Holding Up the Empire

Colombia, American Oil Interests, and the 1921 Urrutia–Thomson Treaty

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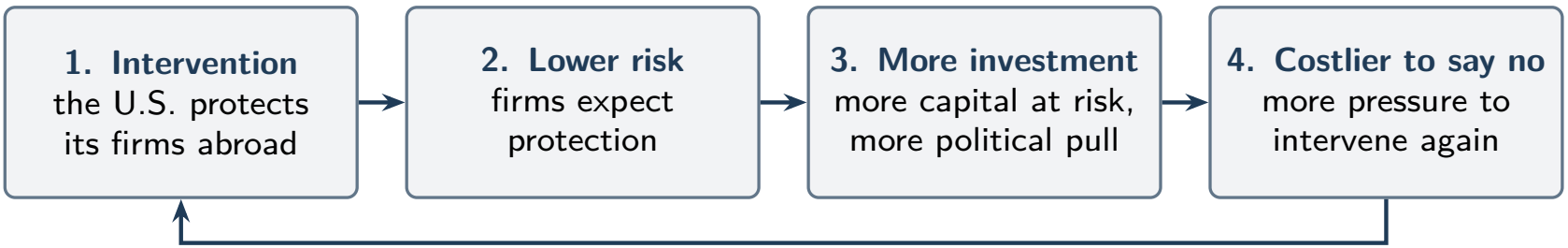
Xavier Durán (Universidad de los Andes)
Marcelo Bucheli (University of Illinois at Urbana-Champaign)

Presented by **Jorge Guerra-España**
Harvard Econ History Reading Group

Why I want to present this paper

- First, the paper tests the "empire trap" (Maurer, 2013). ▸ The empire trap

  Once a government protects its firms abroad, it gets pulled into protecting them again, even when the country does not gain.

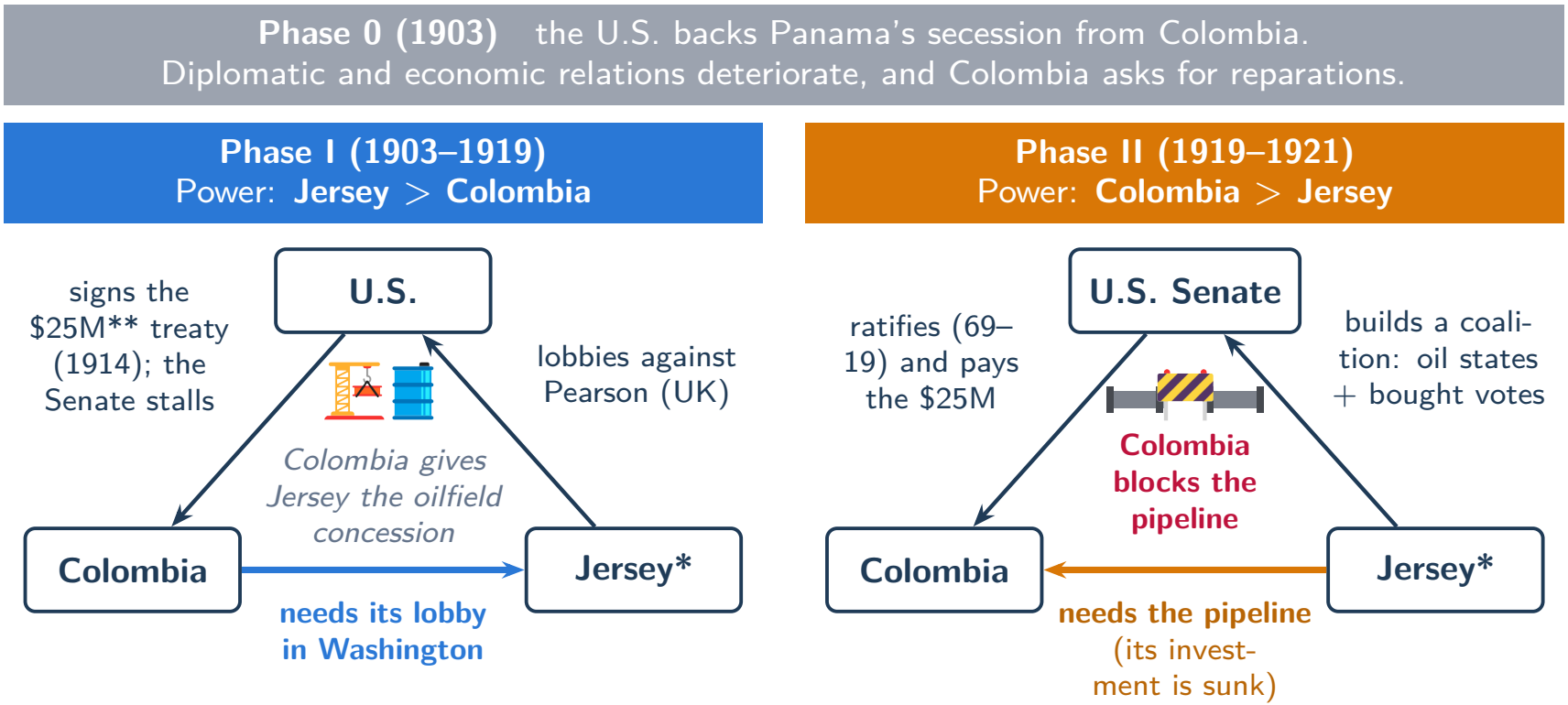


- Second, it shows that firms can use diplomatic tools between countries: for themselves, for their home country, and even for the host country.

- Third, it gives me a better understanding of an important episode in Colombia's history and, more broadly, of the agency capacity of colonies.

The puzzle: sunk investments flip the power

- Why do empires subsidize their multinationals' entry into informal colonies? Was it for national welfare or private interests?



* Jersey: Standard Oil of New Jersey.
** $25M = 3.5% of U.S. federal spending and 9% of Colombia's GNP.

Findings

- Why do empires subsidize their multinationals' entry into informal colonies? Was it for national welfare or private interests?
- **Short answer:** because special interests captured the decision, not because of national welfare: the empire trap.
- **How:** archival and econometric evidence.
  1. The U.S. did not want to pay. Colombia held up Jersey: no pipeline until the Senate ratified the treaty.
  2. Jersey built the coalition: oil-producing and refining states, plus plausibly bought votes of "indifferent" senators. With them, **69 votes** (59 needed); without them, only **58**.
  3. The U.S. gained in the aggregate (up to **$243M** in savings vs. **$25M** paid), but refiners kept the gains. Jersey gained about **$53M**.
- **But:** the coalition mixed ideology, oil interests and vote buying to reach a supermajority.

Theory and related literature

1. Why do empires subsidize home firms to enter into their colonies?

- US CIA support military coups to protect US MNCs: Iran (53), Guatemala (54), Chile (73) ▸ more
- The interventions raised the stock prices of the protected MNCs and boosted U.S. exports [1, 2] ▸ more

2. But why did US government intervene?

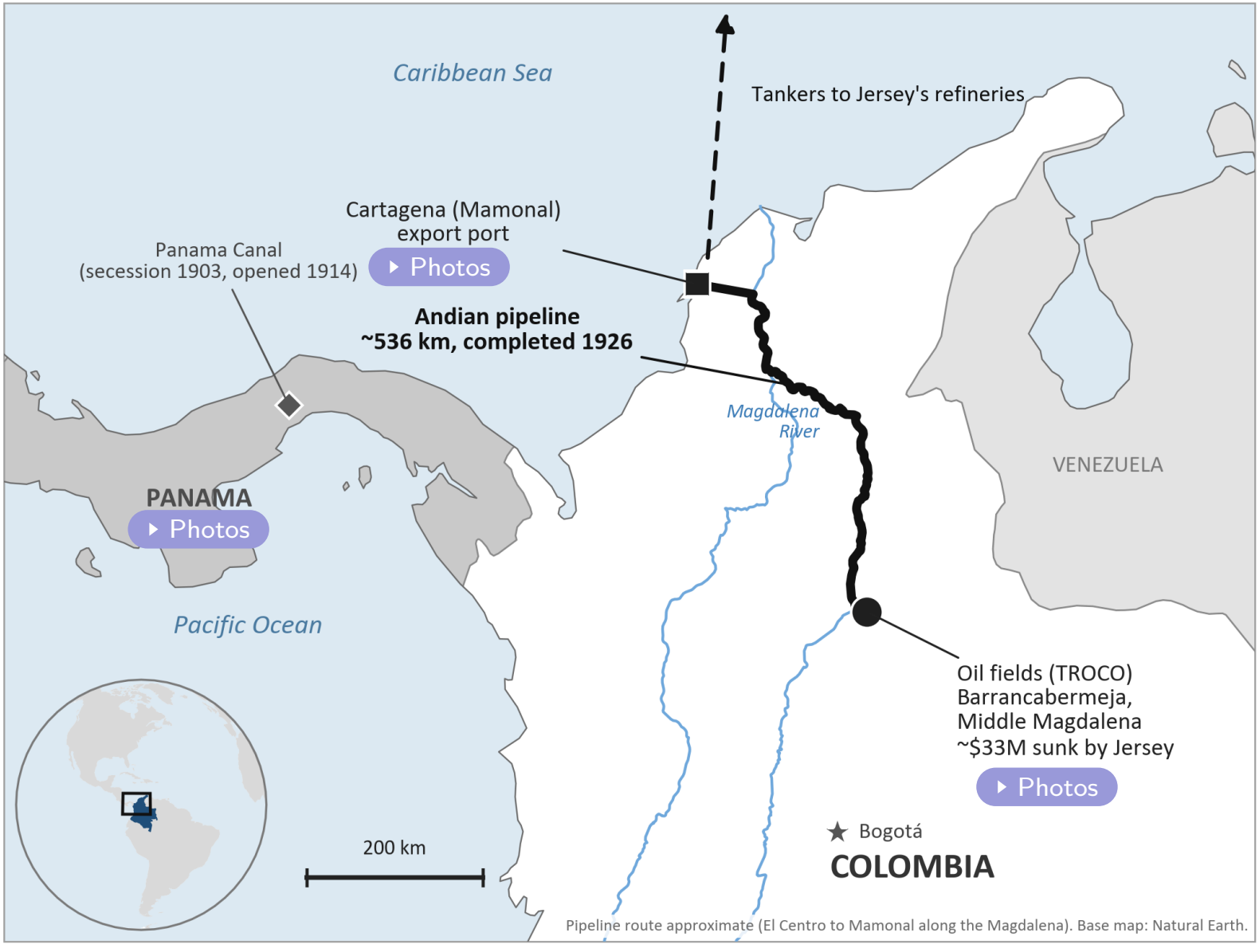
- Empire effect: the empire offers public goods (common law, currency, lower trade barriers) that raise welfare in the empire and its colonies [3, 4] ▸ more
- Empire trap: firms at risk abroad push their government to protect them and succeed, even though few gain and many pay [5, 6, 7] ▸ more

3. Colonies' bargaining power

- Colonies' governments can hold up MNCs and leverage negotiated outcomes [8, 9, 6] ▸ more
- But less is known about whether a colony can use foreign firms in its territory to trigger the empire trap and make the empire pay ▸ more

[1] Dube et al. (2011); [2] Berger et al. (2013); [3] Mitchener & Weidenmier (2005, 2008); [4] Ferguson & Schularick (2006); [5] Hopkins (1973); [6] Maurer (2013); [7] Olson (1965); [8] Kobrin (1980); [9] Maurer (2011).

Geography setting



Panama and the canal (1903–1914)

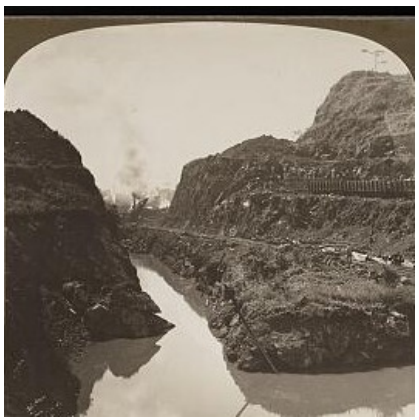
The origin of the claim: the U.S. backed Panama's secession and built the canal.



"The first spadeful"
cartoon, 1903



Roosevelt on a steam shovel
Culebra Cut, 1906



"Making the dirt fly"
Culebra Cut, 1907



Steam shovel at work
Culebra Cut, 1912

Sources: Library of Congress, Prints and Photographs Division.

