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Country size and freedom of international economic exchange

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Abstract: Small countries, because their lack of land, population, and natural resources make attempts at restricting international economic activity less feasible, will tend to allow a greater degree of openness to international trade and capital flows. In contrast, larger, more populous, and more resource-rich countries will tend to restrict cross-border economic activity to a greater degree because they can do so without great and immediate pain. Using panel and cross-sectional regressions, I find very strong evidence for a positive association between smallness and trade share of GDP. This holds for both EU and non-EU states, indicating that it is not just the small states of the EU driving the result through their ability to negotiate trade deals as one large bloc. Moreover, I find strong evidence of an association between smallness in terms of surface area, population, and lack of natural resource wealth, and policies open to free trade. Similarly, there is evidence to suggest that physically larger countries and those with the most natural resources have more restrictive capital controls.

Keywords: capital flows, country size, economic geography, European Union, large states, natural resources, political economy, small states, trade, trade openness

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Introduction

What are the systematic differences between small countries and large countries? I expect the former to be more open to international trade, because while Russia, China, and the U.S. can survive considerable tariff and non-tariff barriers on trade without immediate, extreme pain, equivalent barriers may be disastrous for Liechtenstein, Malta, and Andorra (Alesina and Wacziarg, 1998, p. 306).

I argue that, other things equal, smaller countries will tend to be more inclined toward free international economic exchange, including both trade and capital flows, for systematic, material reasons. Smaller countries, precisely because of the infeasibility of attempting severe restrictions on trade, have the incentive to allow greater trade freedom. It is large, resource-rich states which are most capable of limiting their own international trade through tariffs, non-tariff-barriers, and capital controls precisely because protectionism is more feasible for them than it is for small states. This study will attempt to see if there has in fact been an association between smallness and openness to international economic activity.

One main contribution of this paper is operationalizing country size not only in terms of surface area and population, but also using a measure natural resource wealth. To my knowledge I am the first to do this. Another main contribution of this study is measuring trade openness using the Fraser Institute's "Freedom to Trade Internationally" index, its components, and subcomponents (Gwartney et al., 2025a). The use of this index is a major improvement on prior operationalizations of trade openness in the literature. A number of studies, such as Alesina et al. (2000, p. 1285), use the sum of imports and exports, divided by GDP to operationalize openness. However, what this is actually measuring is an economic *outcome*, not a *policy decision*. While Sachs and Warner (1995) and Wacziarg and Welch (2008) use variables that take into account policy to measure trade openness, these variables are binary. Alesina and Wacziarg (1998, pp. 316-317) use tariff rates as a dependent variable. However, a country with low tariff rates may still be engaging in enormous encroachments on trade freedom by means of non-tariff barriers to trade. This is especially problematic considering that while global tariff rates have been declining and low in recent decades (World Bank, n.d.), non-tariff barriers play a greater role than tariff barriers in restricting trade (UNCTAD, 2019). The Fraser Institute's "Freedom to Trade Internationally" variable is an improvement on all of these past operationalizations because it is a continuous variable that ranges from zero to ten, and accounts for an array of policy decisions, including both tariff and non-tariff barriers to trade, and restrictions on capital flows (Fraser Institute, 2025b).

I also use the previously employed measure of trade openness, imports plus exports divided by GDP, as an alternate dependent variable. By using various operationalizations of trade openness in otherwise identical models, we can examine how the results compare to one another. In a similar vein, I use three distinct measures of country size, the natural log of surface area, the natural log of population, and whether a country is in the top eleven countries by natural resource value. This lends itself to comparison of the results of these varying conceptions of "country size."

The question of whether smaller countries are more conducive to free international exchange is important because of its ability to foster economic wellbeing, and potentially even peace. Economic freedom is associated with economic growth (Williamson and Mathers, 2011) as well as political freedom (Lawson and Clark, 2010). Pellegrino et al. (2025) estimate that policy and geopolitical barriers to international capital flows decrease global GDP by around 7%. Additionally, trade has been found to associate with peace, negatively correlating with belligerence (Polachek, 1980; Oneal and Russett, 1997). Similarly, Gartzke (2007) finds support for the idea that capitalism encourages peace. To the extent that greater freedom of exchange among countries increases our standard of living, promotes political freedom, and discourages warfare, it is a worthwhile venture to examine the determinants of this openness.

The systematic effects of country size on freedom of exchange and other variables of interest is particularly pressing where there are or have been independence movements, such as in Scotland, Quebec, Catalonia, Kurd-inhabited regions of Turkey, Iran, Iraq, and Syria, and other places across the globe. Irrespective of the effect of country size on trade freedom, each case must be considered individually based on the multitude of discrete factors that each instance brings with it. For example, Katzenstein (1985, p. 80) writes that, in addition to their greater degree of openness, small countries are also politically, militarily, and economically more vulnerable relative to large countries. Furthermore, Ruggie (1983, p. 18) writes that international economic openness causes dislocations along with the opportunities it brings. As an example of the type of

vulnerability and dislocation that small, open economies can expect to face, Krasner (2009, p. 131) points out:

> Greater openness exposes the domestic economy to the exigencies of the world market. That implies a higher level of factor movements than in a closed economy, because domestic production patterns must adjust to changes in international prices. Social instability is thereby increased, since there is friction in moving factors, particularly labour, from one sector to another. The impact will be stronger in small states than in large.

Nevertheless, in order to paint a full picture of these potential geopolitical and political-economic shifts, we must also investigate the differences in international exchange between smaller and larger countries.

Small states, resources, markets, and freedom of international economic exchange

Multiple studies have found a negative association between measures of country size and trade/trade openness (Alesina and Wacziarg, 1998; Alesina et al., 2000; Rose, 2006; Amin and Haidar, 2014). Qualitative discussions have also noted that smaller states tend to be more open to or engaged in trade (Katzenstein, 1985, p. 80; Krasner, 2009, p. 131). The idea that trade is particularly important to small states is found repeatedly in the social sciences literature, which considers the need for economies of scale, sufficiently large pools of inputs (supply), and sufficiently large bases of consumption (demand). Balassa (1986) notes that small countries can in particular benefit from trade due to the phenomenon of economies of scale (325). International trade produces advantages that, for countries that are not large, have a special significance; small countries can make up for domestic markets that are too constrained to allow for economies of scale via the solution of trade (Balassa, 1986, p. 328).

In other words, some industries can only be efficient enough to exist if they are sufficiently large. However, if a given country is small, domestic consumers alone cannot possibly support the industry, and so exportation of the industry's products to other countries is a perquisite for the existence of that industry in the small country. Likewise, just as a small country may not have enough consumers to justify an industry without exports, the small country may not be able to provide the necessary input materials involved in production without imports (Markowitz et al., 2019, p. 1377). As a country's domestic market grows larger, protection becomes less harmful; on the other hand, countries that are small have to pay a particularly high price to engage in protection (Balassa, 1986, p. 328).

Katzenstein (1985, p. 81) also notes that small European countries are far more open economically compared to larger European countries due to the smaller countries' need for exports to supplement limited domestic markets and the inability to domestically provide the economies of scale needed to support important industries. Russia and the U.S., the biggest developed countries at the 20th century's start, were the most protectionist; while free trade was customary in the Scandinavian countries, the Netherlands, and Belgium (Balassa, 1986, p. 328). As Rosecrance (2013, p. 12) writes:

> A large territory historically was not the only means to economic power. Long-distance commerce over open trading routes offered an alternative to geographical expansion. The contrast between Russia and Portugal illustrates this point. ... Economic size can compensate for small territorial size.

Echoing Rosecrance (2013), Markowitz et al. (2019, p. 1377) explain how states that rely upon land for their revenue tend to seek further land via annexation, while states that rely upon trade for their wealth tend to seek markets rather than land. In other words, we see again in another form the inverse relationship between dependence on land and dependence on trade:

> the more economically dependent on territory the state is, the stronger its preference will be to seek rents through control of territory. . . . the more production oriented a state's economy is, the stronger its incentives will be to seek access to foreign markets. Foreign markets provide both the inputs needed to produce goods and, perhaps more critically, consumers to buy those goods (Markowitz et al., 2019, p. 1377).

This quotation also reinforces the economy of scale argument for small states needing trade, seen in Balassa (1986). Small countries need trade for consumers of their products and producers of the inputs needed to create those products. This is a fundamental explanation for why small countries must rely upon trade.

A large country rich with natural resources, with millions of square miles of land, and an enormous population, can enact tariffs or capital controls without causing devastating harm to itself and its people. On the other hand, a city-state or small country with a few dozen or hundred square miles of land, a tiny population, and few natural resources cannot raise heavy barriers to trade without significant and immediate economic pain. When countries are smaller, because restrictions on trade are so costly, these states will tend to have to allow their inhabitants a greater degree of freedom of cross-border economic exchange.

Small states need to be particularly open to trade due to economies of scale. In order for small economies to reach or maintain their economic potentials, some industries will need markets larger than the domestic consumers can provide (Balassa, 1986). They will also require inputs exceeding that which the natural resources of the state can provide (Markowitz et al., 2019, p. 1377). As such, trade provides the answer to both the need for consumers of outputs and suppliers of inputs.

