

Resources and Territorial Claims:  
Domestic Opposition to Resource-Rich Territory  
Online Appendix

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## A List of Territorial Claims in South America 1830-2001

Table A1: List of Territorial Claims in South America 1830-2001

Claim ID	Polygon ID	Name	Side A	Side B	Start Year	End Year	Resource (Predates Claim)	Resource (After Claim)
100	1000	Goajira-Guainia	VEN	COL	1841	1922		oil
102	1020	Los Monjes	COL	VEN	1951	2001	guano	
104	1041	Oriente-Aguarico	ECU	COL	1830	1832	coal	oil
104	1042	Oriente-Aguarico	ECU	COL	1840	1904		oil
104	1043	Oriente-Aguarico	ECU	COL	1904	1916		oil
106	1061	Loreto	PER	COL	1839	1922		
106	1062	Leticia	PER	COL	1932	1935		
108	1080	Apaporis	BRA	COL	1831	1928		
112	1121	Essequibo	VEN	UKG	1841	1886	gold	oil
112	1122	Essequibo	VEN	UKG	1886	1899	gold	oil
112	1123	Essequibo	VEN	UKG	1951	1966	gold	oil
112	1124	Essequibo	VEN	GUY	1966	2001	gold	oil
114	1140	Patos Island	VEN	UKG	1859	1942	guano	
118	1180	Los roques	NTH	VEN	1850	1856	guano	
120	1201	Corentyn-NRT	NTH	GUY	1966	1975		
120	1202	Corentyn-NRT	GUY	SUR	1975	2001		
122	1220	Pirara	BRA	UKG	1838	1926		oil
124	1241	Maroni	NTH	FRA	1849	1975		
124	1242	Maroni	SUR	FRA	1975	2001		
126	1260	Tumuc-Humac	BRA	NTH	1852	1906	copper	
128	1280	Amapa	FRA	BRA	1826	1900	coal	
130	1301	Oriente-Mainas	PER	ECU	1830	1916	coal	oil
130	1302	Oriente-Mainas	PER	ECU	1916	1945	coal, copper, gold	oil
130	1303	Oriente-Mainas	ECU	PAR	1947	1960		oil
130	1304	Oriente-Mainas	ECU	PER	1960	1998	coal	
131	1311	Galapagos	USA	ECU	1854	1855		
131	1312	Galapagos	USA	ECU	1892	1906		
132	1321	Amazonas-Caqueta	ECU	BRA	1854	1904		
132	1322	Amazonas-Ica	ECU	BRA	1904	1922		
133	1330	Amazonas-Caqueta	COL	BRA	1854	1922		
134	1340	Chincha Islands	SPN	PER	1864	1866	guano	
136	1361	Acre-Abuna	BRA	BOL	1848	1867		
136	1362	Acre-Abuna	BRA	BOL	1867	1903		manganese
137	1370	Acre-Madre de Dios	PER	BOL	1848	1912		oil
138	1380	Acre-Purus	PER	BRA	1839	1909		
		⋮						

Table A1 continued

Claim ID	Polygon ID	Dispute	Side A	Side B	Start Year	End Year	Resource (Predates Claim)	Resource (After Claim)
		⋮						
144	1441	Apa	PAR	BRA	1846	1870		
144	1442	Rio Paraguay Border	PAR	BRA	1876	1929		
146	1461	Misiones	ARG	PAR	1822	1852		oil
146	1462	Misiones	ARG	BRA	1841	1895		oil
150	1500	Trindade Island	BRA	UKG	1826	1896		
152	1521	Chaco Boreal	BOL	PAR	1858	1878		oil
152	1522	Chaco Boreal	BOL	PAR	1878	1938		oil
153	1530	Tacna Arica	CHL	PER	1883	1929	coal, copper	molybdenum
154	1541	Antofagasta	CHL	BOL	1848	1866	coal, copper	molybdenum
154	1542	Antofagasta	CHL	BOL	1866	1884	copper, saltpeter, gold	
154	1543	Antofagasta	BOL	CHL	1884	2001		
156	1561	Puna de Atacama	ARG	BOL	1848	1889	silver,	tin
156	1562	Tarija	ARG	BOL	1848	1889	boron, silver,	tin, oil
156	1563	Tarija	ARG	BOL	1895	1925		oil
157	1570	Los Andes	CHL	ARG	1896	1904	copper, gold	lithium, halite boron, gypsum
158	1581	Chaco Central	ARG	PAR	1846	1876		oil
158	1582	Chaco Central	ARG	PAR	1876	1878		
159	1590	Chaco Central	ARG	BOL	1868	1889		oil
160	1601	Patagonia	CHL	ARG	1841	1872	coal, gold, silver	lead, halite, oil
160	1602	Patagonia	CHL	ARG	1872	1876	coal, gold, silver	lead, halite, oil
160	1603	Patagonia	CHL	ARG	1876	1881	coal	oil
160	1604	Patagonia	CHL	ARG	1881	1902	coal	oil
160	1605	Palena Glaciers	CHL	ARG	1903	1998		
164	1640	Beagle Channel	ARG	CHL	1904	1985		
168	1680	Rio de la Plata	ARG	URU	1882	1973		
170	1700	Falklands	ARG	UKG	1841	2001		

Resources in the "Predates Dispute" column notes the resources present when the territorial claim was initiated. Resources in the "After Dispute" column notes resources that were discovered after the territorial claim was resolved. If a country re-initiates a claim over a territory after the discovery of a certain resource, the claim would be coded as a new claim, with the discovered resource now being listed under "Predates Dispute".

The list of territorial claims and the resources involved with each claim provide further evidence that even when we only look at territories that were claimed (in other words, even when we are not comparing the probability of resource presence between claimed and unclaimed areas as we do in the main text), it does not seem to be the case that territorial claims were initiated over valuable resources. First, many territorial claims did not have resources predating the dispute. Second, even when resources did predate a territorial claim, many of the resources were those such as coal which were also found (in fact, more frequently) in unclaimed areas. Third, even after more resources such as oil were discovered after the resolution of a territorial claim, the territory was hardly re-claimed following the discovery.

## B Descriptive Statistics

### B.1 Distribution of Resource Capital Intensity per Decade

Table B1: Distribution of Resource Capital Intensity per Decade (All Gridcells)

Primary Industry	Barren	Crop & Animal	Forestry & Fishing	Mining	Oil & Gas
	Potential Benefit Concentration				
Income from Structure(%)	0	0.18	0.2	0.39	0.90
Ordinal Ranking	Low	Low	Low	Medium	High
1830s	11	119	7090	324	0
1840s	8	117	7055	364	0
1850s	8	117	7053	366	0
1860s	8	117	7043	366	10
1870s	8	117	7043	366	10
1880s	8	117	7043	366	10
1890s	8	117	7062	347	10
1900s	8	116	7019	356	45
1910s	8	116	6965	350	105
1920s	7	114	6862	347	214
1930s	7	111	6824	348	254
1940s	7	103	6757	337	340
1950s	10	102	6666	328	438

Low capital-intensive gridcells (barren or areas only suitable for agriculture, forestry, or fishing) decrease over the years from 95% to 89% as minerals and oil are found. Areas suitable for mining remain constant at around 4-5%, and gridcells containing oil gradually increase from 0 to 6%.

Table B2: Distribution of Resource Capital Intensity per Decade (High Risk Areas)

Primary Industry	Barren	Crop & Animal	Forestry & Fishing	Mining	Oil & Gas
	Potential Benefit Concentration				
Income from Structure(%)	0	0.18	0.2	0.39	0.90
Ordinal Ranking	Low	Low	Low	Medium	High
1830s	11	118	3808	202	0
1840s	8	116	3791	224	0
1850s	8	116	3791	224	0
1860s	8	116	3785	224	6
1870s	8	116	3785	224	6
1880s	8	116	3785	224	6
1890s	8	116	3786	223	6
1900s	8	115	3747	228	41
1910s	8	115	3712	220	84
1920s	7	113	3635	217	167
1930s	7	110	3614	219	189
1940s	7	102	3547	208	275
1950s	10	101	3528	192	308

Similarly, low capital-intensive gridcells (barren or areas only suitable for agriculture, forestry, or fishing) decrease over the years from 94% to 85% as minerals and oil are found. Areas suitable for mining remain constant at around 4-6%; areas containing oil gradually increase from 0 to 9%.

## B.2 Number of Claimed Gridcells per Decade (by High-Risk/ Non-High Risk Areas)

Table B3: Number of Claimed Gridcells (New claims in parentheses)

	High Risk Areas (Overlap+ No Hist + Border) # of gridcells: 4139	Non-High Risk Areas #of gridcells: 3405	Total 7544
1830s	578 (578)	54 (54)	632 (632)
1840s	1413 (889)	130 (76)	1543 (965)
1850s	1476 (63)	176 (46)	1652 (109)
1860s	1527 (65)	157 (0)	1684 (65)
1870s	1555 (52)	157(0)	1712 (52)
1880s	1246 (64)	154 (3)	1400 (67)
1890s	1044 (43)	169 (17)	1213 (60)
1900s	978 (1)	164 (1)	1142 (2)
1910s	643 (0)	119 (0)	762 (0)
1920s	544 (0)	19 (0)	563 (0)
1930s	324 (5)	1 (0)	325 (5)
1940s	164 (6)	1 (0)	165 (6)
1950s	102 (70)	1 (0)	103 (70)
Ever claimed	1679/ 4139 (40.6%)	179/3405 (5.6%)	1858/7544 (24.6%)
Gridcells   Claimed	1679/1858 (90.4%)	179/1858 (9.6%)	

Table B3 provides a breakdown of how many High-Risk Gridcells versus non-High Risk Gridcells were claimed for each decade. A total of 40.6% gridcells in High Risk Areas were claimed, while only 5.6% of gridcells in Non-High Risk Areas were claimed. We also see that 90.4% of all territorial claims took place within the High Risk Gridcells. The 9.6% that did not happen in High-Risk areas are mostly the Acre disputes (Acre Madre de Dios, Acre-Abuna), which are coded as having taken place within Peruvian territory (although the "Peruvian" territory was de facto mostly uninhabited territory in the Amazons). Goajira-Guainia, Tumuc-Humac, and Apaporis disputes are also coded as being only partially overlapping with the High-Risk Areas. In terms of claim numbers, 56 of the 61 territorial claim polygons took place in the High-Risk Area. Figure B1 visualizes the overlap between areas coded as High Risk Areas (gray) and all territorial claims from 1830-2001 (orange). Overlapping territorial claim are shown in darker shades of orange.