From the well to the pipeline

What Jersey sank in Colombia: oil wells and a 500 km pipeline to the sea.



An oil well
Ebano, Mexico, c. 1910



Laying a pipeline
Iraq, 1933



Welding the pipe
Iraq, 1933

Illustrative photos from other places: TROCO's fields and the Andian pipeline (1923–26) looked alike. Sources: Wikimedia Commons (Mexican Petroleum Co.); Library of Congress, Matson Collection (Iraq Petroleum Co.).

The port of Cartagena

Where the pipeline ended: Colombian crude left for the U.S. from Cartagena.



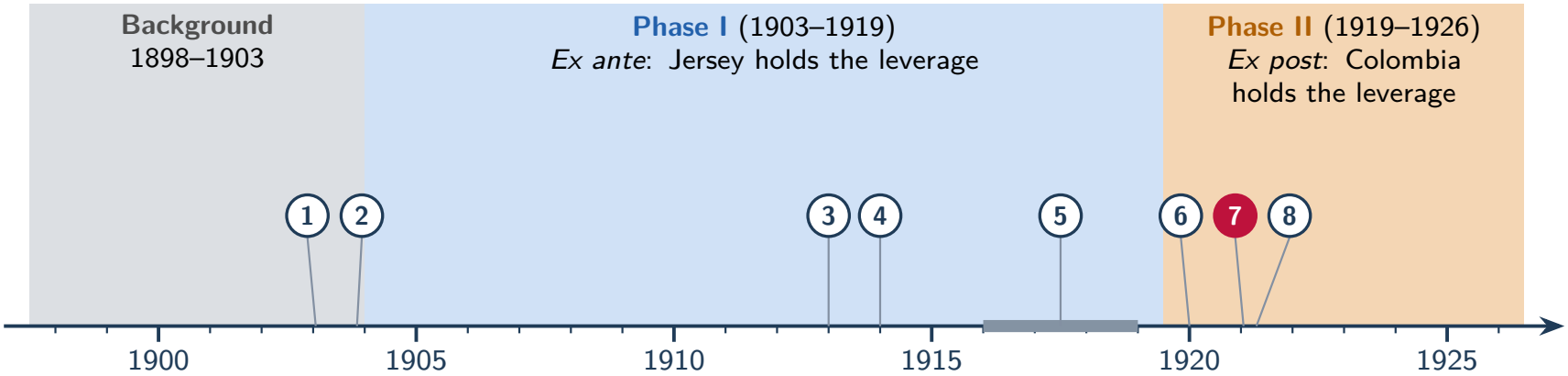
Spanish fort at the harbor entrance
c. 1915



The maritime terminal
postcard, 1940s

The Andian pipeline ended near Cartagena, where tankers loaded Colombian crude for the U.S. Sources: Library of Congress; Wikimedia Commons.

Key events (qualitative evidence)



Background*

1 **Jan 1903.** Herrán–Hay Treaty (NPV $12.4M). Colombia's Congress rejects it.

2 **Nov 1903.** The U.S. backs Panama's secession, and the canal is built in Panama.

Phase I**

3 **1913.** Pearson (UK) seeks a concession. Jersey lobbies in Colombia and the U.S., the U.S. offers $20M, and Pearson withdraws.

4 **1914.** The Urrutia–Thomson Treaty is signed: $25M (3.5% of U.S. federal spending, 9% of Colombia's GNP). The U.S. Senate stalls.

5 **1916–1919.** Jersey's intermediaries create TROCO and legalize the oilfield concession.

Phase II

6 **1920.** Jersey buys TROCO (~$33M sunk) but needs a pipeline to export.

7 ★ **Jan 1921.** Colombia blocks the pipeline until the U.S. Senate ratifies the treaty.

8 **Apr 1921.** Jersey lobbies the Senate, and the treaty is ratified 69–19.

* Why was the canal strategic? It links the two U.S. coasts, for the navy (in 1898, the USS *Oregon* took 66 days to reach Cuba around Cape Horn) and for trade (New York–San Francisco is about 8,000 miles shorter).
** After the U.S. Supreme Court broke up Standard Oil (1911), Jersey kept a quarter of world refining capacity but little crude. With antitrust limits at home, it had to look for oil abroad.

▸ Full timeline

Pearson, Jersey's British rival

Pearson was no small rival: this Mexican gusher belonged to its Mexican Eagle.

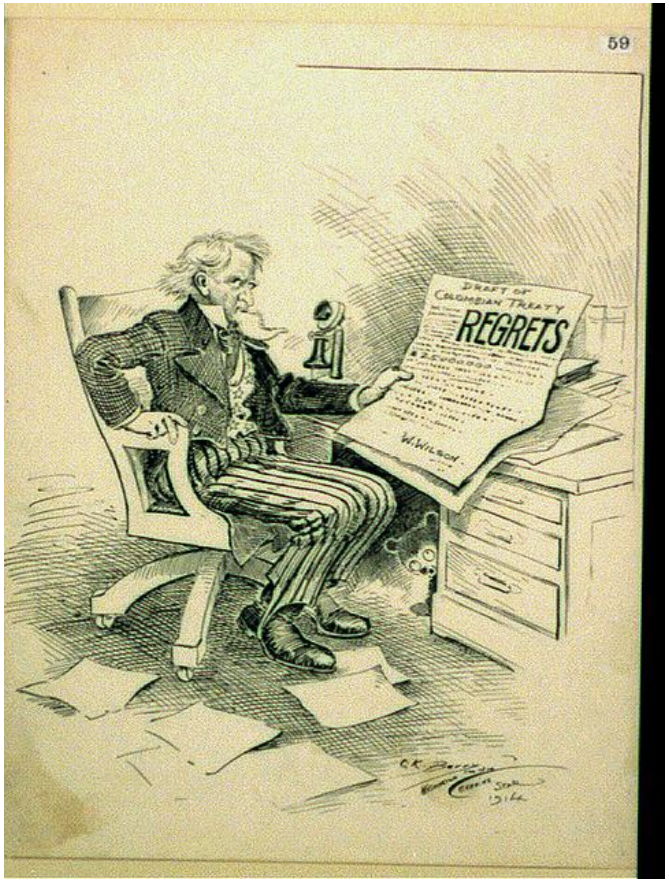


Potrero del Llano No. 4, Mexico, burning in 1914
a well of Pearson's Mexican Eagle, one of the largest gushers of its time

Pearson & Son (Lord Cowdray) was a major oil producer in Mexico when it sought the Colombian concession in 1913. Source: Wikimedia Commons.

The 1914 treaty and the apology

1914: the U.S. offers $25M and "sincere regret", and the Senate stalls.



"Draft of Colombian Treaty . . . regrets"
Clifford K. Berryman, 1914

Source: Library of Congress, Cartoon Drawings.

Qualitative evidence

Phase I (1903–1919)

- **Pearson out (1913):** Washington tells Colombia it is *"not indifferent"* to the Pearson deal, and Pearson withdraws.

Phase II (1919–1921)

- **Lobbying for the concession (1920):** Colombia's Supreme Court strikes down a law nationalizing the subsoil, with a text *"secretly approved by **Henry Cabot Lodge**"*.

> **The holdup. Colombia holds out (1921):** *"My government does not threaten, it just suspends resolutions on oil concessions."*
>
> — Laureano García Ortiz, Colombia's foreign minister, cable to Washington

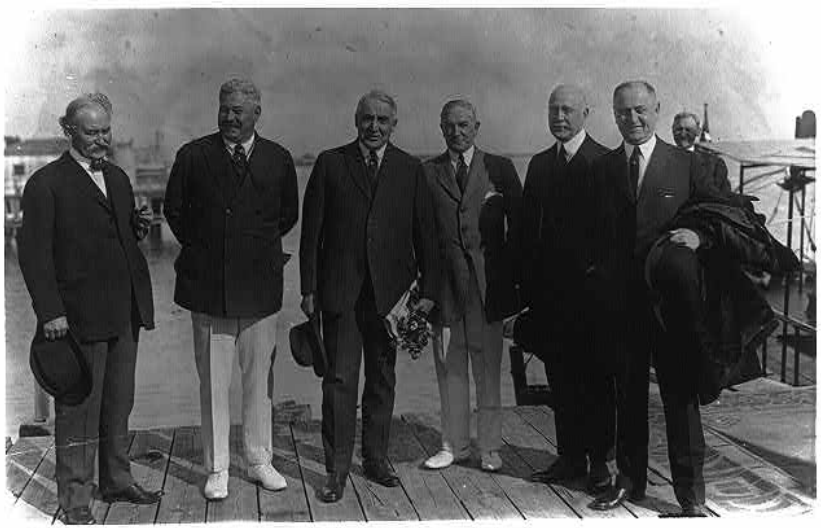
- **The U.S. complains, but pays (1921):** **Kenyon** calls it *"a blackmail proposition"*; **Lodge** says it makes *"secure the concessions we now have."*
- **Vote buying?** **Borah**: *"the lobbying behind this thing is simply stupendous."* No bribes on record.

Senators, all Republicans: **blue** supported the treaty in 1921, **red** opposed it. Lodge (Massachusetts) chaired the Foreign Relations Committee; Kenyon (Iowa) and Borah (Idaho) were progressives.

Sources: Durán & Bucheli (2017, pp. 256–260), citing the Congressional Record (67th Congress, 1st session) and Murphy (2013); Bucheli, Durán & Kim (2024, pp. 330–331).

1921: Harding and the Senate

1921: the new president pushes the treaty, and some senators call it blackmail.



President-elect Harding, January 24, 1921

In 1920, as a senator, he met Colombia's minister with Senators Fall and Lodge, in a meeting set up by Jersey's negotiator, Flanagan.

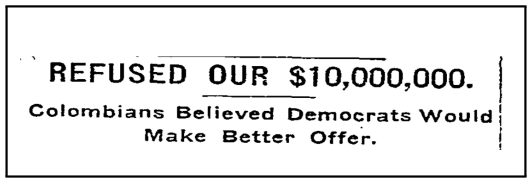


Senator William S. Kenyon (R)
"voting away $25 million in a blackmail proposition"

Sources: Library of Congress (Harris & Ewing; Prints and Photographs Division); 1920 meeting: Durán and Bucheli (2017, p. 258).

The press at the time (1913–1921)

The same story, as the newspapers told it.


REFUSED OUR $10,000,000.

Colombians Believed Democrats Would Make Better Offer.

NYT, Mar 1, 1913
Colombia turns down U.S. offers

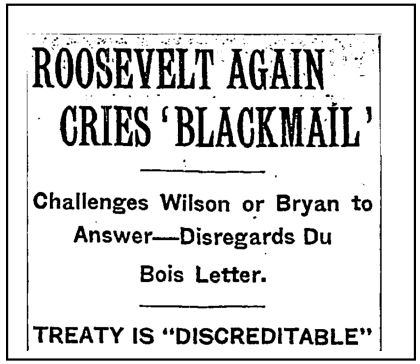

NO PRESSURE USED TO BLOCK OIL DEAL

Washington Did Not Influence Colombia to Reject Pearson Contracts.

CONSERVATION LAW PASSED

This, Says Diplomatic Authority, Caused British Interests to Withdraw Voluntarily.

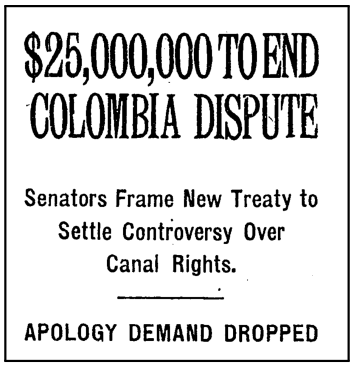
NYT, Dec 31, 1913
Pearson withdraws


ROOSEVELT AGAIN CRIES 'BLACKMAIL'

Challenges Wilson or Bryan to Answer—Disregards Du Bois Letter.

TREATY IS "DISCREDITABLE"

NYT, Jul 3, 1914
Roosevelt attacks the treaty


$25,000,000 TO END COLOMBIA DISPUTE

Senators Frame New Treaty to Settle Controversy Over Canal Rights.

APOLOGY DEMAND DROPPED

NYT, Jun 19, 1919
The apology is dropped


COLUMBIA TREATY URGED BY HARDING

Ratification of Compact Is Asked In First Official Message As President.

Courier-Journal, Mar 10, 1921
Harding asks the Senate to ratify


SAY OIL MEN WANT COLOMBIAN TREATY

Opposing Republican Senators Declare Many Concessions Depend Upon its Ratification.