As for openness to trade, so with openness to capital. The smaller the country, the more constrained the ability for domestic actors to provide financial capital for investments, and the greater the need to be open to inflows of capital from abroad. Similarly, in small countries, capital providers would be faced with limited investment opportunities, and have more to gain compared to capital providers in large countries, *ceteris paribus*, from the option to pursue investment or lending opportunities abroad. Early 19th century independence movements in Latin America were in part motivated by the desire to break free from Spain's colonial trade restrictions and receive capital inflows from the broader world market (Alesina et al., 1997, p. 21; Bulmer-Thomas, 1994, as cited in Alesina et al., 1997, p. 21). This analysis leads to the following hypothesis:

H: Country size, in the form of surface area, population, and natural resource wealth will negatively associate with openness to international economic exchange in terms of both trade volume and policy orientation.

Research design

I use three independent variables to capture different conceptions of country size. The first measure of country size is the natural logarithm of surface area in square kilometers, using World Development Indicators data for 2023, 2013, and 2003 (World Bank, n.d.). This measures the physical size of each country in the most literal sense, which can also be thought of as a crude but reasonable proxy for the likelihood of possessing a greater quantity and variety of natural resources. Countries that cover a greater physical expanse contain more land and/or water, and ceteris paribus are also more likely to contain a greater quantity and variety of other natural resources. I examine three different years to examine if the association holds across time, and use robust standard errors.

Following Alesina et al. (2000, p. 1286), the second measure of country size is the natural logarithm of population, also from the World Bank. A larger workforce means the potential for a more developed internal division of labor. It also means a greater internal market providing demand for goods produced by domestic industries. When using the variable population, I use panel regressions with country and year fixed effects and robust standard errors for the years 2003, 2008, 2013, 2018, and 2023. I use five-year intervals moving back from the most recent year for which data is available across my variables, 2023, as population does not vary much from one year to the other.

Finally, the third measure of country size is natural resource wealth. More specifically, I take the list of the top eleven nations by natural resource wealth for the year 2021 from Statista (n.d.), and I create a dummy variable that takes a value of zero if a country is not one of these top countries by natural resource wealth, and a one if they are. These eleven countries, in order from greatest to least, are Russia, the United States, Saudi Arabia, Canada, Iran, China, Brazil, Australia, Iraq, Venezuela, and India.

Dependent variables

The dependent variable, trade freedom, is measured in two ways. First, in accordance with past literature on this topic, I use imports plus exports as a proportion of GDP. This data is drawn from World Development Indicators (World Bank, n.d.). Alesina et al. (2000, p. 1285) also operationalize openness to trade in this somewhat problematic manner, as the sum of imports and exports, divided by GDP. This operationalization is problematic because the proportion of a country's economy that is constituted by trade in a given year can be driven by discrete economic factors outside of the control of the economic leadership of any given country. A country may have an increase in the percentage of their economy that is constituted by trade as a result of global economic conditions, changes in climate, natural disasters, etc. Changes such as these have nothing *per se* to do with conscious policy decisions aimed at being more or less open to trade. I also break up the variable trade as a percent of GDP into its two constituent parts, imports as a share of GDP,

and exports as a share of GDP, allowing detection of any discrepancies between the two constituent components of trade.

The EU allows its constituent states to negotiate as a bloc, plausibly granting member states increased bargaining power in trade negotiations with non-members (Meunier, 2000, p. 103). For this reason, I also run these models on trade, exports, and imports splitting up the sample into EU countries and non-EU countries.

However, since the degree to which trade constitutes an economy is not necessarily determined by a conscious decision on the part of those who control the state, and may instead reflect other economic phenomena, I also use the variable "Freedom to Trade Internationally," which comes from Lawson and Murphy (2025a). This index score consists of four components and nine subcomponents. The component 'Tariffs' is made up of the subcomponents 'Trade Tax Revenue,' 'Mean Tariff Rate,' and, 'Standard Deviation of Tariff Rates.' The component 'Regulatory Trade Barriers' is constituted by the subcomponents 'Non-tariff Trade Barriers' and 'Costs of Importing and Exporting.'[1] The component 'Black-market Exchange Rates' has no subcomponents. Finally, the component 'Controls of the Movement of Capital and People' is constituted by the subcomponents 'Financial Openness,' 'Capital Controls,' 'Freedom of Foreigners to Visit,' and 'Protection of Foreign Assets' (Gwartney et al., 2025b, p. 6).[2]

Each component is the simple average of its subcomponents, if it has subcomponents. The aggregate index Freedom to Trade Internationally is in turn the simple average of its components. The scores of each subcomponent, component, and variable (in this case Freedom to Trade Internationally) in the EFW index range from zero to ten (Gwartney et al., 2025b, p. 5).

As seen in the description above, Freedom to Trade Internationally is a multidimensional account of a variety of policy decisions and outcomes associated with a country's openness to trade. It does not merely describe an economic outcome or a single aspect of trade policy, but rather tackles openness to international economic exchange in a multi-faceted way. In this paper's models, I first use as my dependent variables the aggregate index alongside its components. Second, I open up these black boxes by using as distinct dependent variables each subcomponent.

Alesina and Wacziarg (1998, pp. 316-317) use tariff rates as a dependent variable. Tariff rates are a policy-oriented measure of openness (as opposed to the sum of imports and exports divided by GDP). However, tariff rates are only one element of trade openness. Amin and Haidar (2014, p. 1441) also use a more policy-oriented measure, namely, "the number of documents required to export and import, as a measure of trade facilitation." However, I argue that in relation to this measure, too, the Fraser Institute index is a more comprehensive operationalization of trade openness. As described above, The Fraser Institute index includes non-tariff barriers as well as tariffs, capital controls, and other factors. Using "the number of documents required to export and

[1]The subcomponent "Non-tariff trade barriers" is operationalized in a way that is discordant with its title, "notwithstanding the subcomponent's title, this indicator captures both tariff and non-tariff barriers" (Gwartney et al., 2025b, p. 87). The description of the subcomponent is given in Gwartney et al. (2025b, pp. 86-87). Fortunately, the results of this study do not hinge upon this particular subcomponent isolating non-tariff barriers from tariff barriers.
[2] Precise and technical descriptions of the subcomponents, and the component "Black-market exchange rates," which has no subcomponents, are provided in Gwartney et al. (2025b, pp. 86-88).

import, as a measure of trade facilitation" (Amin and Haidar, 2014, p. 1441) is also problematic because a country can require very few documents, and yet still have enormous tariff or non-tariff barriers to trade, depending on the *content* of the documents. Finally, both Sachs and Warner (1995) and Wacziarg and Welch (2008) use binary variables to categorize countries as either open to trade or not open to trade. The categorical variable approach found in these papers, while taking into consideration policy decisions, does not convey nearly as much information or nuance as the continuous Freedom to Trade Internationally component and subcomponent scores employed here.

Control variables

As "many papers in the literature examine how economic freedom in one dimension might predict economic freedom in another" (Lawson et al., 2020, p. 626), I include the other four areas of the Fraser Institute's EFW index as controls. These four variables also range from zero to ten, with ten meaning the most freedom. They are "Regulation," "Sound Money," "Legal System and Property Rights," and "Size of Government."

Moreover, I use V-Dem's electoral democracy index (Coppedge et al., 2025) to control for regime type, as the literature has repeatedly found positive associations between economic freedom, and both democracy and political freedom (Lawson et al., 2020; Lawson and Clark, 2010). I also control for human capital, using the variable by the same name provided by Penn World Table version 11.0 (Feenstra et al., 2015). I use a dummy variable to control for whether a state is landlocked or not, as this may be related to measures of size and is liable to affect openness to and participation in trade. Countries are coded as landlocked or not in accordance with Central Intelligence Agency (n.d.-a). Finally, I use Central Intelligence Agency (n.d.-b) to code for whether a country is an island or not, based on whether they have any land border with another country. I deviate from Central Intelligence Agency (n.d.-b) in one case; I code Cuba as an island despite the fact that it technically has a land border with the U.S. in the form of the Guantánamo Bay Naval Base. Table 1 presents summary statistics. Table A5 presents a correlation matrix between variables.[3]

Results

Tables 2, 3, and 4 show the associations between surface area and trade as a percent of GDP for the years 2023, 2013, and 2003, respectively. Across the board we see that bigness negatively associates with trade, imports, and exports for all three years with statistical significance at the 99% level. Based on the coefficient from Table 2, we see that a one unit increase in the log of surface area, which is about a third of a standard deviation, associates with an increase in trade as a percent of GDP of about eighteen percent percentage points, which is somewhat less than a third of a standard deviation. In other words, a country growing from the size of Albania to the size of Austria (not much of a jump) associates with about an eighteen-percentage point fall in trade as a percent of GDP. This is an enormous effect.

[3] The correlation between trade (% of GDP) and Freedom to Trade Internationally is 0.42, indicating that, while there is a strong correlation, the two are quite distinct.

We now turn to Tables 5, 6, and 7. These look at cross-sectional regressions for the years 2023, 2013, and 2003, respectively. They examine the link between surface area and Freedom to Trade Internationally. These tables include both the aggregate index and each component. All three years show small, negative associations between size and the aggregate index. These associations are significant at the 99% level in 2023 and 2013, but insignificant in 2003, when there are notably fewer observations in the regression. The magnitude in 2023 shows that a one unit increase in the log of surface area means a fall of 0.137 percentage points in the index, out of 10.

