The U.S. presidential requests are available from the database of the ICSPR U.S. Congressional Historical Statistics. The number of presidential requests is summarized by presidential period and subject in table 1. The table indicates that the various U.S. presidents between 1897 and 1923 focused their relationship with Colombia on developing a project to build a canal, 17 out of 19 requests in total. After the secession of Panama, Republican Presidents Theodore Roosevelt and William Taft made no request for the U.S. senate to consider normalizing relations with Colombia. Even Progressive president Woodrow Wilson, whose cabinet signed the Urrutia-Thomson Treaty in 1914, only requested the U.S. senate to consider ratification of the Treaty in 1918. Finally, Republican president Warren Harding did request the U.S. senate to consider the vote after learning directly from James Flannagan about the risk JS faced of effectively losing its sunk investments in Colombia if the Treaty was not ratified. Overall, the U.S. presidents did not show any significant interest in Colombia, except for when it offered the possibility of building the Panama Canal on its territory via the Herran-Hay Treaty or when Colombia used the oil pipeline to press JS and U.S. senate.

Table 1. Presidential requests to U.S. senate regarding a Canal in Central America or any other issue connected to Colombia, 1897-1923

President	Congress & period	Presidential request's subject			
		(1) Canal, other than Panama	(2) Herran-Hay Treaty	(3) Canal in Panama	(4) Normalizing with Colombia
William McKinley	55-56 - 1897-1901	4	0	0	0
Theodore Roosevelt	57-60 - 1901-1909	1	2	4	0
William Taft	61-62 - 1909-1913	0	0	6	0
Woodrow Wilson	63-66 - 1913-1921	0	0	0	1
Warren Harding	67 - 1921-1923	0	0	0	1
Total		5	2	10	2

**Source:** ICSPR U.S. Congressional Historical Statistics. (1): Requests for construction of a canal on any part of Central America other than Panama, (2): Requests for ratification of Herran-Hay Treaty with Colombia, (3): Requests for construction of a canal on Panama, (4): Requests for normalizing relations with Colombia, including reparations.



Why don't we see more interest from U.S. presidents to press the U.S. senate to ratify the Urrutia-Thomson Treaty? Given that Theodore Roosevelt decided to support the secession of Panama and William Taft followed a similar standing on foreign policy, it is not surprising that no presidential requests were submitted to normalize relations with Colombia 1903-1913.

Somewhat more surprising is that Woodrow Wilson did not submit earlier or more frequently his request given it was his cabinet that signed the Urrutia-Thomson Treaty. One possible explanation is that president Wilson was busy fighting a world war, and therefore a treaty with Colombia was, understandably, not within his priorities. However, precisely during this period he did find time to examine, divert resources to and authorize intensive imperial actions like multi-year military interventions to occupy Cuba, Haiti, Veracruz in Mexico, Nicaragua and indirect actions to oust General Bordas in Dominican Republic.<sup>37</sup> Thus, it seems unlikely engagement in the First World War, as important as it was, is sufficient to explain Wilson's motives not to request consideration of the Treaty.

President Wilson's delay to request ratification of the Treaty to the senate is even harder to understand given that the Democrat-Progressive coalition dominated the U.S. senate and its committee of foreign relations, 1913-1919. The fact that most of the members of the committee that voted positively to forward the Urrutia-Thomson Treaty to the Senate's plenary session and who voted positively to ratify it in April 20 1921 were already in the committee by 1913 makes it even more unlikely that either president Wilson, the U.S. senate or its foreign relations committee saw the convenience of ratifying the Treaty before 1921.<sup>38</sup> In 1919 the U.S. senate and its committee turned into a more hawkish Republican majority that had expressed in the past against any Treaty initiative 1903-1913, presumably making harder, not easier, for the Treaty to pass.

Analysis of U.S. presidential requests to the senate suggests interest in Colombia while it was a potential landsite for an inter-oceanic canal. After Panama seceded the Presidents revealed little interest in Colombia, until Colombia influenced the JS and the U.S. political process to settle the Panama issue in 1921.

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<sup>37</sup> Coatsworth, J. (2006) p. 19.

<sup>38</sup> The committee was composed by 14 members, and 8 of those who voted to ratify the Treaty were already in the committee by 1913. ICSPR U.S. Congressional Historical Statistics.

### *Political parties and the Treaty*

The U.S. presidential requests are only one source of legislative proposals. Senators may also submit their own initiatives to the relevant committee. The committee, in turn, may decide to propose a roll call vote. The ICSPR database does not provide evidence on the initiatives submitted by senators, but it does on the roll call votes proposed by the foreign relations committee to the senate. The number of roll call votes by congressional period and subject are presented in table 2. Again the majority of legislative activity is connected to the development of a Canal through Central America and the construction of the Panama Canal. Only 11 out of 126 roll calls are connected to normalizing the relationship with Colombia, and 10 of them are connected to the vote over the ratification of the Urrutia-Thomson Treaty in April 20 1921. Thus, the U.S. senate did not show much interest in normalizing relations with Colombia either.

Table 2. Roll calls regarding a canal in Central America or any other issue connected to Colombia, 1897-1923

President	Congress	Congress roll call subject			
		(1) Canal, other than Panama	(2) Herran-Hay Treaty	(3) Canal in Panama	(4) Normalizing with Colombia
William McKinley	55-56 - 1897-1901	27	0	0	0
Theodore Roosevelt	57-60 - 1901-1909	14	0	18	0
William Taft	61-62 - 1909-1913	0	0	4	0
Woodrow Wilson	63-66 - 1913-1921	2	0	33	1
Warren Harding	67 - 1921-1923	0	0	3	10
Total		43	0	72	11

**Source:** ICSPR U.S. Congressional Historical Statistics. (1): Requests for construction of a canal on any part of Central America other than Panama, (2): Requests for ratification of Herran-Hay Treaty with Colombia, (3): Requests for construction of a canal on Panama, (4): Requests for normalizing relations with Colombia, including reparations.<sup>39</sup>

The Urrutia-Thomson Treaty ratification of April 20 1921 involved 10 roll call votes. The number of senators that voted the roll calls was 88 (see table 3). The Treaty was finally ratified with the support of 78% of the senators. The Democratic party supported

<sup>39</sup> A 1914 roll call vote considered the issue of whether the executive could develop negotiations with Colombia in secret, regarding the Panama Canal. ICSPR U.S. Congressional Historical Statistics.

proportionally more the ratification of the Treaty, with 88% voting positively. But, since Democrats were minority within the committee of foreign relations and the U.S. senate, support by 72% of the Republican party was crucial.

Table 3. Urrutia-Thomson Treaty final roll call vote, April 20 1921

Vote	Number of senators	Party	Number of senators
Not ratify	19	Democrat	4
		Republican	15
Ratify	69	Democrat	29
		Republican	40
Total	88	Total	88

**Source:** ICSPR U.S. Congressional Historical Statistics

The other nine roll calls connected to the Urrutia-Thomson Treaty confirm the strong commitment of senators to ratifying the Treaty as it had been originally written. For instance, a roll call vote, identical to the text finally ratified except for the amount of reparation that was reduced from \$25 million to \$15 million, was rejected by the senate. The senator’s votes on the final roll call vote that was ratified and the one that was rejected have a correlation coefficient of -0.94. Only senators Kenneth McKellar, Democrat from Tennessee, and Park Trammell, Democrat from Florida, changed the direction of their final roll call vote and would have preferred the Treaty to offer Colombia \$15 million, instead of \$25 million. This shows that senators who supported the Treaty had made their mind regarding the vote. The majority that ratified the Treaty was wide, strong and stable.

In sum, party differences do not seem to explain ratification of the Treaty. Few if any senators demonstrated interest in Colombia other than as a land-site for the Panama Canal. Interest in Colombia had to wait until 1921 when Colombia induced JS to influence the political process in the U.S.. Both parties reacted by ratifying with more than supermajority support.

*The oil special interest and the Treaty*

The narrative presented above indicates that JS performed important efforts to influence the senate’s vote on the Urrutia-Thomson Treaty, that the senators preferred to

refer to oil influence on the Treaty vote rather than just JS during the congressional discussions, and that the JS and the oil industry strongly influenced the senate's vote on the Treaty. What quantitative evidence do we have of the relationship between oil and the Treaty ratification?