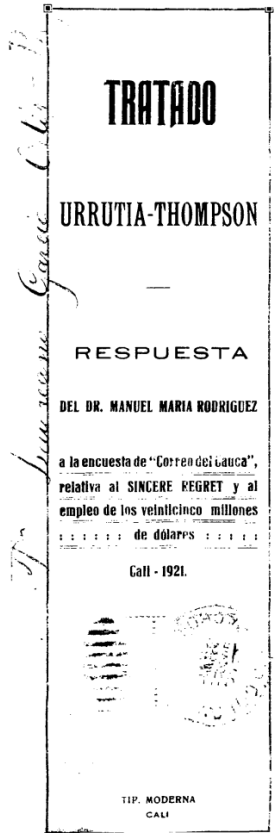
NAME INTERESTED CONCERNS

NYT, Mar 14, 1921
"Oil men want" the treaty

Sources: The New York Times and The Courier-Journal (ProQuest Historical Newspapers).

The debate in Colombia (1921)

In Colombia, the apology and the use of the money were debated.



TRATADO

URRUTIA-THOMPSON

—

RESPUESTA

DEL DR. MANUEL MARIA RODRIGUEZ

a la encuesta de "Correo del Cauca", relativa al SINCERE REGRET y al empleo de los veinticinco millones de dólares

Cali - 1921.

TIP. MODERNA
CALI

"Tratado Urrutia-Thomson. Respuesta"
Manuel María Rodríguez, Cali, 1921: on the "sincere regret" and how to use the 25 million dollars

Source: Manuel María Rodríguez (1921).

From archives to votes

We complement the qualitative evidence with econometrics.

Empirically, were oil states more likely to ratify?
Do the data support the empire trap?

Quantitative evidence: oil interests

Empirical strategy

$$\Pr(\text{Ratify}_{is} = 1) = \Pr\left(\alpha \, \text{Oil interest}_s + X'_{is}\beta > \varepsilon_i^1 - \varepsilon_i^0 \right)$$

The vote
1 if senator *i* voted to ratify (88 senators, 20 April 1921; LPM)

Special interest
(crude produced + crude refined) / value of the state's production

Controls
ideology and the fiscal cost for the state's voters

Hypothesis: if the empire trap holds, $\alpha > 0$: senators from states with larger oil interests were more likely to ratify.

Controls (X): W-Nominate scores for government intervention in economic (W1) and social (W2) issues, and the tax ratio (rank of the state's federal taxes / federal spending). W-NOMINATE (Poole & Rosenthal) places each senator on two dimensions, from -1 to 1, using all his roll-call votes in the 67th Congress.

Quantitative evidence: oil interests, results

	(1)	(2)	(3)
Dependent variable: Ratify			
Oil interest	**0.0119****	**0.0152*****	**0.0145****
	(0.0049)	(0.0056)	(0.0066)
Ideology	No	Yes	Yes
Fiscal cost (tax ratio)	No	Yes	Yes
State census controls	No	No	Yes
Observations	88	88	88
Adjusted R^2	0.009	0.29	0.29

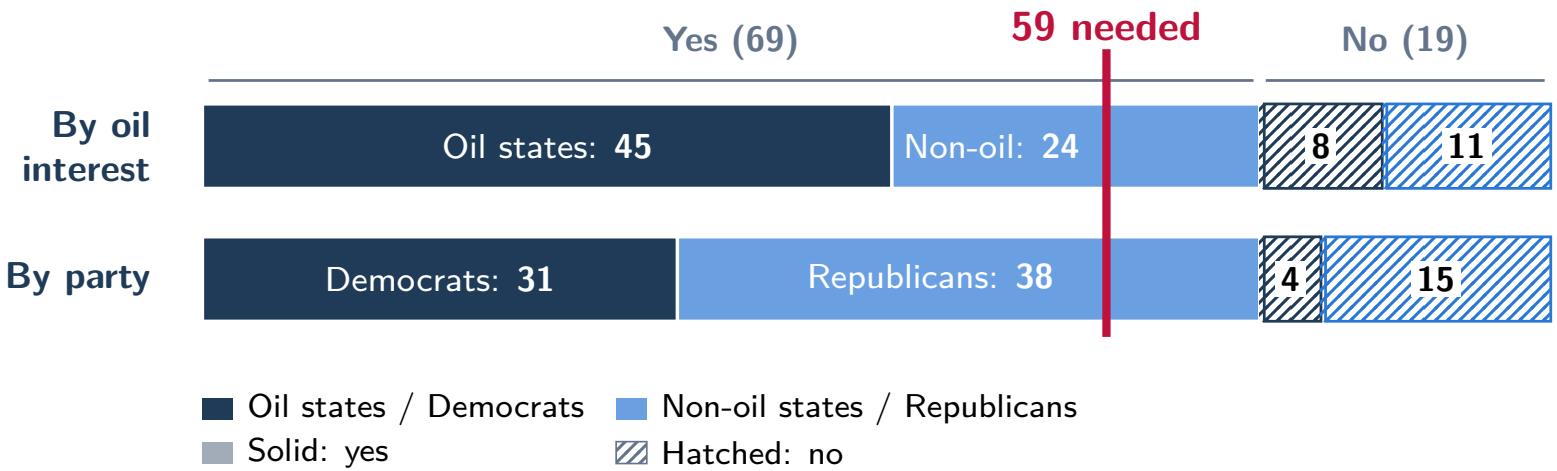
- The empire trap holds: senators from states with more oil interests were more likely to ratify a treaty with clear benefits for Jersey, but not for U.S. welfare.

Table 1 in the paper, columns 2, 4 and 6. LPM; clustered robust SE in parentheses. * 10%, ** 5%, *** 1%. Controls (col. 2): W2 0.52***, W1 0.04, tax ratio −0.004**. Census controls: income per capita, illiteracy, rural and black population shares. Oil interest in percentage points of the state's production (the paper's coefficients divided by 100): one more point of oil share raises the probability of voting yes by about 0.015.

▸ Crude and refining separately

To keep in mind

- Why it matters for the regressions: even if every oil-state senator voted yes, the treaty would get at most **58** votes, one short of the **59** needed (it got **69**). Oil interests alone cannot explain the ratification.



So where did the other votes come from? Were they bought?

Quantitative evidence: votes

Empirical strategy

$$\Pr(\text{Ratify}_{is} = 1) = \Pr\Big(\gamma_1 \,\text{Indifferent}_i + \gamma_2 \,\text{Margin}_i + \gamma_3 \,(\text{Indiff.} \times \text{Margin})_i + X'_{is}\beta > \varepsilon_i^1 - \varepsilon_i^0 \Big)$$

Proxy for indecision
1 if $|W2|$ is in the half closest to 0: no firm stance on social issues

Proxy for a cheap vote
winning margin in the last election: a safe seat

Cheapest vote
no firm stance *and* a safe seat

Controls
oil interest, ideology and fiscal cost, as before

Hypothesis: if votes were bought, $\gamma_1 > 0$ and $\gamma_3 > 0$: senators with no firm stance, especially those with a safe seat, were more likely to ratify.

Rationale (Snyder, 1991): a special interest buys the votes of legislators who are slightly opposed or indifferent, not of those who strongly support or oppose. Controls (X): oil interest, W1, W2 and the tax ratio.

Quantitative evidence: votes, results

Was there vote buying? Was it a coalition specific to this treaty?

Dependent variable: Ratify	(1)	(2)	(3)
Oil interest	0.0149**	0.0152**	0.0136**
	(0.0058)	(0.0059)	(0.0060)
Indifferent	0.17**		0.04
	(0.07)		(0.09)
Margin		−0.14	−0.33**
		(0.12)	(0.14)
Indifferent × Margin			0.44**
			(0.17)
Controls (ideology, tax ratio)	Yes	Yes	Yes
Observations	88	88	88
Adjusted R^2	0.33	0.30	0.35
F: Indifferent = Indiff. × Margin = 0			8.65***

Table 2 in the paper, columns 1–3. Linear probability model; clustered robust standard errors in parentheses. * 10%, ** 5%, *** 1%. Controls as in Table 1: W2 $\approx 0.5^{***}$, W1 not significant, tax ratio $\approx -0.004^{**}$. Oil interest in percentage points (the paper's coefficients divided by 100).

▸ The $15M text and a placebo vote

Quantitative evidence: predicted votes

	(1)
Actual votes	
(1) Senators that voted UTT	88
(2) Senators that voted UTT yes	69
Predicted yes votes, using:	
(3) Ideology	73
(4) Ideology + Tax ratio + Margin	58
(5) Ideology + Tax ratio + Margin + Oil influence*	69

- Ideology alone seems enough (73), but once each state's cost for its taxpayers enters, the coalition falls to 58, below the **59** needed.
- Oil influence (oil interest + vote buying) brings it back to 69, the actual result: oil swung about **11 votes**, exactly the ones that were missing.

Column (1) is Table 2, column 3 in the paper. A senator is predicted to vote yes if the predicted probability is 0.5 or higher; ratification required 59 votes. Ideology: W1 and W2 (W-Nominate). * Oil influence: proxies of oil interests and vote buying (Oil interest, Indifferent, Indifferent × Margin).

▸ Full table

Welfare effects: who gained?

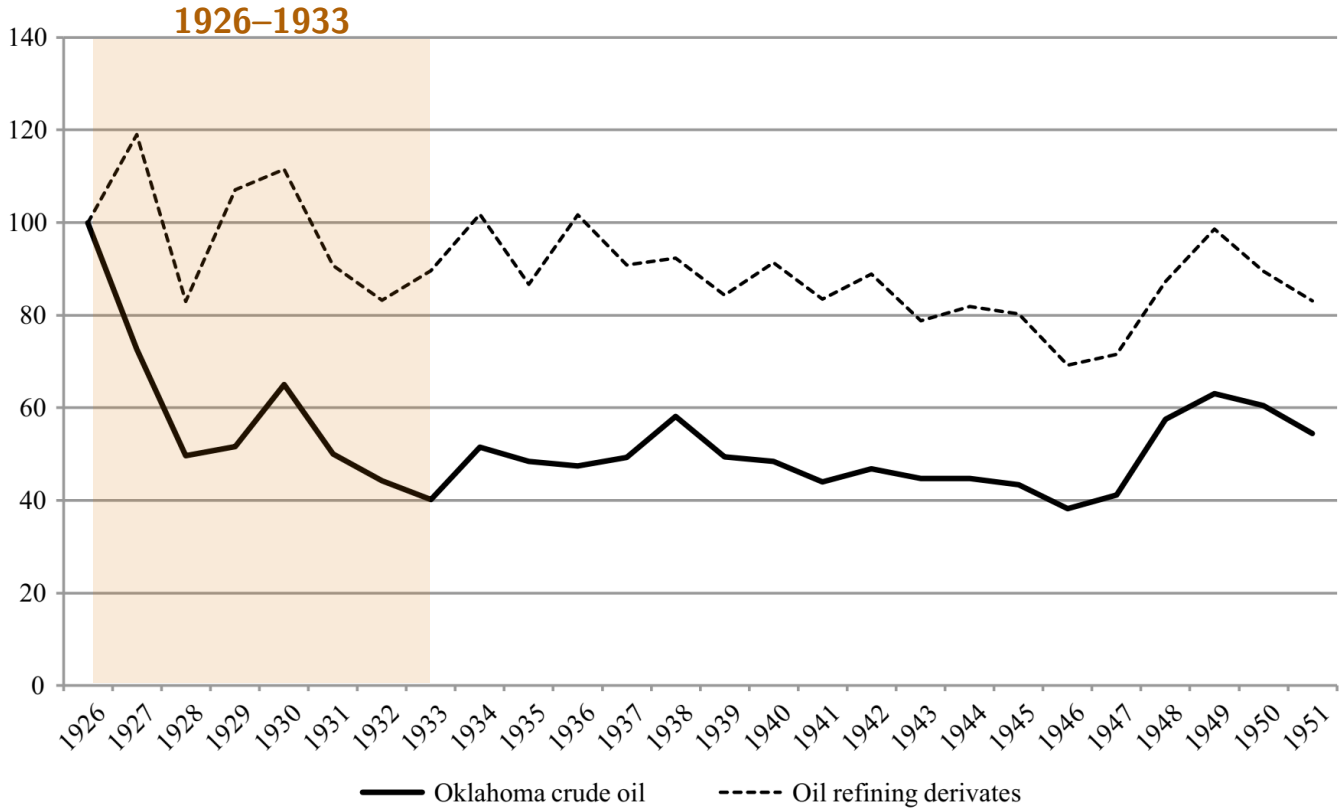
- **Jersey:** taking into account its investment ($61M) and its profits per barrel, Jersey gained about **$53M**: the pipeline paid, production alone did not. ▸ more
- **The U.S.:** taking into account the cheaper crude for refiners (social savings, 1926–1933), the U.S. gained more than the **$25M** paid, unless demand was very elastic. ▸ more
- **But** the gains went to the refiners, not to consumers. ▸ more

$ million, NPV	Gain	Cost: reparation
Jersey (TROCO + Andian)	**53.1**	25.0
U.S., $\varepsilon = 0.5$ / 3 / 5	**243.3** / **40.5** / **24.3**	25.0

1921 dollars. Jersey: NPV of TROCO (-25.1) and Andian ($+78.2$), at a 5.6% discount rate. U.S.: social savings of East and Central refiners, 1926–1933; ε: price elasticity of demand.

