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International Politics and Import Diversification in the Second Wave of Globalization

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International Politics and Import Diversification in the Second Wave of Globalization*

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Abstract

We provide evidence that deterioration of relations between the United States and another country, measured by divergence in their UN General Assembly voting patterns, reduces US imports from that country during the second wave of globalization. Though statistically significant, such an effect of "political distance" on trade is small compared with the frictions imposed by other trade barriers. Indeed, using sector-level trade data, we show that except for petroleum and some chemical products, US imports are not affected by international politics. American firms, however, diversify their import of crude oil significantly away from the political opponents of the US, even after controlling for wars, sanctions, and tariffs. To explain the distinctive political impact on oil import diversification, we test the strategy commodity hypothesis over the hold-up risk hypothesis, because while oil is widely thought to be a strategic commodity, oil trade is also often associated with backward vertical FDI that is subject to the risks of hold-up and expropriation. Our results suggest both political and economic forces are at work. First, although the political limits on oil import are only significant when American firms import oil from dictators, the effect is even more pronounced when the exporting countries have high expropriation risk. Second, a similar import pattern is observed only for other major powers or countries with oil companies operating overseas. Finally, we show that while the US imports of a few strategic commodities, such as tin, are also discouraged by political distance, a similar political effect is also observed in the import of R&D intensive goods, in which case quasi-rents derived from backward FDI in R&D may be expropriated by a hostile government.

JEL classification: F13, F51, F59, Q34

Keywords: international politics, hold-up risk, energy security

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1. Introduction

A growing consensus has emerged from the recent empirical trade literature that economic expansion and trade liberalization significantly promote international trade and thereby improve welfare. For instance, in a widely-cited paper, Baier and Bergstrand (2001) show that income growth and trade policies account for more than 90 percent of the post-war trade growth. Furthermore, economic factors, such as economic size and factor endowment, explain 85 percent of these free trade agreements (Baier and Bergstrand, 2004). These findings appear to be at variance with the conventional wisdom that political influence plays an important role in international trade (e.g., Findlay and O'Rourke, 2007). If economic determinants explain most of the post-war world trade growth, is the recent Iranian oil embargo a rather isolated political event? More generally, with efficiency-driven trade liberalization and technology-led declines in communication and transportation costs, is the process of globalization inherently irreversible?

Comparing the two waves of globalization, Jacks, Meissner, and Novy (2011) conclude that the dominant force of world trade growth has switched from political ties and other trade cost declines in the nineteenth-century wave (a.k.a. the Age of High Imperialism) to the post-war global output growth.[1] In this paper, we provide the first systematic empirical analysis of the effect of international politics on imports of goods during the second wave of globalization, which is also a period of decolonization with little international violence. We ask the following questions: (1) Do interstate political tensions reduce trade during the second wave of globalization? If so, how does the trade cost created by such a "political distance" compare with the frictions imposed by other trade barriers? (2) Does political distance hinder imports of some goods more than others? For example, does political distance have a larger impact on import of crude oil, which is widely thought to be a strategic commodity over this period? (3) Does the magnitude of the political effect on bilateral trade vary across trading partners? In particular, is trade more sensitive to political distance when one of the trading partners is a dictatorial government? What is the mechanism by which international politics affect trade in the absence of empire or war?

Mitchener and Weidenmier (2007) show that being in an empire more than doubled bilateral trade in the first wave of globalization (1870-1913), although Alesina, Spolaore, and Wacziarg (2000) argue that "the globalization of market goes hand in hand with political separatism." A few

[1] In particular, Jacks, Meissner, and Novy (2011) show that the pro-trade effect of political ties (measured by imperial membership) has been diminishing over time. Similarly, Head, Mayer, and Ries (2010) document the erosion of colonial trade linkages after independence.

empirical studies have examined the impact of interstate war on bilateral trade (e.g., Blomberg and Hess, 2006; Glick and Talor, 2010). Although international violence does restrict economic integration, interstate war is rare, especially after the Second World War. There are also important case studies in the post-war period. Berger et al. (2010) show that, during the Cold War, a foreign government imported more American products following a CIA intervention. Using more recent data, Michaels and Zhi (2010) find that the deterioration of relations between the United States and France from 2002-2003 reduced trade.[2]

It is our contention that in the contemporary world the presence of *heterogeneity* in the response of trade to international politics is pervasive, and such heterogeneity takes many forms (e.g., across countries, goods, and time) so that extrapolating estimates from one population to another can be misleading. Using voting records for the United Nations General Assembly to measure the degree of misalignment in political interests between country pairs, we first examine if the United States, the world's largest importer, diversifies her imports away from her political opponents over almost four decades (1962-2000). Our data confirm the famous quote that "a week is a long time in politics." The substantial time-variation in political distance within each country-pair allows us to exploit the panel structure of our data to control for persistent historical factors that affect both political distance and bilateral trade. Controlling for exporting country fixed effects and other standard gravity controls, we find that the United States indeed imports less from her political opponents, although the estimated impact is only modest in economic terms. According to our preferred Poisson pseudo-maximum-likelihood (PPML) estimation (Santos Silva and Tenreyro, 2006), for instance, we find that a one standard deviation decrease in political distance is associated with an increase in US imports by less than 14 percent, whereas regional trade agreement increases trade by almost 50 percent.[3] This finding supports the notion that, unlike the nineteenth-century wave of globalization, in the current wave political factors are less important determinants of international trade than economic factors are.

The result on aggregate trade, however, masks the significant heterogeneity of the political effects on trade in the contemporary world. Using disaggregated trade data by sector, we show that

[2] In addition, Summary (1989), an early contribution, identifies several political factors, such as arms transfers and the number of foreign agents registered in the United States, which affect bilateral trade flows between the United States and other countries. More recently, Acemoglu and Yared (2010) find that two countries jointly experiencing greater increases in militarism have lower growth in bilateral trade.

[3] As a reference, the political distance between the United States and Venezuela has increased by approximately one standard deviation (0.18) after Chávez became the president.

for most traded goods, including raw materials, forest products, tropical agricultural products, animal products, cereal, labor-intensive goods, capital-intensive goods, and machinery, there is little significant correlation between international politics and US imports. However, political distance has a distinctive effect on import of petroleum and chemical products. In particular, the estimated political effect on US petroleum imports is almost four times larger than the effect on total imports.

The case of petroleum trade deserves a special attention. There is more trade internationally in crude oil than in any other commodity (Ruta and Venables, 2012). Concerns about "energy security" have motivated policy researchers to quantify the "externalities" as an oil security premium (Leiby, 2007).[4] Because petroleum includes crude oil and other refinery products, and oil reserves change over time due to new discoveries and depletion, a more careful empirical analysis requires better measurements in trade flows and endowments. Focusing on import of crude oil and controlling for oil reserves, we find that a one standard deviation reduction in political distance increases US oil imports by 130 percent, an effect similar to the empire effect in the first wave of globalization. Interestingly, US oil imports respond to international politics even after accounting for government policies, including sanctions and tariffs. Our results are also robust to controlling for militarized interstate disputes, suggesting that the political impact on oil import diversification exists even during times of peace.

Why should international politics affect import decisions of the US private oil companies but not other importing firms? To better understand this sector-specific trade pattern, we examine two possible explanations. First, under the *strategic commodity hypothesis*, import decisions of strategic commodities, such as oil, are not driven solely by profit-maximizing motives because of strategic and security considerations imposed by governments. Alternatively, under the *hold-up risk hypothesis*, oil imports are affected by political risk because oil trade is often associated with backward vertical FDI, which is subject to the risk of selective discrimination, including indirect expropriation (e.g., royalty renegotiation) and forced divestment.

Under the strategy commodity hypothesis, political factors such as the strategic value of a good and regime type of a trading partner are key determinants of the political effects on trade,

[4] These "externalities" include economic losses due to disruptions in oil supply and military spending in vulnerable supply areas, The idea of energy security can be traced back to the time when Winston Churchill changed coal to oil as power source for the Royal Navy prior to the First World War. According to Churchill, "Safety and certainty in oil lie in variety and variety alone." However, unlike some policymakers, many economists maintain that the world oil market is "one great pool," because crude oil is fungible in an integrated oil exchange market (Nordhaus, 2010). If oil is completely fungible, oil moves to the nearest market to minimize transportation cost, and cost minimization prevents the market from distinguishing sources from friendly and hostile regimes.

whereas the hold-up risk hypothesis implies the relationship between international politics and trade is a function of economic factors, such as relationship-specific investment and expropriation risk. To test these two hypotheses, we first examine the heterogeneity in political impact on US oil imports with respect to two institutional characteristics of the exporting countries, namely the degree of democracy and the risk of expropriation. Second, we consider oil imports into other countries. Finally, we examine the effect of international politics on US imports of other strategic commodities and various trade aggregates constructed to measure the degree of relationship specificity. Our findings suggest both political and economic forces are at work, although in the case of oil the economic force of hold-up risk seems to be more important.