First, JS benefit derived from the Urrutia-Thomson Treaty ratification was avoiding loss of both, \$39 million sunk investment and profits connected to opening the oil fields in Colombia and subsequent crude oil exports. Indeed, the senators from the 10 states in the U.S. where JS was active voted to ratify the Treaty, in line with the JS interests.<sup>40</sup> But JS special interest only achieved influence over 18 of the 59 votes necessary to pass the Treaty and of the 69 that actually voted to ratify the Treaty.

Second, why would other crude oil producers and refiners like JS find it beneficial to cooperate with JS and influence their own senators to ratify the Treaty? The interests of oil producers and oil refiners need not to be aligned. Approval of the Urrutia-Thomson Treaty would benefit oil refiners because Colombia's entry into the crude oil world market would probably shift and make more elastic crude oil supply, pressing equilibrium prices down. If crude oil represents an important share in unit cost, and a crude oil price reduction is not instantaneously transferred by refiners to consumers, oil refiners would benefit from the Urrutia-Thomson Treaty and their interests would be aligned with those of JS. Evidence suggests this was the case. The oil refining industry was composed by regional oligopolies that use crude oil as the main input, about 70% of average unit cost of aggregate oil refining products. The price of gasoline and fuel oil moved substantially slower than that of crude oil.<sup>41</sup> The census of 1920 reports establishments in 25 states refined oil. If the senators from the oil refining states all vote to ratify the Treaty, the coalition would add up to 46 votes, and 13 votes short from the two thirds majority required.<sup>42</sup>

In principle, the cost structure and pricing behavior of refiners implies the Treaty would be beneficial to refiners but crude oil producers would lose either via a drop in its output price or a decline in relative profitability, compared to refining. However, if there is

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<sup>40</sup> ICSPR U.S. Congressional Historical Statistics and Gibb and Knowlton (1956) appendices. One senator from Oklahoma and one from West Virginia, where JS produced oil, preferred not to turn to vote.

<sup>41</sup> Olmstead and Rhode (1920), U.S. Census (1920), Hopkins (1927), and Pogue (1928).

<sup>42</sup> Note that for ratification vote ratios calculated in this subsection senators from states that produce or refine oil and who did not vote are excluded from the numerator and the denominator of the ratio to calculate the vote. Data from U.S. census 1920 and ICSPR U.S. Congressional Historical Statistics.

a larger absolute level of profit to be made in refining than the profit loss incurred in the production of crude oil and if the firms producing crude oil and oil derivatives are integrated the conclusion may be different. It is possible that the conflict between crude oil producers and oil refiners may in fact be internalized to a large extent within firms. Examples of vertical integration abound in the oil industry, like most of the Standard Oil Holding companies created by the Supreme Court 1911 break-up decision, even though no data on its extent is available. If these two assumptions were true, then the whole industry should prefer to support ratification of the Treaty. The census also reports that 20 states produced crude oil, and a total of 29 states produced or refined oil. Assuming a perfect coalition of all oil producers and refiners gives 54 votes, 5 votes less than the minimum two thirds necessary to ratify the Treaty, and 15 less than those who actually voted to ratify it. In fact, out of the 54 votes of a perfect coalition, a substantive coalition of 45 senators from crude oil and oil refining states voted to support ratification of the Treaty, making it 14 votes less than the minimum required to pass it.

The fact that 45 out of 54 voted to support the Treaty suggests strong support to the Treaty from a vertically integrated oil industry. The 9 senators that preferred not to vote to ratify the Treaty were mostly Republicans.<sup>43</sup> A coalition of oil producers goes a long way to explain ratification of the Treaty, but it is still not enough.

## WHY DID THE U.S. PAY TO COLOMBIA (IF IT DID NOT HAVE TO)?

### *An econometric model of the Urrutia-Thomson Treaty*

So who else supported ratification of the Urrutia-Thomson Treaty if the coalition of oil producers was not enough to pass it? To examine the U.S. senate vote in a more exhaustive manner we develop an econometric framework. A special interest group or lobbying framework is a convenient one to think about a senator's decision facing this vote.

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<sup>43</sup> Senators Charles Townsend, MI R, and Peter Norbeck, SD R from states where only oil was produced. Senators Hiram Johnson, CA R, Arthur Capper, KS R, and James Wadsworth, NY R from states that produced and refined oil. Senators William Borah, ID R, Frank Kellogg and Knute Nelson, MN R, and James Reed, MO D, from states where only refining took place.

In this framework senator  $i$  representing state  $s$  votes,  $v_{is}$ , either to pass the Urrutia-Thomson Treaty ( $v_{is}=1$ ) or to oppose ( $v_{is}=0$ ). Senator  $i$  is willing to sell his vote, one direction or the other, depending on the offer made by special interest group,  $g$ , in his state. If information is imperfect or voters cannot process information appropriately, voters cannot evaluate the actions by politicians. Under these circumstances, a small group of people expecting to derive large gains from a given policy intervention, a special interest group, may coordinate to form a coalition, lobby senators and influence the given policy intervention to favor their own interest. The demand for the senator's vote depends on the gains a given coalition may expect to derive from a policy intervention, the resources available for the group to lobby senators and the how efficiently the group may organize to lobby.<sup>44</sup> Because policy interventions frequently have redistributive effects, a policy intervention that may benefit a special interest group may hurt another one. For instance, consider that, if oil refiners do not pass down to consumers the crude oil price decline expected to be caused by the Urrutia-Thomson Treaty ratification, oil derivative consumers will expect their profit relative to that of oil refiners to decline. Oil refiners will lobby senators to ratify the Urrutia-Thomson Treaty, while oil consumers will lobby senators to oppose it. Which special interest group wins the senator's vote depends on each group's expected gains from the policy intervention and ability to organize to lobby.

The different special interest groups affected by the Urrutia-Thomson Treaty were identified using the oil supply chain. Contemporary descriptions of the industry and consumers indicate the key players who would expect to borne the positive and negative effects of the Treaty were crude oil producers, oil refiners, oil derivative consumers and taxpayers. The following paragraphs explain the expected position of each special interest group regarding the Treaty.

*Special interest crude oil producers:* The magnitude of gains or losses derived from government intervention and the ability to organize as a group determines how effective a special interest group is influencing its own senators. In the case of crude oil producers, more than a gain, the Urrutia-Thomson Treaty represents an opportunity not to lose. Crude oil producers expected that ratification of the Treaty would reduce the crude oil price, and that in turn would cut unit profit and producer surplus. In turn, the special interest of crude

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<sup>44</sup> Olson (1965). Grossman and Helpman (1994) develop a lobbying model applied to trade subsidies.

oil producers should have been willing to devote to lobbying activities up to the amount of expected producer surplus loss.

Precise estimation of the expected loss requires knowledge of different elasticity values for production and demand (and for all sectors included in the analysis). Elasticity values are not available; therefore we assume that expected loss (or gain) is proportional to crude oil production (or crude oil, fuel oil or gasoline consumption) value before the Treaty was ratified. Sectors in state  $s$  that produce (or consume) high levels of crude oil (or of its derivatives) are likely to lose (or win) more in absolute levels from the effects the Treaty was expected to have on international crude oil prices and the downstream supply chain.

Thus, the size of resources the special interest of crude oil producers was willing to offer senator  $i$  via lobbying relative to those offered by other sectors within state  $s$  was the value of crude oil production per dollar of total value of production in state  $s$ ,  $OP_{gs}$ . The larger the share of expected losses a special interest would have within a state, the larger the benefits the special interest may reap from the Treaty (compared to other interest groups within the state), and the more politically influential the group may be perceived by the state's senators. An analogous argument is used to measure the influence of the other special interest groups to be examined below.

Ideally, one would like to measure independently the magnitude of potential gains an interest group may derive from ratification of the Treaty and its ability to organize, as the two need not be positive correlated. A measure for both concepts is only available for three of the eight special interest groups to be examined. To the extent that these measures do indicate both concepts are positively and statistically significantly correlated, at least for these three special interest groups, not including indicators to proxy ability to organize does not seem to limit severely the empirical exercise conducted.<sup>45</sup>

*Special interest oil refiners:* The special interest of oil refiners is measured by the consumption of crude oil by refiners per dollar of total value of production in state  $s$ ,  $OR_{gs}$ .

