Supplementary Appendix for "Power, Proximity, and Democracy: Geopolitical Competition in the International System"

S1. The Need for a Country-Level Measure of Geopolitical Competition

Previous scholarship has often evaluated the level of geopolitical competition between pairs of states, identifying enduring rivalries or dangerous dyads (Bremer, 1992; Huth, Bennett & Gelpi, 1992; Goertz & Diehl, 1993, 1995; Thompson, 2001). Our hypothesis predicts a country-level response—development of power projection capabilities—and thus we develop a country-level measure of geopolitical competition. In this section, we provide some additional discussion of the tradeoffs associated with our measurement approach, and provide a more complete justification for our decision to measure political competition at the country level.

We develop a new country-specific measure for each state in the system because the decision of a state to develop power projection capabilities is not just driven by their interactions with another individual state, but rather by its interactions with multiple states in its geopolitical environment. There is no way to capture this intuition using a traditional dyadic approach. To illustrate why this is a measurement challenge, consider a world in which there is only one state that other states might find potentially threatening. Let's call the potentially threatening state China and the state we are modeling the power projection choice for Japan. Other states exist in this simplified system but, by assumption, only China is potentially threatening. Since all the other states are not threatening to Japan, we can take the China-specific variables (distance from China and the size of China's economy) and place them on the right hand side of the equation to model Japan's choice to arm as a function of the distance from Japan to China and the size of China's economy.

Now imagine that there is a second state that is also potentially threatening to Japan; let's call this state Russia. If both Russia and China are threatening to Japan, then we would need to add both their distances from Japan and the size of China's and Russia's economies to the model. The model would estimate how the size of the Russian and Chinese economy and the distance to those two states are related to the choice of Japan to develop power projection capabilities. As more states become potentially threatening, we would need to add more variables to capture the dynamics. Each new threatening state adds two more variables to the right hand side of the model. This quickly makes the model intractable as it would require that we put hundreds of variables on the right side of the equation in order to include all states in the system—which would make interpretation of results difficult if not impossible. We could also combine these two variables (distance and economic size) by weighting the size of the economy by distance for each threatening state, but we would still need to add in a new variable for each threatening state. Instead, our approach uses the spatial weight, which allows us to combine all of this information for each state in the international system using a principled method.

In sum, as the simplified example above demonstrates, using traditional methods, we are not able to disentangle if a given state, like Japan, is responding to single state, like China or Russia, or both. We therefore need our measure to include dyadic-level information for the relationships of each state and aggregate it into a valid country-year measure. Capturing this concept requires that we adopt a country-year unit of analysis and not a dyadic one.

How Our Measure is Different from an Index

Our measure of geopolitical competition combines information about interest compatibility, geographic distance, and relative economic power. Thus, at first blush it seems to be an index that combines three distinct components of competition into a single measure. However, rather than an index, our measure is better thought of as a spatial weight similar to those used in work that utilizes the minimum-distance-between-states data published by Gleditsch & Ward (2001). Commonly used indices like CINC or Polity IV combine country-specific information into country-specific indicators. Our approach differs in that, like other spatial weights, we are aggregating dyadic-level information into a country-specific measure.

Thus, whereas traditional indices like CINC and Polity pull together diverse information about the individual state, we are taking the weighted mean of the same dyadic measure across all the dyads that include State A into a country level measure for State A.

Our measure captures, at the individual state level, the distance-weighted power of potential opponents. The regime type information in our measure proxies for interest compatibility. It identifies whether State B in a given dyad is or is not a potential opponent of State A. For states that are potential opponents, we measure their power and weight that by the geographic distance from State A. In this measure of threat, no one piece of information about State B (interest compatibility with State B, power of State B, distance from State B) is informative independent of the other pieces of information in the measure.

Hypothetically, (1) we could create a measure of the summed distances between State A and all other states in the system, which would be the geographic component. (2) We could create a measure of potential incompatibility, which would be the number of states in the system with which State A is potentially interest incompatible (the interest compatibility piece). However, for democracies this would be the number of autocracies in the system and for autocracies this would be the number of all other states in the system. And (3) we could create a measure of the summed power of all other State B's in the system; however, this would reduce to simply a measure of State A's own power as a share of total power in the world. None of these measures make sense on their own, because these three pieces of information about a dyad—interest compatibility, power, and geographic distance—have to be combined before they are collapsed down to the country level.