The paper proceeds as follows. Section 2 describes the data and illustrates several stylized examples in the case of oil trade. Section 3 presents our initial evidence on the effects of international politics on US total imports and imports by sector. Our main results using US oil imports data are presented in Section 4. Section 5 evaluates the strategic commodity hypothesis and the hold-up risk hypothesis by extending the analysis to different subsamples of exporting countries, other oil importing countries, and various trade aggregates. Section 6 concludes.

2. The Data and Some Stylized Examples

We combine data from the following sources for our analysis. First, our disaggregated bilateral trade data are taken from the NBER-UN world trade data, complied by Feenstra et al. (2005). The NBER-UN dataset provides bilateral trade data by commodity (4-digit SITC code) over the 1962-2000 period. We use this dataset to construct total imports and other trade aggregates, according to Leamer (1984), Nunn (2007), and Fernandes and Tang (forthcoming). Our main dependent variable is the value of crude oil imports, which is classified as "petroleum oils and oils obtained from bituminous minerals, crude" (SITC code = 3330).

Data on political distance between country pairs are obtained from the Affinity of Nations Index (Gartzke, 2010). The Affinity of Nations index provides a metric that reflects the similarity of state preferences based on voting positions of country pairs in the United Nations General Assembly since 1946. In particular, our measure of political distance, which lies between 0 and 1, is calculated as d/d_{max}, where d is the sum of metric distances between votes by a country-pair in a given year and d_{max} is the largest possible metric distance for those votes.[5] For instance, when two countries always cast the same vote for any proposal, their political distance is zero. Alesina and

[5] Votes are coded as either 1 ("yes" or approval for an issue), 2 (abstain), or 3 ("no" or disapproval for an issue).

Dollar (2000) argue that UN votes are a reliable indication of the political alliances between countries, because the pattern of UN votes is strongly correlated with alliances and similarity of economic and geopolitical interest.[6] Unlike other indices based on alliance portfolios, UN voting-based indices provides significant time-series variation in political distance. Following Dreher and Sturm (2012) and the majority of the literature, we focus on all votes (i.e., including both key and non-key votes), although we also report results using only key votes in the sensitivity analysis.

To test whether political distance affects trade predominantly at the extensive margin because of trade sanctions, we obtain sanctions data from Hufbauer et al. (2007). Data on standard gravity controls are taken from various sources. The CEPII provides data on bilateral distance, colonial historical links, GATT/WTO membership, and regional trade agreement. Linguistic dissimilarity and religious distance data are provided by Hanson and Xiang (2011), whereas genetic distance data are taken from Spolaore and Wacziarg (2009). GDP and population data are taken from the Penn World Table (version 6.3).[7] Political scientists believe that joint democracy increases bilateral trade (e.g., Morro, Siverson, and Tabares, 1998), and that joint democracy makes peace (e.g., Oneal and Russett, 2001). Democracy data are taken from the Polity IV dataset. Civil conflict and interstate violence and warfare may disrupt trade. The Correlates of War Project provides data on civil war and militarized interstate disputes.[8] Our oil reserves data are obtained from Dr. Colin Campbell at the Association for the Study of Peak Oil (ASPO). The ASPO dataset covers most oil countries. We obtain additional information on oil reserves for other countries from three public databases: BP Statistical Review of World Energy (BP), Oil and Gas Journal (OGJ), and CIA factbook (see Cotet and Tsui, forthcoming). In some specifications, we also control for tariff duties on US oil imports. These data are obtained from various issues of Harmonized Tariff Schedule of the United States and Tariff Schedule of the United States Annotated. Finally, data on expropriation risk in the oil industry are taken from Guriev, Kolotilin, and Sonin (2011), which provides a list of oil nationalizations, including formal nationalization, intervention, forced sale, and contract renegotiation, during 1960-2006.

[6] More recently, Dreher and Jensen (2007) show that the number of conditions on an IMF loan depends on a borrowing country's voting pattern in the UN General Assembly.

[7] Data for USSR and other former communist countries are obtained from version 5.6.

[8] The raw data of the militarized disputes variable can take 5 values, depended on the hostility level of dispute: 1 = no militarized action, 2 = threat to use force, 3 = display of force, 4 = use of force, and 5 = war. Since the potential impact of hostility level on oil imports is not necessarily linear, in our regressions, we generate dummies variables based on these different levels of hostility. There are also 4 types of civil war: 1=civil war for central control, 2 = civil war over local issues, 3 = regional internal, and 4 = intercommunal. We create dummies for each type of war in our regressions.

In the full sample of total US imports and imports of various trade aggregates, we have 4,977 observations from 158 exporting countries. We present in Table 1 the summary statistics for the variables we use in our US total imports and sectoral imports regressions. The first row shows that the variation in the size of imports into the United States is enormous. The next row shows that there is also significant variation in political distance, our variable of interest. Trade sanctions are rare, especially export sanctions imposed by other countries on the United States.[9] Finally, civil war in exporting countries is not common, and militarized disputes between the United States and potential exporting countries are even rarer. For instance, militarized disputes between the United States and potential exporting countries only occur at a rate of 2 percent (111 out of 4,977) of our sample.[10] We report in the Appendix similar summary statistics when we restrict our sample to country-years with positive oil reserves for our oil imports regressions.

Before presenting our formal regression results, we first consider the following illustrative case studies. Figure 1 depicts the time-series of the political distance between the United States and Libya and the fraction of US oil imports from Libya. Although there has never been formal alliance between the US and Libya according to the Correlates of War Formal Alliance dataset (Gibler and Sarkees, 2004), a sharp increase in political distance is observed in the late 1970s when the US government designated Libya a "state sponsor of terrorism." US dependence on Libyan oil co-move negatively with political distance, as the US government imposed trade sanctions against Libya over the 1979-2004 period. Figure 2 shows a similar pattern in the case of the US-Iran relations: US dependence on Iranian oil has declined dramatically since the late 1970s, when Ruhollah Khomeini led the Iranian Revolution. Unlike the case of Libya, however, Iran had been a formal alliance with the United States before 1979.

[9] See Hufbauer et al. (2007) for an overview of the literature on economic sanctions. In terms of the economic determinants of sanctions, Hafner-Burton and Montgomery (2008) show that although more bilateral trade reduces sanctioning behavior, higher GDP for a potential sanctioner in the network of all preferential trade agreements increases the likelihood of initiating sanctions. Political factors also play a role. For example, Whang (2010) documents that senders of economic sanctions are predominantly democratic, whereas targets are much more diverse in terms of their regime type. In case of the US, the US government often imposes economic sanctions when a target country's leader abolished a democratic constitution or disregarded civil or human rights, although during the Cold War the US government was more reluctant to impose comprehensive embargoes if the target was a close Cold War ally.

[10] In the Appendix, we also report the pairwise correlations between different measures of distances. Consistent with intuition, political distance is positively correlated with import sanctions, geographical distance, linguistic distance, religious distance, genetic distance, and militarized disputes, and negatively correlated with international and regional trade agreements as well as colonial-tie, although none of the correlation is particularly strong (with magnitude never exceeds 0.4). GATT/WTO membership is negatively correlated with militarized disputes, whereas import sanctions and militarized disputes are positively correlated.

The examples of Libya and Iran illustrate that sharp deterioration in international relations leads to trade sanctions, and a subsequent decline in trade on the extensive margin. Figure 3 shows that, even in the absence of sanctions against Venezuela, misalignment in political interests appears to influence the intensive margin of US oil imports. Indeed, more recent data indicate that US dependence on Venezuelan oil has been declining as their political distance was increasing during the past decade under the presidency of Hugo Chávez (Mityakov, Tang, and Tsui, 2011).

3. Political Limits on US Imports

3.1. Distances and US Total Imports

In its multiplicative constant-elasticity form, the gravity equation for trade states the value of imports from country i to the United States in year t,[11] denoted by $M_{i,t}^{US}$ is inversely proportional to their distance $D_{i,t}^{US}$ (which typically includes all factors that might create trade resistance), and proportional to the product of the two countries' GDPs, denoted by $Y_{i,t}$ and Y_t^{US}:

$$(1)\ M_{i,t}^{US} = e^{\alpha} \times (D_{i,t})^{\beta} \times (Y_{i,t})^{\gamma} \times (Y_t^{US})^{\delta} \times e^{\eta_{i,t}^{US}} ,$$

where α, β, γ, and δ are unknown parameters, and $\eta_{i,t}^{US}$ is an error term. Provided $M_{i,t}^{US}$ is strictly positive, we can log-linearize the above equation to obtain the standard representation of the gravity equation: $\ln M_{i,t}^{US} = \alpha + \beta \ln D_{i,t} + \gamma \ln Y_{i,t} + \delta \ln Y_t^{US} + \eta_{i,t}^{US}$. Our point of departure from the traditional gravity model is the focus on international politics, and hence $D_{i,t}^{US}$ also measures political distance.[12] To take into account that contract arrangements cover many international transactions and also to alleviate concerns about reverse causality, $D_{i,t}^{US}$ measures the one-year lag of political distance between the United States and country i. The coefficient of interest is β, the estimated impact of US foreign relations on the log of the value of imports into the United States.