*Special interest oil derivative consumers:* The special interest of oil derivatives consumers focuses on the groups of consumers that demand the lion share of refined products. The oil refining industry produces two main products. Gasoline and naphtha represent about 50%

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<sup>45</sup> Measures of the potential gains derived from the Treaty ratification and ability to organize are available for oil refining, oil derivatives and coal intensive manufacturing and oil intensive derivatives manufacturing. A positive and significant correlation ranging 0.3-0.5 does exist

value of production and fuel oil represents just over 20%. In 1920 most gasoline was consumed by motor vehicles, while aircraft demanded a growing but still very small 1% share of total gasoline sales. Fuel oil consumption was driven by the shipping industry with a 24% share, while railroads consumed 20%, oil production 14%, heating utilities 7%, iron and steel 5% and other manufacturing products that include refined, canned and refrigerated food products, brick and clay, and motor vehicle production (including motorbikes and auto parts) another 5%.<sup>46</sup> Special interest groups are aggregated into cars, shipping, railroads, manufacturing industries like iron and steel that use intensively fuel oil and coal, and manufacturing industries that use intensively fuel oil. The influence of each special interest group is measured by total gasoline or fuel oil consumption value of each special interest group  $g$  per dollar of total value of production in state  $s$ ,  $OC_{gs}$ .

Finally, senator  $i$  vote may also be influenced by the interests of his electorate. The importance of the median voter in shaping the decisions of legislators has been well identified. The median voter interest constitutes a point of convergence for the senator to move to capture the largest possible group of the electorate.<sup>47</sup> In theory, the median voter's interests generally differ by their preferences. In the context of this model we will assume the preference for fairness is identical in the population between states, but perceived fairness differs in the population between states. A median voter in a state that is a net recipient of federal expenditure is likely to feel different than one in a state that is net contributor of federal taxes or under economic strain. The latter is more likely to feel that it is unfair to transfer resources to Colombia rather than to his own state and prefer to oppose ratification of the Treaty. Note that a median voter defined this way may also be thought of as a weak special interest group. The loss for the group as a whole is large, but the group of tax payers is highly decentralized and fragmented, and the loss to each individual tax payer is relatively small. The median voter perceived preference for fairness is measured by net federal expenditure; federal expenditure received less federal taxes contributed by state  $s$  citizens and corporations,  $NT_s$ .

A long tradition of research has used a probit model to estimate the influences that different special interest groups exert on politicians. The model estimates the influence of

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<sup>46</sup> US manufacturing census (1920) p. 763, American Petroleum Institute (1930) pp. 105-129. Hager (1939) p. 5. Consumption data is for 1926. No previous data is available.

<sup>47</sup> See Bowen (1943) and Hotelling (1929).



each special interest group included in the analysis on the average senator. We follow this tradition.

Equation (1) summarizes the theoretical framework. Initially, econometric estimation focuses on the influence of lobbying on the senators' decision, and all senators and states are assumed identical in all other dimensions. The various  $\alpha$  parameters capture the effects of oil producers, oil refiners and oil derivative consumers' special interest groups and taxpayers median voters on the voting decision.

$$(1) v_{is} = \theta_1 + \alpha_2 OP_s + \alpha_3 OR_s + \alpha_4 * NT_s + \sum_5^l \alpha_l OC_{gs} + \sum_1^m \beta_m SC_s + \sum_1^n \gamma_n CC_i + \varepsilon_i$$

While the focus of the framework is lobbying, in a second step the model is extended to contextualize each senator's vote decision, by including heterogeneity in state characteristics and senator's preferences, behavior, and level of political competition. Variables  $SC_s$  measure relevant state characteristics while parameters  $\beta$  capture the effects of these variables on the vote decision. Variables  $CC_i$  measure the senators' preferences, behavior as politician and the level of electoral competition he faces, and parameters  $\gamma$  capture these effects on vote decision.

The sample is composed by 88 senators from 48 states who voted the Treaty and the special interests state level characteristics they each face.<sup>48</sup> Data was drawn from the U.S. government censuses and statistical bulletins. Table 4 presents the descriptive statistics of the variables included in the analysis. The definition and sources of each variable are included in appendix to this paper.

The average senator faces a state where oil production and oil refining consumption of crude oil, each accounts for just over 1% of the value of production, and the oil coalition if its interest are aligned, represents over 2%. The consumption of fuel oil is an important economic activity, compared to the oil industry, in states with access to internal and external waterways, while manufacturing sectors consume a substantially smaller share of fuel oil. Car owners consume most gasoline and represent a substantial share of economic

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<sup>48</sup> One senator representing Florida, Iowa, Michigan, Montana, Oklahoma, Tennessee, Vermont, West Virginia respectively, failed to show up for the Urrutia-Thompson Treaty vote. Oklahoma and West Virginia were important crude oil producers and relatively smaller oil refiners. Montana and Tennessee were very small producers of crude oil with no oil refining activity.

activity within the average state. Finally, the average senator faces a state that is a net contributor to the federal government – it produces more federal taxes than the federal expenditure it receives.

Table 4. Descriptive statistics

Variable	Mean	Stdev	Min	Max
Vote to ratify Urrutia-Thomson Treaty	0.7840	0.4138	0	1.0000
Crude oil production (A)	0.0108	0.0296	0	0.1780
Oil refining crude consumption (B)	0.0114	0.0226	0	0.1281
Crude oil & oil refining (A+B)	0.0223	0.0493	0	0.2435
Railroad fuel oil consumption	0.0016	0.0019	0.00007	0.0099
Domestic shipping fuel oil	0.0001	0.0004	0	0.0022
International shipping fuel oil consumption	0.0161	0.0317	0	0.1623
Cars gasoline consumption	0.0105	0.0043	0.00535	0.0216
Heating utilities fuel oil consumption	0.0007	0.0016	0	0.0078
Iron & steel fuel oil consumption	0.0001	0.0001	0	0.0008
Other intensive manuf. fuel oil	0.0001	0.0001	0	0.0008
Federal expenditure less federal taxes	-60.0000	125.0000	-749.0000	1.0733
State area	62,376.4000	47,316.8000	1,067.0000	262,398.00000
State average temperature	51.9050	7.6349	39.4400	70.5900
State precipitation	2.9151	1.1297	0.7300	4.7400
State share of illiterate population	0.0639	0.0539	0.0108	0.2189
State share of rural population	0.5606	0.2294	0.0251	0.8659
Senator congress time as share of life time	0.2625	0.1422	0.0465	0.5909
Senator political ideology	0.1569	0.3829	-0.4800	0.7200
Senator election win difference	0.2759	0.3142	0.0013	1.0000

**Source:** See appendix.

The average senator faces a state where oil production and oil refining consumption of crude oil, each accounts for just over 1% of the value of production, and the oil coalition represents over 2% if the interest of oil producers and refiners are aligned. The consumption of fuel oil is an important economic activity, compared to the oil industry, in states with access to internal and external waterways, while manufacturing sectors consume a substantially smaller share of fuel oil. Car owners consume most gasoline and represent a substantial share of economic activity within the average state. Finally, the average senator faces a state that is a net contributor to the federal government – it produces more federal taxes than the federal expenditure it receives.

As two senators from each state are elected to congress, data is clustered on states. Fixed state effects reduce substantially the degrees of freedom of the estimation and cannot

be used when the two state senators' vote in the same direction, as it is frequently the case in this vote. Thus, state clustered standard errors are used.

### *Results*

The results of the econometric exercise are presented in table 5. The probit model estimates indicate the influence of the oil interests on the Urrutia-Thomson Treaty decision. The crude oil producers, as expected, do appear to oppose the ratification of the Treaty - the sign of the coefficient is negative. However, the effect of this opposition seems to have been weak as the coefficient is not statistically significant different than zero. The oil refiners, as expected, did strongly support the Treaty – the coefficient is positive and statistically significant. The effect remains and even strengthens if we exclude crude oil producers (see model 2). If we assume the extent of vertical integration in the oil industry was widespread, the interests of the two stages of the industry would actually be aligned through ownership. We add up crude oil production and crude oil consumption in refining and estimate model 3. The vertically integrated oil industry coefficient is positive and statistically significant, indicating a strong positive influence of the oil interests, united, on the Treaty decision.