Crude vs. refined product prices (1926 = 100)

Crude fell by half, refined products did not: refiners kept the savings.



1926–1933 averages: crude **56**, refined products **98**.

"Refiners, including SONJ, captured important savings in crude oil input expenses" (p. 278). Crude: Oklahoma price; refined products: average price of gasoline, fuel oil and kerosene; deflated by the PPI. Source: Durán & Bucheli (2017, Figure 1), from the U.S. Bureau of Mines.

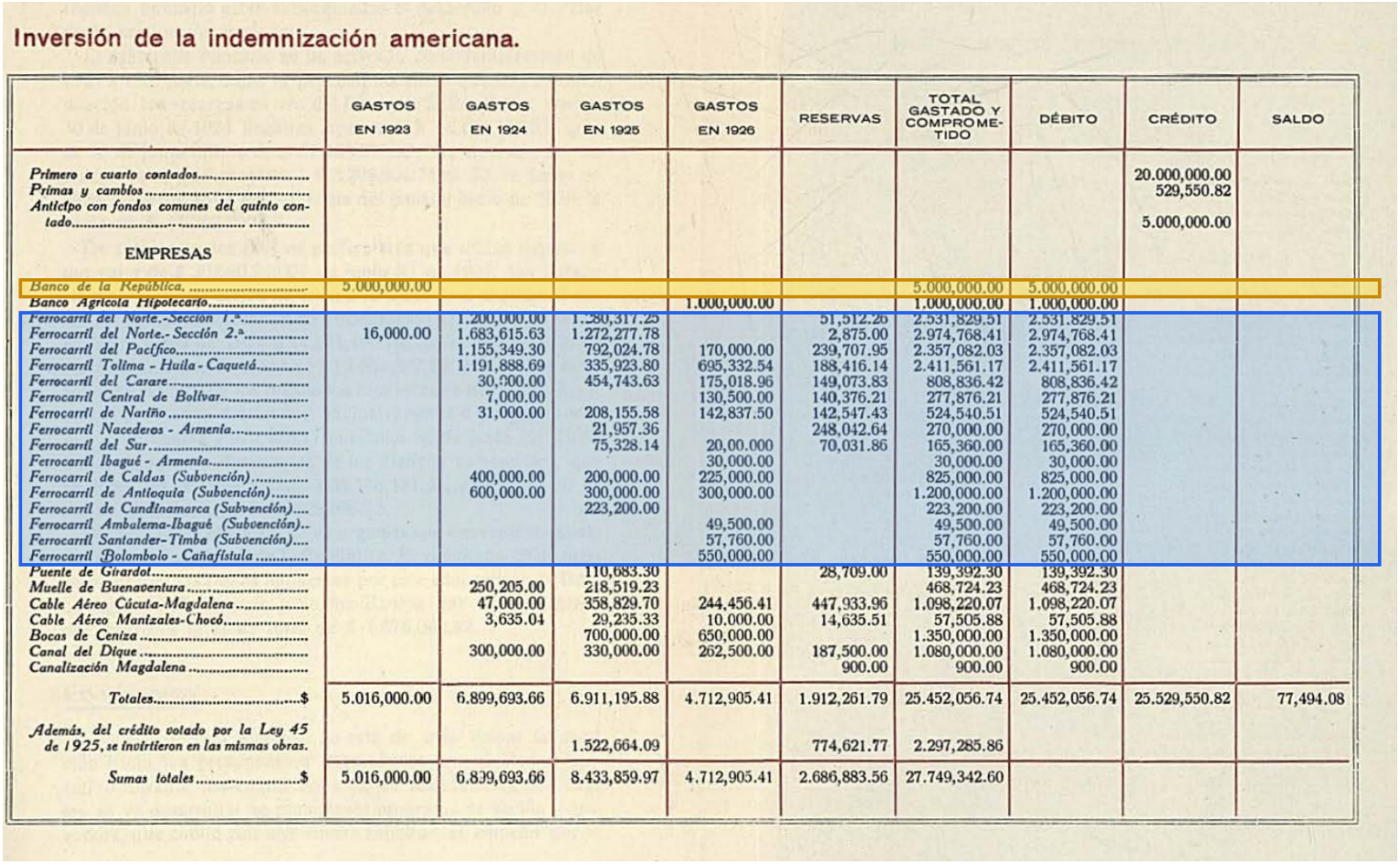
Does the empire trap hold?

- Under these assumptions, the oil firm seems to have gained: Jersey made about **$53M**, more than the **$25M** the U.S. paid.

- So the empire trap holds:
  - Channel: oil interests + plausibly bought votes ✓
  - Profitable for the firm ✓
  - **But** the colony moved the firm: Colombia held up Jersey to make the empire pay.

And Colombia? How it spent the $25M

Colombia spent the $25M on public works, railways and the central bank.



Inversión de la indemnización americana.

	GASTOS EN 1923	GASTOS EN 1924	GASTOS EN 1925	GASTOS EN 1926	RESERVAS	TOTAL GASTADO Y COMPROMETIDO	DÉBITO	CRÉDITO	SALDO
Primero a cuarto contados								20.000,000.00	
Primas y cambios								529,550.82	
Anticipo con fondos comunes del quinto contado								5.000,000.00	
EMPRESAS									
Banco de la República	5.000,000.00					5.000,000.00	5.000,000.00		
Banco Agrícola Hipotecario				1.000,000.00		1.000,000.00	1.000,000.00		
Ferrocarril del Norte.-Sección 1.ª		1.200,000.00	1.280,317.25		51,512.26	2.531,829.51	2.531,829.51		
Ferrocarril del Norte.-Sección 2.ª	16,000.00	1.683,615.63	1.272,277.78		2,875.00	2.974,768.41	2.974,768.41		
Ferrocarril del Pacífico		1.155,349.30	792,024.78	170,000.00	239,707.95	2.357,082.03	2.357,082.03		
Ferrocarril Tolima - Huila - Caquetá		1.191,888.69	335,923.80	695,332.54	188,416.14	2.411,561.17	2.411,561.17		
Ferrocarril del Carare		30,000.00	454,743.63	175,018.96	149,073.83	808,836.42	808,836.42		
Ferrocarril Central de Bolívar		7,000.00		130,500.00	140,376.21	277,876.21	277,876.21		
Ferrocarril de Nariño		31,000.00	208,155.58	142,837.50	142,547.43	524,540.51	524,540.51		
Ferrocarril Nacederos - Armenia			21,957.36		248,042.64	270,000.00	270,000.00		
Ferrocarril del Sur			75,328.14	20,00.000	70,031.86	165,360.00	165,360.00		
Ferrocarril Ibagué - Armenia				30,000.00		30,000.00	30,000.00		
Ferrocarril de Caldas (Subvención)		400,000.00	200,000.00	225,000.00		825,000.00	825,000.00		
Ferrocarril de Antioquia (Subvención)		600,000.00	300,000.00	300,000.00		1.200,000.00	1.200,000.00		
Ferrocarril de Cundinamarca (Subvención)			223,200.00			223,200.00	223,200.00		
Ferrocarril Ambalema-Ibagué (Subvención)				49,500.00		49,500.00	49,500.00		
Ferrocarril Santander-Timba (Subvención)				57,760.00		57,760.00	57,760.00		
Ferrocarril Bolombolo - Cañafístula				550,000.00		550,000.00	550,000.00		
Puente de Girardot			110,683.30		28,709.00	139,392.30	139,392.30		
Muelle de Buenaventura		250,205.00	218,519.23			468,724.23	468,724.23		
Cable Aéreo Cúcuta-Magdalena		47,000.00	358,829.70	244,456.41	447,933.96	1.098,220.07	1.098,220.07		
Cable Aéreo Manizales-Chocó		3,635.04	29,235.33	10.000.00	14,635.51	57,505.88	57,505.88		
Bocas de Ceniza			700,000.00	650,000.00		1.350,000.00	1.350,000.00		
Canal del Dique		300,000.00	330,000.00	262,500.00	187,500.00	1.080,000.00	1.080,000.00		
Canalización Magdalena					900.00	900.00	900.00		
Totales...$	5.016,000.00	6.899,693.66	6.911,195.88	4.712,905.41	1.912,261.79	25.452,056.74	25.452,056.74	25.529,550.82	77,494.08
Además, del crédito votado por la Ley 45 de 1925, se invirtieron en las mismas obras.			1.522,664.09		774,621.77	2.297,285.86			
Sumas totales...$	5.016,000.00	6.899,693.66	8.433,859.97	4.712,905.41	2.686,883.56	27.749,342.60			

"Inversión de la indemnización americana", Colombia, Memoria de Hacienda, 1926

Banco de la República: $5M Railways

What happened to the railways?

Most of the $25M went to railways. Today, most of them no longer run.



A Colombian railway, c. 1930



Rail network: dashed = inactive

$15M

of the $25M went to 15 railway lines (1923–1926)

1/3

of today's 3,533 km rail network is in operation

$94 > $60

per ton: Bogotá → coast vs. Cartagena → Shanghai

Sources: Memoria de Hacienda (1926); Ministerio de Transporte and DNP (2025–2026), 29–37% of the network in operation; World Bank (2012). Photo: unknown photographer, c. 1930 (public domain). Map: Milenioscuro, Wikimedia Commons, CC BY-SA 3.0, cropped.

Conclusions

- **The paper:** the U.S. paid Colombia because Colombia held up Jersey. Its sunk investment forced Jersey to build the Senate coalition, with oil interests and plausibly bought votes. The empire trap holds, but the colony had the power to trigger it.