Following the trade literature, other control variables are measured in year t. To examine the incentives to diversify at the intensive margin as well as the extensive margin, we also control for trade sanctions, which accounts for the extensive margin. In our first specification, we control for country i's GDP and population, as well as other standard trade resistance measures, including international and regional trade agreements, geographical distance and various measures of cultural

[11] Once controlling for year fixed effects, using the value of oil imports is equivalent to using the quantity of oil imports in the linear model provided there is a unique world oil price. We obtain almost identical results in our probit and Poisson regressions when we use the value of oil imports divided by an index of oil price as the dependent variable.

[12] Unlike geographical distance, our measure of political distance lies between zero and one, and hence in the regressions we use the level of political distance instead of the log of it.

distance. We also control for civil war and year fixed effects, in order to capture potential supply interruption and other time-specific specific characteristics (e.g., global oil price, as well as US GDP and political distance to the rest of the world). The year fixed effects also capture the possible dramatic differences in the types of votes cast each year, because the years with the greatest political distance are years when there are lots of votes about Israel and Palestine.

Columns 1 to 3 of Table 2 compare the effects of various measures of resistance to trade on US total imports, at both the extensive and intensive margins. The first row reports the estimates of the political distance coefficient, our variable of interest. First, using probit estimation to highlight the extensive margin, column 1 shows that political distance is negatively associated with US imports. The political effect is somewhat weakened after controlling for trade sanctions, suggesting the effect of political distance is partially explained by sanctions (column 2). When we restrict to the subsample of positive imports, our simple OLS estimates show that political distance is also negatively associated with US imports on the intensive margin (column 3). A point estimate of -0.967 implies that a one standard deviation reduction in political distance (approximately 0.18) is associated with an increase in US imports by about 19 percent. According to this traditional gravity model, an estimated distance coefficient of -0.428 implies that a one standard deviation decrease in geographical distance (approximately 0.50) increases trade by more than 23 percent, which is slightly larger than the impact of political distance.

The negative cross-country correlation between colonial ties and US imports raises the concern of omitted variable bias, perhaps due to omitted variables such as factor endowment.[13] We have seen from the examples of Libya and Iran that, unlike geographical distance, political distance can fluctuate significantly over time. Substantial within-country variation in political distance over time allows us to control for omitted factors that simultaneously affect both political distance and trade.[14] The log-linear form of our baseline specification, therefore, can be written as:

$$(2)\ \ln M_{i,t}^{US} = \alpha_t + \alpha_i + \beta \ln D_{i,t} + \gamma \ln Y_{i,t} + X_{i,t}\Gamma + \eta_{i,t}^{US} ,$$

where the vector $X_{i,t}$ includes a set of additional controls that vary across countries and years. In the full specification, $X_{i,t}$ also includes country i's democracy score and militarized dispute between

[13] Baier and Bergstrand (2007), for example, show that standard cross-sectional techniques do not provide stable estimates of the effect of free trade agreement on international trade.

[14] Including country fixed effects in our specification is also equivalent to country-pair fixed effects, which capture many of the standard country-pair specific measures that are standard in gravity regressions.

country i and the United States. We note that some of these low frequency political events, such as regime transitions and militarized disputes, are potentially endogenous to international relations. The purpose of this more stringent and demanding specification is to test whether international politics still matter for trade even after controlling for these violent political events.

The rest of Table 2 reports our fixed-effect estimates. Columns 4 to 6 show that our OLS estimate is robust to controlling for exporter fixed effects, although the probit estimates become less precise. In our full specification that controls for democracy score and militarized disputes, however, our estimates suggest international politics affects US imports on both the extensive and intensive margins. Finally, to avoid selection problem when dropping observations with no trade, following Santos Silva and Tenreyro (2006), we estimate the multiplicative form (1) using the Poisson pseudo-maximum-likelihood (PPML) estimator. The main advantages of the PPML estimator are that while it provides a natural way to deal with zero values of the dependent variable, the estimates will be consistent even in the presence of heteroskedasticity.[15] According to column 10, a point estimate of -0.712 (standard error = 0.258) implies that a one standard deviation decrease in political distance is associated with an increase in US imports by less than 14 percent. In contrast, a point estimate of 0.398 implies regional trade agreement increases trade by almost 50 percent, which is economically more significant than the impact of international politics. This finding support the new consensus that economic factors, including efficiency-driven trade liberalization, are major determinants of trade growth in the second wave of globalization.

3.2. Political Distance and US Imports by Sector

To our knowledge, little is known about the heterogeneity of the effects of international politics on trade in the contemporary world. Given that the number of commodities that are internationally traded is enormous, to avoid being arbitrary, we consider the 10 trade aggregates that are employed by Leamer (1984). These 10 aggregates (namely, petroleum, raw materials, forest products, tropical agriculture, animal products, cereals, etc., labor intensive, capital intensive, machinery, and chemicals) are formed from the 61 2-digit SITC commodity classes, based on the idea that commodities within a class behave similarly in international trade. To show the most conservative estimates, we include exporter fixed effects and the full set of controls in our estimations.

[15] A caveat of any estimation technique that incorporates zeros, however, is that it may generate biased estimates if some trade flows are incorrectly reported as zeros. As such, we report both least square and PPML estimates.

We summarize our results based on probit, OLS, and PPML estimations in Table 3. For most traded goods, including raw materials, forest products, tropical agricultural products, animal products, cereal, labor-intensive goods, capital-intensive goods, and machinery, Table 3 shows that there is no systematic statistical association between trade cost created by political distance and US imports. However, political distance has a distinctive effect on import of petroleum and chemical products. The magnitudes of the estimates from the chemical products regressions are similar to those from the total imports regressions. Interestingly, our preferred PPML estimate of -2.993 (standard error = 1.449) from the petroleum imports regression is more than 4 times bigger than the estimate from the total imports, although the probit and OLS estimates are less precise.[16]

4. Political Limits on US Oil Imports

We have seen that unlike most other traded goods, there is a strong negative statistical relationship between political distance and petroleum imports to the US. The objectives of this section are to establish the causation and to carefully quantify the impact of international politics on oil trade.

4.1. Estimation with Improved Measures of Oil Trade, Endowments, and Import Tariffs

We first extend our previous analysis by focusing on trade in crude oil (SITC code = 3330) and controlling for oil reserves. Our baseline sample consists of all potential crude oil exporters (i.e., country-years in which oil reserves are strictly positive).

Columns 1 to 5 in Table 4 present the results from the pooled regressions. Column 1 shows that the US is less likely to import oil from oil countries with political distance farther apart. The effect is weakened once we control for sanctions. When we restrict to the subsample of positive oil imports, the simple OLS estimate shows that American firms diversify their oil import away from the political opponents of the US (column 3). A point estimate of -1.886 from our preferred PPML specification, which retains zero observations by directly estimating the constant-elasticity model, is more than doubled the fixed effects PPML estimate of the US total imports regression (Table 2, column 10). The effect of political distance is also robust to controlling for oil import tariffs.

[16] When we disaggregate chemicals into 9 subcategories, namely, (a) chemical elements, compounds, (b) mineral tar and crude chemicals from coal, petroleum, natural gas, (c) dyeing, tanning, coloring materials, (d) medicinal, pharmaceutical products, (e) essential oils, perfume materials, (f) fertilizers, manufactured, (g) explosives, pyrotechnic products, (h) plastic materials, cellulose, etc., and (i) chemical materials, n.e.s., we find that political distance has a statistically significant effect of import of only chemical elements and dyeing, tanning, coloring materials in the PPML estimation. Political distance also have economically large impact on import of explosives, pyrotechnic products, although the estimate is rather imprecise (point estimate = -2.126, with standard error = 1.347). We also experiment with different combinations of trade aggregates. For example, we construct a trade aggregate that includes all goods except petroleum, and we find that the PMML estimate remain significant, although the magnitude is almost four times smaller than the effect on petroleum imports (point estimate = -0.839, with standard error = 0.318).

Economically, the estimates from column 5 suggest that the impact of a two standard deviation decrease in political distance lies between the effects of easing import sanctions and joining WTO. On the other hand, a point estimate of -0.120 of the tariff coefficient implies that this political effect on oil import is also similar to a decrease in tariff by more than 5 cents per barrel, approximately the tariff duty imposed on most countries without a preferential trade agreement with the United States.

Our fixed effects estimates, with the full set of control, are reported in the next 5 columns. First, notice that over the sample period American firms diversified their countries' sources of imported oil, which is regarded as a highly homogenous commodity, over 65 (out of 82) oil countries. Figure 4 graphically display a negative relationship between political distance and US oil imports implied by our linear model. Using our preferred PPML estimation (column 9), a coefficient of -4.400 (standard error = 1.327, and hence significant at the 1% level) implies that a one standard deviation decrease in political distance increases US oil imports by 130 percent! One plausible interpretation of the larger estimated coefficient from the fixed-effects specification is that there are unobserved factors that impede oil exports to the United States, but are negatively correlated with political distance. Institutional quality, for instance, may be negatively correlated with oil exports, because oil extraction began earlier in countries with better institutions and hence higher domestic demand for oil. If these countries also have better international relations with the United States, the pooled estimates will underestimate the true effect of political distance.