The econometric exercise suggests other special interest groups supported and opposed ratification of the Treaty. The exercise indicates the coalition of oil producers and refiners were also supported by railroads and iron and steel industries to ratify the Treaty. The estimated coefficients for both sectors are positive and statistically significant in models 1 through 3. The special interest groups that opposed to ratification of the Treaty were domestic shipping, car owners and other manufacturing industry intensive in the consumption of fuel oil. The estimated coefficients are negative and statistically significant. Finally, the median voter supported ratification of the Treaty when she was lucky to live in a state that received more federal expenditure than paid federal taxes. Note that only five states were net recipients of funds, the rest have negative values on this variable. Thus, most of the effect of this variable denotes influence on senators to oppose the Treaty.

Table 5. Probit model of U.S. senate vote of Urrutia-Thomson Treaty

Model	1		2		3		4	
Depvar	Ratify (0=No, 1=Yes)							
Crude oil production (A)	-0.13							
	0.29							
Oil refining crude consumption (B)	0.92 *		0.83 **					
	0.54		0.40					
Crude oil & refining (A+B)					0.82 **		0.99 *	
					0.41		0.59	
Railroads fuel oil consumption	0.90 **		0.92 **		0.97 **		1.29 *	
	0.42		0.44		0.44		0.69	
Domestic shipping fuel oil consumption	-0.97 ***		-0.97 ***		-0.97 ***		-1.07 ***	
	0.17		0.17		0.18		0.27	
International shipping fuel oil consumption	0.06		0.07		0.09		0.27	
	0.23		0.23		0.24		0.29	
Cars gasoline consumption	-0.48 ***		-0.49 ***		-0.48 ***		-0.90	
	0.18		0.18		0.18		0.58	
Heating utilities fuel oil consumption	-0.06		-0.08		-0.11		0.03	
	0.13		0.14		0.16		0.22	
Iron & steel fuel oil consumption	3.60 **		3.64 ***		3.71 ***		3.51 ***	
	1.25		1.27		1.39		0.96	
Oil intensive manuf. fuel oil consumption	-0.31 **		-0.32 **		-0.32 **		-0.31	
	0.13		0.14		0.15		0.29	
Federal expenditure less federal taxes	0.26 **		0.26 **		0.27 **		0.35 **	
	0.12		0.12		0.13		0.17	
State area							-0.28	
							0.37	
State temperature							-0.09	
							0.45	
State precipitation							-0.35	
							0.54	
State share illiterate population							0.32	
							0.44	
State share rural population							0.15	
							0.28	
Senator length life in congress							-0.10	
							0.29	
Senator political ideology							0.32	
							0.38	
Senator election win difference							-0.35	
							0.23	
Constant	2.13 ***		2.16 ***		2.20 ***		2.39 ***	
	0.51		0.53		0.56		0.51	
Nobs	88		88		88		88	
Wald Chi2	81.70 ***		67.30 ***		68.06 ***		92.60 ***	
Paseudo R2	0.42		0.42		0.41		0.48	

**Note:** Clustered by state robust standard errors in parenthesis. \* indicates level of statistical significance of parameter estimate: \*\*\* 99%, \*\* 95% and \* 90%.

## *Robustness*

In the simple framework initially proposed, senators are assumed to be homogenous agents that face a homogenous economic and political context. Senators, however, face states with different economic structures that may impose different constraints on senatorial behavior. Physical and human geography varies between states in the size of the state, climate, literacy and urbanization. Senators may also have different political preferences, senatorial behavior and face different levels of electoral competition. In model 4 controls for dimensions of heterogeneity are included to model 3 to examine if results are robust to a more complex definition of the economic and political context of the Treaty vote.

Results indicate that most qualitative results of models 1, 2 and 3 are robust to inclusion of economic and political context controls. It was not possible to reject the influence of the oil industry in the ratification of the Treaty, or that railroad and iron and steel industries also supported ratification. The opposition of domestic shipping industry or the median tax payer cannot not be rejected either. However, the evidence that car owners and other manufacturing industry intensive in consumption of fuel oil had opposed the Treaty weakened with inclusion of controls.

Additional tests to examine robustness of results are also possible. First, senate also voted (and rejected) an alternative text for the Treaty. The only difference with the text finally ratified was that the value of reparations went down from \$25 to \$15 million. We expect that this vote would have tested the strength of the coalition to ratify the Treaty. Certainly this bill should have been preferable to all American parties: the same effects in the crude oil market and supply chain would be obtained at a lower fiscal cost. Only Colombia would lose if this other text was ratified, and only those supporting Colombia's interest closely would oppose to this text. The same model of explanatory variables used to explain ratification of the final text is now used to explain the rejection of the alternative text. The results presented in table 6 model 2 indicate the coalition of oil, railroad and iron and steel industry opposed to this alternative text. The estimated coefficients for these industries, changed sign, are now negative and continue to be statistically significant. Some of the special interest groups opposing ratification of the final text supported this alternative text, like car owners and other manufacturing industry intensive in fuel oil consumption.

But the influence of domestic shipping on this vote has to be rejected. The coefficient on federal net expenditure did change sign as expected, but, surprisingly, is not statistically significant. Thus, the coalition supporting ratification of the Treaty including reparation of \$25 million dollars remained strong and acted to oppose to this alternative text.

Table 6. Placebo tests for probit model of U.S. senate vote of Urrutia-Thomson Treaty

Model	1	2	3	4
Depvar	Ratify	Reduce	Peace with Germany	Four powers respect borders
Mean	0.78	0.24	0.72	0.39
Stdev	0.41	0.43	0.45	0.49
Crude oil & refining (A+B)	0.82 **	-1.44 ***	0.24	-0.14
	0.41	0.53	0.18	0.10
Railroad fuel oil consumption	0.97 **	-0.70 **	-0.39 ***	0.39 **
	0.44	0.36	0.14	0.16
Dom. shipping fuel oil consumption.	-0.97 ***	2.25	0.09	-0.01
	0.18	1.95	0.16	0.14
Intl shipping fuel oil consumption	0.09	0.02	0.11	0.11
	0.24	0.21	0.23	0.16
Cars gasoline consumption	-0.48 ***	0.39 **	0.64 ***	-0.57 ***
	0.18	0.17	0.19	0.19
Heating utilities fuel oil consumption	-0.11	0.39 *	-0.11	0.36 ***
	0.16	0.21	0.28	0.12
Iron & steel fuel oil consumption	3.71 ***	-4.31 **	0.07	-0.22
	1.39	1.71	0.16	0.22
Oil int. manuf. fuel oil consumption	-0.32 **	0.40 **	0.13	0.03
	0.15	0.20	0.18	0.20
Federal expenditure less taxes	0.27 **	-0.17	-0.22	0.30 *
	0.13	0.18	0.16	0.17
Constant	2.20 ***	-2.07 ***	0.68 ***	-0.35 **
	0.56	0.62	0.17	0.14
Nobs	88	88	88	88
Walt Chi2	68.06 ***	30.50 ***	17.88 **	22.67 ***
Pseudo R2	0.41	0.40	0.14	0.15

**Note:** Clustered by state robust standard errors in parenthesis. \* indicates level of statistical significance of parameter estimate: \*\*\* 99%, \*\* 95% and \* 90%.

Second, it is also possible to perform a placebo test. Such a test of the results reported above indicates that when we use the same set of independent variables that explain the Urrutia-Thomson Treaty vote to explain an entirely different vote, the explanatory power of these independent variables should not be high. Other variables may gain explanatory power, and total explanatory power of the model should drop

substantially. This test is important to rule out the possibility that what we find as a coalition of oil, railroad and iron and steel special interest groups to ratify the Urrutia-Thomson Treaty, is not in fact a coalition consequence of vote trading, is not a broader coalition over a larger set of issues and votes.

The 67<sup>th</sup> senate performed 751 different roll call votes and over 88% of these were performed by a set of less than 90% of the senators that voted the Urrutia-Thomson Treaty. Only six other votes on issues different than a Treaty with Colombia during the 67<sup>th</sup> shared the same 88 senators that voted the Urrutia-Thomson Treaty. The six other votes have low correlation coefficients with the vote of the Urrutia-Thomson, ranging from 0.3 to 0.13.