Tables 8, 9, and 10 also look at surface area in 2023, 2013, and 2003, but they examine each *subcomponent* of the index, providing a zoomed in and finer-grained view. For 2023, all subcomponents have negative magnitudes, five of which with statistical significance at the 95% level or greater: non-tariff trade barriers, financial openness, capital controls, freedom of foreigners to visit, and protection of foreign assets. These significant variables have coefficients ranging from -.102 to -.584. These are considerable falls in trade freedom subcomponents for as modest a change in surface area as that between Albania and Austria.

This concludes the models which operationalize country size as the natural log of surface area. In sum, we see very consistent evidence for very large negative associations between size and trade, imports, and exports as a percent of GDP. As for Freedom to Trade Internationally, its components, and its subcomponents, there is substantial evidence of a negative association here too, with remarkable substantive significance.

We now turn to the models focusing on population. Table 11 shows the results of the panel models examining how population in the years 2023, 2018, 2013, 2008, and 2003 associates with trade, imports, and exports. We see negative relationships for all three with significance at the 90% level. Also, the magnitude of the exports coefficient is more than two percentage points larger than the magnitude of the imports coefficient.

A one unit increase in the natural log of population (going from the population of Australia to that of France) associates with an almost twenty-two percentage point fall in trade as a percent of GDP. This is over a third of the standard deviation of trade as a percent of GDP, again a strong correlation. As the panel regression in Table 11 uses year fixed effects, I had to omit the control variables for landlocked and island status, because these variables are time-invariant. Table A4 shows the results of a cross-sectional regression between population and trade for the year 2023 that includes these covariates, producing large negative coefficients with 99% significance for trade, imports, and exports.

Next, Tables 12 and 13 look at population and Freedom to Trade Internationally. Table 12 looks at the aggregate index, and each component. The index as a whole is negative with statistical significance at the 99.9% level, with a coefficient of -.856. Three out of four components are negative, with regulatory barriers significant at the 99.9% level, with a coefficient of -2.438. In recent decades, tariffs as an instrument of affecting trade seem to have been declining in importance relative to non-tariff barriers. According to UNCTAD (2019), non-tariff measures were estimated to impose over double the costs on trade as tariffs. As Figure 5 shows, the global weighted mean applied tariff rate experienced a downtrend in recent decades. The level for the most recent year of my dataset, 2022, is about 5.64% (World Bank, n.d.).

In a similar vein, the United Kingdom had a painful Brexit deal despite the fact that the deal it got with the European Union "prevented any tariffs and quotas being introduced" (Edgington, 2024). How could a trade deal with no tariffs or quotas be painful? Because the deal entailed onerous regulatory non-tariff barriers that gum up trade between the UK and the EU, "Although there will not be any tariffs levied or restrictive quotas imposed, there will be a whole series of new customs and regulatory checks, including rules of origin and stringent local content requirements" (Matthijs, 2020). However, Donald Trump's presidencies have revived the significance of tariffs as policy tool.

Table 13 dives deeper by showing the associations between population and each subcomponent. The starkest result is the subcomponent Costs of Importing and Exporting, with a coefficient of -4.273 that is significant at the 99% level. Interestingly, a larger population associates positively and significantly at the 95% level with Freedom of Foreigners to Visit, with a coefficient of 3.950. Fraser measures freedom of foreigners to visit in terms of "the percentage of countries for which a country requires a visa from foreign visitors" (Gwartney et al., 2025b, 88). Perhaps larger countries have more visa-free deals because they are more sought after as tourist destinations, and because of their larger populations do not have to fear being overwhelmed with a large percent of visitors relative to their permanent populations, compared to smaller states, which could pose national security risks.

Table 14 shows natural resource value and trade (% of GDP). The results for trade, imports, and exports are all statistically significant at the 99.9% level. The magnitudes are all very large. Being one of the top eleven countries by natural resource wealth associates with almost a sixty-three-percentage point drop in trade as a percent of GDP, divided roughly evenly between imports and exports. Table 15 shows natural resource value regressed against 'Freedom to Trade Internationally' and its components. The index negatively associates with natural resource value at the 90% level. Being one of these eleven top countries associates with a 0.615 fall in the index, out of ten. The component 'Controls on the Movement of Capital and People' is negatively associated with trade openness at the 99.9% level. Being one of the top natural resource countries associates with about a 1.701-point reduction in this component of the index. Finally, Table 16 shows that the subcomponents 'Capital controls' and 'Freedom of Foreigners to Visit' negatively associate with natural resource value at the 95% and 99% levels, with magnitudes of 1.34 and 4.009, respectively.

Figures 1-2 visually present the associations between surface area and population with Freedom to Trade Internationally. Figures 3-4 do the same for trade as a percentage of GDP. While these graphs do not take into account control variables as the regressions above did, they help to illustrate the fairly steep and clear negative relationships between country size and both trade and Freedom to Trade Internationally. Tables A1-A3 show that the significant and negative relationships between surface area and trade, imports, and exports hold for both EU and non-EU states. The EU states have much larger negative magnitudes.

Conclusion

For smaller countries – defined in terms of surface area, population, and natural resource wealth – trade, imports, and exports constitute a much larger share of their economies. Likewise, smaller countries – in terms of all three operationalizations – experience remarkably greater degrees of *freedom* toward international economic exchange. We also see that more populous states score worse on the subcomponent 'Non-tariff trade barriers' and much worse on the subcomponent 'Costs of importing and exporting'. In recent decades, the average global tariff rate fell to a quite low level, while non-tariff barriers played a more important role in restricting trade.

Turning to natural resource wealth, this measure of bigness associates with more restrictive Capital controls and reduced Freedom of foreigners to visit with strong statistical significance, and there are no components with positive statistical significance to offset this. It seems that natural resources bear another type of resource curse than those typically discussed in the literature. Citizens of countries blessed with large quantities of natural resources may see those large natural resource resources afford their states the ability to close themselves off from the world economy to a substantial extent more than states not advantaged with great natural resource wealth.

The next step can be to open the black box of small and large states, and examine the micro-level mechanisms by which smallness (largeness) translates to more (less) openness to cross-border exchange. Are there explicit policy debates invoking a country's size as an argument for a particular trade policy? If so, which groups are the ones pushing for such policies? These processes will likely vary across democracies and autocracies, and amongst different forms of democracies and autocracies. Along this vein, this large-n analysis may be supplemented with case studies of particular instances of internal market growth (shrinkage) leading to less (more) openness to international exchange. For example, have countries that have experienced rapid population growth or annexed new territory reduced their openness to trade, as the growth of their internal markets made it easier to do so? While the qualitative differences between countries (democracy/autocracy, rich/poor, etc.) have been greatly explored, the scale of countries has been relatively neglected. But the *scope* of political and social communities also matters, surprisingly often to the advantage of the diminutive.

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Table 1: Summary Statistics (2023, 2018, 2013, 2008, and 2003)

Variables	Obs.	Mean	Standard Deviation	Minimum	Maximum
Ln Surface Area	1,075	10.78937	3.083078	0.7065569	16.65606
Ln Population	1,085	15.14511	2.438677	9.179365	21.08657
Trade Freedom	754	7.195905	1.39717	1.757154	9.774448
Trade (% of GDP)	891	92.71352	61.09611	2.473729	863.1951
Imports (% of GDP)	891	49.27192	30.60507	1.36562	429.3591
Exports (% of GDP)	891	43.44159	33.32646	1.108109	433.836
Size of Government	819	6.585227	1.310127	0.9975	9.528973
LSPR	825	5.570376	1.65858	1.836307	9.332035
Sound Money	822	7.490322	1.834444	0	9.874157
Regulation	825	6.185826	1.160386	2.297816	9.229312
Electoral Dem.	883	0.5173024	0.2602746	0.015	0.922
Human Capital	725	2.576295	0.6941258	1.09758	3.986023
Landlocked	1,110	0.1981982	0.398822	0	1
Island	1,110	0.2522523	0.434501	0	1

Table 2: Surface Area and Trade (% of GDP) (2023)

	Trade	Imports	Exports
Ln Surface Area	-18.09***	-9.007***	-9.085***
	(2.835)	(1.291)	(1.593)
Size of Government	-0.305	-0.259	-0.0452
	(3.985)	(1.970)	(2.243)
Legal System and Property Rights	14.97***	5.189**	9.777***
	(5.368)	(2.605)	(3.052)
Sound Money	2.587	1.437*	1.150
	(1.698)	(0.800)	(0.947)
Regulation	-4.493	-0.912	-3.580
	(6.527)	(3.154)	(3.720)
Electoral Democracy	-63.60**	-26.28*	-37.32***
	(26.87)	(13.45)	(14.10)
Human Capital	16.13**	6.189	9.942**
	(7.741)	(4.161)	(4.237)
Landlocked	5.341	5.281	0.0607
	(10.62)	(5.015)	(6.054)
Island	-23.35	-12.19*	-11.16
	(15.84)	(7.233)	(8.870)
Constant	226.4***	120.2***	106.2***
	(52.24)	(25.97)	(29.27)
Observations	126	126	126
R-squared	0.551	0.547	0.528

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3: Surface Area and Trade (% of GDP) (2013)