- **Firms as diplomats:** can firms act as diplomats between countries? Does corporate diplomacy have two faces, where the political influence that wins the investment ex ante becomes a liability once the investment is sunk? ▸ Two phases

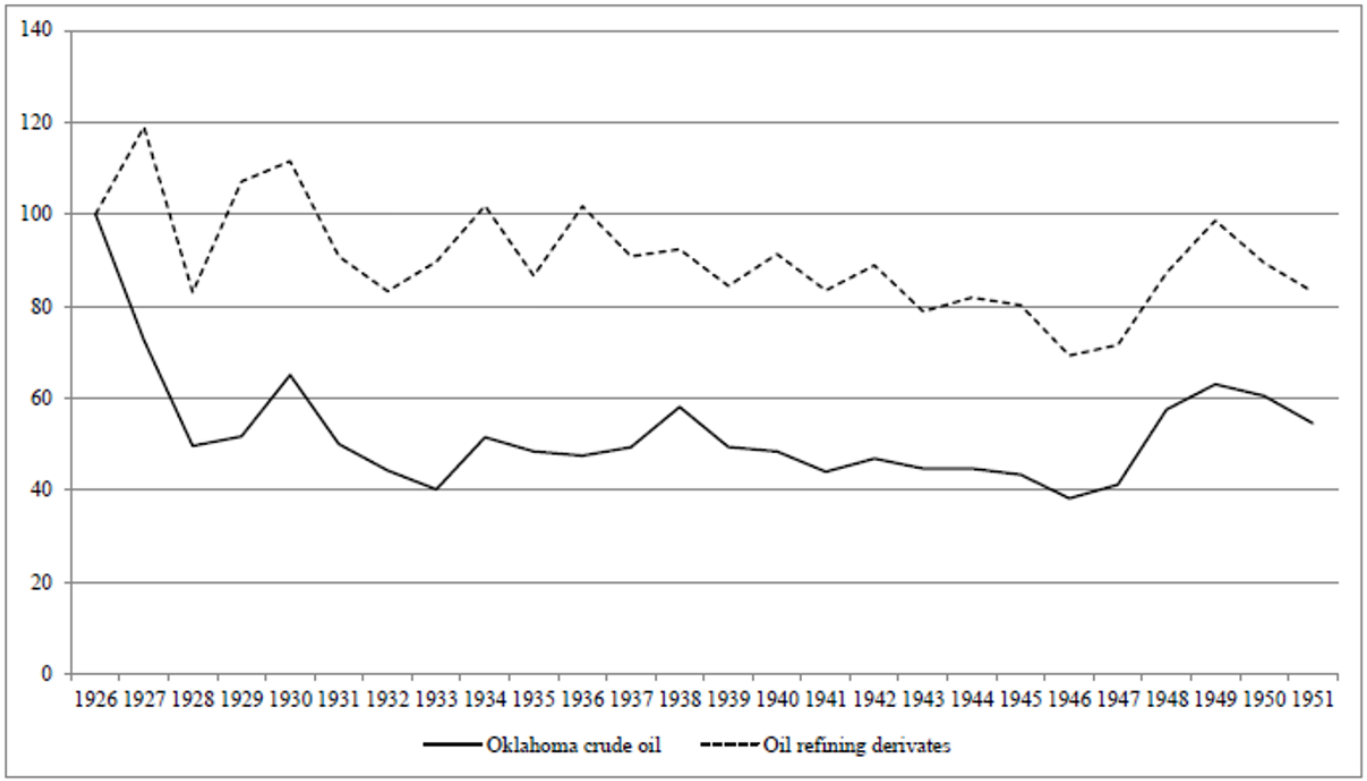
- **Today:** can the same logic help read current geopolitics? In Venezuela 2026, U.S. intervention was followed by 100-year oil concessions, with the U.S. government as a shareholder. ▸ Venezuela 2026

And as the AI boom spreads data centers abroad, will host countries gain leverage over these sunk investments, and through the firms, over their home governments? ▸ Data centers

Appendix

Who won? Refiners, not consumers

Figure 1. Index number for crude oil prices and oil refining derivatives

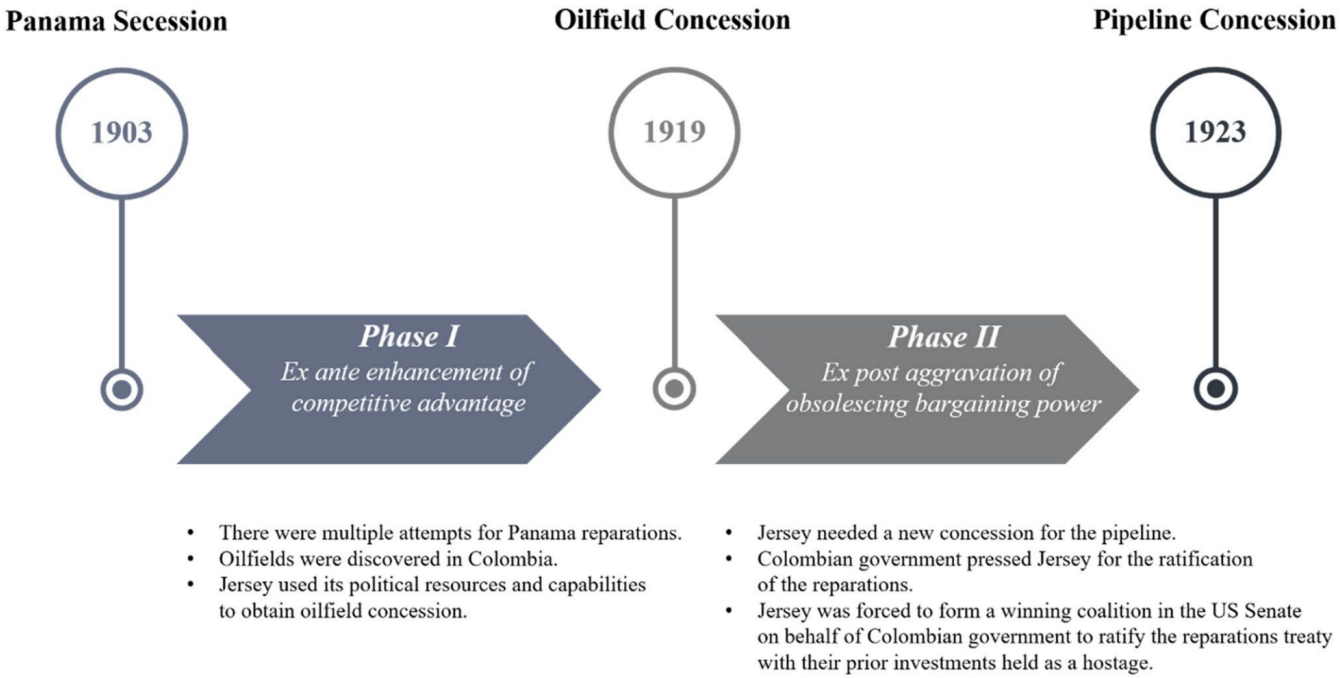


Source: Crude oil price Oklahoma from Bureau of Mines (various years). Oil refining derivatives is output weighted average price in cents per gallon of US motor oil gasoline (Oklahoma), bunker fuel oil (New York), and kerosene (Chicago) from Bureau of Mines. Series deflated using PPI.

Note. The figure shows who captured the gains, not that Colombian oil caused the fall in crude prices. Without Colombian imports, prices would have been only 0.3–3.4% higher (Table 4), while crude fell by about half.

From history to theory: corporate diplomacy in two phases

Durán & Bucheli (2017) test the empire trap from the U.S. side. Bucheli, Durán & Kim (2024) revisit the same episode from the firm's perspective to build a theory of corporate diplomacy.



- **Phase I (1903–1919):** Jersey uses its U.S. political capital to win the oilfield concession over Pearson. Diplomacy works as a competitive advantage.
- **Phase II (1919–1923):** once its investment is sunk, the same political capital becomes a liability. Colombia holds Jersey hostage until it delivers the Senate.

From history to theory: why the leverage flipped

	Who depends on whom	Bargaining power	Implication for Jersey
Phase I: before sunk investment	Colombia → Jersey (needs its U.S. political access)	Jersey > Colombia	Ex-ante competitive advantage
Phase II: after sunk investment	Jersey → Colombia (needs the pipeline)	Colombia > Jersey	Ex-post obsolescing bargain

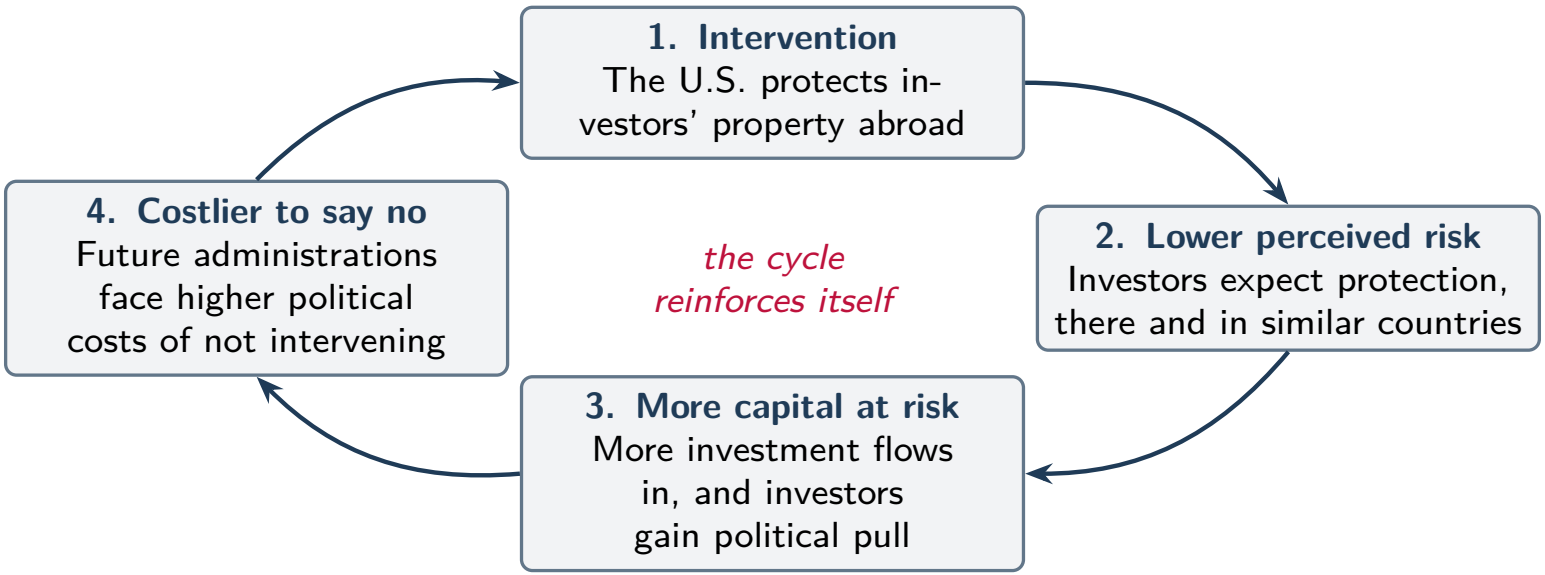
Message: If both dependencies coexisted, each side would hold the other hostage and neither would have leverage. The sequence drives the dynamics: success ex-ante sows vulnerability ex-post.

Phase II admits multiple equilibria: direct expropriation, indirect expropriation (denying the pipeline), or a treaty. In 1921, Colombia chose the treaty.

In Phase II, Colombia still needed Jersey's lobbying. What was asymmetric was who could wait: Colombia "could wait a few more years" (BDK, p. 331); Jersey could not.

The empire trap (Maurer, 2013)

"Successful intervention on behalf of overseas investors begets more overseas investment, which creates more pressure to intervene when those investments come under threat." (Maurer, 2013, p. 8)



- **Why a trap:** today's intervention changes tomorrow's incentives, so each administration inherits less freedom to refrain (path dependence).
- **Not inevitable:** its strength depends on how organized investors are, domestic political preferences, and the tools available to intervene.

The classic coups: Iran, Guatemala, Chile

Iran (1953)

- Prime Minister Mossadegh nationalized the Anglo-Iranian Oil Company (British, today BP) in 1951.
- The CIA and Britain's MI6 overthrew Mossadegh in August 1953 and brought the Shah back to power.
- A 1954 consortium gave U.S. oil companies, Jersey among them, 40% of Iran's oil. U.S. aid rose from $11M to almost $600M.

Guatemala (1954)

- President Árbenz's land reform (1952) took idle land from large estates, including the United Fruit Company's (U.S.).
- The CIA backed an invasion in June 1954 that forced Árbenz to resign.
- The new ruler, Castillo Armas, reversed the reform. U.S. aid rose from $1.4M to more than $70M.

Chile (1973)

- President Allende nationalized the copper mines of Anaconda and Kennecott (U.S.) in 1971. ITT had offered the CIA money in 1970 to stop Allende.
- The CIA funded the opposition (1970–73), and the military, led by Pinochet, took power in September 1973.
- Copper stayed state-owned. U.S. aid rose from $3.8M to more than $95M.

Literature: what the interventions gave the firms

Dube, Kaplan & Naidu (2011, *QJE*) "Coups, Corporations, and Classified Information"

- Event study of U.S. firms exposed to expropriation in countries where the CIA backed coups.
- Their stock prices rose when coups were secretly **authorized**, before they happened: private information was traded on.

Berger, Easterly, Nunn & Satyanath (2013, *AER*) "Commercial Imperialism?"

- After CIA interventions during the Cold War, U.S. **exports** to the country rose, mostly in industries where the U.S. was not competitive.
- The channel: purchases by the governments the U.S. helped install.

Link to the paper: these show that interventions brought private gains. Durán & Bucheli study a case decided in a public Senate vote, which shows who supported the intervention and why.

Literature: empire effect vs. empire trap

Empire effect welfare rises in the empire and its colonies

- **Mitchener & Weidenmier (2005, *JEH*):** after the Roosevelt Corollary (1904), the cost of debt of Caribbean and Central American countries fell; the U.S. acted as an enforcer.
- **Mitchener & Weidenmier (2008, *EJ*):** belonging to an empire raised trade among its members.
- **Ferguson & Schularick (2006, *JEH*):** in 1880–1913, British colonies borrowed more cheaply than similar independent countries.