The Appendix contains a range of sensitivity checks. We briefly summarize our findings here. Similar political impacts on US oil imports are observed in both the Cold War (1962-1989) and the post-Cold War (1990-2000) periods, although the political effect becomes significant both on the extensive and intensive margins in the post-Cold War period. We obtain slightly stronger results when we exclude the years when the US government implemented the Mandatory Oil Import Quota program (1959-1973).[17] The estimated effects remain highly significant when we restrict the sample period to 1984-2000 using the UN Comtrade data. Similar results are also obtained when we restrict the samples by excluding observations for countries under sanctions or engaged in interstate wars. In other words, the political limits on oil trade that we focus on are distinct from a disruption effect. Finally, we also show that although the political effect remains negative, it becomes much

[17] The quota system restricted the amount of crude oil and refined products imported into the United States and gave preferential treatment to oil imports from Canada, Mexico, and, somewhat later, Venezuela.

less significant both economically and statistically when we focus on key votes to measure political distance in the smaller subsample over the 1983-2000 period.[18]

4.2. Lead-Lag Effects and Simultaneity Concerns

In their history of trade over the second millennium, Findlay and O'Rourke (2007) emphasize the two-way interaction between trade and geopolitics. The expression of "oil diplomacy" refers to using oil in foreign relations to pursue a country's international interests, although in our case it is natural to interpret our results as oil companies responding to changes in geopolitical risks driven by changes in international politics because in the United States import decisions are highly decentralized. Table 5 reports the estimates for the effects of concurrent, lagged and future political distance. Columns 1 to 3 of Table 5 show that in all specifications the estimated coefficients of the lagged political distance are more significant both economically and statistically than the coefficients of the current measure. One simple way to check if there is feedback effect from oil imports to political distance is to add a future level of political distance to the regression model. Contrary to the oil diplomacy argument, columns 4 and 5 of Panel A show that future level of political distance has a positive effect on oil imports on the extensive margin. Although the estimate of the lagged political distance from the log-linear specification remains statistically significant, Panel B suggests the possibility of reverse causality on the intensive margin.[19] In our preferred PPML specification, however, the effect of future political distance disappears (Panel C). By contrast, lagged political distance always significantly reduces oil imports. Interestingly, the result of the "kitchen-sink" specification from column 5 shows that only the two lagged political distance variables are significantly correlated with oil trade.[20]

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[18] Our results are also robust to controlling for a proxy for political remoteness, which is constructed as the GDP-share-weighted averages of the political distance between the exporter and all other countries. For instance, in our PPML specification with the full set of controls, the estimate becomes -5.094 (standard error = 1.285) when we also control for the exporter's political remoteness from the rest of the world. A more formal way to control for multilateral trade resistance by using country-year fixed effects in an extended sample that includes more than one importing country is considered in section 5. Finally, our results are also robust to the influence of outliers. For example, our results are robust to dropping potential outliers, including Libya, Iran, Saudi Arabia, Canada, and Mexico. In particular, our preferred Poisson estimates range from -3.975 to -5.418 (all significant at the 1% level) when dropping these countries one at a time. Dropping all these countries from the sample altogether, the Poisson estimate becomes -5.355 (standard error = 1.331). See also Figures A1 and A2 for graphical illustrations.

[19] An empirical finding that oil import leads political distance does not necessarily imply that oil trade "causes" an improvement in international relations, because trade may increase in anticipation of an improvement in relations.

[20] Interestingly, Alesina and Dollar (2000) also prefer to interpret the association between foreign aid and UN vote pattern as donors favoring their political alliances in disbursing aid, instead of aid being used to buy political support in the United Nations, partly because many UN votes are not very important per se.

Another way to address the potential simultaneity bias problem is to use instrumental variable method. We have seen from Figure 2 that the Iranian revolution led by Khomeini changed the US-Iran relations dramatically. It appears implausible that the deterioration of the US-Iran relations was driven by a sudden drop in demand for the Iranian oil. A number of recent studies have shown how leadership changes, especially in nondemocratic countries, affect economic policy and political outcomes (e.g., Jones and Olken, 2005 and 2009).[21] Inspired by the example of the Iranian revolution, where Khomeini reached power through irregular means,[22] we exploit similar changes in the identity of national leaders in potential oil exporting countries to construct an instrument for political distance. In particular, we construct leader dummies for these leaders (and their successors if they reached power through regular means) that are not driven by foreign intervention as instruments for political distance.[23] Because of the computation burden in estimating nonlinear model with instrumental variables and a large number of fixed effects, we here focus on the linear specification. Table 6 reports our instrumental-variable estimates. Estimates of the first two columns of Table 6 are based on the whole sample with positive trade flows, whereas the last two columns consider the subsample where countries with irregular leadership transition imposed by foreign government are excluded. Our two-stage least square estimates are consistent with our hypothesis that political distance has a negative effect on oil imports.

5. Testing Alternative Explanations

To this point, we have documented a robust negative relationship between political distance and US oil imports, which we have interpreted as evidence of the effect of international politics on import decision of American oil companies. Why should international politics affect import decisions of these private oil companies but not other importing firms?

We examine two possible explanations. First, under the *strategic commodity hypothesis*, import decision of strategic commodities, such as oil, is not driven solely by profit-maximizing motives because of strategic and security considerations imposed by governments. When either importers or exporters have national oil companies controlled by governments, for instance, it is not

[21] More recently, Dreher and Jensen (2012) show that leadership change affects a country's UN voting with the US.

[22] According to the political leaders dataset, Archigos (Goemans, Gleditsch, and Chiozza, 2009), leaders are selected into and leave political office in a manner prescribed by either explicit rules or established conventions. In an autocratic regime, for example, leader changes that occur through designation by an outgoing leader, hereditary succession in a monarchy, and appointment by the central committee of a ruling party would all be considered regular transfers of power from one leader to another.

[23] To ensure that new leadership has sufficient time to influence policy, in creating the leader dummies, we impose the criterion the leadership has to last for more than two years. Similar results are obtained when we use different cutoffs.

difficult to understand that trade is subject to state influence (e.g., the China-Venezuela oil deal).[24] The strategic commodity hypothesis implies that the political effect on US import should be more pronounced for nondemocratic exporting countries, because according to the democratic peace doctrine democracies do not fight with each other. Theoretical foundations for the democratic peace doctrine are provided by Bueno de Mesquita et al. (1999), and more recently Jackson and Morelli (2007). For a similar reason, one may expect international politics should have a larger effect on oil imports into countries that are major power. Moreover, strategic and security considerations imply similar trade patterns for the import of other strategic commodities.

An alternative explanation is that oil imports are affected by political risk because oil trade is often associated with backward vertical FDI, which is subject to selective discrimination risks, such as tax renegotiation and expropriation. Oil production involves massive upfront investments in exploration, and geological knowledge is country- or even oilfield-specific. In the presence of sizeable appropriable quasi rent (Klein, Crawford, and Alchian, 1978), it is common for bilateral oil trade to be subject to state influence with relationship-specific investment in exploration, pipelines, and refining capacity.[25] International contracts are largely self-enforcing (Thomas and Worrall, 1994), especially when the oil sector in many oil-rich countries is controlled by the state-owned monopolies. It is well documented that extractive industries are the most vulnerable to government theft (e.g., Jensen and Johnston, 2011),[26] and that there are oil countries favoring other foreign oil companies over American ones (Chester, 1983). Levchenko (2007) introduces the hold-up problem and incomplete contract into international trade theory, and argues that institutional differences are a source of comparative advantage. Under the *hold-up risk hypothesis*, the political effects should be larger for exporting countries with higher expropriation risk, and only countries with oil

[24] The round trip voyage from Venezuela to the US Gulf ports is almost five times shorter than that to China, and hence any effort to diversify Venezuelan oil sales away from the United States to China does not appear to be cost effective. After all, it appears more than political rhetoric, when China deposits $8 billion in an infrastructure development fund in exchange for Venezuelan oil. In the case of coal, Wolak and Kolstak (1991) observe that over 1983-1987 Japan imported a significant amount of coal from the United States even though the price of US coal was above that of all other suppliers, whereas the Soviet Union consistently had the smallest market share despite its coal was the cheapest. Wolak and Kolstak consider a pure economic reason of price-risk diversification to explain Japan's coal import strategy, although the trade pattern is also consistent with the close Japan-US security ties during the Cold War.

[25] A related reason why oil is only partially fungible is that oil has to be refined, and refineries are built to handle specific types of oil. For example, according to the EIA, "Venezuela's crude oil is heavy and sour by international standards, and hence a significant fraction of the Venezuela's oil production must go to specialized domestic and international refineries" (http://www.eia.doe.gov/cabs/venezuela/oil.html).

[26] In an earlier study, Kobrin (1984) documents that mining and petroleum expropriations accounted for 32 percent of all nationalizations over the period 1960-1979 period.

investment overseas is expected to respond to international politics. In general, we also expect to see a similar trade pattern for goods that involves backward vertical FDI.