	Trade	Imports	Exports
Ln Surface Area	-16.55***	-8.227***	-8.323***
	(2.868)	(1.404)	(1.527)
Size of Government	0.263	1.293	-1.030
	(4.198)	(2.118)	(2.287)
Legal System and Property Rights	7.976	1.894	6.082**
	(5.399)	(2.767)	(2.942)
Sound Money	-6.493*	-3.413*	-3.080
	(3.773)	(1.909)	(1.969)
Regulation	9.088	4.933	4.155
	(6.448)	(3.256)	(3.528)
Electoral Democracy	-51.28*	-17.71	-33.57**
	(27.72)	(14.98)	(13.78)
Human Capital	19.92***	8.553**	11.37***
	(7.398)	(3.925)	(4.165)
Landlocked	4.510	6.354	-1.844
	(10.01)	(4.839)	(5.748)
Island	-21.37	-10.22	-11.15
	(20.00)	(9.835)	(10.44)
Constant	216.0***	110.7***	105.3***
	(35.57)	(18.35)	(20.51)
Observations	132	132	132
R-squared	0.506	0.466	0.512

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Surface Area and Trade (% of GDP) (2003)

	Trade	Imports	Exports
Ln Surface Area	-12.71***	-6.633***	-6.080***
	(2.389)	(1.110)	(1.317)
Size of Government	-3.953	-1.041	-2.912
	(3.971)	(2.087)	(1.983)
Legal System and Property Rights	1.206	-0.303	1.510
	(5.448)	(2.699)	(2.856)
Sound Money	-3.784**	-1.794*	-1.991**
	(1.778)	(0.935)	(0.956)
Regulation	9.166	4.036	5.130*
	(6.038)	(3.086)	(3.085)
Electoral Democracy	-48.53*	-18.75	-29.79**
	(25.93)	(12.53)	(13.92)
Human Capital	17.81***	7.964***	9.850***
	(6.037)	(2.945)	(3.362)
Landlocked	-3.321	0.261	-3.582
	(9.017)	(4.134)	(5.127)
Island	-5.497	-3.139	-2.357
	(17.43)	(8.071)	(9.523)
Constant	212.2***	110.8***	101.4***
	(39.29)	(19.32)	(21.01)
Observations	131	131	131
R-squared	0.426	0.411	0.423

Table 5: Surface Area and Trade Freedom (2023)

	Trade Freedom	Tariffs	Regulatory Barriers	Black Market Exchange Rates	Capital and Visitation Controls
Ln Surface Area	-0.137***	-0.0800*	-0.109**	-0.0746	-0.283***
	(0.0316)	(0.0479)	(0.0484)	(0.0746)	(0.0578)
Size of Gov.	0.0705	0.107	0.214*	-0.119	0.0799
	(0.0901)	(0.109)	(0.118)	(0.250)	(0.108)
LSPR	0.123	-0.00789	0.613***	-0.296	0.185
	(0.0879)	(0.131)	(0.134)	(0.235)	(0.132)
Sound Money	0.220***	0.170***	0.137*	0.373*	0.201***
	(0.0648)	(0.0515)	(0.0792)	(0.215)	(0.0747)
Regulation	0.429***	0.102	0.266	0.766	0.581***
	(0.144)	(0.172)	(0.195)	(0.527)	(0.216)
Electoral Democracy	0.0884	-0.306	-0.392	0.177	0.875*
	(0.312)	(0.428)	(0.471)	(0.779)	(0.513)
Human Capital	0.527***	0.489***	0.961***	-0.000232	0.656***
	(0.134)	(0.151)	(0.229)	(0.395)	(0.197)
Landlocked	-0.261*	-0.290	-0.0801	-0.463	-0.210
	(0.157)	(0.209)	(0.279)	(0.492)	(0.251)
Island	-0.548**	-0.300	-0.672**	-0.337	-0.883***
	(0.217)	(0.323)	(0.273)	(0.399)	(0.314)
Constant	1.955*	4.994***	-2.456*	5.035*	0.248
	(1.016)	(1.206)	(1.261)	(2.796)	(1.431)
Observations	140	140	140	140	140
R-squared	0.732	0.316	0.708	0.232	0.716

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Surface Area and Trade Freedom (2013)

	Trade Freedom	Tariffs	Regulatory Barriers	Black Market Exchange Rates	Capital and Visitation Controls
Ln Surface Area	-0.105***	-0.105**	-0.128***	0.0144	-0.208***
	(0.0195)	(0.0496)	(0.0334)	(0.0434)	(0.0512)
Size of Gov.	0.0371	0.00892	-0.0867	0.110	-0.0832
	(0.0410)	(0.0989)	(0.0855)	(0.120)	(0.111)
LSPR	0.0656	-0.158	0.313***	0.0178	0.0867
	(0.0561)	(0.137)	(0.103)	(0.149)	(0.147)
Sound Money	0.336***	0.144	0.304***	0.485**	0.511***
	(0.0527)	(0.0956)	(0.0672)	(0.217)	(0.114)
Regulation	0.378***	0.333*	0.174	0.306*	0.533**
	(0.0829)	(0.190)	(0.158)	(0.172)	(0.207)
Electoral Democracy	0.371	0.672	0.0339	-0.337	0.841*
	(0.246)	(0.508)	(0.345)	(0.553)	(0.485)
Human Capital	-0.0285	0.138	0.0744	-0.788**	0.390*
	(0.0954)	(0.211)	(0.169)	(0.354)	(0.219)
Landlocked	-0.518***	-0.378	-1.299***	0.354*	-0.590**
	(0.107)	(0.229)	(0.208)	(0.184)	(0.248)
Island	-0.397***	-0.502	-0.0906	0.0309	-0.793**
	(0.126)	(0.331)	(0.207)	(0.225)	(0.378)
Constant	2.785***	5.763***	3.345***	5.077***	-0.991
	(0.509)	(1.161)	(0.931)	(1.912)	(1.472)
Observations	136	136	140	136	140
R-squared	0.843	0.286	0.761	0.352	0.750

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: Surface Area and Trade Freedom (2003)

	Trade Freedom	Tariffs	Regulatory Barriers	Black Market Exchange Rates	Capital and Visitation Controls
Ln Surface Area	-0.0453	-0.0745	-0.0785	0.0198	-0.0842
	(0.0387)	(0.0511)	(0.0476)	(0.0549)	(0.0865)
Size of Gov.	0.167**	0.108	-0.0824	0.298*	0.0104
	(0.0712)	(0.0769)	(0.109)	(0.179)	(0.139)
LSPR	0.168**	-0.00939	0.488***	0.113	0.137
	(0.0848)	(0.134)	(0.119)	(0.170)	(0.174)
Sound Money	0.270***	0.179**	0.108	0.171	0.343***
	(0.0650)	(0.0729)	(0.0691)	(0.175)	(0.0922)
Regulation	0.287**	0.212	0.283*	0.351	0.537**
	(0.123)	(0.195)	(0.146)	(0.286)	(0.241)
Electoral Democracy	0.992**	0.451	0.949	1.439*	0.643
	(0.453)	(0.695)	(0.573)	(0.798)	(0.716)
Human Capital	0.404**	0.925***	0.101	-0.487	0.681**
	(0.200)	(0.271)	(0.257)	(0.444)	(0.295)
Landlocked	-0.126	-0.0503	-0.701**	-0.184	-0.000758
	(0.212)	(0.266)	(0.280)	(0.523)	(0.347)
Island	-0.531**	-0.587*	-0.544	-0.128	-1.086**
	(0.227)	(0.315)	(0.332)	(0.264)	(0.541)
Constant	0.596	2.633**	2.362**	3.579	-1.654
	(0.914)	(1.218)	(1.070)	(2.449)	(1.886)
Observations	118	118	133	118	139
R-squared	0.797	0.542	0.683	0.285	0.575

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Surface Area and Trade Freedom Sub-Components (2023)

	Trade Tax Revenue	Mean Tariff Rate	Standard Deviation of Tariff Rates	Non-Tariff Trade Barriers	Costs of Importing and Exporting	Financial Openness	Capital Controls	Freedom of Foreigners to Visit	Protection of Foreign Assets
Ln Surface Area	-0.0557	-0.0464	-0.136	-0.102**	-0.116	-0.141**	-0.283**	-0.584***	-0.126**
	(0.0538)	(0.0289)	(0.114)	(0.0412)	(0.0874)	(0.0697)	(0.119)	(0.162)	(0.0492)
Size of Government	0.0310	0.128**	0.241	0.125	0.303	0.0615	0.200	-0.0240	0.0818
	(0.129)	(0.0597)	(0.216)	(0.126)	(0.213)	(0.185)	(0.208)	(0.227)	(0.0902)
LSPR	0.0574	0.0665	-0.0450	0.324**	0.902***	0.356	-0.0142	-0.0533	0.451***
	(0.144)	(0.0727)	(0.266)	(0.145)	(0.246)	(0.218)	(0.251)	(0.284)	(0.132)
Sound Money	0.141	0.115***	0.248**	0.110*	0.164	0.402***	0.438***	-0.0306	-0.00339
	(0.112)	(0.0349)	(0.120)	(0.0564)	(0.130)	(0.120)	(0.143)	(0.171)	(0.0683)
Regulation	0.00159	0.221*	0.00866	0.392*	0.141	0.710*	0.235	0.594	0.785***
	(0.187)	(0.119)	(0.334)	(0.204)	(0.318)	(0.366)	(0.411)	(0.447)	(0.157)
Electoral Dem.	-0.909*	-0.281	0.252	-1.189***	0.405	0.643	0.467	2.119*	0.270
	(0.502)	(0.244)	(1.028)	(0.375)	(0.829)	(0.663)	(0.984)	(1.073)	(0.474)
Human Capital	1.005***	0.470***	-0.0270	0.821***	1.100***	1.111***	0.539	0.691	0.285
	(0.257)	(0.103)	(0.299)	(0.174)	(0.401)	(0.244)	(0.353)	(0.506)	(0.224)
Landlocked	-0.632**	-0.104	-0.0651	-0.663**	0.503	-0.730**	-0.432	1.170**	-0.846***
	(0.295)	(0.123)	(0.425)	(0.258)	(0.495)	(0.324)	(0.506)	(0.511)	(0.271)
Island	-0.379	-0.0162	-0.495	-0.445	-0.898**	-1.037***	-1.112	-0.714	-0.669**
	(0.376)	(0.148)	(0.755)	(0.316)	(0.439)	(0.395)	(0.759)	(0.969)	(0.318)
Constant	5.614***	4.244***	4.542*	-0.235	-4.677**	-5.241***	-0.599	8.096**	-1.265
	(1.484)	(0.759)	(2.726)	(1.210)	(2.313)	(1.741)	(2.733)	(3.980)	(1.211)
Observations	136	139	139	140	140	140	140	140	140
R-squared	0.351	0.559	0.096	0.631	0.587	0.723	0.305	0.358	0.721