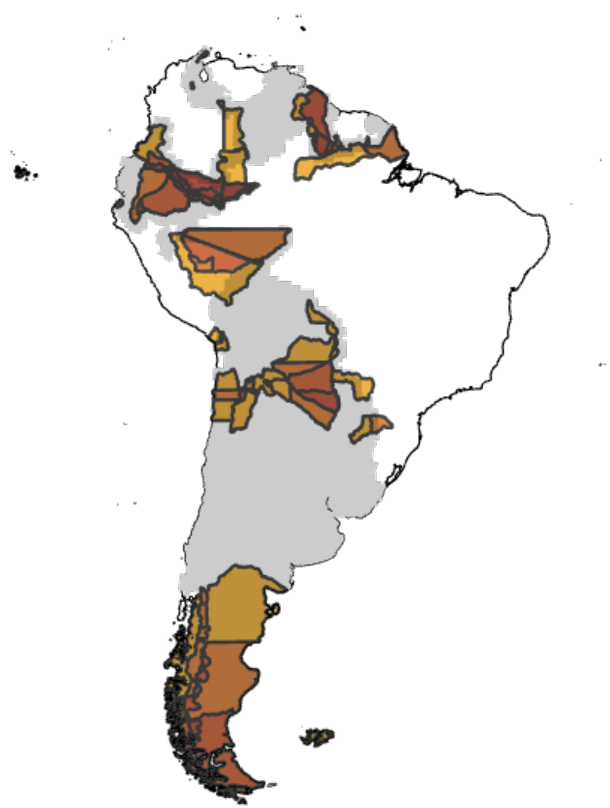


Figure B1: Overlap between High Risk Areas and Territorial Claims



### B.3 Justification for Using Gridcells as Unit of Analysis

I use gridcells as the main unit of analysis because gridcells allow for a more fine-grained examination of which specific territories were claimed (Schultz, 2017). Most territorial claims are made on small parts of a province—73% of territorial claims disputed less than half of a province in a single dispute (Figure B3). This implies that some claimed can be erroneously classified as being related to resources when the actual area claimed does not include resource deposits if the unit of analysis is too big, such as at the province or state level. Additionally, because the basemap for provinces is only available for Spanish America, using entire provinces as the unit of analysis would leave out a handful of territorial claims involving Brazil or the Guianas.

The definition and basemap for "provinces" of colonial Spanish America come from HGIS de las India (Figure B2).<sup>1</sup> The data acknowledges that "there is no single definition of what constituted a "province", any effort can be contested". However, it lists a series of guidelines, such as including every entity headed by a "gobernador", intendencias, autonomous fiefdoms, or core areas where viceroys and captain-generals were also immediate governors.

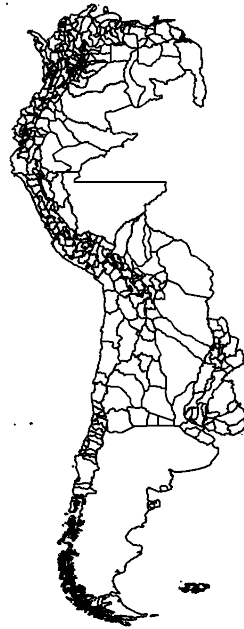


Figure B2: Basemap of 1808 provinces

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<sup>1</sup>Stangl, Werner, 2020, "Basemaps of Spanish American provinces (1701, 1725, 1750, 1775, 1787, 1800, 1808)", <https://doi.org/10.7910/DVN/RV4LTY>

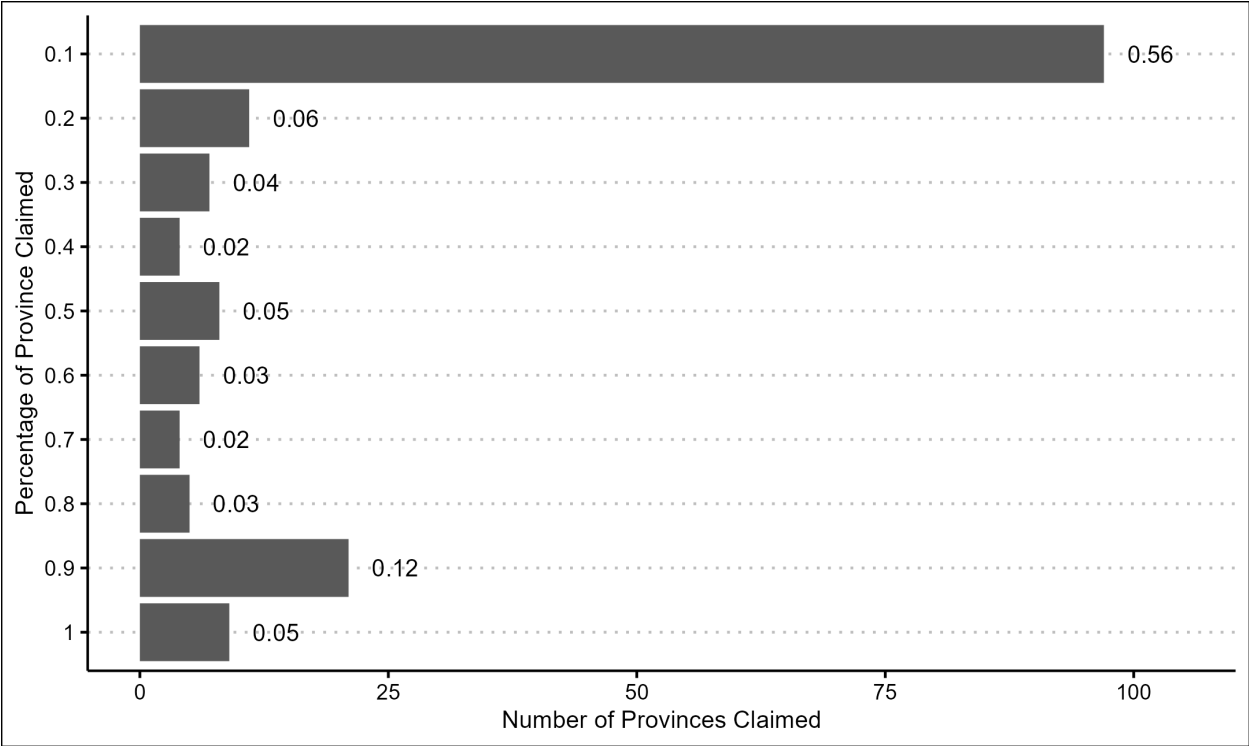


Figure B3: Proportion of a Province Claimed in a Territorial Claim

The y-axis indicates the proportion of a province that was contested in a territorial claim: for example, the first bar from the top indicates how many territorial claims disputed 0% to 10% of a 1808 province’s area (56% of territorial claims). The x-axis represents the number of provinces, and the numbers on the right of each bar represents what proportion of territorial claims are included in the cutoff section. We see that claims over entire provinces were quite rare— only about 17% provinces had more than 90% of their territory contested.

## C Additional Information on Resources

### C.1 Georeferenced Sources for Primary Industries

**[111,112] Crop and Animal Production** To code land that can be used for crop and animal production, I use geocoded data of crop distribution provided by Spatial Production Allocation Model (SPAM, Wood et al. 2010). SPAM records spatial patterns of crop performance for 42 agricultural and commercial crops such as wheat, rice, bananas, cocoa, coffee, and soybeans in 2010. I use SPAM to construct a binary variable indicating whether or not the land is arable: a gridcell containing any record of crop harvest is considered arable '1' while a cell without any record of crop harvest is coded as non-arable '0'. Using this way of coding, 93% of gridcells are coded as arable. The reason for choosing a lenient measure to code arable areas is because it is helpful for the measure to capture areas with potential for agriculture throughout 1830-2001 rather than to simply reflect the state of the agriculture at a given time. See <https://mapspam.info/methodology/> for more details on the dataset.

**[113-115] Forestry and Fishing** I rely on the GlobCover V2.3 data to code which areas are suitable for forestry, hunting, and fishing. GlobCover is a project headed by the European Space Agency to keep track of global land coverage and offers a detailed mapping of types of forests and shrublands around the world based on satellite data. As with agriculture, I employ a lenient standard and code all types of forests as shrublands as '1'. I also code all cells bordering the ocean as suitable for fishing. The only areas that are coded as '0' are inland grid cells which have been marked as barren (under 30% vegetation density) by GlobCover, which results in 98% of grid cells being coded as suitable for Forestry & Fishing. See [http://due.esrin.esa.int/files/GLOBCOVER2009\\_Validation\\_Report\\_2.2.pdf](http://due.esrin.esa.int/files/GLOBCOVER2009_Validation_Report_2.2.pdf) for more details.

**[211] Oil and Gas Extraction (Time-varying)** I draw on the oil and gas fields mapped out by Petrodata V1.2 by Lujala, Rød, and Thieme (2007) to construct a time-varying variable of oil. The data codes a total of 130 onshore and offshore oil and gas fields in South America. The original data runs from 1946-2003 and codes all oil fields discovered prior to 1946 as "1945". However, the data contains source links to each oil field, which in turn have information on the discovery year of each oil field including those that were discovered in the 19th century. I use this data to input the discovery years of each oil field discovered before 1945.

**[212] Mining (Time-varying)** To code the distribution of valuable minerals and metals, I use the United States Geological Survey (USGS) report on "Geology and Nonfuel Mineral Deposits of Latin America and Canada" by Cunningham et al. (2005). This data compiles geocoded information on 15 valuable metals such as gold, copper, iron, and aluminum, and 16 industrial minerals such as clay, gemstones, lithium, and phosphate. The distribution of coal is coded based on a separate USGS report named "The World Coal Quality Inventory: South America" by Karlsen et al. (2006). See <https://pubs.usgs.gov/of/2006/1241/> for more information.

## C.2 Mineral Value Data

I code a mineral to be economically valuable when their global market value (unit value per ton  $\times$  world production in tons) surpasses \$1 billion in 1998 US dollars based on USGS historical data (Cunningham et al. 2005). I choose one billion dollars as the threshold because it generally coincides with a qualitative read of when minerals widely became valuable: for example, using this coding rule, tin enters the global market in 1905, aluminum in 1916, sulfur in 1934, and lithium in 1954. Minerals thought to be historically valuable, such as gold, copper, silver, iron, were surpassing 3 billion dollars of global market value in the 1800s (see Table C1 below). Again the USGS mineral data does not have information on organic materials— I code coal to be valuable starting from the beginning of the data, 1830, and guano and saltpeter deposits to be valuable from 1830 to 1940. It is also worth noting that guano and nitrates are the only resources that lose commercial value in the data: usually once a mineral surpasses world market value of \$1 billion, it tends to remain or become increasingly valuable. I also test my results against alternative measurements of mineral value, such as when the mineral first appears in the US mineral yearbook and when the mineral first had value in the stock markets, but the alternative coding rules do not change the results.