Empire trap a special interest captures the empire

- **Hopkins (1973):** in West Africa, British commercial interests pushed for colonial intervention.
- **Maurer (2013):** each successful intervention attracts more investment, which raises the pressure to intervene again. ▸ more
- **Olson (1965):** small, concentrated groups organize better than large, dispersed ones, so they win even when the total cost is larger.

Literature: colonies can hold up MNCs

Kobrin (1980, *International Organization*) "Foreign Enterprise and Forced Divestment in LDCs"

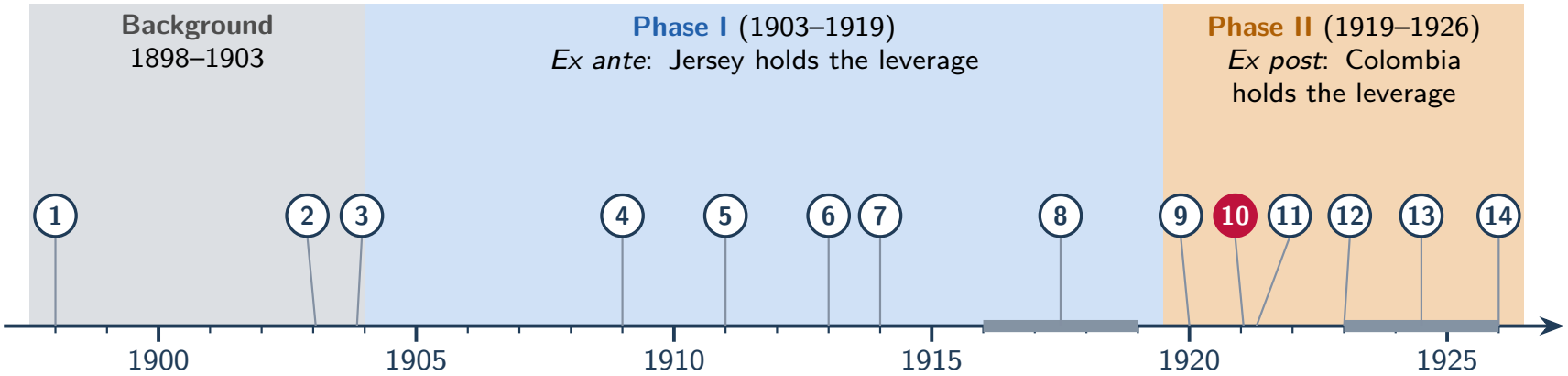
- Documents the expropriation ("forced divestment") of foreign firms in developing countries.
- Host governments target specific firms and sectors, so foreign investors are exposed to them.

Maurer (2011, *JEH*) "The Empire Struck Back: Sanctions and Compensation in the Mexican Oil Expropriation of 1938"

- Mexico expropriates the foreign oil companies in 1938.
- The U.S. answers with sanctions, and the bargaining sets how much compensation Mexico pays.

The gap (Durán & Bucheli, 2017, p. 254): "neither the point that an informal colony's government may influence an empire's policy nor the multinational as a mechanism to do so has been identified before in the literature."

Key events: full timeline



Background

1 **1898.** The U.S. wins the Spanish–American War and gains a military interest in a Panama canal.

2 **Jan 1903.** Herrán–Hay Treaty (NPV $12.4M). Colombia's Congress rejects it.

3 **Nov 1903.** The U.S. backs Panama's secession, and the canal is built in Panama.

Phase I

4 **1909.** The Root–Cortés agreement ($2.5M) fails, and President Reyes resigns.

5 **1911.** The antitrust breakup leaves Jersey with 25% of world refining capacity but little crude.

6 **1913.** Pearson (UK) seeks a concession. Jersey lobbies in Colombia and the U.S., the U.S. offers $20M, and Pearson withdraws.

7 **1914.** The Urrutia–Thomson Treaty is signed: $25M (3.5% of U.S. federal spending, 9% of Colombia's GNP). The U.S. Senate stalls.

8 **1916–1919.** Jersey's intermediaries create TROCO and legalize the oilfield concession.

Phase II

9 **1920.** Jersey buys TROCO (~$33M sunk) but needs a pipeline to export.

10 ★ **Jan 1921.** Colombia blocks the pipeline until the U.S. Senate ratifies the treaty.

11 **Apr 1921.** Jersey lobbies the Senate, and the treaty is ratified 69–19.

12 **1923.** Andian National Corp. gets the pipeline concession.

13 **1923–1926.** The U.S. pays the $25M, used for the central bank and railways.

14 **1926.** The pipeline is completed, and Jersey starts exporting (mostly to the U.S.).

Key events in detail: background (1898–1903)

1. 1898: the Spanish–American War

- The U.S. defeats Spain and becomes an empire: it gains the Philippines and Guam, and its trade across the Pacific grows fast.
- A canal between the Atlantic and the Pacific becomes a priority. Panama, then part of Colombia, is the preferred route.

2. January 1903: the Herrán–Hay Treaty

- The U.S. offers Colombia $10M upfront, plus an annual payment once the canal runs, for the right to build and operate it (NPV ~$12.4M).
- Colombia's Congress rejects it.

3. November 1903: Panama secedes

- The U.S. backs Panama's secession and negotiates the canal with the new government. The canal opens in 1914.
- Relations with Colombia sour, and reparations become Colombia's long-standing demand.

Key events in detail: Phase I (1909–1914)

4. 1909: the Root–Cortés agreement

- The U.S. offers $2.5M in reparations. The small amount causes fury in Colombia's Congress.
- President Reyes, who negotiated it, is accused of treason, resigns and goes into exile.

5. 1911: the breakup of Standard Oil

- The U.S. Supreme Court (*Standard Oil Co. of New Jersey v. United States*) splits the Standard Oil holding, then the world's largest oil producer and refiner, into 34 firms. Among them: Jersey (today ExxonMobil) and Standard Oil of California (today Chevron).
- Jersey keeps a quarter of world refining capacity but little crude. Antitrust rules limit it at home and European empires block their colonies, so it looks for oil abroad.

6. 1913: Pearson vs. Jersey ▸ more

- Britain's Pearson & Son seeks an oil concession, and it passes the first round in Colombia's Congress.
- Jersey sends an agent to run a press campaign against it. In September the U.S. offers $20M in reparations, and days later Pearson withdraws.

7. 1914: the Urrutia–Thomson Treaty ▸ more

- On April 6, both governments sign it: $25M (3.5% of U.S. federal spending; 9% of Colombia's GNP). Colombia ratifies it in June.
- In the U.S. Senate, Lodge and the Republicans block it, and try to cut it to $15M and drop the apology.

1913: Pearson vs. Jersey

- **Pearson almost wins.** Britain's Pearson & Son negotiates a large oil concession; it passes the first round in Congress, and only the final vote is left.
- **Jersey reacts.** An agent runs a press campaign: approving Pearson would put the U.S. reparations at risk.
- **Washington presses.** The U.S. warns President Restrepo that it is "not indifferent" to the Pearson concession.
- **The offer.** In September, just before the final vote, the U.S. offers $20M in reparations, "presumably under [Jersey's] influence".
- **Pearson withdraws** days later, feeling used as a pawn between Colombia and the U.S.

Sources: Durán & Bucheli (2017, p. 256); Bucheli, Durán & Kim (2024, pp. 329–330).

1914–1921: who blocked the treaty, and why it passed

- **Who.** Henry Cabot Lodge, a Republican senator from Massachusetts, a leader of the Foreign Relations Committee and Theodore Roosevelt's closest ally.
- **Why they blocked it.** Paying $25M and apologizing meant admitting that Roosevelt was wrong in Panama; Roosevelt himself opposed the reparations.
- **How they could.** A treaty needs two thirds of the Senate, so the Republicans could block it.
- **Failed fixes.** The committee tried to cut it to $15M and drop the apology. In 1919 Colombia dropped the apology, but Republicans still found $25M too high.
- **Why it passed in 1921.** Roosevelt died in 1919. Lodge and the "Old Guard" switched, citing oil; Progressive Republicans (Johnson, Borah, Kenyon, Norris) opposed it as "blackmail".

Source: Durán & Bucheli (2017, pp. 253, 257–260).

Key events in detail: from Phase I to Phase II (1916–1921)

8. 1916–1919: TROCO

- Jersey's intermediaries legalize the oil concession and create the Tropical Oil Company (TROCO), while Jersey checks the potential of the fields.
- In 1919 Colombia drops its demand for an apology and passes rules that favor foreign oil investment, but the Senate keeps delaying.

9. 1920: Jersey buys TROCO ▸ more

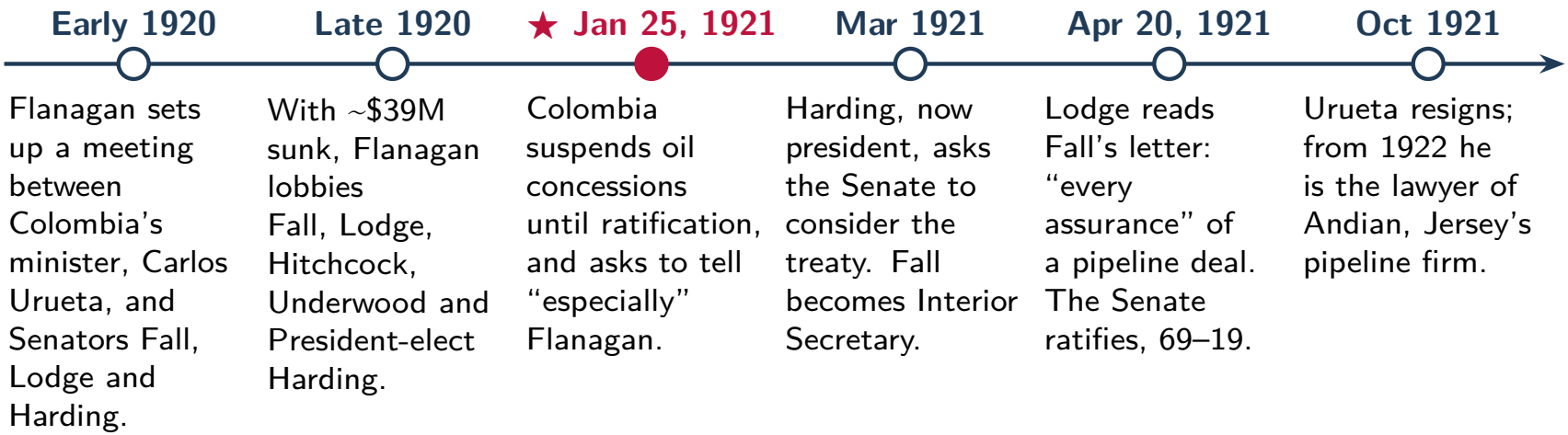
- In August, TROCO passes to the International Petroleum Company, a Jersey affiliate. About $39M has been sunk to produce oil.
- The fields are 300 miles inland, so Jersey asks for a pipeline concession. Its negotiator, James Flanagan, sets up a meeting between Colombia's minister and Senators Fall, Lodge and Harding.

10. ★ January 25, 1921: Colombia's cable

- Foreign minister García Ortiz writes to Colombia's minister in Washington: *"My Government does not threat, it just suspends resolutions on oil concessions, because public opinion does not allow its approval anymore."*
- He asks him to pass it on *"especially"* to Flanagan.

The paper puts Jersey's sunk investment at about $39M (p. 256); Bucheli, Durán & Kim (2024) give about $33M.

1920–1921: Jersey as a diplomatic broker



Who's who

Flanagan: Jersey's chief negotiator in Latin America. **Urueta:** Colombia's minister in Washington. **Fall, Lodge, Harding:** Republican senators on the Foreign Relations Committee, all three opposed to the treaty.

Side notes

- The early-1920 meeting included a dinner between Urueta and Fall, arranged by Flanagan.
- Urueta was not neutral: a Colombian congressional commission later found that he was already working for Jersey before he resigned.
- Fall was later convicted in the Teapot Dome scandal, for taking bribes from oilmen to lease Navy oil reserves: the first U.S. cabinet member sent to prison.

Sources: Durán & Bucheli (2017, pp. 258–259); Bucheli, Durán & Kim (2024, pp. 331–333).