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 9: Surface Area and Trade Freedom Sub-Components (2013)

	Trade Tax Revenue	Mean Tariff Rate	Standard Deviation of Tariff Rates	Non-Tariff Trade Barriers	Costs of Importing and Exporting	Financial Openness	Capital Controls	Freedom of Foreigners to Visit	Protection of Foreign Assets
Ln Surface Area	-0.145	-0.0476**	-0.124	-0.116***	-0.142***	-0.134**	-0.145	-0.462***	-0.0835*
	(0.0968)	(0.0224)	(0.106)	(0.0415)	(0.0523)	(0.0677)	(0.110)	(0.128)	(0.0432)
Size of Gov.	-0.104	-0.00554	0.0685	-0.0850	-0.00723	-0.122	0.0403	0.0156	-0.0408
	(0.161)	(0.0607)	(0.187)	(0.114)	(0.120)	(0.151)	(0.202)	(0.235)	(0.0736)
LSPR	-0.142	-0.0691	-0.366	0.174	0.427***	0.0846	-0.255	0.226	0.432***
	(0.191)	(0.0902)	(0.276)	(0.133)	(0.140)	(0.175)	(0.264)	(0.340)	(0.130)
Sound Money	0.205	0.127**	0.0911	0.251***	0.293**	0.820***	0.986***	0.0186	0.191**
	(0.159)	(0.0530)	(0.190)	(0.0908)	(0.122)	(0.124)	(0.206)	(0.267)	(0.0938)
Regulation	0.312	0.360***	0.446	0.204	0.218	0.817***	0.451	0.266	0.595***
	(0.225)	(0.130)	(0.421)	(0.194)	(0.179)	(0.214)	(0.368)	(0.524)	(0.185)
Electoral Dem.	0.427	0.138	1.580	-0.0432	0.306	0.958	-0.232	2.241*	0.367
	(0.843)	(0.297)	(1.001)	(0.431)	(0.563)	(0.693)	(0.915)	(1.266)	(0.435)
Human Capital	0.740*	0.271**	-0.569	0.343	-0.167	0.577**	0.162	0.993*	-0.142
	(0.377)	(0.118)	(0.378)	(0.219)	(0.350)	(0.262)	(0.397)	(0.508)	(0.178)
Landlocked	-1.154***	-0.0870	0.0622	-0.559**	-2.148***	-0.836***	-0.457	-0.174	-0.884***
	(0.411)	(0.117)	(0.429)	(0.252)	(0.373)	(0.313)	(0.512)	(0.593)	(0.262)
Island	-0.606*	-0.0859	-0.843	-0.0525	-0.248	-0.915*	-1.295	-0.778	-0.325
	(0.335)	(0.161)	(0.839)	(0.322)	(0.248)	(0.473)	(0.789)	(0.931)	(0.295)
Constant	6.221***	5.230***	6.129***	2.726**	3.480**	-5.288***	-4.209	3.220	-0.0122
	(2.074)	(0.646)	(2.340)	(1.196)	(1.581)	(1.624)	(2.630)	(3.356)	(1.021)
Observations	132	136	136	140	136	140	136	139	140
R-squared	0.321	0.544	0.099	0.563	0.663	0.762	0.390	0.379	0.729

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10: Surface Area and Trade Freedom Sub-Components (2003)[4]

	Trade Tax Revenue	Mean Tariff Rates	Standard Deviation of Tariff Rates	Non-Tariff Trade Barriers	Costs of Importing and Exporting	Financial Openness	Capital Controls	Protection of Foreign Assets
Ln Surface Area	-0.130**	-0.00702	-0.0394	-0.177***	-0.0487	-0.0472	-0.157	0.0112
	(0.0626)	(0.0539)	(0.113)	(0.0571)	(0.0297)	(0.122)	(0.143)	(0.0539)
Size of Gov.	0.134	-0.0181	0.225	-0.108	-0.0907	0.127	0.277	-0.0292
	(0.196)	(0.100)	(0.141)	(0.119)	(0.0720)	(0.186)	(0.268)	(0.113)
LSPR	0.0225	0.146	-0.164	0.567***	0.184**	0.183	-0.317	0.438***
	(0.189)	(0.162)	(0.222)	(0.131)	(0.0924)	(0.269)	(0.296)	(0.155)
Sound Money	0.238**	0.105	0.147	0.0760	0.0960*	0.638***	0.593***	0.114
	(0.119)	(0.0862)	(0.151)	(0.0842)	(0.0530)	(0.129)	(0.170)	(0.0751)
Regulation	-0.0622	0.197	0.301	0.380**	0.303**	0.376	0.535	0.517**
	(0.258)	(0.175)	(0.364)	(0.175)	(0.132)	(0.367)	(0.438)	(0.200)
Electoral Dem.	-0.104	0.256	3.007**	0.710	-0.362	0.0691	2.000	0.776
	(0.712)	(0.676)	(1.449)	(0.577)	(0.463)	(0.972)	(1.292)	(0.707)
Human Capital	2.033***	0.407	0.231	-0.00188	0.556***	1.028**	1.648***	-0.355
	(0.459)	(0.283)	(0.452)	(0.323)	(0.162)	(0.451)	(0.609)	(0.279)
Landlocked	-0.781*	0.00577	0.663	-0.679**	-0.195	-0.365	1.207*	-0.583*
	(0.443)	(0.272)	(0.445)	(0.334)	(0.165)	(0.426)	(0.620)	(0.348)
Island	-0.798**	-0.288	-0.714	-0.821*	-0.437**	-0.0757	-2.245***	-0.689*
	(0.320)	(0.375)	(0.728)	(0.474)	(0.191)	(0.771)	(0.852)	(0.376)
Constant	2.366	4.252***	0.918	2.732**	4.450***	-4.598*	-6.655**	1.061
	(1.915)	(1.145)	(2.322)	(1.270)	(0.702)	(2.759)	(2.937)	(1.131)
Observations	110	116	104	133	98	137	118	132
R-squared	0.548	0.386	0.277	0.633	0.654	0.567	0.471	0.546

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

[4] There were no observations for "Freedom of Foreigners to Visit."

Table 11: Population and Trade (% of GDP) (2023, 2018, 2013, 2008, 2003)

	Trade	Imports	Exports
Ln Population	-21.85*	-9.810*	-12.04*
	(12.41)	(5.663)	(7.220)
Size of Government	-2.746*	-0.619	-2.127**
	(1.650)	(0.752)	(1.010)
Legal System and Property Rights	-0.265	0.983	-1.248
	(4.087)	(2.110)	(2.224)
Sound Money	-3.214***	-1.708**	-1.506**
	(1.213)	(0.662)	(0.603)
Regulation	3.817*	0.718	3.099***
	(2.108)	(1.197)	(1.135)
Electoral Democracy	-17.20	-7.287	-9.913
	(11.28)	(6.128)	(6.324)
Human Capital	9.218	5.745	3.473
	(11.14)	(5.395)	(6.386)
Constant	442.6**	197.5**	245.0**
	(198.1)	(90.49)	(114.9)
Observations	651	651	651
R-squared	0.151	0.148	0.139
Countries	134	134	134

Country and year fixed effects are estimated but not reported.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 12: Population and Trade Freedom (2023, 2018, 2013, 2008, 2003)

	Trade Freedom	Tariffs	Regulatory Barriers	Black Market Exchange Rates	Capital and Visitation Controls
Ln Population	-0.856***	0.155	-2.438***	-1.463	-0.0588
	(0.259)	(0.392)	(0.500)	(0.921)	(0.397)
Size of Government	0.0108	0.148	0.0273	-0.108	-0.168**
	(0.0851)	(0.101)	(0.0804)	(0.257)	(0.0809)
LSPR	0.126	0.0926	0.236	-0.205	0.334
	(0.119)	(0.139)	(0.190)	(0.309)	(0.230)
Sound Money	0.0848**	-0.0112	0.0889**	0.147	0.0691
	(0.0398)	(0.0393)	(0.0380)	(0.156)	(0.0459)
Regulation	0.267***	0.299***	0.156	0.366	0.241**
	(0.0943)	(0.0872)	(0.111)	(0.340)	(0.120)
Electoral Democracy	0.197	0.651	-0.0953	0.508	-0.529
	(0.445)	(0.511)	(0.558)	(1.551)	(0.474)
Human capital	0.214	-0.248	0.0686	-0.0339	0.602
	(0.342)	(0.349)	(0.461)	(1.248)	(0.489)
Constant	17.60***	1.995	42.99***	31.61**	2.804
	(4.229)	(6.046)	(7.917)	(15.34)	(6.535)
Observations	663	663	691	663	698
R-squared	0.087	0.117	0.133	0.048	0.134
Countries	140	140	140	140	140