S2. Potential Tradeoffs Associated with Adopting a Naval-Focused Measure of Power Projection

As discussed in the main paper, we operationalize power projection capabilities using naval tonnage for several reasons. First, when engaging in a cross-national comparisons, naval tonnage is more directly comparable then military expenditures, which vary widely across states due to different national accounting standards (see Bolks & Stoll, 2000). Second, in comparison to alternative measures such as military expenditures, naval tonnage is a more direct measure of our key construct of interest: the degree to which states have invested in in actual capabilities to project power beyond their border. Third, ships are far less useful for engaging in domestic suppression than armies, and therefore represent a clearer signal that a state has invested in the capabilities to project power over distance. Finally, there are substantive reasons to focus on naval capabilities as policy makers and scholars are increasing interested in the question of the degree to which rising powers such as China, India, and Brazil will invest in building naval capabilities. However, there are also some potential tradeoffs associated with operationalizing power projection capabilities using naval tonnage, which we explain below.

The central drawback of a naval-focused measure of power projection capabilities is that it may systematically underestimate the power projection capabilities of land powers, or systematically overestimate the capabilities of wealthy states. Land powers are less likely than island states to project power primarily by sea; wealthy states are more likely to make capital-intensive investments in navies, as opposed to labor-intensive investments in land armies. For each of these potential biases, we discuss the likely severity of the measurement bias and the effect that such a bias would have on our results. We expect that the overestimation of power projection capabilities is quite small, if it exists at all. The underestimation of capabilities for land powers is potentially significant, but its effect on our analysis is actually to make it more difficult for us to find support for our hypotheses. Thus, the fact that we find results consistent with our hypothesis in the face of this potential bias provides particularly compelling support for our theory.

Wealthy Nations vs. Poor Nations

Note that our theory expects states to become more likely to project power as they become more economically powerful, as their interests will tend to expand geographically, and because they have greater ability to afford expensive power projection capabilities. However, wealthier countries may be more likely to build navies because they have a greater capacity to invest in a capital-intensive military, and not because they are interested in projecting power.

That said, states that are interested in substituting capital for labor, but not interested in projecting power far beyond their borders, can invest in non-naval capital-intensive military assets, such as better trained and equipped forces. For example, many wealthy European states, such as Germany, Switzerland, and Denmark have relatively weak power projection capabilities, but possess highly capital-intensive militaries. Moreover, there is little evidence that wealthier states face a more competitive geopolitical environment and, in fact, there is some evidence to suggest that the opposite is true. Finally, in Table 4 of this appendix, we show that we obtain substantively similar results in models that remove what is by the far the most economically powerful "sea power," the United States.

Land Powers vs. Island States

Our principal concern is that variables that cause states to be more likely to invest in power projection capabilities may be correlated with whether they are land or sea powers and that this could bias our findings. How might this occur? There are two possibilities. First, it might be the case that sea powers are more economically powerful and thus have a greater capacity to build naval capabilities than land powers. At first glance, the historical examples of the United Kingdom, the United States, and Japan seem to be confirm this case. However, a closer look reveals that there are also a number of economically weak island nations, such as the Philippines, Cuba, and Madagascar. Moreover, if one looks at the historical record economically powerful land powers such as Russia, Germany, and France have been just as, if not more, common as sea-powers. And even if we remove what is by the far the most economically powerful "sea power," the United States, our results still hold (see Table 4).

Second, it is likely the case that sea-powers are more likely to have maritime interests, such as protecting shipping routes, fisheries and off-shore sea-bed resources and are therefore more likely than land powers to invest in naval power projection capabilities. However, in order for the measure to represent a threat to our analysis, we would have to believe that sea-powers are not only more likely to build naval capabilities, but also more likely to face a competitive geopolitical environment. If sea-powers are more likely to build naval capabilities, regardless of their geopolitical environment, then this makes us less likely to find results supportive of our theoretical predictions. This is because sea-powers that do not face a high level of geopolitical competition will build power projection capabilities when our theory predicts that they should not. Thus, unless we believe that sea-powers are both more likely to build power projection capabilities and face a higher level of geopolitical competition than land powers, the direction of bias is not clear and may be even bias against our results. This leads us to the next issue, which is whether sea-powers are more likely to face a higher level of geopolitical competition than land powers and therefore be more likely to build power projection capabilities.