A placebo test is performed with three of these other six votes that were foreign treaties and therefore were also subject to supermajority decision and similar dynamics. The senate faced a vote on an international treaty that also required supermajority to pass when 1) signing peace with Germany, 2) signing will to respect the borders of the territories of the four powers after the end of the First World War and 3) signing to have no obligation to develop joint defense with the four powers after the end of the First World War. Results of the placebo test indicate that the oil and the iron and steel industry were unlikely to play a role in ratification of these two treaties (see models 3 and 4).<sup>49</sup> However, it was not possible to reject that the railroad industry did play a role in passing these two treaties. Thus, the influence of the railroad industry may not be exclusive to the Urrutia-Thomson Treaty. A similar argument may be put forward in the case of car owners opposition to the Urrutia-Thomson Treaty. The pseudo R2 does drop to less than half of the level it had in model 1, the baseline for this placebo exercise. The model used to explain the Urrutia-Thomson Treaty does not explain (at least as well) the ratification of these two other international treaties.

The econometric exercise indicates a coalition of oil, railroad, and iron and steel special interests joined to support ratification of the Urrutia-Thomson Treaty, although railroads support was probably not exclusive to this Treaty. The opposition to ratification of the Treaty came from the domestic shipping industry, car owners and, given that most states contribute more to the federal purse than the federal expenditure they receive, taxpayers also opposed. How far does the influence of the railroad and the iron and steel

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<sup>49</sup> The results on roll call vote 3) are qualitatively identical to those of model 4.

special interest takes us in understanding ratification of the Treaty? And can we learn more about why domestic shipping, car owners and taxpayers failed to reject the Treaty?

Archival, statistical and econometric evidence suggests oil production and refining activities strongly influenced the senators to vote to ratify the Treaty. The econometric model indicates that, even evaluated at the lowest level of oil production and refining's crude oil consumption, the average senator would have voted to ratify the Treaty with 76% probability, given that this senator faced values on the 50<sup>th</sup> percentile in all other variables. Thus, the model predicts that out of the 53 senators whose states produced or refined oil and voted the Treaty, about 40 should have been expected to vote to ratify the Treaty. Recall that 45 out of 53 did vote to ratify the Treaty.

The influence of the railroad and iron and steel special interests on the senators is something uncovered in this study. We set a conservative cut-off probability value of 66% of predicting the average senator will vote to ratify the Treaty, given all other variables are evaluated at the 50<sup>th</sup> percentile, to identify the identity of other senators who might have joined the oil special interest to support ratification of the Treaty.<sup>50</sup> Using this criterion for railroad fuel oil consumption helps to identify another 21 senators within the group of senators that ratified the Treaty, and using it for iron and steel fuel oil consumption identifies another 4 more – and 2 senators rank high in both special interest group indicators. In total, out of 69 senators who voted to ratify the Treaty, we have now identified 65. Most likely, 40 were influenced by the oil special interest, while another 25 were more probably influenced by the railroad and iron and steel special interests.

Since the influence of the railroad and the iron and steel special interest groups was critical for the success of the coalition supporting ratification of the Treaty, it is interesting to explore the motives these two industries had to join the coalition. One element of this explanation might lie in vote trading and the role that the railroad industry might have played in a broader political agenda – as suggested by the placebo test. However, an interesting coincidence may also shed some light. The reparation, once paid to Colombia, was invested in the creation of a central bank and funding final stages of construction of several railroad projects. In turn, creation of a central bank brought credibility to

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<sup>50</sup> The cut-off value is conservative compared to the default criteria frequently used that sets a 50.1% predicted probability to vote to ratify the Treaty to classify it as a predicted vote to ratify the Treaty when constructing measures of goodness of fit.



Colombia's capacity to manage debt. Public investment in Colombia's railroad and transport development increased substantially, well over the resources included in the reparation, and these projects used American iron and steel and engineering companies. Although no evidence of the reparation funds having strings attached to specific expenditure exists, it is certainly possible that the American railroad and iron and steel industry decided to support ratification in the expectation that Colombia would invest to overcome the most highly noted problem at the time: railroads and transport projects. For instance, Princeton University's Edwin Kemmerer commented in 1923, when in Colombia for a mission to create the central bank, "Colombia is comparatively isolated from the rest of the world mainly for lack of railroads. The great problem of Colombia is currently that of transportation".<sup>51</sup>

We set the cut-off probability value at 33% to examine the influence of domestic shipping special interest and the median voter effect on federal net expenditure identify the key states opposing to ratification of the Treaty. The domestic shipping industry fuel oil consumption is important in Minnesota and Wisconsin, two of the three states whose senators both voted against the Treaty. The value for Michigan was also close to the cut-off probability value. The analysis for federal net expenditure suggests an interesting finding. Most of the largest oil producers and refiners were also large contributors of net taxes to federal government. Thus, senators at states like New York, Pennsylvania, Illinois, Ohio, California, New Jersey, West Virginia and to a lesser extent Texas face an internal conflict between the influence of the oil special interest group and the median voter.

In sum, the econometric evidence cannot reject the idea that JS led the organization of an effective lobby by the oil industry to influence their state senators to vote for ratification. States with railroads or iron and steel industries whose fuel oil consumption was high relative to economic activity of the state, also supported ratification of the Treaty. Together, the three forces may account for the majority of the coalition organized to pass the Treaty. At the other end of the distributional conflict, states whose domestic shipping, manufacturing industries and car owners consumed high levels of fuel oil or gasoline relative to the state's economic activity opposed ratification of the Treaty. Tax payers also influenced their own senators to oppose the Treaty, particularly when their own state was a

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<sup>51</sup> Meisel, Ramirez and Jaramillo (2014).

net contributor to the federal purse and oil was not present in the state. But these special interest groups probably were small or highly decentralized to deliver strong influence beyond a small group of senators. The special interest groups supporting and opposing the Treaty engaged in a distributional conflict in the U.S. senate, and the outcome was positive for those supporting the Treaty.

#### *WELFARE AND DISTRIBUTION*

The archival, statistical and econometric evidence presented documents the strong influence of the oil special interest over the Treaty's vote outcome, aided by railroads and iron and steel special interest. The domestic shipping, car owners, manufacturers with high consumption of fuel oil and tax payers opposed the Treaty. The Treaty was ratified. What were the effects of the Treaty on JS, the oil industry, oil consumers and the taxpayers?

#### *How much did Jersey Standard win?*

The benefits JS derived from such a policy intervention as the Urrutia-Thomson Treaty may be measured by the additional profits accrued due to the exploitation of oil in Colombia. Benefits come from, other things equal, lower crude oil prices on all non-Colombian barrels of oil refined and the profits derived from extracting, transporting and refining Colombian oil. In order to establish the magnitude of additional profits it is necessary to know the cost structure and prices within the vertical supply chain, all indirectly owned by JS. The cost structure and prices are not available. An alternative is to identify a lower bound of additional profits and assume that TROCO's and Andian's profits reflect JS's additional profits. The NPV of the TROCO and the Andian projects are calculated.

Ideally one would like to have the flows of capital investments and net income for each, TROCO and Andian, to calculate the NPV. The conventional sources for this information are the annual financial reports produced by each company. Only three years of these reports are available, 1936-38. The reports are for a period of high production of oil in Colombia's TROCO concession to export crude oil.

The information contained in these reports indicates that average capital investment for TROCO 1936-38 was \$42.1 million and for Andian is \$19.3 million.<sup>52</sup> Given the short period covered by the financial reports available, newspapers were examined to confirm the information. Capital subscribed, presumably to invest in building a refining plant, by TROCO in 1920 was \$39 million. Andian issued bond debt to finance oil pipeline construction in 1924-6 for \$15 million while its subscribed capital was \$1 million. Thus, capital investment reports in the annual reports and the press seem to be roughly in line.<sup>53</sup>

The annual financial reports indicate average annual net earnings for TROCO were \$2 million and for Andian \$7.3 million.<sup>54</sup> Unfortunately, it is not possible to compare these numbers with results obtained by these companies at other moments.