Country and year fixed effects are estimated but not reported.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 13: Population and Trade Freedom Subcomponents (2023, 2018, 2013, 2008, 2003)

	Trade Tax Revenue	Mean Tariff Rate	Std. Dev. of Tariff Rates	Non-Tariff Trade Barriers	Costs of Importing and Exporting	Financial Openness	Capital Controls	Freedom of Foreigners to Visit	Protection of Foreign Assets
Ln Population	1.904***	-0.237	-1.226*	-0.934***	-4.273***	-0.0373	1.547**	3.950**	-1.140*
	(0.679)	(0.290)	(0.638)	(0.340)	(0.888)	(0.594)	(0.686)	(1.655)	(0.624)
Size of Government	0.107	0.0617	0.219	-0.0188	-0.0299	0.0926	0.213*	-0.454*	-0.0758
	(0.228)	(0.0598)	(0.160)	(0.0664)	(0.148)	(0.0897)	(0.126)	(0.248)	(0.0855)
LSPR	0.0881	0.0595	0.209	0.735***	-0.610*	0.102	0.374	0.611	0.301*
	(0.195)	(0.133)	(0.250)	(0.148)	(0.353)	(0.327)	(0.348)	(0.621)	(0.176)
Sound Money	-0.0521	0.0368	-0.0363	0.0669*	0.131	0.120*	0.179*	-0.248*	0.0528*
	(0.0662)	(0.0278)	(0.0652)	(0.0376)	(0.0850)	(0.0716)	(0.0960)	(0.144)	(0.0305)
Regulation	0.410***	0.111	0.344**	0.189*	0.245	0.254*	0.195	0.0973	0.102
	(0.152)	(0.0781)	(0.166)	(0.100)	(0.201)	(0.148)	(0.202)	(0.297)	(0.103)
Electoral Dem.	0.558	0.583	0.662	-1.117***	0.763	-0.359	-0.0296	-1.197	-0.303
	(0.897)	(0.559)	(0.799)	(0.340)	(0.945)	(0.641)	(0.602)	(1.575)	(0.365)
Human Capital	-0.610	0.0501	-0.269	0.865**	-1.148	-0.144	0.672	0.205	0.463
	(0.582)	(0.331)	(0.641)	(0.412)	(0.927)	(1.000)	(0.763)	(1.604)	(0.431)
Constant	-25.26**	9.724**	22.41**	14.17***	80.75***	3.539	-28.47**	-59.02**	22.14**
	(9.790)	(4.520)	(10.33)	(5.370)	(14.10)	(8.850)	(11.22)	(25.89)	(9.770)
Observations	637	659	647	686	640	693	663	548	687
R-squared	0.176	0.074	0.121	0.193	0.161	0.046	0.121	0.411	0.367
Countries	136	139	139	140	140	140	140	140	140

Country and year fixed effects are estimated but not reported.
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 14: Natural Resource Value and Trade (% of GDP) (2023)

	Trade	Imports	Exports
Top Resource Country	-62.87***	-31.48***	-31.39***
	(14.91)	(6.717)	(8.441)
Size of Government	-1.297	-0.755	-0.541
	(5.358)	(2.626)	(2.899)
Legal System and Property Rights	14.97**	5.193	9.776**
	(6.913)	(3.264)	(3.866)
Sound Money	4.503**	2.392**	2.111**
	(1.895)	(0.918)	(1.023)
Regulation	8.895	5.746	3.149
	(8.844)	(4.351)	(4.743)
Electoral Democracy	-95.50**	-42.21**	-53.29***
	(37.33)	(18.68)	(19.21)
Human Capital	18.45**	7.359*	11.09***
	(7.979)	(4.427)	(4.230)
Landlocked	9.760	7.460	2.301
	(13.60)	(6.617)	(7.367)
Island	-0.234	-0.686	0.452
	(21.77)	(9.788)	(12.15)
Constant	-76.16	-30.42	-45.74
	(54.50)	(27.69)	(28.37)
Observations	126	126	126
R-squared	0.357	0.331	0.366

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 15: Natural Resource Value and Trade Freedom (2023)

	Trade Freedom	Tariffs	Regulatory Barriers	Black Market Exchange Rates	Capital and Visitation Controls
Top Resource Country	-0.615*	-0.249	-0.161	-0.348	-1.701***
	(0.353)	(0.434)	(0.266)	(0.830)	(0.469)
Size of Government	0.0544	0.0918	0.210*	-0.126	0.0413
	(0.0973)	(0.109)	(0.120)	(0.251)	(0.114)
LSPR	0.131	-0.00860	0.621***	-0.290	0.203
	(0.0926)	(0.134)	(0.132)	(0.233)	(0.139)
Sound Money	0.231***	0.175***	0.147*	0.379*	0.224***
	(0.0689)	(0.0544)	(0.0792)	(0.217)	(0.0748)
Regulation	0.487***	0.151	0.319	0.793	0.684***
	(0.144)	(0.170)	(0.198)	(0.519)	(0.216)
Electoral Democracy	-0.168	-0.445	-0.521	0.0377	0.256
	(0.315)	(0.448)	(0.455)	(0.754)	(0.551)
Human Capital	0.567***	0.496***	0.958***	0.0246	0.788***
	(0.135)	(0.162)	(0.231)	(0.381)	(0.225)
Landlocked	-0.254	-0.277	-0.0379	-0.460	-0.241
	(0.166)	(0.213)	(0.286)	(0.507)	(0.249)
Island	-0.306	-0.207	-0.464*	-0.191	-0.363
	(0.193)	(0.307)	(0.241)	(0.391)	(0.265)
Constant	-0.0459	3.847***	-4.150***	3.932	-3.812***
	(1.003)	(0.955)	(1.131)	(2.558)	(1.090)
Observations	141	141	141	141	141
R-squared	0.716	0.297	0.702	0.231	0.701

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 16: Natural Resource Value and Trade Freedom Subcomponents (2023)

	Trade Tax Revenue	Mean Tariff Rate	Std. Dev. Tariff Rates	Non-Tariff Barriers	Import/Export Costs	Financial Openness	Capital Controls	Freedom of Foreigners to Visit	Protection of Foreign Assets
Top Resource Country	-0.358	-0.228	-0.875	-0.468	0.146	-1.023	-1.340**	-4.009***	-0.421
	(0.344)	(0.278)	(0.962)	(0.424)	(0.560)	(0.619)	(0.652)	(1.279)	(0.420)
Size of Government	0.0240	0.121**	0.209	0.117	0.303	0.0276	0.176	-0.137	0.0776
	(0.129)	(0.0604)	(0.214)	(0.126)	(0.211)	(0.185)	(0.212)	(0.229)	(0.0907)
LSPR	0.0627	0.0706	-0.0361	0.332**	0.910***	0.357	0.00843	-0.0324	0.464***
	(0.145)	(0.0713)	(0.262)	(0.148)	(0.242)	(0.223)	(0.257)	(0.275)	(0.134)
Sound Money	0.147	0.117***	0.250**	0.119**	0.174	0.409***	0.463***	0.00738	0.00909
	(0.114)	(0.0365)	(0.125)	(0.0573)	(0.129)	(0.121)	(0.144)	(0.165)	(0.0691)
Regulation	0.0164	0.243**	0.0788	0.429**	0.208	0.772**	0.338	0.824*	0.831***
	(0.186)	(0.114)	(0.320)	(0.206)	(0.323)	(0.363)	(0.408)	(0.429)	(0.162)
Electoral Democracy	-1.027**	-0.382	-0.108	-1.376***	0.333	0.280	-0.0626	0.699	0.0778
	(0.504)	(0.240)	(1.013)	(0.379)	(0.792)	(0.661)	(1.004)	(1.210)	(0.476)
Human Capital	1.033***	0.482***	0.0240	0.855***	1.062***	1.189***	0.637	1.004**	0.311
	(0.261)	(0.110)	(0.322)	(0.175)	(0.405)	(0.264)	(0.404)	(0.488)	(0.234)
Landlocked	-0.641**	-0.103	-0.0852	-0.658**	0.582	-0.769**	-0.421	1.039**	-0.821***
	(0.304)	(0.128)	(0.429)	(0.258)	(0.498)	(0.325)	(0.491)	(0.523)	(0.279)
Island	-0.258	0.0357	-0.408	-0.243	-0.685*	-0.845**	-0.550	0.221	-0.400
	(0.319)	(0.147)	(0.729)	(0.300)	(0.380)	(0.369)	(0.703)	(0.780)	(0.304)
Constant	4.819***	3.576***	2.687	-1.747*	-6.552***	-7.147***	-4.786**	0.00132	-3.191***
	(1.106)	(0.605)	(2.097)	(0.989)	(1.967)	(1.470)	(1.872)	(2.520)	(0.877)
Observations	137	140	140	141	141	141	140	141	141
R-squared	0.352	0.552	0.087	0.627	0.584	0.723	0.287	0.347	0.713