Our theory predicts that states facing higher levels of geopolitical competition will invest more heavily in power projection capabilities. It is possible that we systematically underestimate the power projection capabilities of land powers. If land powers, on average, face lower levels of geopolitical competition than sea-powers, this mis-measurement could lead us to find unjustified support for our hypothesis. However, as we argue in detail below, the reverse is actually the case. Sea-powers, on average, face lower levels of geopolitical competition. Thus, to the extent that we overestimate the power projection capabilities of sea-powers relative to land powers, we bias our results against our theory.

There are several reasons to believe sea-powers, on average, face a lower level of geopolitical competition than land powers. First, land powers are, on average, more geographically proximate to other states given that they share land border with them. For illustration, maritime power such as the United States, the United Kingdom were both more geographically distance from potential adversaries such as Germany and Russia than their continental counter-parts. Second, there is little evidence that sea-powers are less likely to be democratic than land powers, and there is some evidence to suggest that sea-powers are more likely to be liberal democracies (see Heginbotham, 2002). Third, there is little reason to believe that sea-powers face more economically powerful potential opponents than land powers. For illustration, during the first half of the 20th century, Britain, a sea-power, and France, a land power, both faced off against an economically powerful Germany. In sum, there is little reason to believe that sea-powers face a lower level of geopolitical competition than land-powers, and some evidence to suggest the reverse.

But, if land powers do face a higher level of geopolitical competition, this fact will bias the model estimates, given that we focus on naval capabilities and land powers will have a greater incentive to build forces to project power over land. However, the direction of this bias should make our results more conservative. This is because, when faced with a higher level of geopolitical competition, land powers are more likely to invest in armies, rather than navies. We should therefore be less likely to find support for our explanation, because these states will invest less in navies than expected from the theory. Thus, the decision to use navies rather than armies as a measure of power-projection capabilities acts as a signal-weakener for our empirical analysis, making it less likely that we will find supportive results. If we find results even when using navies, this represents strong evidence for the theory.

References

Bolks, Sean & Richard J Stoll (2000) The arms acquisition process: The effect of internal and external constraints on arms race dynamics. *Journal of Conflict Resolution* 44(5): 580–603.

Bremer, Stuart A (1992) Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816-1965. *The Journal of Conflict Resolution* 36(2): 309–341.

Gleditsch, Kristian S & Michael D Ward (2001) Measuring Space: A Minimum Distance Data Set. *Journal of Peace Research* 38(4): 749–768.

Goertz, Gary & Paul F Diehl (1993) Enduring rivalries: Theoretical constructs and empirical patterns. *International Studies Quarterly* 37(2): 147–171.

Goertz, Gary & Paul F Diehl (1995) The initiation and termination of enduring rivalries: The impact of political shocks. *American Journal of Political Science* 39(1): 30–52.

Heginbotham, Eric (2002) The Fall and Rise of Navies in East Asia: Military Organizations, Domestic Politics, and Grand Strategy. *International Security* 27(2): 86–125.

Huth, Paul, D Scott Bennett & Christopher Gelpi (1992) System Uncertainty, Risk Propensity, and International Conflict among the Great Powers. *The Journal of Conflict Resolution* 36(3): 478–517.

Thompson, William R (2001) Identifying Rivals and Rivalries in World Politics. *International Studies Quarterly* 45(4): 557–586.

Table 1: Summary statistics for key variables.

Statistic	Min	Median	Mean	Max	St. Dev.	N
Geopolitical Competition	0.001	0.006	0.010	0.046	0.008	10,689
Naval Tonnage	1	29,801	233,787.600	11,267,551	862,975.000	4,655
Naval Tonnage Index (Tonnage/GDP)	0.00001	0.413	1.605	17.545	2.519	4,572
Democracy (Polity 2)	−10	−1	0.053	10	7.176	11,380
ln GDP	3.028	9.327	9.442	16.074	2.126	11,986
GDP Ratio	0.00000	0.002	0.012	0.375	0.031	11,986
Island Dummy	0	0	0.190	1	0.393	12,956
PreDreadnoughts (MT)	0	0	0.158	50	1.711	12,956
Dreadnoughts (MT)	0	0	0.176	44	1.720	12,956
Aircraft Carriers (MT)	0	0	0.102	27	1.133	12,956
Battleships (CS)	0	0	0.697	35	3.009	5,014
Aircraft Carriers (CS)	0	0	0.949	119	6.998	5,014
Diesel Submarines (CS)	0	0	9.102	441	32.408	5,014
Nuclear Attack Submarines (CS)	0	0	1.234	96	8.563	5,014
Ballistic Submarines (CS)	0	0	0.791	83	5.837	5,014