5.1. Heterogeneity in Oil-Exporting Countries

Our first test is to examine if the political effect on US oil imports is more pronounced when the oil-exporting countries are nondemocratic or when they have high expropriation risk. Panel A of Table 7 shows that although the political distance-democracy interaction term is never significant, the political effect on oil trade is significant only in the subsample of nondemocratic exporters. Panel B indicates that there is a systematic relationship between expropriation risk and the political effect on oil trade.[27] In particular, it appears that the political impact is completely driven by exporters with a record of oil expropriation. It has also been documented that nondemocratic countries expropriate more frequently than do democratic ones (Li, 2009). To distinguish between the two hypotheses, columns 1 to 3 in Panel C report the results of the regressions controlling for both the political distance-democracy and political distance-expropriation risk interaction terms. The negative and significant estimates of the latter and the lack of significance (both economically and statistically) of the former suggest that American firms are discouraged from importing oil from politically hostile regimes because of their higher expropriation risk. The last two columns show that among nondemocratic oil exporters, the political impact on oil trade is stronger in the subsample of the countries with higher expropriation risk.[28]

We also experiment with a similar exercise using the US import of non-petroleum goods. The results are mixed and they are reported in the appendix. Overall, expropriation risk, measured by the number of expropriation cases in all sectors reported in Kobrin (1984) and Minor (1992), do not appear to affect the relationship between international politics and import of non-petroleum goods systematically. One possible interpretation is that expropriation risk is sector specific, and hence summing up expropriation cases of all sectors together provides a noisy measure of expropriation risk in most sectors. There is some evidence that international politics matters more when an exporter is a nondemocratic country, as the estimate of the political distance-democracy

[27] The expropriation risk variable is constructed as follows: the initial value for each country is set to be zero, and then the value is updated over time to measure the cumulative incidence of oil nationalizations since 1960. A country is classified as a high expropriation risk one if there is at least one oil nationalization over the sample period.

[28] We also estimate the regressions using the subsamples of democratic countries with high and low expropriation risk. In these small subsamples (with only 38 and 20 countries, respectively), the PPML estimates are, respectively -4.238 (standard error = 2.759) and 0.721 (standard error = 1.197).

interaction term is positive and statistically significant in the Poisson specification. The result, however, is not robust to using the subsamples of democratic and nondemocratic countries.

5.2. Heterogeneity in Oil-Importing Countries

We repeat our exercise using oil imports data from the top 10 oil importing countries in 1980. Table 8 reports the fixed effects estimates of the impact of political distance on oil imports into these 10 countries. The first five rows report the estimated coefficients for the countries classified as major powers according to the Correlates of War Project.[29] According to the Petroleum Intelligence Weekly, on the other hand, among the top 10 largest oil companies in 2008, 7 of them are international ones owned by companies from 4 major power countries: namely, China, France, the United Kingdom, and the United States.[30] Even for Japan, the ratio of self-developed oil in its total imports is nontrivial, partly because of the Japanese governmental support in overseas exploration (Koike, Mogi, and Albedaiwi, 2008). The only non-major power top oil importer with global oil giant operating overseas is Netherlands.

Row (1) replicates the results of the US oil imports. Row (2) reports that in the case of the United Kingdom the effect appears to be slightly weaker. The next three rows show that while the political effect is only significant on the extensive margin in France, the effect is significant for both Japan and China according to the PPML estimates. With the exception of France, it is interesting to note while the ownership and market structures of the oil sector differ significantly across these countries, both private and national oil companies appear to respond to international politics when deciding their sources of oil imports.

The next five rows report the effect for other major oil importing countries that are not major powers. According to our preferred PPML estimator, a significant negative effect is observed only in the case of Netherlands, where the global oil giant Royal-Dutch Shell was founded. The estimated coefficients are positive for Italy, Spain, South Korean, and India, although none of them is significant. The probit estimates also suggest that political distance impedes oil imports into Spain and India on the extensive margin. The case of Netherlands provides an important critical test supporting the hold-up risk hypothesis, although we cannot easily reject the strategic commodity hypothesis given that major powers also tend to have substantial oil investment overseas.

[29] Note that four of them, namely China, France, the United Kingdom, and the United States, are also permanent members of the United Nations Security Council.

[30] The remaining 3 companies are state-owned ones from Saudi Arabia, Iran, and Venezuela. According to the OECD data, in 2008, the United States, the United Kingdom, and France are also among the top 5 countries in their outward FDI in the extraction of crude petroleum and natural gas.

In the last specification we pool all the 10 importing countries into one sample. One advantage of this specification is that it allows us to control for time-varying multilateral trade resistance by controlling for both importer-year and exporter-year fixed effects. Given the computation burden in estimating nonlinear models with a large number of fixed effects, we focus on the linear specification. Control for the interaction between political distance and major power status of the importers, the last row shows that political distance significantly reduces oil imports into major power countries.

We obtain qualitatively similar results when considering import of non-petroleum goods into the same set of countries, although the magnitudes of the estimated effects are smaller (see Appendix). It is interesting to note that among the non-major power countries, only Netherlands, one of the world's largest suppliers of investment capital in terms of outward FDI stock, diversifies her non-petroleum goods imports away from her political opponents.

5.3. Heterogeneity in Traded Goods

We have seen that in the case of oil, there is substantial empirical support for the hold-up risk hypothesis. Historically, most backward vertical FDI has been in extractive industries, such as oil extraction. However, we have also observed international politics have a nontrivial effect on US import of chemical products, and it is less clear if backward vertical FDI is also important in the chemical industry. Rows 1 to 7 of Table 9 report the effect of international politics on the US import of 7 strategic commodities identified by a report from the Office of Technology Assessment. In addition to petroleum, they include bauxite, cobalt, fluorspar, mercury, platinum group, tin, and natural rubber.[31] The evidence for the strategic commodity hypothesis is mixed. Political distance appears to reduce import of bauxite and tin, and there is also some evidence that the US is less likely to import mercury and natural rubber from her political opponents. For other strategic commodities, however, international politics and trade are essentially uncorrelated.

The next two rows present the political effect on import of goods according to their dependence on contract enforcement (Nunn, 2007, Table II). Using the United States input–output tables, Nunn constructed for each industry an index of contract intensity that quantifies the importance of relationship-specific investments in the upstream industries. He then showed that countries with better institutions for contract enforcement specialize in industries where

[31] The report also identified chromate as a strategic commodity. The best match of chromate in our trade data is "salts of metallic acids; compounds of precious metals" (SITC code = 5233). However, there are not enough positive trade entries for this good to perform a formal statistical estimation.

relationship-specific investments are more important. According to the hold-up risk hypothesis, trade is more responsive to political distance when the traded good is contract intensive. Our results, however, suggest the opposite is true. Although Klein, Crawford, and Alchian (1978, p. 310) describe the petroleum industry as one in which appropriable quasi rents exist in specific assets of oil fields, refineries, and pipelines, oil gas extraction and petroleum refineries are classified as two of the least contract intensive industries according to Nunn (2007), because crude oil is regarded as a homogeneous organized exchange commodity (Rauch, 1999).[32] As such, our results do not necessarily reject the hold-up risk hypothesis.[33] Rather, our analysis suggests that existing measure of contract intensity may not be sufficient to capture the hold-up and expropriation risks identified in Klein, Crawford and Alchian (1978).

Extractive industry is not the only industry subject to expropriation risk. Jones and Lubinski (2011), for example, provide a case study of the expropriation of the brands and trademarks of Beiersdorf, a pharmaceutical and skin care company in Germany, during World War I. To the extent that R&D investments are sunk costs that are subject to hold-up risk, an alternative proxy for relationship specificity is R&D intensity. The last two rows compare the political effect on import of the most and the least R&D intensive goods.[34] Our preferred PPML estimates suggest that, consistent with the hold-up risk hypothesis, international politics only affect import of R&D intensive good.

6. Concluding Remarks

[32] While oil is sold under a variety of contract arrangements as well as in spot transactions, term contracts cover most oil transactions (Slade, Kolstad, and Weiner, 1993). Existing evidence on the integrated-market view, however, is based on movement of prices of different crudes traded in the spot market (e.g., Nordhaus, 2010). Although these spot and contract markets sell the same physical commodity, because of the stipulations on the magnitude, price, and quality of the product delivered under long-term contracts, no arbitrage relation necessarily hold between spot and contract market magnitudes similar to those which hold between futures and spot market magnitudes. Wolak (1996) finds that in the case of the US steam coal market, there is a fairly large price premium on contract versus spot transactions.

[33] When we exclude oil from the least contract intensive goods, the PPML estimate becomes 0.160 (standard error = 0.432), although the probit and OLS estimates remain negative and significant. We also experiment with a related classification constructed earlier by Rauch (1999), which argues that colonial tie and other barriers to trade are more important for differentiated products than for simple products traded on organized exchanges in matching international buyers and sellers. When we exclude crude oil and focus on the extensive margin, political distance reduces US import of organized exchange, reference priced goods, and differentiated products. However, once we consider both margins, our PMML estimates indicate that political distance only impedes import of reference prices commodities, which include chemicals and some other strategic raw materials. The magnitude of the effect, however, is significantly smaller than in the case of crude oil (point estimate = -0.601, with standard error = 0.287).