Table C1 presents the minerals that appear in the USGS dataset and the year in which their global market value surpassed \$1 billion in 1998 U.S. dollars. Data on minerals' global market value are taken from the USGS Historical Statistics for Mineral and Material Commodities (Kelly et al. 2005)<sup>2</sup> and records on individual gem prices from Ball (1931), who records approximate value of gem prices from 16th-early 20th century. Minerals that never reached global value are marked as N/A.

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<sup>2</sup><https://www.usgs.gov/centers/national-minerals-information-center/historical-statistics-mineral-and-material-commodities>

Table C1: List of Minerals and their Global Value Year

Mineral	Year	Mineral	Year
Aluminum	1916	Lead	1900
Andalusite	N/A	Limestone	1962
Antimony	2009	Lithium	1954
Barite	N/A	Magnesite	1975
Beryllium	N/A	Magnesium	1975
Boron	1975	Manganese	1950
Calcite	N/A	Molybdenum	1966
Calcium carbonate (limestone)	N/A	Nepheline syenite	N/A
Coal	1830	Nickel	1937
Cobalt	N/A	Niobium	2007
Copper	1830	Nitrate	1840
Diatomite	N/A	Palladium	N/A
Feldspar	2006	Phosphate	1953
Fluorine	1970	Platinum	1967
Gem amethyst	N/A	Potash (Alum)	1921
Gem emerald	1852	Pyrophyllite (w/ sulfur)	1977
Gem topaz	N/A	Rare earths	2008
Graphite	N/A	Rhodochrosite	N/A
Guano	1840	Silver	1830
Gypsum	1928	Sulfur	1930
Halite (rock salt)	1922	Talc	1977
Iodine	N/A	Tin	1905
Iron	1830	Titanium	1994
Kaolin (clay mineral, industrial)	N/A	Tungsten	1951
Kaolinite	N/A	Vermiculite (Zonolite)	N/A
		Zinc	1902
		Zirconium	2011

### C.3 State of Agriculture in 19th Century South America

While using a relative ordering of primary resources helps ensure generalizability over time and space, it may be necessary to provide more details on the state of the agricultural industry in South America. I cannot attempt to provide a full picture here, but I offer some details below that would help lend more credibility to the ordinal ranking.

Bauer & Johnson (1978), for example, present a study of how historical land distribution in Chile changed from 1850 to 1935. Their study contains various land distribution records for multiple provinces in Chile: Table C2 displays an example table from their study for 1854. The first table represents a province whose land distribution was less equitable, and the second table represents a province whose distribution was more equitable. According to the authors, most provinces looked like something in between La Ligua and San Felipe.

**TABLE 11** *Land distribution in La Ligua, 1854*

Category in hectares	0-5	6-20	21-50	51-200	201-1,000	1,001-5,000	over 5,000	Total
No. of owners	95	40	9	4	5	1	8	162
Percentage of owners	58.6%	24.6%	5.6%	2.6%	3.1%	0.6%	4.9%	100%
Total hectares	243	394	252	385	3,006	1,570	142,850	148,700
Percentage of total hectares	0.2%	0.3%	0.2%	0.3%	2.0%	1.0%	96.0%	100%

*Source:* Archivo Nacional (Santiago), *Colección de Hacienda*, vol. CCCIV (1854-6), p. 36.

**TABLE 12** *Land distribution in San Felipe, 1854*

Category in hectares	0-5	6-20	21-50	51-200	201-1,000	1,001-5,000	over 5,000	Total
No. of owners	353	134	40	22	5	2	—	556
Percentage of owners	63.4%	24.2%	7.1%	4.0%	0.9%	0.4%	—	100%
Total hectares	739	1,421	1,423	1,839	1,607	3,227	—	10,256
Percentage of total hectares	7.2%	13.8%	13.8%	17.9%	15.7%	31.6%	—	100%

*Source:* Archivo Nacional (Santiago), *Colección de Hacienda*, vol. CCCIV (1854-6), no page.

Table C2: Example table of land distribution records in Chile

Table taken from (Bauer & Johnson, 1978, 85) *Land and Labour in Rural Chile 1850-1935* Cambridge University Press Series in Latin American Studies.

Kay (1978) further discusses how there was considerable variation within the Latin American *hacienda* system. While there definitely existed sprawling plantations owned by a handful of elites who exploited sharecroppers' gains, the majority of haciendas were owned by less affluent and less powerful landlords who had to operate on a more equitable profit distribution system. In his study of the Peruvian sugar industry 1870-1930, (Klaren, 2005, 239) also notes that Peru had a "sizeable rural middle class" who cultivated small plots of land in and around the region's urban centers. The dispossession of small farmers in Peru came in the 20th century as an aftermath of the War of the Pacific and mechanization, but even then, it is questionable whether sugar farms had a higher potential for benefit concentration than the mining or oil industry.

In fact, Ortega (1982) shows in his study of Chilean mining industry 1840-1879 that ownership of mines could often be attributed to a single rich entrepreneur—mining entrepreneurs had to invest not only in developing the mine and hiring miners but also in the auxiliary industries such as workshops, smelting establishments, and sometimes even railways to transport the mined minerals, making entrance into the mining market much more forbidding than into the agricultural industry.

## D Robustness Checks

### D.1 Spatial Lag Regressions by Decade

Table D1: Spatial Lag Regressions by Decade (DV: Territorial Claims (0, 1))

	All Gridcells					High Risk Gridcells	
	Minerals (Med BenCon)	Oil (High BenCon)	Historical Overlap	No Juris	Dist to Border	Minerals (Med BenCon)	Oil (High BenCon)
1830s	-0.004		0.014***	-0.004	-0.000	-0.003	
1840s	-0.001		0.015***	0.033***	-0.000	-0.000	
1850s	-0.001		0.012***	0.033***	-0.000	-0.001	
1860s	0.001	-0.054	0.015***	0.035***	-0.000	0.002	-0.103
1870s	0.002	-0.054	0.015***	0.037***	-0.000	0.004	-0.103
1880s	-0.005	-0.055	0.017***	0.018***	-0.000	-0.001	-0.100
1890s	-0.014*	-0.054	0.014***	0.006	-0.000	-0.017	-0.098
1900s	-0.014*	-0.021	0.013***	0.007	-0.000	-0.020*	-0.029
1910s	-0.007	-0.010	0.005*	0.005	-0.000	-0.010	-0.014
1920s	-0.005	-0.004	0.008***	0.008***	-0.000	-0.007	-0.004
1930s	0.000	-0.004	0.007***	0.011***	-0.000	0.001	-0.004
1940s	-0.003	-0.004	0.007***	-0.001	0.000	-0.003	-0.006
1950s	-0.003	-0.001	0.007***	-0.001	0.000	-0.003	-0.001

Summary of coefficients from spatial lag regressions at the decade level. All regressions are run on decades (ex: the 1830s regression collapse together ten years from 1830-1839) except for the 1950s regression, which collapses together all years between 1950-2001. This is to prevent unnecessary repetition of results, since almost no new claims are made after this period. Results for High capital intensity are not estimated from decades 1830s-50s because South America’s first oil discovery was in the 1860s. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

Because the spatial model coefficients in the main text show the average effect of resource capital intensity on territorial claims for years 1830-2001, it is difficult to know if there are heterogeneous effects by time periods. I check the possibility of heterogeneous effects by running spatial lag regressions for each decade starting from the 1830s. In these regressions, gridcell attributes are coded to reflect values of each decade: for example, if a gridcell was contested from 1846 to 1854, the gridcell is coded as having been unclaimed (0) for 1830s, as claimed (1) for 1840s and 50s, and back to unclaimed from the 1860s. The coefficients thus indicate the relationship between resource capital intensity and territorial claims for each decade.

The decade-level regressions demonstrate that the spatial lag results presented in the main text hold across time periods: the presence of both minerals and oil are negatively related to territorial claims in almost all decades. These results indicate that even in the 19th century, states were not raising more territorial claims on resource-rich areas. The consistency of results across decades alleviates concerns that the results are driven by certain time periods or certain ideologies like Marxism. The results also question the popularly held belief that disputes over barren territories are only a modern phenomenon.



## D.2 Robustness to Other Cutoffs for Proportion of Gridcell claimed

While gridcells allow for a statistical testing of the hypothesis, they also generate a coding dilemma, where the researcher has to determine how much of the gridcell has to be claimed for the gridcell to be coded as claimed. Making the threshold too low would count a gridcell that overlaps very little with the territorial dispute polygon as claimed, but making the threshold too high would result in some smaller claims being dropped because they do not cover the entire gridcell. This is especially a cause of concern for many 20th century territorial disputes which are smaller in size. I thus define a gridcell to be contested when more than 20% of the gridcell is claimed in the main text, but provide robustness checks on different thresholds such as 50% and 80% (Tables D2 & D3). Results are identical.

Table D2: Spatial Lag Model using 50% of gridcell claimed as cutoff

Explanatory Variables	DV: Territorial Claim (0,1)							
	Year FEs				Two-way FEs			
	All Gridcells		High Risk		All Gridcells		High Risk	
	$\beta$	s.e.	$\beta$	s.e.	$\beta$	s.e.	$\beta$	s.e.
Minerals (Medium Ben.Con.)	-0.009***	0.000	-0.014***	0.001	-0.002*	0.001	-0.0002	0.002
Oil (High Ben.Con.)	-0.004***	0.001	-0.004***	0.001	-0.001***	0.0005	-0.0001	0.001
Historical Overlap	0.005***	0.000						
No Jurisdiction	0.008***	0.000						
Dist to Border (100km)	-0.000***	0.000						
$\rho$	0.92***		0.91***		0.92***		0.91***	
Gridcell FEs					✓		✓	
Year Fixed-Effects	✓		✓		✓		✓	
Observations	7,544 × 172		4,139 × 172		7,544 × 172		4,139 × 172	
	1,297,568		711,908		1,297,568		711,908	

Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

Table D3: Spatial Lag Model using 80% of gridcell claimed as cutoff

Explanatory Variables	DV: Territorial Claim (0,1)							
	Year FEs				Two-way FEs			
	All Gridcells		High Risk		All Gridcells		High Risk	
	$\beta$	s.e.	$\beta$	s.e.	$\beta$	s.e.	$\beta$	s.e.
Minerals (Medium Ben.Con.)	-0.007***	0.000	-0.012***	0.001	-0.001	0.001	0.002	0.002
Oil (High Ben.Con.)	-0.002***	0.001	-0.003***	0.001	-0.005***	0.001	-0.006***	0.001
Historical Overlap	0.002***	0.000						
No Jurisdiction	0.006***	0.000						
Dist to Border (100km)	-0.000***	0.000						
$\rho$	0.91***		0.91***		0.91***		0.91***	
Gridcell FEs					✓		✓	
Year Fixed-Effects	✓		✓		✓		✓	
Observations	7,544 × 172		4,139 × 172		7,544 × 172		4,139 × 172	
	1,297,568		711,908		1,297,568		711,908	

Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

### D.3 OLS Model

Table D4: Main Results (Table 3), using ordinary least squares

<i>Dependent variable: Territorial Claims Incidence (0,1)</i>				
	All Gridcells	High Risk Gridcells	All Gridcells	High Risk Gridcells
	(1)	(2)	(3)	(4)
Minerals & Metals (Medium Ben.Con.)	-0.036*** (0.009)	-0.053*** (0.014)	-0.036*** (0.001)	-0.053*** (0.002)
Oil & Gas (High Ben.Con.)	-0.028*** (0.005)	-0.025*** (0.006)	-0.028*** (0.001)	-0.025*** (0.002)
Historical Overlap	0.070*** (0.006)		0.070*** (0.001)	
No Colonial Jurisdiction	0.085*** (0.006)		0.085*** (0.002)	
Distance to Border	-0.0001*** (0.00000)		-0.0001*** (0.00000)	
Year Fixed-Effects	✓	✓	✓	✓
SE Cluster Level	Gridcell	Gridcell	Conley (100km)	Conley (100km)
Observations	1,297,568	711,908	1,297,568	711,908
R <sup>2</sup>	0.103	0.111		

Results using Ordinary Least Squares as the estimation method. Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing), and the Dependent variable is Territorial Claims Incidence as in the main text. Models 1-2 cluster the standard errors at the gridcell-level and Models 3-4 use Conley standard errors that accounts for spatial correlation between observations. The cutoff used for Conley standard errors is 100km, but results are robust to using 50km or 200km cutoffs. The OLS results presented here are very similar to the spatial lag results presented in the main text. Conley Standard Errors were estimated using the `conleyreg` package in R. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01. See also, Table D7 for OLS results using year and gridcell fixed-effects.

## D.4 Claim Onsets as the Dependent Variable

The dependent variable here is territorial claim onset, instead of territorial claims incidence used in the main text. A claim onset is a binary variable, where it takes a value of ‘1’ if a territorial claim started on that year. It is coded as a ‘NA’ in the subsequent years of the same territorial claim—hence a territorial claim would be coded as ‘1’ only on the year it started and coded as ‘NA’ afterwards. The variable takes a value of ‘0’ if there is no ongoing territorial claim over the gridcell.

This coding has the advantage of accounting for temporal correlation between observations. However, because the coding introduces NAs into the dependent variable, it becomes practically impossible to computationally calculate a time-series spatial lag regression (such model would require a new spatial matrix for each year that drops gridcells that have NAs in the DV). I therefore calculate the model using ordinary least squares; results are very similar to the main results where minerals and oil have a negative effect on the probability of new claim onsets. See also, Section D.3 for OLS results using claim incidents.

Table D5: Using New Claim Onsets as the DV (OLS model)

	<i>Dependent variable: New Claim Onset (0,1)</i>			
	All Gridcells (1)	High Risk Gridcells (2)	All Gridcells (3)	High Risk Gridcells (4)
Minerals & Metals (Medium Ben.Con.)	−0.0004** (0.0002)	−0.001** (0.0003)	−0.0004* (0.0002)	−0.001* (0.0004)
Oil & Gas (High Ben.Con.)	−0.001*** (0.0001)	−0.001*** (0.00004)	−0.001*** (0.0001)	−0.001*** (0.0001)
Historical Overlap	0.001*** (0.0001)		0.001*** (0.0002)	
No Colonial Jurisdiction	0.003*** (0.0002)		0.003*** (0.0003)	
Distance to Border	−0.00000*** (0.00000)		−0.00000*** (0.00000)	
Year Fixed-Effects	✓	✓	✓	✓
SE Cluster Level	Gridcell	Gridcell	Conley (100km)	Conley (100km)
Observations	1,178,156	603,212	1,178,156	603,212
R <sup>2</sup>	0.042	0.078		

The baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). Models 1-2 cluster the standard errors at the gridcell-level and Models 3-4 use Conley standard errors that accounts for spatial correlation between observations. The cutoff used is 100km, but results are robust to using 50km or 200km cutoffs. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

## D.5 Two-Way Fixed Effects

This section explores whether the *discovery* of capital-intensive resources decreases the probability of territorial claims by adding both year and gridcell fixed-effects. See also, Table D9, where I run the two-way fixed effects analysis using only the original minerals data from USGS. This table also shows a null to a more negative relationship.

Table D6: Discovery of Capital-Intensive Resources on Probability of Territorial Claims (Spatial Lag Model, TWFE)

Explanatory Vars	DV: Territorial Claim Incidence (0,1)					
	Model 1 All Gridcells			Model 2 High Risk Gridcells		
	$\beta$	s.e.	Marginal Effects	$\beta$	s.e.	Marginal Effects
Minerals (Medium Ben.Con.)	0.001	0.001	0.016	0.002	0.002	0.027
Oil (High Ben.Con.)	-0.001**	0.000	-0.015**	-0.000	0.000	-0.004
$\rho$		0.93***			0.92***	
Gridcell Fixed-Effects		✓			✓	
Year Fixed-Effects		✓			✓	
Observations		7,544 × 172 1,297,568			4,139 × 172 711,908	

Spatial Lag Model.  $\beta$  column displays the regression coefficient; s.e. column displays the standard errors; M.E. column shows the marginal effect of the explanatory variables. Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing) and models estimate how the discovery of capital-intensive resources in a gridcell changes the probability that the gridcell would be claimed. \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

This result is also replicated in Table D7, which estimates the relationship between resource discovery and territorial claims using an OLS model. Models 1-2 use territorial claims incidence as the dependent variable while Models 3-4 take new claim onset as the dependent variable. Again, the coefficients are either null or negative, showing that at the very least, resource discovery is not positively correlated with either territorial claim incidences or onsets.

Table D7: Discovery of Capital-Intensive Resources on Probability of Territorial Claims (OLS Model, TWFE)

	<i>Dependent variable:</i>			
	Claim Incidence		Claim Onset	
	(1)	(2)	(3)	(4)
Minerals & Metals (Medium Ben. Con.)	0.005 (0.014)	0.005 (0.022)	0.0004 (0.001)	0.001 (0.001)
Oil & Gas (High Ben. Con.)	-0.015 (0.010)	0.002 (0.013)	-0.001*** (0.0004)	-0.0001 (0.001)
Gridcell Fixed-Effects	✓	✓	✓	✓
Year Fixed-Effects	✓	✓	✓	✓
Observations	1,297,568	711,908	1,178,156	603,212
R <sup>2</sup>	0.511	0.527	0.062	0.098

Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). Standard errors are clustered at the gridcell-level. \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

## D.6 Spatial Lag Model using only USGS Mineral Data

Table D8: Spatial Lag Model with Year Fixed-Effects (Main text: Table 3)

Explanatory Variables	DV: Territorial Claim (0,1)					
	Model 1 All Gridcells			Model 2 High Risk Gridcells		
	$\beta$	s.e.	Marginal Effect	$\beta$	s.e.	Marginal Effect
Minerals (Medium Ben.Con.)	-0.006***	0.001	-0.070***	-0.008***	0.001	-0.099***
Oil (High Ben.Con.)	-0.004***	0.001	-0.048***	-0.003***	0.001	-0.040***
Historical Overlap	0.010***	0.000	0.121***			
No Jurisdiction	0.010***	0.000	0.120***			
Dist to Border (100km)	-0.000***	0.000	-0.000***			
$\rho$		0.93***			0.92***	
Year Fixed-Effects		✓			✓	
Observations		7,544 × 172 1,297,568			4,139 × 172 711,908	

Minerals are coded using only the original mineral deposits data from USGS, excluding handcoded deposits of coal, guano, and saltpeter. Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

Table D9: Spatial Lag Results with Two-way Fixed Effects (Appendix Table D6)

Explanatory Variables	DV: Territorial Claim (0,1)					
	Model 1 All Gridcells			Model 2 High Risk Gridcells		
	$\beta$	s.e.	Marginal Effect	$\beta$	s.e.	Marginal Effect
Minerals (Medium Ben.Con.)	0.001	0.001	0.016	-0.004	0.003	-0.046*
Oil (High Ben.Con.)	-0.001**	0.000	-0.015**	-0.001	0.001	-0.008
$\rho$		0.93**			0.92**	
Gridcell Fixed-Effects		✓			✓	
Year Fixed-Effects		✓			✓	
Observations		7,544 × 172 1,297,568			4,139 × 172 711,908	

Minerals are coded using only the original mineral deposits data from USGS, excluding handcoded deposits of coal, guano, and saltpeter. Baseline comparison is Low Benefit Concentration (No resources, Crop & Animal Production, Forestry & Fishing). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

## D.7 Hazard Model Results

Table D10: Time-Varying Cox Proportional Hazard Model

<i>Dependent variable: Territorial Claim (0,1)</i>				
	Coefficient	Hazard Ratio	Lower 95% CI	Higher 95% CI
Minerals	−0.432*** (0.016)	0.65	0.50	0.85
Oil & Gas	−0.448** (0.036)	0.64	0.47	0.92
Hist. Overlap	0.572*** (0.007)	1.77	1.56	2.01
No Col. Juris.	0.777*** (0.007)	2.18	1.94	2.43
Dist. Border	−0.001*** (0.000)	0.999	0.998	0.999
Observations		1,297,568		
R <sup>2</sup>		0.042		
Log Likelihood		−1,047,276.000		
LR Test		55,868.190*** (df = 5)		

Baseline comparison is gridcells without minerals and oil (No resources, Crop & Animal Production, Forestry & Fishing). Minerals and Oil are time-varying, while Historical Overlap, No Colonial Jurisdiction, and Distance to Border do not vary over time. The time interval used is one year for consistency with other analyses. Standard errors clustered at the gridcell level. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01.

Table D10 shows the results of a Cox proportional hazard model with time-dependent variables (resources) and other control variables such as Historical Overlap, No Colonial Jurisdiction, and Distance to 1810 Border. The results are very similar to the spatial and OLS models: gridcells with minerals and oil are less likely to be claimed than those without (35% and 36% respectively). Also as expected, areas that overlapped historically or did not have clear colonial jurisdictions are each 77% and 118% more likely to be claimed. The resource variables in this data also largely satisfy the conditions for a time-varying Cox model (the discovery of resources is not influenced by territorial claims and the variable is usually strictly ordered, as in once resources are found they do not go back to being "un"found). However, it should also be noted that there is active debate on how to and whether it is possible to interpret the coefficients of a time-varying variable in hazard models (see, for example [Austin \*et al.\*, 2020](#); [Zhang \*et al.\*, 2018](#), for more explanation on how time-varying covariates may be tricky to interpret).