Notes: 1 added to naval tonnage before logging. GDP measured in millions of constant USD.
Data on capital ships from Modelski and Thompson (MT) or Crisher and Souva (CS).

Figure 1: Predicted number of capital ships over the entire range of the one-year lag of geopolitical competition [$\min = 0.0014, \max = 0.0458$] for low and high levels of GDP. with shared areas indicating the 95% confidence intervals. High and low GDP are computed using the first quartile [$Q1 = 21.85$] and third quartile [$Q3 = 24.72$] values of the natural log of the one-year lagged GDP. For most categories, the predicted number of capital ships increases in the level of geopolitical competition that states face. In many cases, states with more financial resources are predicted to have higher investments in capital ships, with the rate of investment increasing in the level of geopolitical competition.

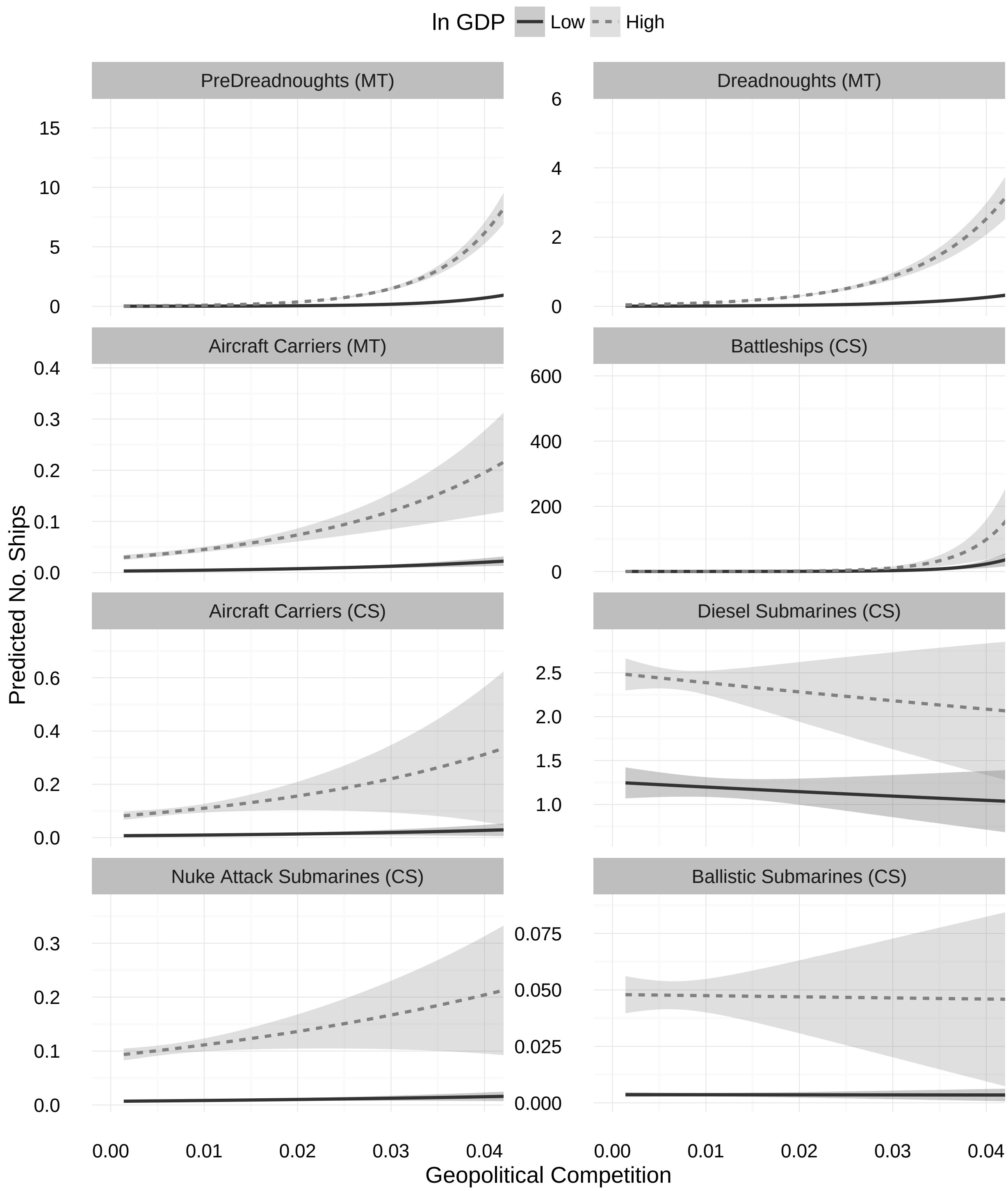

Table 2: Negative binomial count models for different types of capital ships, using the natural log of GDP as control, and accounting for island nations. For most categories of ships, island nations acquire more capital ships than non-island nations. The main results on geopolitical competition are robust to the inclusion of the island nation dummy.

	Dependent variable:							
	PreDreadnoughts	Dreadnoughts	Aircraft Carriers	Battleships	Aircraft Carriers	Diesel Submarines	Nuke Attack Submarines	Ballistic Submarines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\text{Competition}_{i,t-1}$	141.97***	111.28***	50.40***	217.87***	26.30*	−3.49	43.88***	8.12
	(3.26)	(3.52)	(14.40)	(10.72)	(11.89)	(5.46)	(8.00)	(11.98)
$\ln \text{Ratio}_{i,t-1}$	0.80***	0.87***	0.84***	0.53***	0.92***	0.28***	0.98***	0.96***
	(0.02)	(0.02)	(0.06)	(0.04)	(0.04)	(0.02)	(0.02)	(0.02)