Operational net income flows are constructed using production statistics and a fixed dollar profit per barrel produced or transported. TROCO's operational net earnings are estimated as barrels per year produced times dollar amount profit per barrel produced. The quantity of barrels produced and transported are calculated using production and export statistics published by Colombian government. The profit per barrel produced is 10 cents – the average profit per year 1936-1938 divided by the number of barrels produced. Andian's operational net earnings are estimated as barrels per year transported times dollar amount profits per barrel transported. The profit per barrel transported is 43 cents – the average net profit per year 1936-1938 divided by the number of barrels transported. TROCO's operational net earnings are probably slightly underestimated. It exports more than 90% of crude oil production and, assuming that oil extraction costs are relatively stable, the margin on exports in 1936-38 must have been slightly lower than average margin over the whole 1921-1951 period because international prices were \$1.13 per barrel in 1836-38 and slightly below the period's average, \$1.25. Andian's net earnings are roughly accurate as transportation services experienced stable costs and charged a flat fee during the period.<sup>55</sup>

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<sup>52</sup> International Petroleum Company annual reports 1936-38, with information specific to Tropical Oil Company and National Andian Corporation. Glenbow Museum Archive, Imperial Oil Collection.

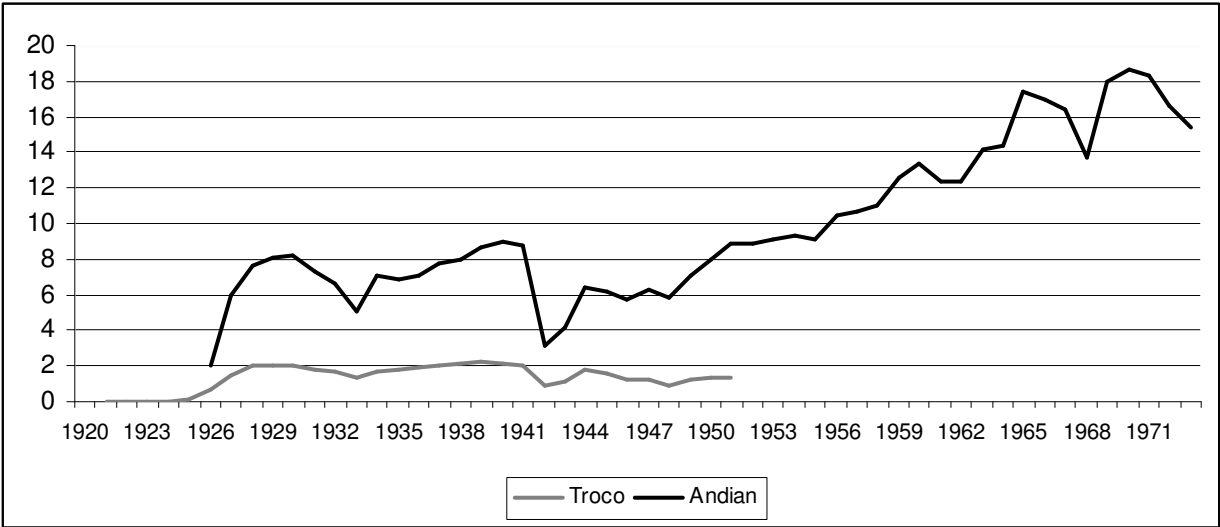
<sup>53</sup> New York Times, New York, August 14 1920, Oil and Gas Journal, Tulsa, January 22 1925, February 5 1925, May 7 1925.

<sup>54</sup> International Petroleum Company annual reports 1936-38, with information specific to Tropical Oil Company and National Andian Corporation. Glenbow Museum Archive, Imperial Oil Collection.

<sup>55</sup> Profit information comes from International Petroleum Company annual reports 1936-38, with information specific to Tropical Oil Company and National Andian Corporation. Glenbow Museum Archive, Imperial Oil Collection. Barrels produced and transported comes from Ministerio de Minas y Petroleo (1944) p. 88 and Santiago (1986) p. 63

TROCO and Andian estimated operational profit (net earnings) is presented in figure 1. TROCO operational net earnings are in a range of \$1 to \$2 million per year and end in 1951, as the concession contract finished and assets were taken by Colombia’s government. Andian operational net earnings are in a range of \$6 to \$9 million per year until the mid-1940s, when other independent concession contracts start operation and pump oil into the Andian pipeline to export.

Figure 1. TROCO and Andian operational net earnings per annum in million dollars



Source: Own calculations based on profit information from International Petroleum Company annual reports 1936-38 (with information specific to Tropical Oil Company and National Andian Corporation) at Glenbow Museum Archive, Imperial Oil Collection, and barrels produced and transported from Ministerio de Minas y Petroleo (1944) p. 88 and Santiago (1986) p. 63. See text for details.

The NPV is calculated using the capital investment in annual reports as an initial fixed capital cost, the estimated net earnings flows presented in figure 1, and the Dow Jones average annual return over the period, 0.56%, as a proxy of the discount rate or inter-temporal opportunity cost. The NPV for TROCO is -\$25.1m, for Andian is \$78.2m and for JS is \$53.1 million. If the discount rate increases to 8% the NPV is just over 0; thus even if the project had been perceived to be about 50% more risky than invest on stocks, the project should have been expected to be profitable privately.

The JS NPV indicates the ratification of the Urrutia-Thomson Treaty resulted in an implicit subsidy that was smaller than the profits accrued by the JS. The U.S. senate could have requested JS to pay voluntary taxes to compensate for the reparations that the U.S. did not want to pay Colombia 1913-1920 but finally did pay in 1921. Interestingly, JS could have offered to pay Colombia more than \$25 million to be offered the oil pipeline concession contract, but we have not seen any evidence suggesting this was attempted.

*How much did the U.S. win?*

#### PRELIMINARY RESULTS BELOW

America's government intervention, all other things equal, facilitated JS to produce crude oil in Colombia, increased supply and presumably reduced the crude oil price. In turn, the crude oil price reduction allowed American refiners to save on crude oil input costs. How much of the crude oil price reduction the refiners passed down to oil derivative consumers determined the distribution of the gains within U.S.<sup>56</sup>

The approach to calculate how much America saved follows a conventional social savings calculation and uses the elasticity of demand to estimate the expenditure crude oil consumers would save in a scenario where Colombia produced oil, compared to a scenario where Colombia did not produce oil. The approach works if the U.S. and the international oil markets are well integrated, as price changes in one market should reflect in the other. This was the case during this period, when the U.S. produced most crude oil and derivatives in the world and also American firm produced crude oil abroad.

Assuming a wide range of price elasticity of demand it is possible to use Colombia's oil supply to calculate the price prevalent had Colombia not provided oil to the market. Given a price elasticity of demand, it is possible to derive the price change due to a percentage quantity change. The social savings are calculated for a range of price elasticity

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<sup>56</sup> Note that focusing on the distribution between oil refiners and oil derivative consumers implies overlooking the distribution between oil producers and refiners. Assuming oil production and refining are vertically integrated to a large extent and therefore that profits loss by oil producers due to a decline of crude oil prices and profits made by refiners on savings on crude oil inputs are internalized reduces the bias of focusing on the former distributional conflict. Note that internalization of profits and losses within oil firms does not mean profits and losses cancel out.

of demand ranging from very low, 0.5, to very high, 5, a wide range of elasticity of demand.

Ideally, data on Colombia's oil supply to the world market, the quantity traded in the international oil market, the quantity of oil consumed by America, and the observed market price are required to produce a range of estimates of social savings in oil costs. Data has been collected for year 1927, the first full operation year for TROCO and Andian. Colombia's crude oil production was 14,900 barrels per year, world output was 1.3 million barrels per year, American consumption was 0.9 million barrels, and the observed price is \$1.30 per barrel. Results of calculations are presented in table 3. Entry of Colombia's oil into the world market saved the U.S. crude oil consumers between \$2.7 and \$136 million just on 1927.<sup>57</sup>

Table 7. US oil consumer's savings 1927

	Elasticity			
	0.5	1.0	2.0	5.0
Colombia share of oil market (%)	0.012	0.012	0.012	0.012
Price reaction to Colombia out of oil market (%)	0.024	0.012	0.006	0.002
Price with Colombia in oil market (\$)	1.300	1.300	1.300	1.300
Price with Colombia out of market (\$)	1.331	1.315	1.308	1.303
Consumer's oil savings 1927 (\$ million)	27.4	13.7	6.8	2.7
NPV (\$ million) 1921-1951	282	141	70	28

Source: Own calculations. See text.