## D.8 Controlling for Terrain (Average Elevation and Ruggedness)

To code information about terrain, I used data from the Digital Elevation Model (DEM) for South America from the Hydrologic Derivatives for Modeling and Analysis (HDMA) database, available on the USGS Science Data Catalog.<sup>3</sup> The data contains information on terrain elevation at the 3-arc-second (90 meters) resolution. I merge this granular data into my gridcell data and calculate two terrain related variables: (1) the average level of elevation per gridcell and (2) the ruggedness of the terrain, i.e., the difference between the maximum and minimum level of elevation within the same gridcell. Because both variables are heavily right-skewed, I use their logged values.

We again observe robust negative results for the effect of both minerals and oil, as well as a positive effect for historical overlaps and no history of colonial jurisdiction. Average elevation does not seem to have a significant effect on the probability of a territorial claim, but range in terrain elevation does: in other words, the more rugged the terrain, the less likely the gridcell would be claimed. This result may be purely mechanical but it may also be a result of rugged terrain being less favorable to acquire.

Table D11: Results Controlling for Terrain Variables

	DV: Territorial Claim (0,1)			
	Model 1 All Gridcells		Model 2 High Risk Gridcells	
	$\beta$	s.e.	$\beta$	s.e.
Minerals & Metals	-0.002***	0.000	-0.001**	0.001
Oil & Gas	-0.003***	0.001	-0.002***	0.001
Average Elevation (logged)	-0.0001	0.000	-0.0002	0.0002
Range in Terrain (logged)	-0.001***	0.000	-0.001***	0.000
Historical Overlap	0.010***	0.000		
No Jurisdiction	0.009***	0.000		
Dist to Border (100km)	-0.000***	0.000		
$\rho$	0.93***		0.92***	
Year Fixed-Effects	✓		✓	
Observations	7,528 × 172		4,137 × 172	
	1,294,816		711,564	

Spatial lag model. Baseline comparison is gridcells with Low Benefit Concentration. Statistical significance markers: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ . Some missing values come from the lack of terrain data (gridcells close to the ocean).

<sup>3</sup><https://www.sciencebase.gov/catalog/item/5920dd83e4b0ac16dbdf3a4d>

## E Alternative Explanations

### E.1 Influence of Previous Territorial Conflicts

This section performs a series of robustness checks to validate the main results and discuss some alternative possibilities. One possibility is that capital-intensive resources happened to be located in areas that had been targets of a previous territorial conflict. If this is the case, the negative association between the resources and territorial disputes could simply be due to the fact that previously disputed and resolved areas are less likely to be contested again (Schultz, 2014; Huth, 1996), rather than there being an independent effect of resources. I therefore re-run the analysis after explicitly controlling for whether the gridcell had been previously claimed and resolved. As expected, having had a previously resolved territorial dispute substantially decreases the probability of becoming involved in a new territorial claim. However, the negative association between capital intensity and territorial claims remains the same, both in terms of its statistical significance and substantive magnitude:

Table E1: Main Results, After Controlling for Previous Territorial Disputes (Main text: Table 3)

	DV: Territorial Claim Incidence (0,1)					
	Model 1 All Gridcells			Model 2 High Risk Gridcells (Overlap, No Juris, Prev Border)		
	$\beta$	s.e.	M. Effect	$\beta$	s.e.	M. Effect
Minerals (Medium Ben.Con.)	-0.003***	0.001	-0.039***	-0.004***	0.001	-0.042***
Oil (High Ben.Con.)	-0.004***	0.001	-0.049***	-0.003***	0.001	-0.040***
Previously Claimed & Resolved	-0.008***	0.000	-0.107***	-0.008***	0.000	-0.092***
Historical Overlap	0.010***	0.000	0.128***			
No Jurisdiction	0.012***	0.000	0.150***			
Dist to Border (100km)	-0.000***	0.000	-0.000***			
$\rho$	0.93***			0.92***		
Year Fixed-Effects	✓			✓		
Observations	7,544 × 172			4,139 × 172		
	1,297,568			711,908		

Spatial lag model. Baseline comparison is gridcells with Low Benefit Concentration (9.7% claimed). Statistical significance markers: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

## E.2 Anticipated Resource Discoveries

Here I examine if the claims could have been driven by anticipated resource discoveries. I employ two tests to investigate this possibility. First, I run the main model again after placing a 10-year lead on the capital intensity of the gridcell, but find almost identical results, where discoveries of resources ten years into the future are also negatively correlated with territorial claims (Table E2).

Table E2: Anticipated Resource Discoveries: 10-year lead in Capital Intensity

	DV: Territorial Claim (0,1)			
	Model 1 All Gridcells		Model 2 High Risk Gridcells	
	$\beta$	s.e.	$\beta$	s.e.
Minerals & Metals (10-year lead)	-0.0032***	0.000	-0.004***	0.001
Oil & Gas (10-year lead)	-0.0035***	0.001	-0.003***	0.001
Historical Overlap	0.010***	0.001		
No Jurisdiction	0.010***	0.001		
Dist to Border (100km)	-0.000***	0.000		
$\rho$	0.93***		0.92***	
Year Fixed-Effects	✓		✓	
Observations	7,544 × 172 1,297,568		4,139 × 172 711,908	

Spatial lag model. Baseline comparison is gridcells with Low Benefit Concentration (9.7% claimed). Statistical significance markers: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

Second, I examine if resources are more likely to be discovered in areas that were disputed. If states were claiming territories because they had reasons to believe that there were potentially valuable resources in the area, we would see resources being discovered at higher rates in places that had been previously claimed. I find little evidence of this pattern. Table E3 indicates that while areas previously disputed are correlated with a higher future discovery of capital-intensive resources is when tested on all gridcells (Model 1), the substantive significance is close to zero. More importantly, the sign switches to negative after taking out Patagonia, which has several notable oil deposits but was disputed in the 1840s long before the discovery of oil as a valuable resource (Model 2). Together, the results indicate that capital-intensive resources are not necessarily more likely to be found in areas that were previously claimed, which would not be the case if states were fighting for territory in anticipation of resource discoveries.

Table E3: Future Resource Discovery in Areas Previously Claimed

	<i>Dependent variable: Discovery of Minerals or Oil</i>	
	All Gridcells (1)	Without Patagonia (2)
Previously claimed	0.0002** (0.0001)	-0.00004 (0.0001)
Observations	1,201,372	1,129,711
Year FEs	✓	✓
R <sup>2</sup>	0.004	0.004

Results are estimated using Ordinary Least Squares; Standard errors are clustered at the gridcell level. Statistical significance markers: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

### E.3 Strategic Selection

Can the negative association between economic benefits and territorial claims be the product of a strategic interaction between states? In other words, are states actually more willing to fight for lands with resources but less likely to claim them because they are afraid that the targeted country would react more strongly to such claims? I explore the possibility of strategic selection below but find little evidence in support of the possibility.

#### E.3.1 When one country is more powerful, do they claim resources?

First, if states in fact wished to acquire resource-rich lands but were deterred by the higher costs of claiming such territories, we would see the negative relationship holding mostly between states who are evenly matched in their power. In cases where states do not have to be very strategic about the costs of claims—for example, when one state is significantly stronger than the other and so cost considerations are not very meaningful—we would see states being more true to their preferences (see, for example [Schultz & Goemans, 2019](#), for a theoretical explanation for why power inequality can lead to more sincere preferences in territorial claims). In other words, if states had a true preference for resource-rich territories but were held back only because of the higher expected costs, we would no longer see a negative relationship between resources and territorial claim when one state significantly overpowers the other.

Table E4 tests this possibility on a subsetted sample of dyads where one country is at least three times more powerful than the other country. We see, however, that minerals and oil still have a negative effect on both claim incidents and new claim onsets. I also check the robustness of the results by excluding European countries and colonial claims from the data (Table E5), and find the same result.<sup>4</sup> Results remain identical.

<sup>4</sup>This excludes the following dyads from the sample: VEN-GUY, GUY-SUR, GUY-BRA, SUR-BRA, SUR-FRG, BRA-FRG

Table E4: Subset to Dyads with more than three times power difference

	<i>Dependent variable:</i>			
	Claim Incidence	Claim Onset	Claim Incidence	Claim Onset
	(1)	(2)	(3)	(4)
Minerals	-0.012* (0.007)	-0.0004** (0.0002)	-0.009 (0.006)	-0.001*** (0.0002)
Oil	0.003 (0.003)	-0.00002** (0.00001)	-0.016*** (0.005)	-0.001*** (0.0001)
Observations	726,098	681,278	726,098	681,278
R <sup>2</sup>	0.116	0.201	0.265	0.206
Year FEs	✓	✓	✓	✓
Dyad FEs			✓	✓
Clustered SEs	✓	✓	✓	✓

The unit of analysis is a dyad-year-gridcell (For more information about the data and its structure, see Appendix Section G.1). State capabilities were measured using their annual CINC scores, and subsetting to dyad-years with more than three times power difference between the two countries uses 54% of the sample. Models 1-2 report results using year fixed-effects, and Models 3-4 employ both dyad and year fixed effects. Standard errors are clustered at the gridcell level. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table E5: Table E4 Excluding European Powers and Colonial Claims

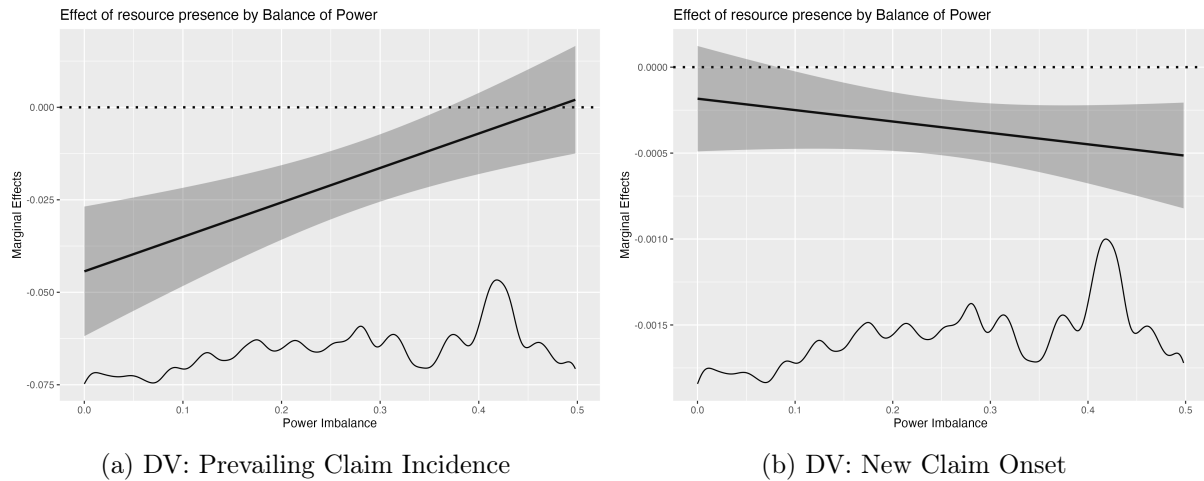
	<i>Dependent variable:</i>			
	Claim Incidence	Claim Onset	Claim Incidence	Claim Onset
	(1)	(2)	(3)	(4)
Minerals	-0.017** (0.007)	-0.001*** (0.0002)	-0.011* (0.006)	-0.001*** (0.0002)
Oil	0.002 (0.003)	-0.00004*** (0.00001)	-0.013*** (0.005)	-0.0004*** (0.0001)
Observations	662,516	620,110	662,516	620,110
R <sup>2</sup>	0.132	0.289	0.267	0.294
Year FEs	✓	✓	✓	✓
Dyad FEs			✓	✓
Clustered SEs	✓	✓	✓	✓