Island Dummy	−0.06	0.59***	1.44***	−0.09	1.19***	−0.78***	1.04***	0.57***
	(0.07)	(0.06)	(0.19)	(0.14)	(0.11)	(0.08)	(0.06)	(0.09)
$\text{PreDreadnoughts}_{i,t-1}$	0.14***							
	(0.002)							
$\text{Dreadnoughts}_{i,t-1}$		0.13***						
		(0.002)						
$\text{Aircraft Carriers}_{i,t-1}$			0.69***					
			(0.02)					
$\text{Battleships}_{i,t-1}$				0.36***				
				(0.01)				
$\text{Aircraft Carriers}_{i,t-1}$					0.12***			
					(0.003)			
$\text{Diesel Submarines}_{i,t-1}$						0.07***		
						(0.001)		
$\text{Nuke Attack Submarines}_{i,t-1}$							0.04***	
							(0.001)	
$\text{Ballistic Submarines}_{i,t-1}$								0.08***
								(0.001)
Constant	−12.71***	−13.18***	−14.62***	−10.27***	−12.95***	−2.60***	−13.68***	−13.93***
	(0.27)	(0.26)	(0.86)	(0.51)	(0.48)	(0.22)	(0.27)	(0.36)
Data	MT	MT	MT	CS	CS	CS	CS	CS
Observations	10,552	10,552	10,552	4,646	4,646	4,646	4,646	4,646
Log Likelihood	−3,243.13	−3,368.27	−975.78	−1,975.82	−2,308.55	−9,551.68	−2,885.23	−1,590.20
θ	86,794.00	75,009.34	0.24*** (0.02)	0.56*** (0.04)	0.44*** (0.03)	0.54*** (0.02)	188,644.10	174,281.40
Akaike Inf. Crit.	6,496.26	6,746.54	1,961.56	3,961.64	4,627.11	19,113.37	5,780.46	3,190.39

Note: *p<0.05; **p<0.01; ***p<0.001
Estimates from two sources of data: Modelski and Thompson (MT) and Crisher and Souva (CS).

Table 3: Linear Regression Models (1865-2011) using the un-logged naval tonnage index and the natural log of naval tonnage as dependent variables. For most models, geopolitical competition is associated with statistically significantly higher levels of investment in power projection capabilities across all models. Some of the competition coefficients are negative for the FE model because the absolute value of tonnage is generally increasing year to year even as competition decreases. This why we prefer the transformed tonnage variable for the main analysis.