[34] R&D intensity is measured as the ratio of R&D spending to sales. The most (least) R&D intensive good is classified as the top (bottom) decile of the industries ranked by their R&D intensity.

According to Findlay and O'Rourke (2007), the nineteenth-century globalization was as much a geopolitical phenomenon as it was a technological one, because imperialism was an important driver of globalization during that period. In their words, "the pattern of trade could only be understood as being the outcome of some military or political equilibrium between contending powers." Because history has repeatedly demonstrated that political choices can make the world less integrated, Findlay and O'Rourke conclude that globalization is potentially reversible.

This paper adds to the growing empirical literature of the role of international politics in trade. Our results quantify the (lack of) significance of political influence on international trade in the contemporary world. More importantly, the evidence we presented highlights the importance of heterogeneity in the response of trade to international politics. It is difficult to refute the proposition that globalization is reversible. Nonetheless, given that the main driving forces of the two waves of globalization are fundamentally different, it is important to understand the nature of the political forces shaping the modern globalization. Unlike much of the history in the last millennium, the expansion of world trade in the contemporary world does not come from "the barrel of a Maxim gun, the edge of a scimitar, or the ferocity of nomadic horsemen." Our findings that support the hold-up risk hypothesis suggest that, even when international politics matter for trade, the politics-trade relationship has an economic origin. If the political limits on trade in the contemporary world are driven primarily by hold-up risks once relationship-specific investments are sunk, to predict the future of globalization, one cannot ignore foreign direct investment by multinational corporations, investment treaties, and the international legal framework (Ruta and Venables, 2012).

One weakness of the evidence supporting the hold-up risk hypothesis is that our results are based solely on trade data. Political scientists have long recognized that institutions and conducts of political leaders affect foreign investment (e.g., Jensen, 2003). Although it is beyond the scope of this paper to provide a detailed analysis of foreign investment activities, Figure 5 suggests that major US oil companies' foreign investment (measured by net ownership interest oil reserves) may be subject to political influence.[35] The decline in US oil activities in both Africa and the Middle East in the 1980s are consistent with the deterioration of the US-Libya and US-Iran relations. More recently, the increase in US oil activities in the Middle East and the decrease in other Western Hemisphere (mainly Venezuela and Mexico) also coincide with the collapse of the Iraqi regime of

[35] The data are obtained from the Financial Reporting System (FRS) survey, which is conduced by the EIA. The dataset contains worldwide financial and operating information for the major energy-producing companies based in the United States. Net ownership interest is defined as net working interest plus own royalty interest.

Saddam Hussein and the rise of Chavez.[36] Not all energy companies based in the United States are vertically integrated with exploration investment overseas. Future research can explore firm-level information about oil import pattern and investment activities overseas to quantify the economic cost of potential holdup.

When oil companies do not minimize their transportation cost of oil imports but instead diversify their import sources, we have identified a cost of oil dependence even in the absence of state intervention or interstate war. Given that the oil industry is highly vertically integrated, the cost arises because of the potential holdup problem in the upstream sector, and enforcement of international contract is less costly when countries involved are political allies. Quantifying this cost of oil dependence provides a useful step towards a better understanding of the relationship between energy policy and foreign policy. However, we should emphasize that our results do not imply that such an oil import diversification is necessarily inefficient. On the contrary, to the extent that there are security externalities due to supply disruptions, the import diversification can be viewed as a means of internalizing the externalities. An evaluation of the efficiency implications for energy policy requires (a) a careful distinction between cases in which import decisions are decentralized and those where import is controlled by the government; (b) a general equilibrium framework that specifies the alternative trading pattern and in particular the cost of substitution when oil importers do not minimize transportation costs; and (c) estimates of the direct benefit as well as other possible political side payments of import diversification.

[36] ExxonMobil Corporation and ConocoPhillips, two of the largest US oil companies, abandoned their multibillion-dollar investments in the heavy oil deposits in Venezuela following the breakdown of the negotiations with Hugo Chavez's government in 2007. While ExxonMobil and ConocoPhillips refused to reduce their stakes that would enable them to keep pumping oil in Venezuela, BP of Britain, Chevron of the United States, Statoil of Norway, and Total of France negotiated deals with Venezuela's state oil company to continue on as minority partners.

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Table 1
Summary Statistics for US Imports, Distances, and Other Exporters' Characteristics

Variable	Mean	Std. Dev.	Min	Max	Observations
Import Value	2,535,256	11,600,000	0	233,000,000	4,977
Political distance	0.534	0.181	0	1	4,977
Import sanctions	0.030	0.172	0	1	4,977
Export sanctions	0.007	0.084	0	1	4,977
GATT/WTO membership	0.631	0.483	0	1	4,977
Regional trade agreement	0.007	0.082	0	1	4,977
Log geographical distance	8.977	0.503	6.307	9.692	4,807
Colonial-tie	0.032	0.177	0	1	4,807
Linguistic distance	0.867	0.147	0.504	1.000	4,807
Religious distance	0.712	0.249	0.324	1.000	4,807
Genetic distance	0.090	0.079	0.000	0.229	4,807
Log exporter's GDP	8.346	1.121	5.033	11.489	4,977
Log exporter's population	8.996	1.536	4.901	14.054	4,977
Exporter's democracy	-0.258	7.526	-10	10	4,977
Civil war	1.500	0.717	1	4	576
Militarized interstate disputes	3.739	0.481	2	4	111

Notes: The raw data of the militarized disputes variable can take 5 values, depended on the hostility level of dispute: 1 = no militarized action, 2 = threat to use force, 3 = display of force, 4 = use of force, and 5 = war. There are also 4 types of civil war: 1 = civil war for central control, 2 = civil war over local issues, 3 = regional internal, and 4 = intercommunal.

Table 2
Political Distance and US Imports

Dependent Variable	Probit $1\{M_{i,t}^{US} > 0\}$ (1)	Probit $1\{M_{i,t}^{US} > 0\}$ (2)	OLS $\ln M_{i,t}^{US}$ (3)	Probit $1\{M_{i,t}^{US} > 0\}$ (4)	Probit $1\{M_{i,t}^{US} > 0\}$ (5)	OLS $\ln M_{i,t}^{US}$ (6)	Probit $1\{M_{i,t}^{US} > 0\}$ (7)	Probit $1\{M_{i,t}^{US} > 0\}$ (8)	OLS $\ln M_{i,t}^{US}$ (9)	PPML $M_{i,t}^{US}$ (10)
Political distance (UNGA voting)	-0.110***	-0.079***	-0.967***	-0.071	-0.072	-1.592***	-0.135***	-0.136***	-1.553***	-0.712***
	(0.032)	(0.028)	(0.249)	(0.094)	(0.095)	(0.428)	(0.051)	(0.052)	(0.469)	(0.258)
Import sanctions dummy		-0.228***	-1.178***		0.003	-1.093*		0.003	-1.139*	-0.556*
		(0.048)	(0.306)		(0.019)	(0.625)		(0.016)	(0.633)	(0.304)
Export sanctions dummy		-0.006	-0.679		-0.015	-0.501		-0.002	-0.453	-1.056***
		(0.032)	(0.494)		(0.061)	(0.431)		(0.036)	(0.437)	(0.308)
GATT/WTO membership dummy	0.032***	0.033***	-0.074	0.012	0.011	0.228	0.006	0.006	0.248*	0.485***
	(0.007)	(0.007)	(0.061)	(0.028)	(0.028)	(0.143)	(0.024)	(0.024)	(0.149)	(0.140)
Regional trade agreement dummy			1.441***			0.525**			0.483**	0.398***
			(0.124)			(0.206)			(0.217)	(0.144)
Log exporter's GDP	0.012***	0.010***	1.779***	0.116***	0.116***	1.597***	0.111***	0.112***	1.598***	1.530***
	(0.003)	(0.003)	(0.035)	(0.029)	(0.030)	(0.200)	(0.026)	(0.026)	(0.206)	(0.237)
Log exporter's population	0.043***	0.042***	1.073***	0.117**	0.113**	0.676	0.116***	0.116***	0.574	0.786***
	(0.003)	(0.003)	(0.020)	(0.048)	(0.047)	(0.411)	(0.042)	(0.041)	(0.420)	(0.132)
Log geographical distance	-0.025***	-0.035***	-0.428***							
	(0.008)	(0.007)	(0.052)							
Colonial-tie dummy			-0.417***							
			(0.100)							
Additional controls										
Civil war dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Exporter's democracy	no	no	no	no	no	no	yes	yes	yes	yes
Militarized interstate disputes	no	no	no	no	no	no	yes	yes	yes	yes
Year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Country fixed effects	no	no	no	yes	yes	yes	yes	yes	yes	yes
Observations (# of countries)	4,616	4,616	4,384	1,892 (56)	1,892 (56)	4,835 (158)	1,848 (55)	1,848 (55)	4,552 (149)	4,977 (158)
R^2	0.240	0.263	0.720	0.477	0.477	0.896	0.512	0.512	0.897	