*At gridcell level*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Taking the analysis further, I also examine if there is a notable interaction effect between resource presence and balance of power between dyads (Figure E1). Figure E1-a shows a positive interaction effect: dyads with higher power imbalance are more likely to make new claims on resource-rich territory, which is what we would expect to see if selection effects were present. However, the relationship between resources and territorial claims is negative at almost all levels of power imbalance and turns positive only at the very highest levels of power imbalance, when one side is 19 times stronger than the other. The interaction effect is also sensitive to model specifications, trending in the opposite direction when the dependent variable is new claim onset (Figure E1-b).

Figure E1: Interaction Effect between Resource Presence and Balance of Power



The density graph on the bottom of the figure shows the distribution of the power imbalance index in the data. This is calculated as the absolute value of  $(\text{CincA} / (\text{CincA} + \text{CincB})) - 0.5$ : the index thus takes a value between 0 and 0.5, with 0 indicating most equal and 0.5 indicating most unequal. 0.25 indicates a situation where one side is three times as powerful as the other side. Regression results include year and dyad fixed-effects and standard errors are clustered at the gridcell-level.

In sum, these results show us that even when one country is significantly stronger than the other and so does not have to worry too much about a potentially higher cost of claiming resource rich territories, the relationship between territorial claims and resources is still negative.

### E.3.2 Do states take advantage of other countries' weaknesses?

Second, if states indeed wanted to acquire resource-rich lands but were only prohibited by the higher costs of claiming them, states would be more likely to claim resource rich lands when they see a window of opportunity. Therefore, when there is a substantial shift in the balance of power between states, states would be more likely to take the opportunity to claim resource-rich territories.

I test the relationship between resources and territorial claims on dyads which have undergone a significant change in balance of power. Models 1-2 from Table E6 show the results for when the relationship is tested on dyads where either one of the party encountered more than a 10% change in their capabilities (29% of the total sample), and Models 3-4 test the relationship on dyads where either one of the party encountered more than a 20% change in their capabilities (12% of the total sample). Yet even among such dyads, territorial claims and resources have a robust negative relationship. The results are identical when excluding European power dyads as well.

Table E6: Among dyads that encountered large power changes

	<i>Dependent variable:</i>			
	Sample: More than 10% Change		Sample: More than 20% Change	
	Claim Incidence	Claim Onset	Claim Incidence	Claim Onset
	(1)	(2)	(3)	(4)
Minerals	-0.027*** (0.009)	-0.0004*** (0.0001)	-0.034*** (0.011)	-0.0003** (0.0001)
Oil	-0.031*** (0.008)	-0.001*** (0.0001)	-0.040*** (0.014)	-0.0001* (0.0001)
Observations	395,328	354,571	162,797	140,538
R <sup>2</sup>	0.225	0.021	0.240	0.018
Year FEs	✓	✓	✓	✓
Dyad FEs	✓	✓	✓	✓
Clustered SEs	✓	✓	✓	✓

The unit of analysis is a dyad-year-gridcell (For more information about the data and its structure, see Appendix Section G.1). State capabilities were measured using their annual CINC scores, and standard errors are clustered at the gridcell level. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Overall, we do not see enough evidence to assume that the negative relationship between resources and territorial claims is not primarily driven by selection effects states. Even when one country is much more powerful than the other, territories with resources are less likely to be claimed than territories without. States also do not take advantage of large power shifts to claim resource-rich territories.

## F Case Study Original Excerpts & Additional Context

### F.1 Footnote 92

Translated from: "Para nosotros el problema del puerto no figura entre los de primera fila que confronta Bolivia. La afirmación que a menudo se hace de que nuestro atraso proviene principalmente de la falta de una salida al mar, a más de pueril es tendenciosa, pues busca desviar la atención pública de las verdaderas causas del estancamiento de Bolivia, más premiosas y más conveniente, desde el punto de vista del interés nacional, es poner toda nuestra capacidad, energía y recursos, en desarrollar los grandes factores potenciales, en el orden económico y humano, que encierra Bolivia" (La Nación, June 19th 1964, qtd. in [Erazo, 2016](#), 57).

### F.2 Footnote 94

The quote in the main text is translated from: "Solo subsistía nuestro derecho y nuestra esperanza sobre nuestro acceso al Plata por el Río Paraguay."

However, Salamanca made many references to the Chaco's potential to connect Bolivia to the Atlantic. For example, even after catastrophic defeats on the battlefield in the later years of the war, Salamanca (August 6th, 1934) announced in his speech to the National Congress:

"The sacrifices are justified. This country cannot remain cloistered within its mountains, deprived of free communication with the world. Bolivia geographically belongs to not only the Pacific but also to the Atlantic, which it can reach through the rivers of the Amazon and the Plata. For Bolivia to live its life, it needs to gain open passage through Río de la Plata [to the Atlantic]."

Original text:

"bajo este aspecto [que Bolivia se resigne a ser una Nación perpetuamente enclaustrada] quedan justificados los sacrificios que hace. Este país no puede seguir asfixiándose clausurado en sus montañas, privado de libre comunicación con el mundo. Por su geografía pertenece tanto al Pacífico como al Atlántico, a donde puede salir por el Amazonas y el Plata. Para completar su vida, tiene que abrirse paso al Plata." Archived by [Arze Quiroga \(1951\)](#)

### F.3 Footnote 96

Public speech by Salamanca, December 8th, 1928, Cochabamba: "Debemos defender el Chaco porque es nuestro, y es el patrimonio que nos legaron nuestros mayores... para nuestros hijos, para nuestros nietos Para la Bolivia de siempre!" archived by [Arze Quiroga \(1951\)](#).



#### F.4 Footnote 98 & 99

Marof's statements are translated from: "Una compañía poderosa, poseedora de más de cuatro millones y medio de terrenos petrolíferos, presionaba con ese objeto (la Guerra). Inepta y traidora de su propio país, la mísera burguesía se arrojó en brazos del capital financiero (...) [sometido a los trabajadores a la dictadura militar sin contemplaciones] destinada especialmente a refrenar las aspiraciones de las masas, obligándolas por la fuerza y un mísero salario, al trabajo rudo de las minas y pozos de petróleo, bajo el látigo del capataz extranjero dueño de las riquezas. Eso es lo que deseaba Salamanca y su camarilla, oliendo el petróleo y dispuestos a entregar Bolivia (...) El plan de Salamanca ha resultado frustrado en parte con las derrotas."

#### F.5 Footnote 104

The full paragraph of Montenegro's letter containing the quote is below:

If the massacre in the Chaco had originated from the greed of rival oil tankers, peace would have included, at the very least, a share of oil between the two imperialisms [but did not] (...) Whoever argues, as the communists argue, that the war was the work of imperialist struggles, is too quick to accept the formula of the socialists which explains all of the world's economic conflicts without taking the trouble to get to the heart of the conflict.

Original text:

Si la matanza del Chaco hubiese tenido origen en la codicia de los petroleros rivales, la paz habría sido, por lo menos, una partija de petróleo entre los dos imperialismos (...) Quien afirme, como afirman los comunistas, que esa guerra fue obra de esa pugna de imperialismos, peca de cómodo al aceptar, sino tomarse el trabajo de llegar hasta la entraña del conflicto, la fórmula académica del socialismo que resuelve con ella todos los conflictos económicos del mundo (Montenegro, 12/14/1938, Letter published in *Última Hora* 12/12/1980 qtd. in [Gumucio, 2016](#)).

## G Preliminary Test of Scope Conditions

### G.1 Data with Dyad-Specific Information

To conduct a preliminary test of the scope conditions and to test the strategic selection effects, I employ a new dataset that includes dyad-specific information. This data builds off of the original data to take a “dyad-year-gridcell” as the unit of analysis. For each dyad, I specify gridcells that can be potentially claimed between the two countries, where a gridcell is regarded as potentially claimable if it had ever belonged to either one of the country in the past or is within 100km of their 1808 borders. Only neighboring countries enter the data, so there are 25 unique dyads in the data. Table G1 lists the dyads that appear in the data and how many gridcells are coded as claimable between each dyad.

The advantages of adding dyad-specific characteristics to the original data is that I am now able to test *by whom* a gridcell was claimed, rather than which gridcell was claimed as was the focus of the analysis in the main text. This new data thus allows the examination of how domestic factors or power considerations can influence territorial claims. (See Section E.3 for whether power considerations influence territorial claims and Section G.3 for an analysis of how domestic factors may moderate the theory.)

Yet there are also limitations to this data format that should be clarified. First, this data structure is less suited to test the original hypothesis of which gridcells are claimed because a single gridcell can appear multiple times in the dataset if it has multiple claimants. For example, Gridcell #1990 is potentially claimable by Peru, Argentina, and Bolivia, which means that the gridcell would appear three times in the dataset for the same year, under ARG-PER, ARG-BOL, and BOL-PER. Second, each dyad has its own set of potentially claimable gridcells, but the potentially claimable gridcells are calculated based on historical ownership and their proximity to 1808 borders, which means that the set of potentially claimable cells do not change over time. It also has the effect of failing to capture cells that are further away from 1808 jurisdictions, such as places that are deep into the Amazon or in the Atacama deserts, leaving out some important territorial disputes such as the Acre, Amazonas, or the Antofagasta. Therefore, while the analyses done using this new data structure provide some important insights, it would be important to remember these limitations when interpreting their results or if one tries to use the data for other purposes.