	Dependent variable:											
	Naval Tonnage Index$_{i,t}$						ln Tonnage$_{i,t}$					
	panel linear				*OLS*		*panel linear*				*OLS*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ln Competition$_{i,t-1}$	1.68***	1.70***	0.43***	0.30**	0.06***	0.06***	−0.26***	−0.25***	0.37***	0.23***	0.02***	0.02**
	(0.04)	(0.04)	(0.09)	(0.09)	(0.01)	(0.01)	(0.02)	(0.02)	(0.05)	(0.04)	(0.01)	(0.01)
Democracy$_{i,t-1}$	0.06***	0.05***	−0.03***	−0.04***	0.002*	0.002*	−0.01*	−0.01***	0.002	−0.01*	0.002*	0.002*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.001)	(0.001)	(0.003)	(0.003)	(0.004)	(0.004)	(0.001)	(0.001)
GDP Ratio$_{i,t-1}$	22.97***		18.13***		0.20		16.63***		16.76***		1.06***	
	(1.65)		(1.53)		(0.13)		(0.83)		(0.75)		(0.14)	
ln GDP Ratio$_{i,t-1}$		0.55***		0.46***		0.005		0.97***		0.89***		0.05***
		(0.08)		(0.07)		(0.004)		(0.04)		(0.04)		(0.005)
ln Naval Tonnage Index$_{i,t-1}$					0.98***	0.98***						
					(0.003)	(0.003)						
ln Tonnage$_{i,t-1}$											0.96***	0.94***
											(0.003)	(0.004)
Constant					0.33***	0.36***					0.55***	0.96***
					(0.05)	(0.05)					(0.05)	(0.07)
Fixed Effects	C	C	C-Y	C-Y	None	None	C	C	C-Y	C-Y	None	None
Observations	4,417	4,417	4,417	4,417	4,326	4,326	4,417	4,417	4,417	4,417	4,326	4,326
Adjusted R^2	0.35	0.33	0.05	0.03	0.98	0.98	0.12	0.16	0.12	0.14	0.97	0.97

Note: *p<0.05; **p<0.01; ***p<0.001
C denote country, and C-Y country-year fixed effects.
Naval tonnage index measured as naval tonnage per GDP in millions. 0.001 added to tonnage before logging.

Table 4: Linear Regression Models (1865-2011): Excluding the U.S. from the data. The results show that the effect of geopolitical competition on power projection is robust the the exclusion of the U.S. The size of the effect is similar to the specification with the US; albeit somewhat higher. A ten percent increase in competition is associated with on average 1% (lagged dependent variable), 2.9% (country and year fixed effects), to 11.4% higher (using just country fixed effects) investment in naval capabilities, based on a model with all controls.

	Dependent variable:											
	ln Naval Tonnage Index$_{i,t}$											
	panel linear								*OLS*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ln Competition$_{i,t-1}$	0.99***	1.14***	1.15***	1.14***	0.30***	0.28***	0.27***	0.29***	0.06***	0.10***	0.10***	0.10***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.04)	(0.04)	(0.04)	(0.01)	(0.01)	(0.01)	(0.01)
Democracy$_{i,t-1}$		0.03***	0.03***	0.03***		−0.003	−0.003	−0.001		0.01***	0.01***	0.01***
		(0.003)	(0.003)	(0.003)		(0.004)	(0.004)	(0.004)		(0.001)	(0.001)	(0.001)
GDP Ratio$_{i,t-1}$			−1.72				−3.17**				0.08	
			(1.10)				(1.01)				(0.18)	
ln GDP Ratio$_{i,t-1}$				−0.17***				−0.18***				−0.0000
				(0.04)				(0.04)				(0.004)
ln Naval Tonnage Index$_{i,t-1}$									0.96***	0.95***	0.95***	0.95***
									(0.003)	(0.004)	(0.004)	(0.004)
Constant									0.27***	0.45***	0.45***	0.45***
									(0.03)	(0.04)	(0.05)	(0.05)
Fixed Effects	C	C	C	C	C-Y	C-Y	C-Y	C-Y	None	None	None	None
Observations	4,270	4,270	4,270	4,270	4,270	4,270	4,270	4,270	4,180	4,180	4,180	4,180
Adjusted R^2	0.48	0.49	0.49	0.49	0.02	0.02	0.02	0.03	0.97	0.97	0.97	0.97

Note: *p<0.05; **p<0.01; ***p<0.001

C denote country, and C-Y country-year fixed effects. U.S. is excluded from the data.