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Figure 1: Surface Area and Freedom to Trade Internationally Scatterplot with Fitted Line (2023)

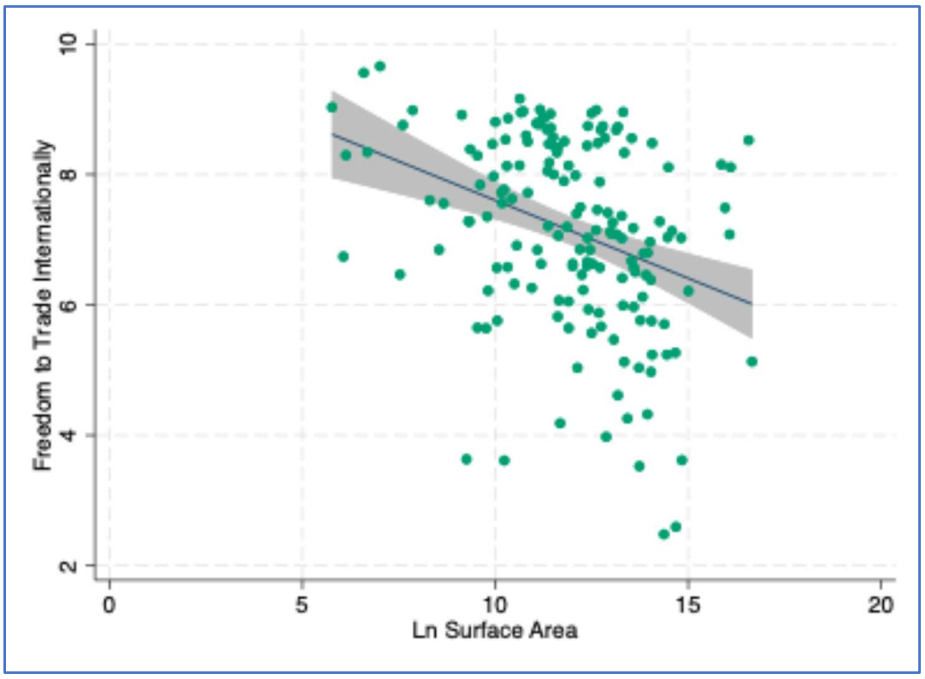


Figure 2: Population and Freedom to Trade Internationally Scatterplot with Fitted Line (2023)

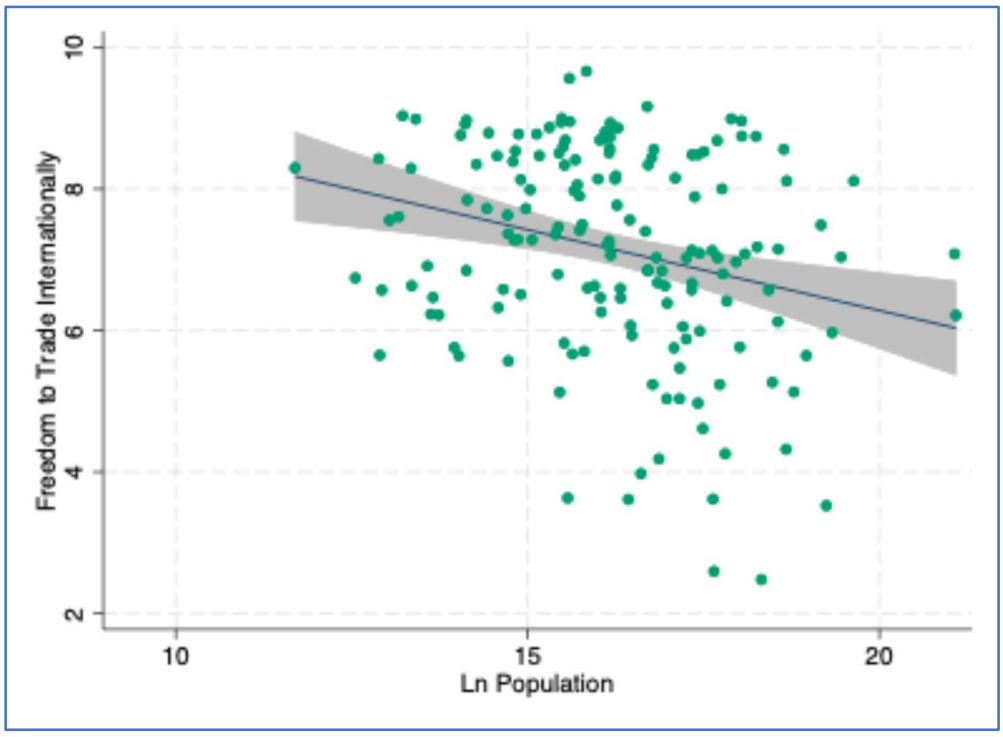


Figure 3: Surface Area and Trade (% of GDP) Scatterplot with Fitted Line (2023)

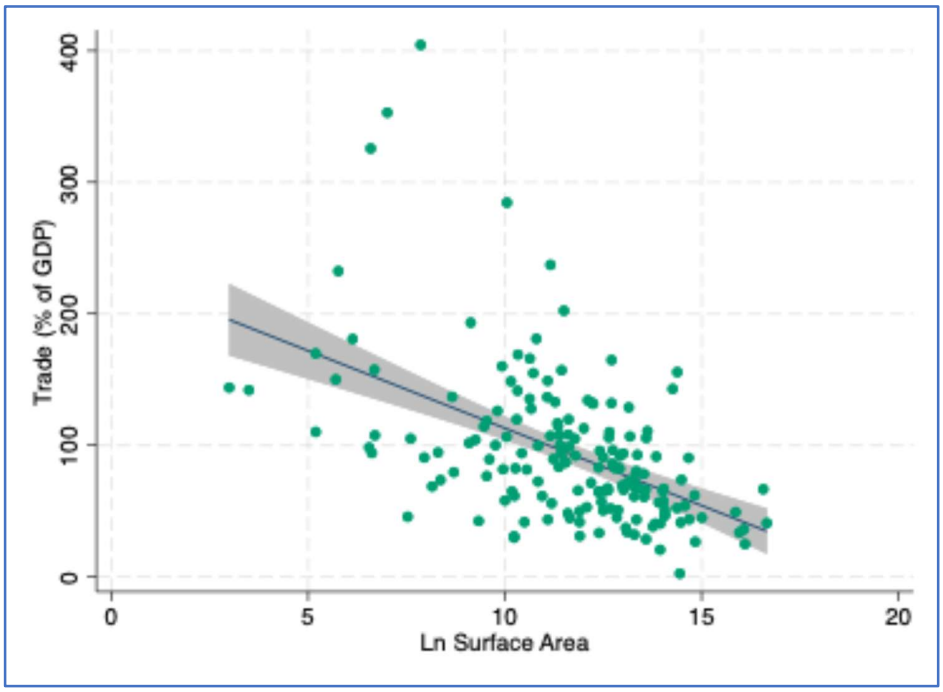


Figure 4: Population and Trade (% of GDP) Scatterplot with Fitted Line (2023)

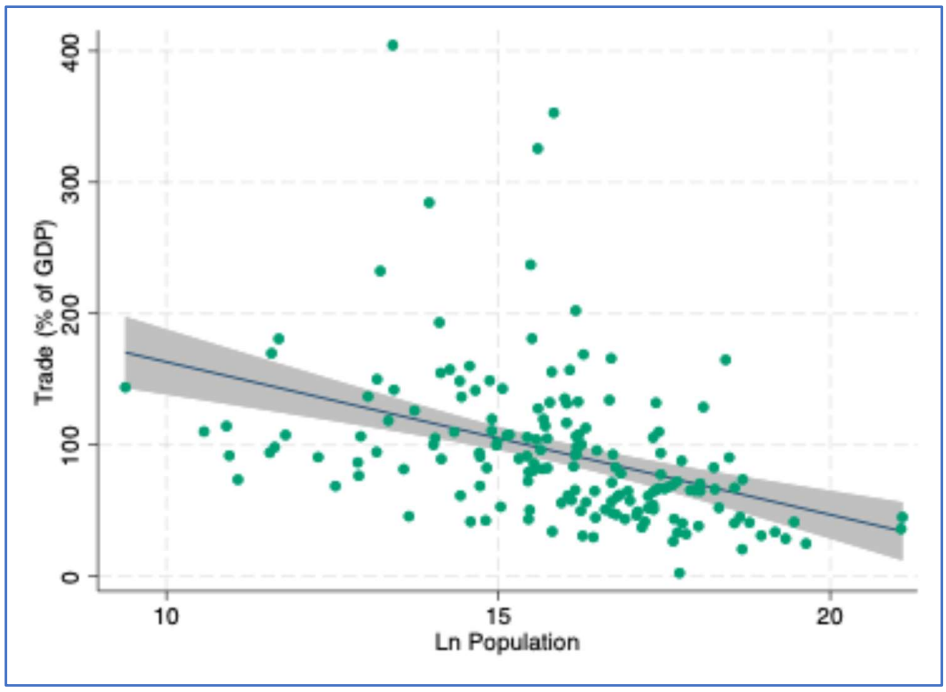


Figure 5: World Tariff Rate, All Countries Weighted Equally (1990-2022)