Key events in detail: Phase II (1921–1926)

11. April 20, 1921: the Senate ratifies

more

- Flanagan lobbies Senators Fall, Lodge, Hitchcock and Underwood, and President-elect Harding. After his first cabinet meeting, Harding asks the Senate to consider the treaty.
- Former opponents (Lodge, Fall, McCumber) switch sides, and the treaty passes 69–19, without the apology.

12. 1923: the pipeline concession

more

- Colombia awards the pipeline concession to the Andian National Corporation. In 1925 Andian passes to IPC, which then runs both production and transport.

13. 1923–1926: the U.S. pays

more

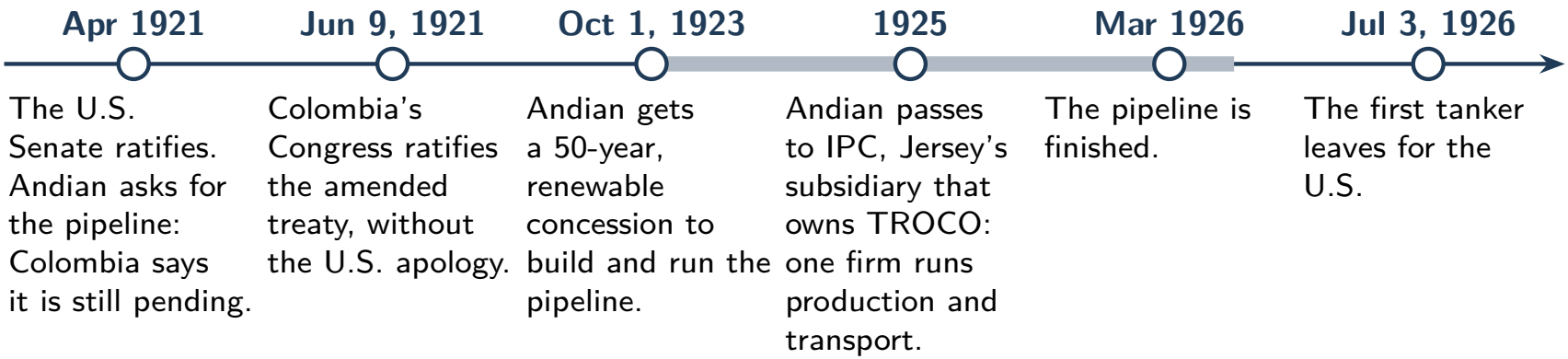
- The $25M is paid in 1923–1926, mostly after the pipeline concession: the deal is done before most of the money arrives.
- Colombia uses it for the central bank and railways.

14. 1926: exports begin

more

- The pipeline is finished in March 1926, and the first tanker leaves for the U.S. on July 3.
- By 1928 Colombia is the world's eighth largest oil producer. Jersey controls almost all Colombian oil until its concession ends in 1951.

1921–1926: closing the deal



Shaded: 1923–1926, the U.S. pays the $25M, mostly after the concession

Why a separate firm for the pipeline?

Flanagan set up Andian in Canada, apart from Jersey: TROCO's concession ended in 1946, too soon to recover the cost of the pipeline. Andian also hid from Colombia that Jersey owned it.

Side notes

- Colombia kept its leverage to the end: no pipeline until both congresses ratified, and the U.S. paid mostly after the concession.
- After ratification, Colombia could not change the terms of its contract with Jersey.
- About a decade later, the Colombian press exposed Flanagan's lies about Andian's owner. This led to the congressional commission whose report is a key source of both papers.

Sources: Durán & Bucheli (2017, p. 260); Bucheli, Durán & Kim (2024, pp. 331–333).

Key moment 1920–1921 (qualitative evidence)

US senate has not ratified Treaty (fact)

Jersey requests oil pipeline concession contract (fact)

Colombia behaves strategically (new archival evidence)

Colombia behaves strategically, induced Jersey to develop a coalition to ratify Treaty in US senate, and US finally pays

1. **Colombia's position:**
   - **Colombian government, January 25 1921:** *"My Government does not threat, it just suspends resolutions on oil concessions, . . . [communicate] to Flanagan."*

   (Informe Comisión Investigadora, 1925, p. 18)

2. **Reactions in US senate discussion of Treaty to Colombia's position:**
   - **Senator Reed, D:** *"An oil companies attorney in Washington . . . stated that if the Treaty was not ratified . . . [American] oil interests [will be] lost"*
   - **Senator Mc Cumber, R:** *"$25m . . . to secure . . . supplemental agreement that will be worth to this country many times that sum"*
   - **Senator Watson, D:** *"(reparation) was an indirect subsidy to the oil interests"*
   - **Senator Kenyon, R:** *"(reparation is) . . . voting away $25 million in a blackmail proposition"*

   (Congressional Record, 67th Congress, 1st session)

Robustness: crude and refining separately

Dependent variable: Ratify	(1)	(3)	(5)	(7)
Crude	−0.0040	0.0090	0.0164	0.0247
	(0.0117)	(0.0094)	(0.0142)	(0.0765)
Refining	0.0337*	0.0236	0.0118	0.0182
	(0.0177)	(0.0184)	(0.0223)	(0.213)
W1		0.04	0.03	0.02
		(0.04)	(0.05)	(0.07)
W2		0.52***	0.50***	0.49***
		(0.09)	(0.09)	(0.15)
Tax ratio		−0.004**	−0.006**	−0.003
		(0.002)	(0.002)	(0.009)
Constant	0.75***	0.95***	0.70**	0.82***
	(0.06)	(0.06)	(0.28)	(0.26)
State census controls	No	No	Yes	No
State fixed effects	No	No	No	Yes
Observations	88	88	88	88
Adjusted R^2	0.003	0.29	0.28	0.28

Table 1 in the paper, odd columns. Linear probability model; clustered robust standard errors in parentheses. * 10%, ** 5%, *** 1%. Crude and refining in percentage points (the paper's coefficients divided by 100).

◂ Back to oil-interest results

Robustness: the $15M text and a placebo vote

Dependent variable	(4) Reduce ($15M)	(5) Peace with Germany
Oil interest	−0.0165***	0.0027
	(0.0061)	(0.0050)
W1	−0.08*	0.41***
	(0.04)	(0.05)
W2	−0.52***	−0.05
	(0.08)	(0.10)
Tax ratio	0.004***	0.001
	(0.001)	(0.001)
Indifferent	−0.12	−0.04
	(0.07)	(0.08)
Constant	0.14*	0.61***
	(0.07)	(0.09)
Observations	88	88
Adjusted R^2	0.32	0.43
F: W2 = Oil interest = Indifferent = 0	15.52***	0.30

Table 2 in the paper, columns 4–5. Reduce: vote on the alternative text with $15M instead of $25M, rejected (1921). Peace with Germany: the Versailles Treaty vote, as a placebo. Clustered robust standard errors in parentheses. Oil interest in percentage points (the paper's coefficient divided by 100).

Jersey's NPV: details

- **What enters:** TROCO (oil production) and Andian (the pipeline), as a lower bound of Jersey's gains: it leaves out refining profits and the lower price of Jersey's other crude.
- **Capital (K_0):** average capital stock in the 1936–38 annual reports: TROCO \$42.1M, Andian \$19.3M. The press is in line: TROCO subscribed \$39M in 1920; Andian issued \$15M in bonds (1924–26) plus \$1M of capital.
- **Profit per barrel (π):** average profit per year in 1936–38 divided by average barrels: 10¢ produced (TROCO), 43¢ transported (Andian). Profits per year: TROCO \$2.0M, Andian \$7.3M.
- **Barrels per year (q_t):** Colombian government statistics on production and exports. In 1936–38, about 20M barrels produced and 17M transported a year (profits per year divided by profit per barrel).
- **Discount rate (r):** 5.6%, the Dow Jones average annual return. At 8% (40% riskier than stocks), Jersey still gains.
- **PV of profits:** implied by the paper's NPV and capital (K_0 + NPV): TROCO \$17.0M, Andian \$97.5M.

Assumptions

- The 1936–38 profit per barrel holds for all years.
- TROCO is probably underestimated: over 90% of its oil was exported, and the 1936–38 world price (\$1.13) was below the 1921–51 average (\$1.25). Andian is roughly accurate: transport costs were stable.

Source: Durán & Bucheli (2017, pp. 272–274).

Welfare effects: methodology (1/2)

Did the U.S. gain? more

- Elasticity: $\varepsilon = \dfrac{\Delta Q/Q}{\Delta P/P} \Rightarrow \dfrac{\Delta P}{P} = \dfrac{1}{\varepsilon} \cdot \dfrac{\Delta Q}{Q}$
- Without Colombia: $\Delta Q = CM, \quad Q = CC \Rightarrow \dfrac{\Delta P}{P} = \dfrac{1}{\varepsilon} \cdot \dfrac{CM}{CC}$
- **Savings:** $SS = \Delta P \cdot CC = \dfrac{1}{\varepsilon} \cdot CM \cdot P$

CM: U.S. crude imports from Colombia

P: Oklahoma crude price

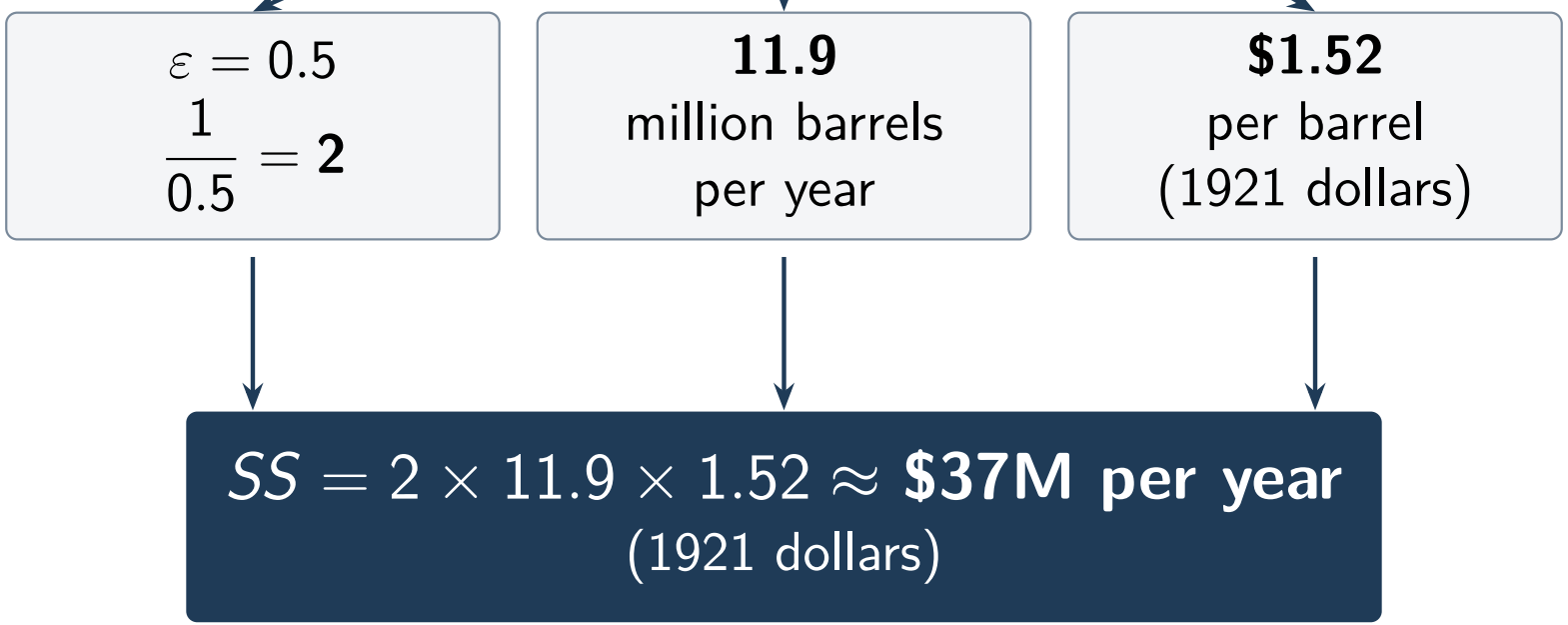
how much more each barrel would cost (ΔP) $\times$ how many barrels are consumed (CC).

Assumptions: segmented U.S. market (Colombian oil goes to the East and Central segment); competitive crude market until the 1933 cartel and import controls; inelastic supply (no other producer replaces Colombian oil). more

CC: East and Central U.S. crude consumption. ε: from 0.5 to 5. Window: 1926–1933.