Table 5: Linear Regression Models 1865-1945 and 1946-2011. These models show that the results hold even during a period in which the US did not serve as a hegemon in the international system prior to 1946. The effects of geopolitical competition, if statistically significant at the minimum 5% level, are in the expected direction. However, in the data for the years until 1945, many coefficients do not reach statistical significance at minimum 5% and are signifciant at much lower levels, as compared to the full sample. One reason might be the lower number of observations in this sample excluding the years after 1945.

	Dependent variable:											
	ln Naval Tonnage Index$_{i,t}$											
	1865-1945						1946-2011					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ln Competition$_{i,t-1}$	0.02	0.13*	0.09	0.05	0.04**	0.04**	0.75***	0.77***	0.08	0.12*	0.06***	0.06***
	(0.06)	(0.07)	(0.12)	(0.12)	(0.01)	(0.01)	(0.04)	(0.04)	(0.05)	(0.05)	(0.02)	(0.02)
Democracy$_{i,t-1}$	−0.0001	0.003	−0.02***	−0.03***	0.001	0.001	0.02***	0.03***	0.01**	0.02***	0.003*	0.004**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.002)	(0.002)
GDP Ratio$_{i,t-1}$	5.71***		4.73***		0.13		7.10***		9.58***		0.26	
	(1.02)		(0.92)		(0.08)		(1.58)		(1.42)		(0.18)	
ln GDP Ratio$_{i,t-1}$		0.63***		0.58***		0.003		−0.37***		−0.18***		−0.005
		(0.08)		(0.07)		(0.003)		(0.05)		(0.05)		(0.01)
ln Naval Tonnage Index$_{i,t-1}$					0.98***	0.97***					0.94***	0.94***
					(0.004)	(0.004)					(0.01)	(0.01)
Constant					0.21***	0.23***					0.20*	0.18
					(0.06)	(0.06)					(0.09)	(0.09)
Fixed Effects	C	C	C-Y	C-Y	None	None	C	C	C-Y	C-Y	None	None
Observations	1,457	1,457	1,457	1,457	1,430	1,430	2,960	2,960	2,960	2,960	2,896	2,896
Adjusted R^2	0.02	0.04	0.05	0.08	0.98	0.98	0.15	0.16	0.02	0.01	0.92	0.92

Note: *p<0.05; **p<0.01; ***p<0.001

C denote country, and C-Y country-year fixed effects. Models (1) through (6): 1865-1945. Models (7) through (12) : 1946-2011.

Table 6: Linear Regression Models (1865-2011), controlling for island nations. The results are robust to the inclusion of a dummy variable indicating whether the country is an island or not. Only the lagged dependent variable specification is estimated here, because an island dummy would be omitted upon estimating the model with country and year fixed effects. Island nations do not have statistically significantly different levels of investment in power projection capabilities than non-island countries. All other effects are robust the inclusion of the island dummy.

	Dependent variable:			
	ln Naval Tonnage Index$_{i,t}$			
	(1)	(2)	(3)	(4)
Competition$_{i,t-1}$	0.06***	0.09***	0.09***	0.09***
	(0.01)	(0.01)	(0.01)	(0.01)
Democracy$_{i,t-1}$		0.01***	0.005***	0.01***
		(0.001)	(0.001)	(0.001)
GDP Ratio$_{i,t-1}$			0.13	
			(0.11)	
ln GDP Ratio$_{i,t-1}$				0.001
				(0.003)
ln Naval Tonnage Index$_{i,t-1}$	0.96***	0.95***	0.95***	0.95***
	(0.003)	(0.004)	(0.004)	(0.004)
Island Nation Dummy	0.02	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Constant	0.27***	0.43***	0.41***	0.43***
	(0.03)	(0.04)	(0.04)	(0.04)
Observations	4,326	4,326	4,326	4,326
Adjusted R^2	0.97	0.97	0.97	0.97
Note:	*p<0.05; **p<0.01; ***p<0.001			