Notes: Columns (1) to (4) also control for cultural distances, measured by linguistic, religious, and genetic distances. Standard errors reported in columns (1) to (4) are robust standard errors. Robust standard errors clustered at the country level are reported in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 3
Political Distance and US Imports of Leamer's Ten Commodity Aggregates

	Probit	OLS	PPML
	(1)	(2)	(3)
Petroleum	-0.354	-1.400	-2.993**
	(0.245)	(1.291)	(1.449)
	[3,485, 104]	[2,214, 122]	[4,977, 158]
Raw Materials	-0.078	-0.753	-0.195
	(0.326)	(0.662)	(0.448)
	[2,988, 93]	[3,208, 143]	[4,977, 158]
Forest Products	-0.474	0.834	0.298
	(0.289)	(0.695)	(0.485)
	[2,654, 82]	[2,874, 128]	[4,977, 158]
Tropical Agriculture	-0.528	-0.295	0.222
	(0.398)	(0.538)	(0.269)
	[2,337, 76]	[3,626, 143]	[4,977, 158]
Animal Products	-0.178	0.297	0.565
	(0.272)	(0.554)	(0.382)
	[2,575, 79]	[3,718, 145]	[4,977, 158]
Cereals, etc.	-0.681*	0.972	-0.071
	(0.362)	(0.681)	(0.521)
	[2,861,89]	[3,176, 137]	[4,977, 158]
Labor Intensive	-0.440***	0.091	0.114
	(0.127)	(0.477)	(0.611)
	[2,338, 72]	[4,232, 149]	[4,977, 158]
Capital Intensive	-0.448*	0.006	-0.569
	(0.255)	(0.778)	(0.378)
	[2,967, 91]	[3,175, 146]	[4,977, 158]
Machinery	-0.040	0.519	-0.641
	(0.237)	(0.797)	(0.428)
	[3,479, 106]	[2,903, 146]	[4,977, 158]
Chemicals	-0.136	-1.626***	-0.736**
	(0.248)	(0.609)	(0.372)
	[2,961, 90]	[3,128, 143]	[4,977, 158]

Notes: Robust standard errors clustered at the country level are reported in parentheses. The number of observations, the number of countries, and R^2 are reported in squared brackets. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 4
Political Distance and US Oil Imports

Dependent Variable	Probit $1\{M_{i,t}^{US} > 0\}$ (1)	Probit $1\{M_{i,t}^{US} > 0\}$ (2)	OLS $\ln M_{i,t}^{US}$ (3)	PPML $M_{i,t}^{US}$ (4)	PPML $M_{i,t}^{US}$ (5)	Probit $1\{M_{i,t}^{US} > 0\}$ (6)	Probit $1\{M_{i,t}^{US} > 0\}$ (7)	OLS $\ln M_{i,t}^{US}$ (8)	PPML $M_{i,t}^{US}$ (9)	PPML $M_{i,t}^{US}$ (10)
Political distance (UNGA voting)	-0.238*	-0.142	-2.272***	-1.886***	-1.685***	-0.443	-0.323	-3.228**	-4.400***	-4.704***
	(0.130)	(0.133)	(0.744)	(0.549)	(0.580)	(0.294)	(0.270)	(1.396)	(1.327)	(1.365)
Import sanctions dummy		-0.375***	-0.223	-0.461**	-0.701***		-0.421***	-0.893	-1.279***	-1.180***
		(0.034)	(0.620)	(0.198)	(0.245)		(0.031)	(1.044)	(0.305)	(0.387)
Export sanctions dummy		0.115	0.040	-0.958**			0.028	0.034	-0.905***	
		(0.156)	(0.665)	(0.434)			(0.225)	(0.742)	(0.325)	
GATT/WTO membership dummy	0.152***	0.135***	0.070	0.586***	0.565***	0.053	0.038	-0.221	0.362	0.343
	(0.031)	(0.032)	(0.132)	(0.089)	(0.091)	(0.131)	(0.127)	(0.384)	(0.255)	(0.292)
Regional trade agreement dummy	-0.120**	-0.122**	0.490***	0.064	-0.069	0.053	-0.237	0.319	0.002	0.154
	(0.053)	(0.052)	(0.189)	(0.112)	(0.111)	(0.131)	(0.160)	(0.534)	(0.178)	(0.175)
Oil import tariffs					-0.120***					0.001
					(0.019)					(0.056)
Log exporter's GDP	0.079***	0.086***	-0.094	-0.052	-0.038	0.370**	0.340*	0.028	0.423	0.479
	(0.021)	(0.021)	(0.087)	(0.067)	(0.069)	(0.174)	(0.175)	(0.334)	(0.594)	(0.647)
Log exporter's population	0.014	0.023**	-0.057	-0.064*	-0.034	0.143	0.168	-0.966	-0.131	-0.221
	(0.011)	(0.011)	(0.042)	(0.033)	(0.034)	(0.288)	(0.294)	(0.992)	(1.038)	(1.135)
Log exporter's oil reserves	0.148***	0.150***	0.854***	1.049***	1.036***	0.166***	0.166***	0.859***	1.426***	1.335***
	(0.007)	(0.007)	(0.031)	(0.037)	(0.037)	(0.032)	(0.031)	(0.176)	(0.219)	(0.271)
Additional controls										
Civil war dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Exporter's democracy	no	no	no	no	no	yes	yes	yes	yes	yes
Militarized interstate disputes	no	no	no	no	no	yes	yes	yes	yes	yes
Year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Country fixed effects	no	no	no	no	no	yes	yes	yes	yes	yes
Observations (# of countries)	2,307	2,307	1,116	2,308	1,642	1,871 (57)	1,871 (57)	1,150 (65)	2,421 (82)	1,725 (81)
R^2	0.356	0.367	0.673	0.810	0.794	0.410	0.415	0.770	.	.

Notes: Columns (1) to (5) also control for geographical distance, cultural distances, measured by linguistic, religious, and genetic distances. Columns (5) and (10) use data only from 1976-2000. Robust standard errors clustered at the country level are reported in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 5
Political Distance and US Oil Imports: Lagged Effects

	(1)	(2)	(3)	(4)	(5)
	Panel A: Fixed Effects Probit Estimation				
Political distance$_t$	-0.080				-0.093
	(0.300)				(0.240)
Political distance$_{t-1}$		-0.323		-0.662***	-0.233
		(0.270)		(0.246)	(0.239)
Political distance$_{t-2}$			-0.600*		-0.784**
			(0.311)		(0.376)
Political distance$_{t+1}$				0.685**	0.886***
				(0.330)	(0.338)
Observations (# of countries)	1,877 (57)	1,871 (57)	1,864 (57)	1,871 (57)	1,864 (57)
R^2	0.413	0.415	0.416	0.417	0.419
	Panel B: Fixed Effects OLS Estimation				
Political distance$_t$	-2.755**				-0.317
	(1.342)				(1.006)
Political distance$_{t-1}$		-3.228**		-2.272*	-1.175
		(1.396)		(1.147)	(0.817)
Political distance$_{t-2}$			-2.902**		-1.370*
			(1.190)		(0.810)
Political distance$_{t+1}$				-2.526**	-2.127**
				(1.013)	(1.042)
Observations (# of countries)	1,156 (65)	1,150 (65)	1,145 (65)	1,150 (65)	1,145 (65)
R^2	0.769	0.770.	0.769	0.771	0.772
	Panel C: Fixed Effects PPML Estimation				
Political distance$_t$	-2.776**				0.086
	(1.263)				(0.468)
Political distance$_{t-1}$		-4.400***		-4.047***	-2.842***
		(1.327)		(1.120)	(0.939)
Political distance$_{t-2}$			-4.295***		-2.916***
			(1.162)		(0.808)
Political distance$_{t+1}$				-0.862	-0.314
				(1.212)	(1.097)
Observations (# of countries)	2,432 (82)	2,421 (82)	2,409 (82)	2,421 (82)	2,409 (82)

Notes: Robust standard errors clustered at the country level are reported in parentheses. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6
Political Distance and US Oil Imports: Instrumental-Variable Estimates