Welfare effects: step by step ($\varepsilon = 0.5$)

$$SS = \Delta P \cdot CC = \frac{1}{\varepsilon} \cdot CM \cdot P$$



Sources. *CM*: U.S. Department of Commerce (1930), U.S. Bureau of Statistics and U.S. Bureau of Mines (various years). *P*: Oklahoma crude price, U.S. Bureau of Mines (various years), deflated with the PPI. Averages for 1926–1933.

Welfare effects: results

Price elasticity of demand (ε)	**Price**	0.5	3.0	5.0
(1) Annual social savings	Oklahoma	37.0	6.2	3.7
(2) Social savings over 1926–1933 (NPV)	Oklahoma	**243.3**	**40.5**	**24.3**
(3) Social savings over 1926–1933 (NPV)	West Texas	**149.4**	**24.9**	**14.9**
(4) Cost: reparation paid to Colombia	–	**25.0**	**25.0**	**25.0**

1921 million dollars.

Annual social savings $SS = CM \cdot P/\varepsilon$, with $CM = 11.9$ million barrels a year (U.S. crude imports from Colombia) and $P =$ \$1.52 per barrel (Oklahoma price, 1921 dollars), 1926–1933 averages. The NPV adds up the savings of 1926–1933. The West Texas price was about one third lower.

Assumptions: segmented U.S. market (Colombian oil goes to the East and Central segment); competitive crude market until the 1933 cartel and import controls; inelastic supply (no other producer replaces Colombian oil). ▸ more

Welfare effects: methodology (2/2)

Did Jersey gain? more

Barrels per year (q_t)
TROCO ≈20M produced
Andian ≈17M transported

Profit per barrel (π)
10¢ produced, 43¢ transported (1936–38)

$$NPV = \sum_t \frac{q_t \ \pi}{(1+r)^t} - K_0$$

Discount rate (r)
5.6% (Dow Jones); 8% robustness

Capital invested (K_0)
TROCO $42.1M, Andian $19.3M (1936–38 reports)

$ million	PV of profits	− Capital (K_0)	= NPV
TROCO (production)	17.0	−42.1	−25.1
Andian (pipeline)	97.5	−19.3	+78.2
Jersey	**114.5**	**−61.4**	**53.1**

Social savings (Fogel, 1964; Fishlow, 1965): derivation

1. Price elasticity of demand (in absolute value)

$$\varepsilon = \frac{\%\text{ fall in quantity}}{\%\text{ rise in price}} = \frac{|\Delta Q|/Q}{\Delta P/P} \quad \Longrightarrow \quad \frac{\Delta P}{P} = \frac{1}{\varepsilon} \cdot \frac{|\Delta Q|}{Q}$$

2. The counterfactual: no Colombian oil

Supply is inelastic, so nobody replaces it: consumption falls by exactly the Colombian imports.

$$Q = CC, \qquad |\Delta Q| = CM \quad \Longrightarrow \quad \frac{|\Delta Q|}{Q} = \frac{CM}{CC} = 1.72\%$$

3. Substitute: the price rise

$$\frac{\Delta P}{P} = \frac{1}{\varepsilon} \cdot \frac{CM}{CC} \quad \Longrightarrow \quad \Delta P = \frac{1}{\varepsilon} \cdot \frac{CM}{CC} \cdot P$$

4. Social savings: the price rise times consumption

$$SS = \Delta P \cdot CC = \frac{1}{\varepsilon} \cdot \frac{CM}{CC} \cdot P \cdot CC = \frac{1}{\varepsilon} \cdot CM \cdot P$$

Example, $\varepsilon = 0.5$: the price must rise $1.72\%/0.5 = 3.44\%$ for buyers to give up the missing 1.72%; then $SS \approx (1/0.5) \times 11.9\text{M} \times \$1.52 \approx \$36\text{M}$ a year (the table gives \$37.0M, computed year by year).

A first-order approximation, good for small shocks like 1.7% of the market. With other suppliers able to respond, prices would rise less: the result is an upper bound.

Social savings: full table

Price elasticity of demand (ε)	**How**	0.5	1.0	2.0	3.0	4.0	5.0
(1) U.S. crude oil imports from Colombia (million barrels per annum) (CM)	data	11.9	11.9	11.9	11.9	11.9	11.9
(2) East and central U.S. crude oil consumption (million barrels per annum) (CC)	data	699	699	699	699	699	699
(3) Share of Colombia imports in east and central U.S. consumption (percent) (CM/CC)	(1) / (2)	1.72	1.72	1.72	1.72	1.72	1.72
(4) East and central U.S. crude oil price (1921 real price in dollars) (P)	data	1.52	1.52	1.52	1.52	1.52	1.52
(5) Increase in east and central U.S. price due to exclusion of Colombia imports (percent)	(3) / ε	3.44	1.72	0.86	0.57	0.43	0.34
(6) Increase in east and central U.S. prices due to exclusion of Colombia imports (1921 real price in dollars)	(5) $\times$ (4)	0.055	0.028	0.014	0.009	0.007	0.006
(7) Average annual social savings, 1926–1933 (1921 million dollars)	(6) $\times$ (2)	37.0	18.5	9.3	6.2	4.6	3.7
(8) NPV social savings 1926–1933 (1921 million dollars)	NPV of (7)	243.3	121.6	60.8	40.5	30.4	24.3
(9) NPV social savings 1926–1933 using West Texas prices (1921 million dollars)	(8), West Texas P	149.4	74.7	37.3	24.9	18.7	14.9

Table 4 in the paper. Lines (1) to (6) are averages for 1926–1933. **Sources.** (1) U.S. Department of Commerce (1930), U.S. Bureau of Statistics and U.S. Bureau of Mines (various years). (2) U.S. crude oil runs to stills minus California: American Petroleum Institute and U.S. Bureau of Mines (various years). (4) Oklahoma crude price: U.S. Bureau of Mines (various years) and PPI.

Would someone have replaced Colombian oil?

Demand: $\varepsilon < 3$ is plausible

- Oil demand is very inelastic: modern short-run estimates are well below 1 (Kilian & Murphy, 2014; Caldara, Cavallo & Iacoviello, 2019)

Supply: the weak point

- The formula assumes nobody replaces Colombian oil. If supply responds:

$$\frac{\Delta P}{P} = \frac{1}{\varepsilon_{demand} + \varepsilon_{supply}} \cdot \frac{CM}{CC}$$

- U.S. oil glut: Seminole (1926), Oklahoma City (1928), East Texas (1930); crude fell by about half
- Venezuela: over 100 million barrels a year by 1929, vs. 11.9 million from Colombia
- If $\varepsilon_{demand} + \varepsilon_{supply} > 4.9$, social savings fall below the \$25M

Takeaway: the table is an upper bound, not a central estimate.

Predicted votes: full table

Model specification in Table 2	(1)	(3)
Actual votes		
(1) Senators that voted UTT	88	88
(2) Senators that voted UTT yes	69	69
Predictions		
(3) W1 + W2 predicts yes	70	73
(4) W1 + W2 + Tax ratio + Margin predicts yes	55	58
(5) W1 + W2 + Tax ratio + Oil influence predicts yes	68	69
(6) W1 + W2 predicts no	18	15
(7) W1 + W2 + Oil influence predicts yes (given W1 + W2 predicts no)	3	3

Table 3 in the paper. A senator is predicted to vote yes if the predicted probability is 0.5 or higher. Oil influence is the predicted probability from oil interest and vote buying (Indifferent, or Indifferent and Indifferent $\times$ Margin). Ratification required 59 votes.

Appendix Table 1: data definitions and sources

Variable	Definition	Source
Ratify	1 if senator *i* voted Yes; 0 if senator voted No	ICSPR U.S. Congressional Historical Statistics
Reduce	1 if senator *i* voted Yes; 0 if senator voted No	ICSPR U.S. Congressional Historical Statistics
Peace with Germany	1 if senator *i* voted Yes; 0 if senator voted No	ICSPR U.S. Congressional Historical Statistics
Crude (A)	Senator state *s* crude oil production value / value of production	U.S. Census (1921)
Refining (B)	Senator state *s* crude oil consumption value by refining / value of production	U.S. Census (1921)
Oil interest	A + B	U.S. Census (1921)
W1	Senator *i* score on government intervention in economic issues	voteview.com
W2	Senator *i* score on government intervention in social issues	voteview.com
Tax ratio	Senator state *s* rank of ratio federal taxes / federal expenditure	Price Fishback (U.S. Office of Government Reports)
Indifferent	1 if senator *i* abs(W2) $<$ 0.3005 (top 50 percentile); 0 all others	voteview.com
Margin	Senator *i* share of votes $-$ second runner up share of votes in last election to 1921	ICSPR U.S. Historical Election Returns Series
Incpc	Senator state *s* personal income / total population	Price Fishback (U.S. Bureau of Economic Analysis)
Illit	Senator state *s* illiterate population older than 10 years / population older than 10 years	U.S. Statistical Bulletin (1921)
Rural	Senator state *s* rural population / total population	U.S. Statistical Bulletin (1921)
Black	Senator state *s* black population / total population	U.S. Statistical Bulletin (1921)

Appendix Table 2: descriptive statistics

Variable	Unit	Obs.	Mean	Std. dev.	Min.	Max.
Ratify	Binary (1 = yes)	88	0.784	0.414	0.000	1.000
Reduce	Binary (1 = yes)	88	0.239	0.429	0.000	1.000
Peace with Germany	Binary (1 = yes)	88	0.716	0.454	0.000	1.000
Crude	Share of state production value	88	0.011	0.030	0.000	0.180
Refining	Share of state production value	88	0.012	0.023	0.000	0.130
Oil interest	Share of state production value	88	0.022	0.049	0.000	0.240
W1	W-Nominate score (−1 to 1)	88	0.176	0.748	−1.000	0.990
W2	W-Nominate score (−1 to 1)	88	−0.065	0.440	−1.000	0.880
Tax ratio	Rank	88	44.500	25.543	1.500	87.500
Indifferent	Binary (1 = indifferent)	88	0.500	0.503	0.000	1.000
Margin	Share of votes	88	0.276	0.314	0.000	1.000
Indifferent × Margin	Share of votes	88	0.132	0.259	0.000	1.000

Appendix A: Venezuela 2026, a modern empire trap?

What happened

- Jan 3, 2026: a U.S. military operation captures Maduro; Delcy Rodríguez is sworn in as interim president. (PBS)
- Aug 31, 2026: Venezuela grants NABEP, a Barbados-based firm run by Venezuelan executive Alejandro Betancourt, 100-year concessions over 17 oil fields (~65B barrels, about 1/5 of proven reserves), with no competitive bidding. (CNBC, CBS)
  - The U.S. gets: a 35% stake in NABEP (Defense Department), 20% of output at production cost, and a right of first refusal on the other 80% (under a 25-year agreement).
- Sep 2, 2026, separately: Chevron commits >$7B over 5 years through its joint ventures (Petroindependencia, 49%; Carabobo-1 and Carabobo-2-South-A) to double output to ~600,000 bpd. (CBC)
- Legal doubts: CSIS argues interim authorities cannot grant 100-year concessions. (CSIS, Mongabay)

1921 vs. 2026

	1921 (Colombia)	**2026 (Venezuela)**
U.S. tool	Reparations ($25M)	Military intervention
Who gets the oil	Jersey	NABEP (100 years) + Chevron (expansion)
U.S. government role	Pays	Becomes a shareholder (35%) and secures offtake
Host leverage	High (holds the pipeline)	Low (interim government)

Appendix B: Data centers as sunk investments (Tenjo, Colombia)

- Investor: ODATA, a subsidiary of U.S.-based Aligned Data Centers. (Aligned)
- Project: the BG03 campus in Tenjo, Cundinamarca: 120 MW, Colombia's largest, part of a $1.3B plan; first phases expected by end-2026. (DCD)
- Host permits: on Sep 16, 2026, ANLA licensed the "BG03 Navarra–Bacatá 220 kV" line, but only 50 MW of connection capacity and one circuit. The building's licenses are municipal and still contested. (ANLA, Colombia One)
- Local debate: energy and water demand in the Sabana de Bogotá. (Portal News, Pluralidad Z)
- The 1921 parallel: like Jersey's oilfields needing a pipeline, a built data center is immobile and depends on host-controlled grid access. The remaining ~70 MW will depend on future permits.