The first column in table 3 indicates Colombia's share in the oil market in 1927 was 1.2%, and the price increase implied by the subtraction of Colombia's oil if the price elasticity of demand is 0.5 is 2.4%. The observed price in 1927 was \$1.30 per barrel, while the price without Colombia's supply would have been \$1.33, if the price elasticity of demand is 0.5. American consumers in 1927 saved more than \$27 million because Colombia's crude oil supply kept prices low. Assuming, at this stage, savings are identical every year, the NPV of the flow of savings along the 30 year period of the concession contract is over \$282 million. The upper bound estimate of the NPV if the price elasticity is

<sup>57</sup> Colombia's production comes from Miniterio de Minas y Petroleo (1944) p. 88 and Santiago (1956) p. 63, world production and US consumption comes from Gibb and Knowlton (1956) p. 676, and international price comes from BP stats.

0.5 is over \$282 million and the lower bound is over \$28m, if the elasticity is 5. As long as the elasticity of crude oil demand was not much higher than 5, the NPV of American consumer savings is higher than the \$25 million invested by the U.S. to pay reparations to Colombia, and implicitly subsidizing JS.

The TROCO and the Andian were affiliated to the Canada based International Petroleum Company, and therefore paid taxes in Canada. In turn, International Petroleum Company was owned by the JS. If the International Petroleum Company paid dividends to JS, the U.S. also received taxes. Thus, it is possible that social savings to American consumer savings were even higher.

*How much did oil derivative consumers win?*

STILL WORKING ON THIS

CONCLUSION

The use of power in the allocation of international trade is an important issue. In this paper we examine an event that provides a unique window to explore and shed light on the origins and consequences of imperial actions in the context of informal commercial imperialism under democratic rule.

The U.S. performed an initial imperial action supporting Panama's secession from Colombia in 1903. The relations between the two countries were strained for a decade as the U.S. showed very little interest to pay reparations to Colombia. However, the imperial action did create an unlikely advantage for American firms negotiating with the Colombian government: now they could offer to lobby U.S. government to pay reparations to Colombia.

The advantage was used by JS that, competing for an oil concession in Colombia with a British firm, organized an effective lobby for the U.S. cabinet to agree to pay reparations to Colombia. On March 1914 the Urrutia-Thomson Treaty offering \$25 million reparation to Colombia was signed by the cabinets of the two countries. The U.S. did not want to pay, and its senate eluded ratification of the Treaty. But in 1921 JS investment in

Colombia was sunk, and it required an additional concession contract for an oil pipeline to exploit effectively its oil extraction investment. Colombia seized the opportunity, behaved strategically and induced JS to organize a coalition with other oil refiners. The event, in turn, also made apparent the conflict within the empire for the distribution of the costs and benefits of this second imperial action. The conflict was set in the U.S. senate and oil refiners lobbied their state senators to ratify the Treaty, while oil derivatives consumers and those expecting to pay for the opportunity cost of foregone taxes influenced their senators to oppose ratification.

The oil refiner's coalition won the contest, the Treaty was ratified and the second imperial action was performed: the U.S. paid \$25 million reparations to Colombia and amounted to an implicit subsidy for JS. The outcome benefited on aggregate Colombia because it reduced the net transfer to the empire. The U.S., on aggregate, was better off as the crude oil price was lower that it would otherwise have been and American crude oil consumers saved at least as much as the U.S. paid Colombia in reparations.

The case shows 1) how an existing imperial action created the conditions for a future imperial action and an asset for home firms to have a competitive advantage and the colony to reduce net transfer, 2) how an informal commercial colony build a coalition with special interest groups within the empire to reduce its transfer to the empire, and 3) makes apparent the conflicts of interest within the empire created by imperial actions that are otherwise opaque when the action is a secret military intervention.

## REFERENCES

American Petroleum Institute (1930) *Petroleum Facts and Figures*, Baltimore

Atack, J. and P. Passell (1994) *A new economic view of American history*. W. W. Norton and Co.

Austin, G. (2003) 'Economic Imperialism' in Joel Mokyr (ed.), *Oxford Encyclopedia of Economic History*, Vol. 2, Oxford University Press: New York

Bell, P. (1921) *Colombia: a commercial and industrial handbook*. Government Printing Office.

Baran, P. (1957) *The political economy of growth*.



Berger, D., W. Easterly, N. Nunn, and S. Satyanath (2013) "Commercial Imperialism? Political Influence and Trade during the Cold War." *American Economic Review*, 103(2): 863-96

Berman, B. and J. Lonsdale (1979) "Coping with the contradictions: the development of the colonial state in Kenya" *Journal of African History* 20: 4.

Bordo, M. and J. Landon-Lane (2010) "Exits from Recessions: The U.S. Experience 1920-2007" Paper prepared for "Monetary Policy after the Financial Crisis" SNB Research Conference, 24-25 September, 2010, Zurich. Downloaded August 4 2014 from <https://www.clevelandfed.org/research/seminars/2011/bordo.pdf>

Bowen, H. (1943) "The Interpretation of Voting in the Allocation of Economic Resources" *The Quarterly Journal of Economics*. Vol. 58, No. 1, pp. 27-48

Bucheli, M. (2005) *Bananas and Business: The United Fruit Company in Colombia, 1899-2000*

Bucheli, M. (2008) "Negotiating under the Monroe doctrine: Weetman Pearson and the Origins of U.S. Control of Colombian Oil" *Business History Review*, Vol. 82, pp. 529-553

Bushnell, D. (2007) *Colombia: Una Nacion a Pesar de Si Misma*. Bogota: Editorial Planeta

Cain, P. and A. Hopkins (1993) *British Imperialism: Innovation and expansion*. London: Longman

Coatsworth, J. (2006) "Liberalism and Big Sticks: The Politics of U.S. Interventions in Latin America, 1898-2004" Paper Presented Conference "Liberalism and Its Legacies: A Symposium of Latin American History in Honor of Charles A. Hale"

Congressional investigation against Andian Corporation Limited (1925)

Day, D. (1922) *A Handbook of the Petroleum Industry*. New York: John Wiley & Sons

Degrad, P., R. Fisk and Derby (1949). *Proceedings of the Friends of a Railroad to San Francisco at their Public Meeting Held at the US Hotel in Boston*. Boston, Dutton and Wentworth.

De la Pedraja, R. (1985) *Historia de la energía en Colombia, 1537-1930*. El Ancora Editores

Denny, L. (1928) *We Fight for Oil*. New York: Alfred Knopf

Dent, David (2005) *Historical Dictionary of U.S.-Latin American Relations*. Westport : Greenwood Press.

Martinez, D. (1923) *La Cartagena Oil Refining Co. en su litigio con la Nación. Alegatos de los apoderados y sentencias de la cortes suprema de justicia.* 1923. Editorial de Cromos. Luis Tamayo y Co. Bogotá. 21 de marzo

Dube, A., E. Kaplan, and S. Naidu (2011) "Coups, corporations, and classified information" *The Quarterly Journal of Economics*, 126(3), 1375-1409

Duran, X (2010) *Was the first transcontinental railroad expected to be profitable? Evidence from entrepreneur's declared expectations, an empirical entry decision model, and ex-post information.* PhD thesis. Department of Economic History. London School of Economics

Duran, X. (2011) "El Petroleo en Colombia, 1900-1950: Especuladores y Empresas Multinacionales" in (ed.) Juan Benavides *Ecopetrol Energia Limpia para el Futuro.* Bogota: Villegas Editores, p.p. 21-62

Evans, R. (1964). "Without regard for cost": the returns on Clipper Ships." *The Journal of Political Economy* Vol. 72, No. 1, pp. 32-43.

Fanning, L. (ed.) (1945) *Our Oil Resources.* New York: McGraw Hill Company Inc.

Fergusson, N. and M. Schularick (2006) "The Empire effect: The determinants of country risk in the first age of globalization, 1880-1913" *Journal of Economic History*, 66, 2, pp. 283-312

Granitz, Elizabeth. y Benjamin. Klein (1996) "Monopolization by "raising rivals' costs: the Standard Oil case" *Journal of Law and Economics*, Vol. 39, No. 1, pp. 1-47

Frankema, Ewout. 2010. "Raising Revenue in the British Empire, 1870-1940: How 'Extractive' were Colonial Taxes?", *Journal of Global History* 5:3, 447-77.