Table G1: List of Dyads in the Data and Number of Claimable Cells between Each Dyad

Dyad Name	Number of Claimable Gridcells
ARG-URG	208
BOL-ARG	1531
BOL-CHL	60
BOL-PAR	240
BRA-ARG	422
BRA-BOL	259
BRA-FRG	60
BRA-PAR	124
BRA-URG	50
CHL-ARG	887
COL-BRA	109
COL-ECU	410
COL-PER	207
COL-VEN	410
ECU-PER	234
GUY-BRA	115
GUY-SUR	77
PAR-ARG	379
PER-BOL	987
PER-BRA	293
PER-CHL	195
SUR-BRA	114
SUR-FRG	66
VEN-BRA	211
VEN-GUY	171

## G.2 Descriptive Analysis of Scope Conditions

The main hypothesis proposed that capital-intensive resources and territorial claims would be negatively correlated when there exist some capable domestic audience and some level of distrust in government redistribution. While the strength of the domestic audience and level of trust in government redistribution can be measured through many different indicators, not many cover South American countries from 1830. I thus use the best available variables from a dataset that covers this time period, *Varieties of Democracy 1789-2022* (V-Dem Project, 2023), to measure the theory's two main scope conditions during 1830-2001. I elaborate on each below.

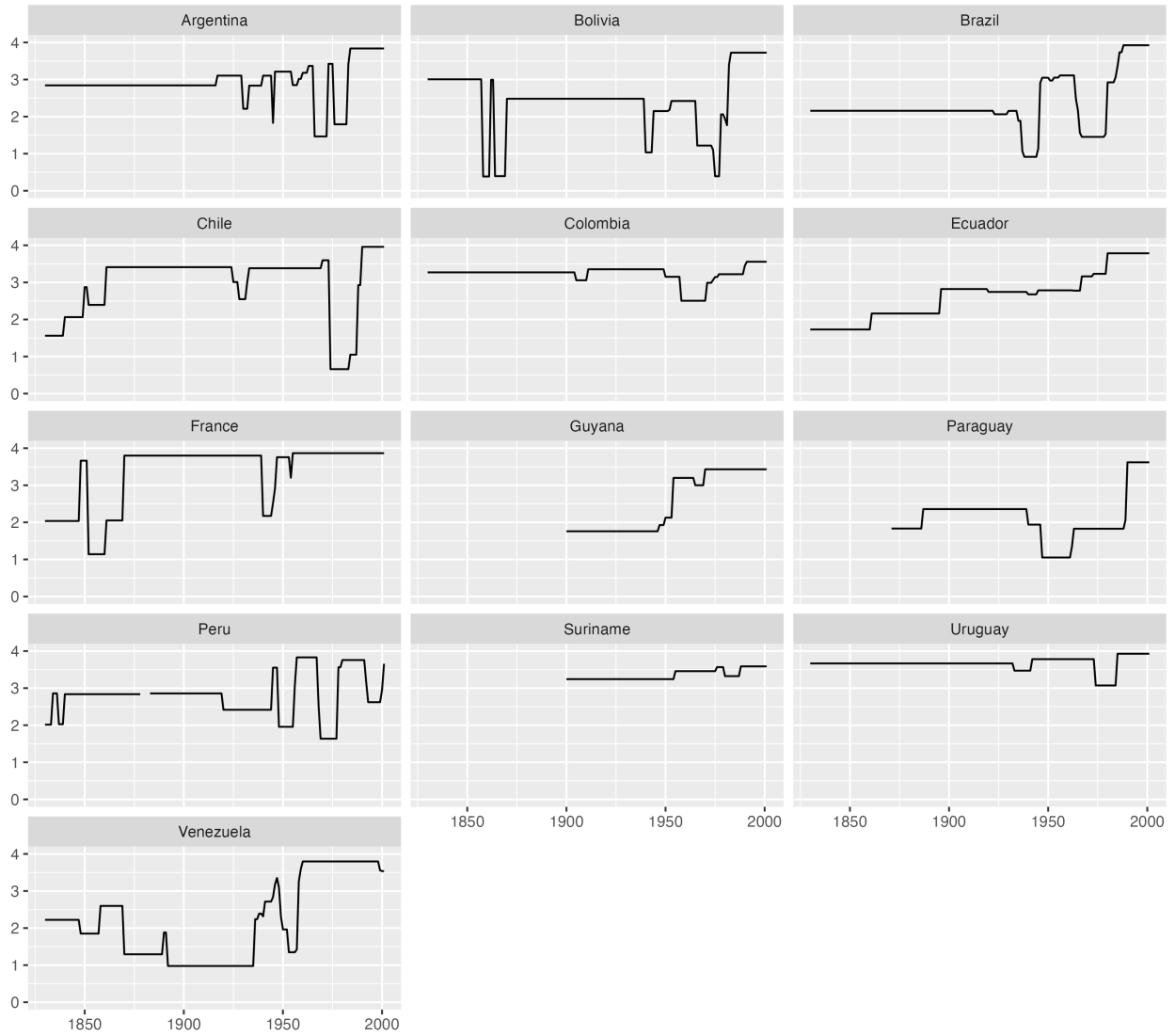
### Capable Domestic Audience

To measure the existence of a functional domestic audience that can constrain leaders, I use the `v2psoppaut` variable from V-Dem. This variable comes closest to the concept I am trying to capture in that it measures the extent to which "opposition parties [are] independent and autonomous of the ruling regime." The answers range on an ordinal scale from 0 to 4, where 0 indicates "opposition parties not allowed" and 4 indicates "All opposition parties are autonomous and independent of the ruling regime."

The value of `v2psoppaut` between 1830-2001 for each South American countries and France (French Guiana) is displayed in Figure G1. We observe that most countries satisfy the scope condition of having a somewhat autonomous opposition. While the values fluctuate, they consistently recorded a score over "2: At least some opposition parties are autonomous and independent of the ruling regime" in most countries for most time periods. The mean and median values are also each 2.9 and 3, where 3 stands for "Most significant opposition parties are autonomous and independent of the ruling regime."

A more detailed regime classification scheme by Geddes (2003) also supports the idea that a capable domestic audience existed in the South American countries for most of the time period. Periods of personalist regimes in South American countries, if they existed, were relatively brief and usually did not go over ten years. The list is as follows: Argentina 1949-55 (Perón); Bolivia 1964-69 (Barrientos), 1971-78 (Banzer); Chile 1973-89 (Pinochet); Colombia 1953-58 (Rojas Pinilla); Paraguay 1940-93 (Morínigo, Chávez, Stroessner); Peru 1948-56 (Odría); Venezuela 1948-58 (Peréz Jiménez). While Geddes (2003)' classification of regimes is limited in that it only stretches back to 1945, coupled with the `v2psoppaut` score from the V-Dem Project (2023), we can see that most countries in the data had a somewhat independent domestic audience that could constrain leaders during the duration of the observation.

Figure G1: Opposition Autonomy Index (0-4) by South American Country 1830-2001



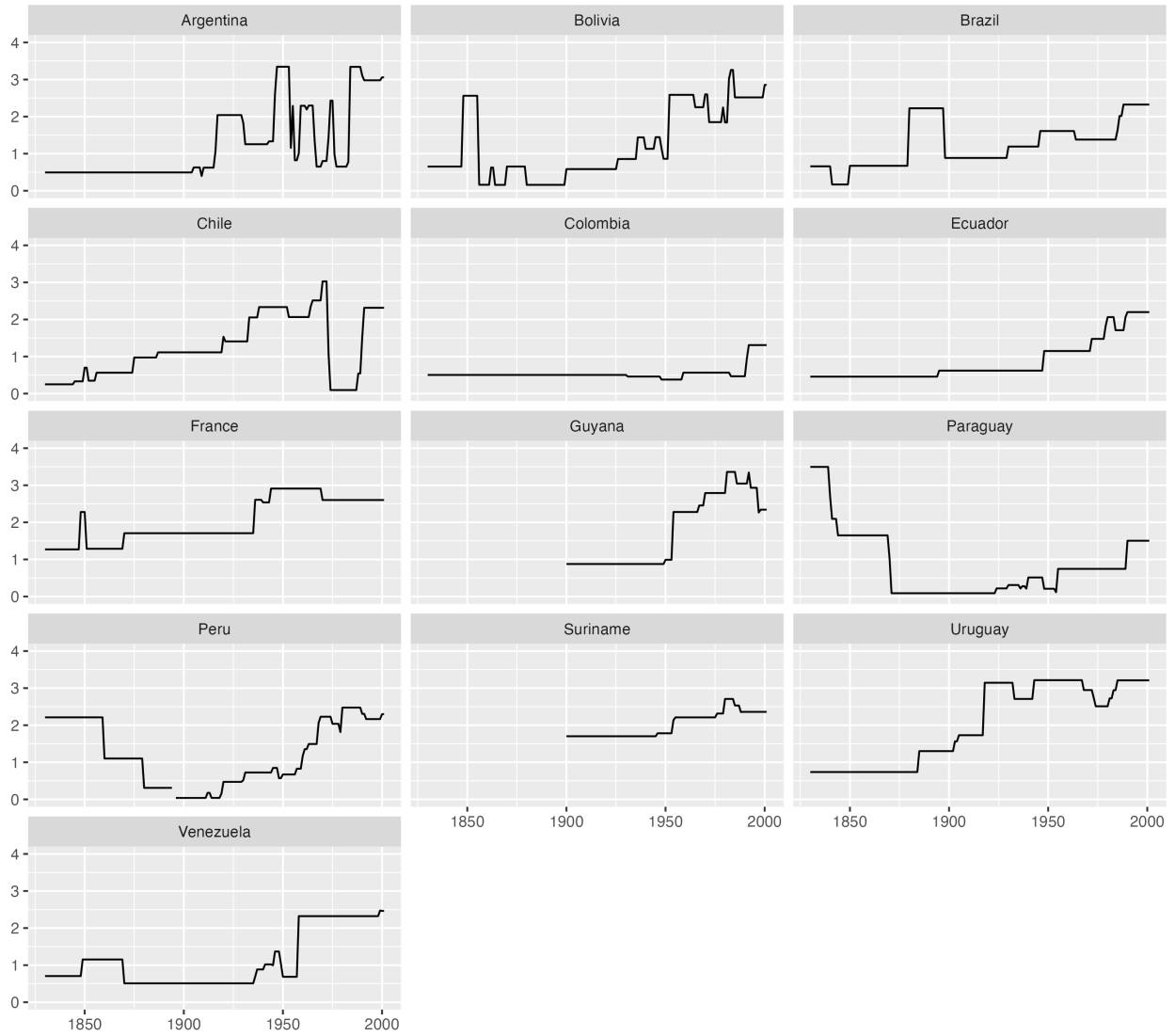
## Trust in Redistribution/ Socioeconomic Equality

Again, there are many ways to proxy governments' ability to make credible promises of redistribution. While factors such as rule of law, track records of upheld and broken promises, level of corruption would all play a role, I measure the first-cut ability of governments to make credible commitments using the `v2pepwrse` index from V-Dem. `v2pepwrse` captures a country's "political equality based on socioeconomic position", and was the closest available indicator dating back to 1830 that spoke to perceptions of socioeconomic inequality. The variable measures answers to the question: "*Is political power distributed according to socioeconomic position? All societies are characterized by some degree of economic (wealth and income) inequality. In some societies, income and wealth are distributed in a grossly unequal fashion. In others, the difference between rich and poor is not so great.*" The range of possible answers runs from 0, where only the wealthy enjoy political power, to 4, where "wealthy people have no more political power than those whose economic status is average or poor."