Appendix

Table A1: Surface Area and Trade (% of GDP) (2023) (EU and Non-EU)

	EU Trade	EU Imports	EU Exports	Non-EU Trade	Non-EU Imports	Non-EU Exports
Ln Surface Area	-40.38***	-19.07***	-21.30***	-12.88***	-6.848***	-6.028***
	(6.809)	(2.911)	(3.950)	(3.078)	(1.503)	(1.663)
Size of Government	-12.69	-6.173	-6.521	4.116	1.601	2.515
	(13.08)	(5.554)	(7.649)	(4.506)	(2.386)	(2.431)
LSPR	-12.06	-6.273	-5.790	13.20**	4.542	8.661**
	(13.09)	(5.564)	(7.652)	(5.995)	(2.895)	(3.453)
Sound Money	3.233	0.594	2.639	3.328**	1.749**	1.579*
	(18.40)	(7.202)	(11.32)	(1.665)	(0.818)	(0.904)
Regulation	65.54**	27.53**	38.01**	-4.838	-1.105	-3.733
	(27.53)	(10.75)	(17.10)	(6.585)	(3.285)	(3.705)
Electoral Dem.	-115.2	-44.09	-71.11	-89.82***	-36.99**	-52.82***
	(97.58)	(40.76)	(57.58)	(30.91)	(15.85)	(15.88)
Human Capital	-5.299	-3.035	-2.264	15.80**	6.040	9.762***
	(21.95)	(9.718)	(12.53)	(7.094)	(4.344)	(3.649)
Landlocked	36.61	16.82	19.79	-0.794	2.876	-3.670
	(22.51)	(10.03)	(12.61)	(8.879)	(4.671)	(4.974)
Island	-136.6***	-66.49***	-70.14**	-8.070	-5.588	-2.482
	(45.03)	(19.35)	(25.99)	(16.84)	(7.988)	(9.196)
Constant	373.4	209.1**	164.2	146.4***	86.62***	59.75**
	(229.6)	(89.80)	(142.9)	(52.84)	(30.19)	(26.83)
Observations	27	27	27	99	99	99
R-squared	0.837	0.861	0.811	0.495	0.475	0.480

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A2: Surface Area and Trade (% of GDP) (2013) (EU and Non-EU)

	EU Trade	EU Imports	EU Exports	Non-EU Trade	Non-EU Imports	Non-EU Exports
Ln Surface Area	-33.76***	-15.56***	-18.20***	-13.64***	-7.104***	-6.540***
	(6.622)	(2.781)	(3.897)	(3.549)	(1.813)	(1.818)
Size of Government	-8.716	-3.745	-4.971	2.155	2.265	-0.110
	(7.625)	(3.314)	(4.486)	(4.777)	(2.470)	(2.578)
LSPR	-18.85**	-9.671**	-9.182	9.868	2.758	7.110**
	(8.764)	(3.567)	(5.304)	(6.371)	(3.316)	(3.386)
Sound Money	0.662	0.0232	0.639	-6.214	-3.387	-2.827
	(15.90)	(6.975)	(9.001)	(4.445)	(2.265)	(2.290)
Regulation	57.66***	26.48***	31.18***	7.735	4.200	3.535
	(17.36)	(6.961)	(10.59)	(7.057)	(3.561)	(3.840)
Electoral Dem.	-70.86	-34.72	-36.14	-67.17**	-24.15	-43.03***
	(66.71)	(29.36)	(38.65)	(26.71)	(14.59)	(13.36)
Human Capital	10.68	6.577	4.104	15.81**	6.967	8.844**
	(17.39)	(7.281)	(10.28)	(7.512)	(4.243)	(4.128)
Landlocked	39.67**	16.98**	22.69**	-4.960	3.150	-8.110
	(18.29)	(7.735)	(10.67)	(9.687)	(5.144)	(5.326)
Island	-125.4***	-57.61***	-67.82**	-14.92	-7.169	-7.752
	(41.99)	(17.70)	(24.67)	(22.92)	(11.41)	(11.84)
Constant	299.5	146.5*	153.1	180.4***	96.37***	83.99***
	(178.7)	(77.77)	(102.8)	(39.28)	(22.13)	(21.35)
Observations	28	28	28	104	104	104
R-squared	0.858	0.873	0.840	0.456	0.404	0.477

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A3: Surface Area and Trade (% of GDP) (2003) (EU and Non-EU)

	EU Trade	EU Imports	EU Exports	Non-EU Trade	Non-EU Imports	Non-EU Exports
Ln Surface Area	-26.27***	-12.06***	-14.21***	-11.49***	-6.153***	-5.342***
	(4.998)	(2.249)	(2.812)	(2.397)	(1.133)	(1.304)
Size of Gov.	-14.51	-5.557	-8.950	-3.471	-0.949	-2.521
	(12.53)	(4.951)	(7.594)	(4.178)	(2.260)	(2.021)
LSPR	-12.26	-5.174	-7.083	1.901	0.0570	1.844
	(11.21)	(4.295)	(7.016)	(5.856)	(2.882)	(3.090)
Sound Money	-164.3	-78.31	-86.04	-3.676**	-1.727*	-1.950**
	(160.6)	(68.04)	(93.90)	(1.767)	(0.944)	(0.938)
Regulation	39.81	15.76	24.05	8.580	3.876	4.704
	(22.45)	(8.539)	(13.95)	(6.243)	(3.210)	(3.173)
Electoral Dem.	322.9	168.6	154.3	-50.85**	-19.32	-31.53**
	(435.3)	(167.1)	(271.2)	(25.44)	(12.31)	(13.65)
Human Capital	-12.61	-6.619	-5.988	19.89***	8.793***	11.09***
	(35.27)	(13.67)	(21.65)	(6.123)	(3.072)	(3.340)
Landlocked	34.24	15.53	18.71	-8.871	-1.910	-6.961
	(22.60)	(9.834)	(13.01)	(8.172)	(3.903)	(4.568)
Island	-	-	-	-5.949	-3.734	-2.215
				(17.85)	(8.370)	(9.683)
Constant	1,603	757.4	845.1	191.2***	102.1***	89.08***
	(1,548)	(655.1)	(902.0)	(39.12)	(19.68)	(20.53)
Observations	15	15	15	116	116	116
R-squared	0.882	0.901	0.863	0.420	0.398	0.422

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A4: Population and Trade, Controlling for Landlocked and Island Status (2023)

	Trade	Imports	Exports
Ln Population	-19.13***	-9.450***	-9.677***
	(2.975)	(1.420)	(1.649)
Size of Government	1.424	0.594	0.831
	(4.389)	(2.124)	(2.472)
Legal System and Property Rights	15.44**	5.417*	10.02***
	(6.511)	(3.030)	(3.705)
Sound Money	2.442	1.371*	1.072
	(1.659)	(0.798)	(0.916)
Regulation	7.321	4.984	2.337
	(7.670)	(3.740)	(4.216)
Electoral Democracy	-102.5***	-45.55**	-56.94***
	(37.67)	(18.76)	(19.40)
Human Capital	14.89**	5.564	9.327**
	(7.163)	(3.980)	(3.897)
Landlocked	-1.577	1.907	-3.484
	(10.70)	(5.254)	(5.925)
Island	-19.69	-10.29	-9.398
	(20.59)	(9.365)	(11.42)
Constant	259.0***	135.1***	123.9***
	(65.62)	(33.48)	(35.42)
Observations	126	126	126
R-squared	0.470	0.454	0.463

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A5: Correlation Matrix (2023, 2018, 2013, 2008 and 2003)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Ln Surface Area	1.000														
(2) Ln Population	0.691	1.000													
(3) Top Resource	0.478	0.429	1.000												
(4) Trade Freedom	-0.385	-0.264	-0.130	1.000											
(5) Trade (%)	-0.603	-0.456	-0.202	0.420	1.000										
(6) Imports (%)	-0.625	-0.474	-0.240	0.382	0.972	1.000									
(7) Exports (%)	-0.557	-0.419	-0.159	0.435	0.979	0.904	1.000								
(8) Size of Gov.	-0.101	0.040	-0.121	-0.002	-0.066	0.001	-0.122	1.000							
(9) LSPR	-0.235	-0.194	0.020	0.729	0.373	0.300	0.420	-0.284	1.000						
(10) Sound Money	-0.276	-0.188	-0.032	0.715	0.256	0.227	0.269	-0.052	0.612	1.000					
(11) Regulation	-0.374	-0.259	-0.066	0.765	0.412	0.379	0.422	0.053	0.770	0.657	1.000				
(12) Electoral Dem.	-0.070	-0.172	-0.062	0.582	0.061	0.036	0.079	-0.113	0.650	0.445	0.504	1.000			
(13) Human Capital	-0.112	-0.118	0.117	0.606	0.326	0.261	0.368	-0.251	0.706	0.509	0.571	0.522	1.000		
(14) Landlocked	-0.050	-0.188	-0.150	-0.178	0.044	0.095	-0.002	-0.007	-0.138	-0.044	-0.098	-0.101	-0.065	1.000	
(15) Island	-0.297	-0.219	0.003	0.150	0.142	0.132	0.144	0.122	0.180	0.124	0.309	0.067	0.114	-0.174	1.000

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