Gibb, G. and E. Knowlton (1956) *History of the Standard Oil Company: the resurgent years, 1911-1927.* Harper & Brothers

Grossman, G. and E. Helpman (1994) "Protection for sale" *The American Economic Review*. Vol. 84, No. 4, pp. 833-850

Gunder Frank, A. (1966) *The development of underdevelopment*

Hager, D. (1939) *Fundamentals of the Petroleum Industry.* McGraw Hill: New York.

Hidy, Ralph (1952) "Development of large scale organization: The Standard Oil Company (New Jersey)" *Journal of Economic History*, Vol. 12, No. 4, pp. 411-424

- Hopkins, G. (1927) *Petroleum Refinery Statistics, 1916-1925*. United States Government Printing Office.
- Hopkins, A. (1973) *An Economic History of West Africa*. London.
- Hotelling, H. (1929) "Stability in Competition" *Economic Journal*. 39, pp. 41-57
- Hutchins, J. (1941). *The American maritime industries and public policy*. Boston, Harvard University Press.
- Isaza, José Fernando. y Luis Eduardo. Salcedo (1991) *Sucedió en la costa atlántica. Los albores de la industria petrolera en Colombia*. Ancora Editores.
- Jones, M. (1995). *The Limits of liberty: American history 1607-1992*. Oxford, Oxford University Press.
- Lael , Richard (1987) *Arrogant diplomacy: US policy towards Colombia, 1903-1922*. Wilmington, Scholarly Books
- Lenin, V. (1916) *Imperialism: The Highest Stage of Capitalism*
- Lotchin, R. (1974). *San Francisco 1846-1856: From Hamlet to City*. New York.
- Lubbock, B. (1916). *The China clippers*. Glasgow
- Marx, K. (1867) *Das Kapital*.
- Maurer, N. (2013) *The Empire Trap*. Princeton: Princeton University Press
- Maurer, N. (2011) "The Empire Struck Back: Sanctions and Compensation in the Mexican Oil Expropriation of 1938." *Journal of Economic History*. 71(3), pp. 590 – 615.
- Maurer, Noel and Carlos Yu (2010) *The big ditch: How America took, built, ran and ultimately gave away the Panama canal*. Princeton, Princeton University Press
- Maurer, Noel and Carlos Yu (2008) "What T. R. Roosevelt took: The economic impact of the Panama canal" *Journal of Economic History*. 68(3)
- Meisel, A., M. T. Ramirez, Juliana Jaramillo (2014) Too late but profitable: Railroads in Colombia, 1920-1950. Working Paper, Banco de la Republica
- McCullough, David (1977) *The path between the seas: The creation of the Panama canal, 1870-1914*. New York, Simon and Schuster
- Mendoza, Félix. y Benjamín. Alvarado (1939) *La industria del petróleo en Colombia*. Ministerio de la Economía Nacional. Departamento de Petróleos. Editorial ABC

- Mercer, L. (1982). *Railroads and land grant policy : A study in government intervention*. New York, Academic Press.
- Ministerio de Minas y Petróleo (1944) *Memoria de minas y petróleos al Congreso 1944*, Imprenta Nacional,
- Mitchener, Kris and Marc D. Weidenmier (2008) "Trade and Empire" *Economic Journal*. 533, pp. 1805-34
- Mitchener, Kris and Marc D. Weidenmier (2005) "Empire, Public Goods, and the Roosevelt Corollary" *Journal of Economic History* 65, pp. 658-692
- Olson, M. (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*.
- Olmstead, A. and P. Rhode (1985) "Rationing without Government: The West Coast Gas Famine of 1920" *The American Economic Review*, 75(5) pp. 1044-1055
- Órgano del Departamento de Minas y Petróleos del Ministerio de Industrias (several issues) *Boletín de Minas y Petróleo*.
- Órgano del Departamento de Minas y Petróleos del Ministerio de Industrias (several issues) *Boletín de Petróleos*.
- O'Brien, Patrick (1982) "European Economic Development: The Contribution of the Periphery." *Economic History Review* 35, pp. 1–18.
- O'Brien, Patrick, and Leandro Prados de la Escosura (1999) "Balance Sheets for the Acquisition, Retention and Loss of European Empires Overseas." *Itinerario* 23(3–4), pp. 25–52.
- Parks, Taylor (1935) *Colombia and the United States, 1765-1934*. Durham: Duke University Press
- Pogue, J. (1939) *Economics of the Petroleum Industry*. Chase National Bank of New York City
- Randall, Stephen. (1992) *Aliados y distantes. Historia de las relaciones entre Colombia y EE.UU. Desde la independencia hasta la guerra de las drogas*. Tercer Mundo Editores. Ediciones Uniandes. CEI.
- Randier, J. (1968). *Men and ships around Cape Horn : 1616-1939*. London,.
- Ripoll, María Teresa. (2009) *Empresarios centenaristas en Cartagena*. Editado por la Universidad Tecnológica de Bolívar
- Rippy, Fred. (1976) *The capitalists and Colombia*. Arno Press

- Rivas, Raimundo (1961) *Historia Diplomática de Colombia*. Bogota: Imprenta Nacional.
- Russel, R. R. (1948). *Improvement of communication with the Pacific Coast as an issue of American politics, 1783-1864*. Cedar Rapids, Iowa, Torch Press.
- Santiago, M. (1986) *Crónica de la concesión de Mares*, Ecopetrol
- Uribe, Rafael. (1927) Republicación Alegato presentado por el general Rafael Uribe Uribe para refutar el informe presentado en 1908 por el subsecretario de gobierno señor Luciano herrera. Editorial Minerva
- Villegas, Jorge (1969) *Petróleo, oligarquía e imperio*. Ediciones ESE
- Villegas, Jorge. (1969) *Petróleo colombiano ganancia gringa*. Ediciones el Tigre de Papel
- Weiner, T. (2007) *Legacy of Ashes: A History of the CIA*. New York; Doubleday Press
- Werner, M. and J. Starr (1959) *Teapot Dome*. New York: Viking Press
- Whitney, A. (1849) *Project for a railroad to the Pacific*. New York.

## APPENDIX

Table 1. Data definitions and sources.

Variable	Definition	Source
Vote to ratify Urrutia-Thomson Treaty	Yes=1, No=0	ICSPR U.S. Congressional Historical Statistics
Crude oil production (A)	Crude oil production value / value of production state s	U.S. Census (1921)
Oil refining crude consumption (B)	Crude oil consumption value by refining / value of production state s	U.S. Census (1921)
Railroad fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by railroads * state s share of railroad main line mileage / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926)
Domestic shipping fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by shipping * state s share of domestic shipping tonnage / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926)
International shipping fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by shipping * state s share of domestic shipping tonnage / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926)
Cars gasoline consumption	Gasoline consumption value total * state s share of car registration / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin
Heating utilities fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by heating * state s share of heating / value of production	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926), API Bulletin (1921)
Iron & steel fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by iron and steel * state s share of iron and steel production / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926)
Other intensive manuf. fuel oil consumption	Fuel oil consumption value * share fuel oil consumption by other manufacturing industries intensive in fuel oil consumption * state s share of iron and steel production / value of production state s	U.S. Census (1921), U.S. Statistical Bulletin, API (1030), Hager (1926)
Federal expenditure less federal taxes	Federal expenditure – federal tax	Fishback, based on Financial statistics of the states (1922), U.S. Statistical Bulletin (1921)
State area	Land are state s	U.S. Statistical Bulletin (1921)
State average temperature	Average annual temperature state s	Berkowitz and Clay (2012)
State precipitation	Average annual precipitation state s	Berkowitz and Clay (2012)
State share of illiterate population	Share of illiterate population older than 10 years state s	U.S. Statistical Bulletin (1921)
State share of rural population	Share rural population state s	U.S. Statistical Bulletin (1921)
Senator congress time as share of life time	Share of life time od senator i in congress	ICSPR U.S. Congressional Historical Statistics
Senator political ideology	DW-NOMINATE SCORE	<a href="http://voteview.com/">http://voteview.com/</a>
Senator election win difference	Share of votes difference between elected senator (winner) and second runner	ICSPR U.S. Historical Election Returns Series