The use of this index was based on the reasoning that high existing levels of socioeconomic inequality would be correlated with higher grievances and skepticism toward existing redistribution system. Furthermore, while the indicator is a measurement of "political power distribution" according to socioeconomic inequality, it does seem to track reasonably well with general perceptions of how a state's redistribution system performs. For example, in 2022, the most equal country by this measure was Norway, followed by Finland. The index, while it mentions political power distribution, also does not seem to necessarily reflect a country's level of liberal democracy (correlation coefficient with the liberal democracy index is  $r = 0.6$ ). For instance, well-known democracies such as the United States and the United Kingdom each scored 2.29 and 2.3 in 2022, ranking 77th and 74th out of 179 countries.

Figure G4 shows the value of `v2pepwrse` between 1830-2001 by each South American country and France (French Guiana). While the values fluctuate, they are generally below '2', which stands for "People of average or poorer income have some degree of influence but only on issues that matter less for wealthy people". The mean and median values are 1.4 and 1.1, indicating that on average, countries in the sample had low levels of socioeconomic equality that would have contributed to a higher distrust of government redistribution and inability to make credible redistribution promises.

Figure G2: Political Equality by Economic Status (0-4) by South American Country 1830-2001



### G.3 Preliminary Analysis: Variables and Results

Using the new data with dyad-specific characteristics described in Section G.1, I conduct a very preliminary test of how the scope conditions outlined in the main text would serve as theory moderators. As mentioned in Section G.2, I use the `v2psoppaut` variable (*Opposition Autonomy*) from V-Dem to proxy for the presence of a functional domestic audience and `v2peprse` (*Socioeconomic Equality*) to measure government redistribution credibility.

While the theory applicability would depend not only on the size of the domestic audience but also on its various composition (see pgs.10-11 and pg.35 of the main text), here I examine the very initial step of whether having a stronger domestic audience is correlated with a stronger applicability of the theory. I also test whether the negative effect of resources is weaker when the society is more equal and has better prospects for ex-post redistribution. These tests would each predict a negative interaction term between Resources and Opposition Autonomy (stronger negative effect of resources when domestic opposition is more autonomous), and a positive interaction term between Resources and Socioeconomic Equality (weaker negative effect of resources when society is more equal).

The results of models estimating these interactions are presented in Table G2. Models 1-3 take Claim Incidence as the dependent variable, and Models 4-6 use Claim Onsets (coding only the initiation of the claim and dropping subsequent claim incidences) as the outcome variable. Models 1 and 4 display results of the interaction between Resources and Opposition Autonomy, and Models 2 and 5 test the interaction effect of Socioeconomic Equality. Models 3 and 6 combine both interactions and also control for the balance of power between dyads, and whether or not the gridcell was previously claimed. For easier interpretation of the interaction effects, I use a binary indicator of capital-intensive resources, which takes a value of ‘1’ if the gridcell contains either oil or minerals and ‘0’ if not. The results are similar when I run the same regression after having separated minerals and oil. Opposition Autonomy and Socioeconomic Equality are measured as the average value of the dyad for each year, but the results are similar when I use the lower value between the two. Figures G2 & G3 visualize these results.

We see that the interaction terms are somewhat in line with what we would expect from the theory. The interaction term between resources and Socioeconomic Equality trends positive, meaning that the negative effect of resources on territorial claims is weaker when the society is more equal. The interaction between resources and Opposition Autonomy is less robust, trending negative in the expected direction when the dependent variable is territorial claims incidence but switching to positive when the DV is claim onset. The lack of robustness in the results could be due to limitations in modeling specifications, or it could be a testament to how many other intricate features of domestic audience characteristics are at play apart from just the size and strength of the domestic opposition.

These results are interesting in that they give us an idea of how the scope conditions presented in the main text can serve as theory moderators. However, the results are far from conclusive and there are many more ways for improvement. Mainly, the V-Dem variables used in this analysis to proxy the scope conditions are very crude, so it would be worth using a more representative measure



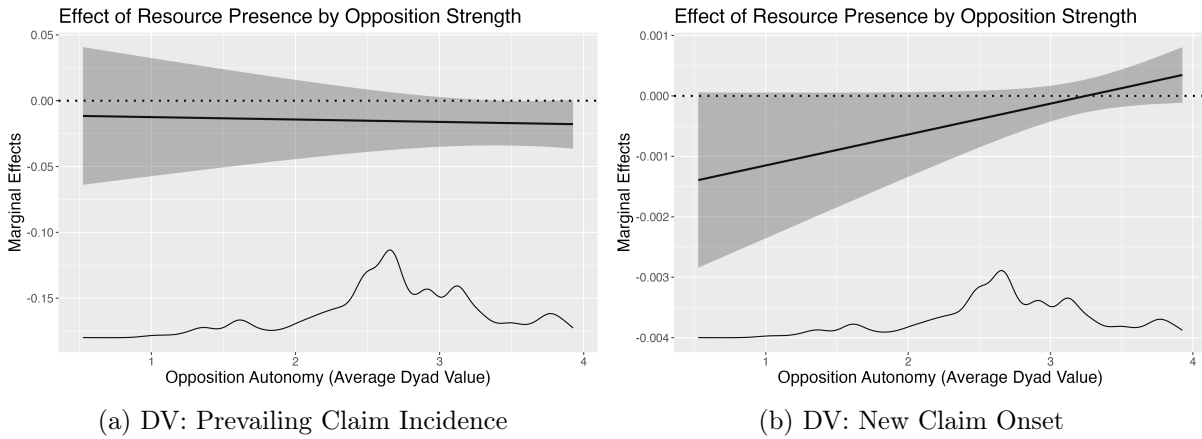
that more closely capture the concept of interest even if the measure does not travel back as much in time. It would also be helpful to examine the effect of the domestic audience in much more detail, such as *who* in the domestic audience (e.g., economic elites, the public, rival politicians) matters more depending on the specific regime type and how their preferences are distributed.

Table G2: Interaction Term between Resources and Moderators

	<i>Dependent variable:</i>					
	Claim Incidence			Claim Onset		
	(1)	(2)	(3)	(4)	(5)	(6)
Resources (Minerals or Oil)	0.010 (0.025)	-0.035** (0.016)	0.015 (0.025)	-0.002* (0.001)	-0.001 (0.0005)	-0.002* (0.001)
Opposition Autonomy	-0.004 (0.010)		-0.002 (0.018)	-0.002* (0.001)		-0.0002 (0.0005)
<b>Resources × Opp.Aut.</b>	-0.011 (0.008)		-0.022*** (0.008)	0.001* (0.0003)		0.001* (0.0004)
Socioeconomic Equality		0.006 (0.030)	0.007 (0.039)		-0.0002 (0.001)	-0.001 (0.001)
<b>Resources × Soc.Eq.</b>		0.011 (0.011)	0.020* (0.010)		0.0002 (0.0002)	-0.0002 (0.0002)
Balance of Power			0.033 (0.103)			0.013** (0.005)
Previously Claimed			-0.061* (0.035)			-0.001** (0.0004)
Observations	1,268,731	1,304,942	1,117,357	1,183,923	1,213,293	1,037,985
R <sup>2</sup>	0.197	0.189	0.209	0.053	0.045	0.188
Year FEs	✓	✓	✓	✓	✓	✓
Dyad FEs	✓	✓	✓	✓	✓	✓
Clustered SEs	✓	✓	✓	✓	✓	✓

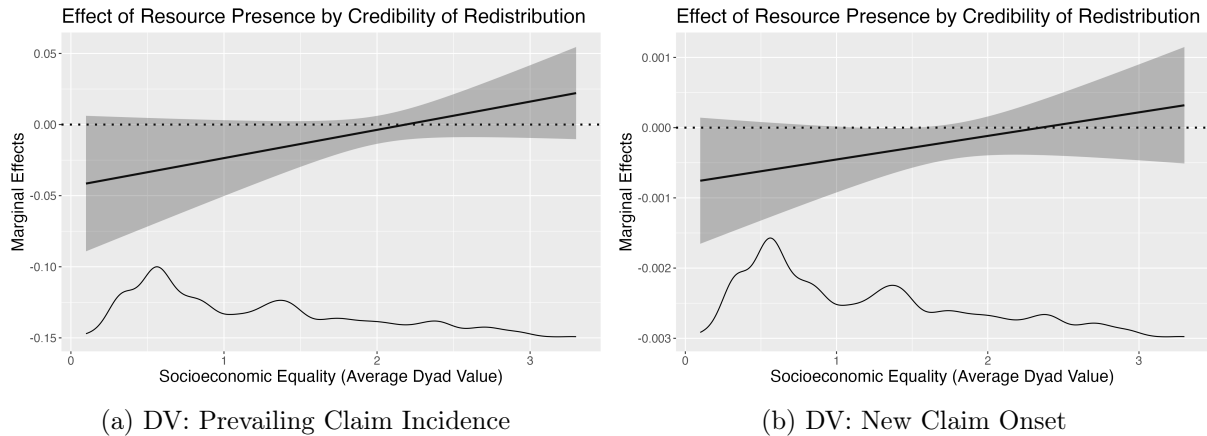
The unit of analysis is a dyad-year-gridcell (For more information about the data and its structure, see Appendix Section G.1). Standard errors are clustered at the dyad level. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Figure G3: Interaction Effect between Resource Presence and Opposition Autonomy



The density graph in the figure shows the distribution of the opposition autonomy index in the data. Interaction results are based on Models 1 and 4 from Table G2. Figure G3-a shows the negative effect of resources on territorial claim incidences becoming stronger as Opposition Autonomy grows stronger, and Figure G3-b shows the the negative effect of resources on territorial claim onsets becoming weaker as Opposition Autonomy grows stronger.

Figure G4: Interaction Effect between Resource Presence and Socioeconomic Equality



The density graph in the figure shows the distribution of the socioeconomic equality index in the data. Interaction results are based on Models 2 and 5 from Table G2. Figure G4-a and G4-b both show the negative effect of resources on territorial claim incidences becoming weaker as Socioeconomic Equality grows stronger.

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