	2SLS	FE-2SLS	2SLS	FE-2SLS
	(1)	(2)	(3)	(4)
Political Distance	-6.504***	-5.576	-6.397***	-6.052**
Political distance	(1.332)	(3.449)	(1.356)	(2.848)
Import sanctions dummy	-0.246	-0.410	-0.220	-0.657
	(0.600)	(1.145)	(0.583)	(0.870)
Export sanctions dummy	0.119	0.192	0.371	0.082
	(0.618)	(0.671)	(0.636)	(0.763)
Economic Distance				
GATT/WTO membership dummy	-0.063	-0.197	0.185	-0.007
	(0.129)	(0.387)	(0.135)	(0.377)
Regional trade agreement dummy	0.540**	0.620	0.604***	0.492
	(0.219)	(0.469)	(0.222)	(0.513)
Geographical Distance				
Log geographical distance	-0.994***		-0.969***	
	(0.104)		(0.105)	
Historical Relations				
Colonial-tie dummy	0.290		0.362	
	(0.338)		(0.339)	
Cultural Distance				
Linguistic distance	1.148		1.887**	
	(0.777)		(0.817)	
Religious distance	0.064		-0.049	
	(0.295)		(0.299)	
Genetic distance	11.799***		11.655***	
	(0.913)		(0.926)	
Other Gravity Controls				
Log exporter's GDP	-0.357***	-1.034***	-0.284**	-0.200
	(0.113)	(0.377)	(0.117)	(0.289)
Log exporter's population	-0.162***	-0.380	-0.217***	-1.761***
	(0.050)	(0.327)	(0.051)	(0.458)
Log exporter's oil reserves	0.934***	0.752***	0.966***	0.788***
	(0.038)	(0.201)	(0.038)	(0.111)
Additional Controls				
Civil war dummies	yes	yes	yes	yes
Exporter's democracy	no	yes	no	yes
Militarized interstate disputes	no	yes	no	yes
Year fixed effects	yes	yes	yes	yes
Country fixed effects	no	yes	no	yes
Number of instruments	69	50	68	50
1st-stage (Kleibergen-Paap) F statistics	39.13	33,318	41.84	51,180
Hansen J statistics	183.8	37.08	183.4	28.37
Observations (# of countries)	1,103 (61)	1,137 (65)	1,041 (59)	1,076 (63)
R^2	0.537	0.091	0.559	0.223

Notes: The instruments are dummies variables for leaders who reached power through irregular means. Estimates of the first two columns of are based on the whole sample with positive trade flows, whereas the last two columns consider the subsample where countries with irregular leadership transition imposed by foreign government are excluded. For columns (1) and (3), robust standard errors are reported in parentheses. For columns (2) and (4), robust standard errors clustered at the country level are reported in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 7
Heterogeneous Political Effect on Oil Imports by Exporter: Democracy vs. Expropriation Risk

	FE-Probit	FE-OLS	FE-PPML	FE-PPML	FE-PPML
	(1)	(2)	(3)	(4)	(5)
	Panel A: The Effect of Democracy				
		All Countries		Democratic	Nondemocratic
Political Distance	-0.340	-3.221**	-4.244***	-2.110	-6.066***
	(0.259)	(1.385)	(1.332)	(1.442)	(2.116)
Political Distance × Democracy	0.011	-0.009	0.054		
	(0.030)	(0.087)	(0.048)		
Obs. (# of countries)	1,871 (57)	1,150 (65)	2,421 (82)	1,183 (58)	1,238 (58)
R^2	0.415	0.770			
	Panel B: The Effect of Expropriation Risk				
		All Countries		Low Risk	High Risk
Political Distance	-0.127	-2.565*	-2.807**	1.166	-6.049***
	(0.292)	(1.376)	(1.430)	(1.172))	(1.560)
Political Distance × Expropriation Risk	-0.477**	-0.674	-0.789***		
	(0.212)	(0.420)	(0.268)		
Obs. (# of countries)	1,871 (57)	1,150 (65)	2,421 (82)	1,345 (50)	1,076 (32)
R^2	0.429	0.776			
	Panel C: The Effect of Democracy vs. Expropriation Risk				
				Nondemocratic & Low Risk	Nondemocratic & High Risk
		All Countries			
Political Distance	-0.109	-2.511*	-2.798**	-4.227*	-6.223***
	(0.291)	(1.367)	(1.420)	(2.383)	(1.997)
Political Distance × Democracy	-0.008	-0.043	0.010		
	(0.031)	(0.091)	(0.048)		
Political Distance × Expropriation Risk	-0.487**	-0.701	-0.780***		
	(0.218)	(0.442)	(0.276)		
Obs. (# of countries)	1,871 (57)	1,150 (65)	2,421 (82)	565 (31)	673 (27)
R^2	0.429	0.776			

Notes: Robust standard errors clustered at the country level are reported in parentheses. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, log exporter's oil reserve, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. In Panels B and C, we also control for expropriation risk. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 8
Political Distance and Oil Imports into Other Countries

	FE-Probit	FE-OLS	FE-PPML
	(1)	(2)	(3)
United States	-0.323	-3.228**	-4.400***
	(0.270)	(1.396)	(1.327)
	[1,871, 57; 0.415]	[1,150, 65; 0.770]	[2,421, 82]
United Kingdom	-0.996**	-2.109	-2.783***
	(0.494)	(1.305)	(1.019)
	[1,439, 42; 0.416]	[728, 48; 0.745]	[2,421, 82]
France	-1.310**	0.793	0.111
	(0.562)	(1.803)	(1.083)
	[1,261, 41; 0.556]	[740, 49; 0.806]	[2,421, 82]
Japan	-0.663	-2.170	-3.387**
	(0.506)	(2.519)	(1.478)
	[1,188, 34; 0.352]	[616, 42; 0.827]	[2,421, 82]
China	-0.308	-1.436	-5.532*
	(0.616)	(5.585)	(3.022)
	[738, 36; 0.545]	[220, 37; 0.787]	[2,382, 81]
Italy	-0.367	0.574	0.609
	(0.260)	(1.669)	(1.289)
	[1,592, 53; 0.398]	[740, 62; 0.846]	[2,421, 82]
Spain	-1.168***	-0.707	0.431
	(0.350)	(1.179)	(1.245)
	[1,579, 49; 0.477]	[641, 54; 0.823]	[2,424, 82]
Netherlands	0.037	-0.498	-2.179**
	(0.583)	(2.365)	(0.886)
	[1,267, 36; 0.450]	[638, 41; 0.740]	[2,421, 82]
South Korea	-1.108	0.323	0.047
	(0.685)	(4.368)	(3.629)
	[1,408, 44; 0.513]	[456, 45; 0.834]	[2,421, 82]
India	-1.193***	6.131*	3.949
	(0.342)	(3.404)	(3.864)
	[550, 21; 0.531]	[178, 21; 0.902]	[2,421, 82]
Top 10 Importers			
Political distance		-7.753***	
× Major powers		(0.562)	
Political distance		2.448***	
		(0.600)	
		[6573, 127; 0.785]	

Notes: Except for the last specification, robust standard errors clustered at the country level are reported in parentheses. In the last specification, robust standard errors clustered at the country-pair level are reported. The number of observations, the number of countries (the number of county-pairs for the last specification), and R^2 are reported in squared brackets. Except for the last specification, all regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, log exporter's oil reserve, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. In the last specification, we control for political distance, interaction of political distance and major power dummies, import and export sanctions dummies, regional trade agreement dummy, militarized interstate disputes, as well as importer-year fixed effects and exporter-year fixed effects. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table 9
Political Distance and US Imports of Various Trade Aggregates

	FE-Probit	FE-OLS	FE-PPML
	(1)	(2)	(3)
Bauxite	-0.624**	-3.774*	-0.332
	(0.302)	(1.938)	(0.804)
	[1,826, 51; 0.536]	[591, 52; 0.792]	[4,977, 158]
Cobalt	-0.085	1.390	1.139*
	(0.246)	(0.862)	(0.670)
	[2,741, 77; 0.433]	[1,272, 83; 0.749]	[4,977, 158]
Fluorspar	-0.111	-0.142	-0.778
	(0.248)	(1.674)	(0.835)
	[1,923, 52; 0.430]	[687, 57; 0.784]	[4,977, 158]
Mercury	-0.489*	-0.649	-0.335
	(0.286)	(1.020)	(0.715)
	[2,236, 66; 0.466]	[1,023, 76; 0.762]	[4,977, 158]
Platinum Group	-0.209	1.503	0.418
	(0.208)	(1.457)	(1.102)
	[2,061, 61; 0.498]	[696, 66; 0.790]	[4,977, 158]
Tin	-0.155	-7.430	-5.623**
	(0.244)	(4.621)	(2.622)
	[382, 14; 0.368]	[79, 14; 0.924]	[4,977, 158]
Natural Rubber	-0.632***	-0.481	-0.838
	(0.189)	(1.475)	(0.824)
	[2,457, 67; 0.457]	[883, 71; 0.821]	[4,977, 158]
Least Contract Intensive	-0.841***	-1.575*	-1.806*
	(0.237)	(0.817)	(1.010)
	[2,924, 89; 0.458]	[3,531, 146; 0.825]	[4,977, 158]
Most Contract Intensive	-0.171	0.215	-0.563
	(0.262)	(0.915)	(0.561)
	[3,367, 105; 0.444]	[2,737, 143; 0.917]	[4,977, 158]
Least R&D Intensive	-0.629**	0.505	-0.316
	(0.261)	(0.675)	(0.611)
	[2,742, 83; 0.445]	[3,453, 146; 0.880]	[4,977, 158]
Most R&D Intensive	0.126	-0.889	-1.088**
	(0.219)	(0.837)	(0.444)
	[3,336, 103; 0.442]	[2,633, 143; 0.901]	[4,977, 158]

Notes: Robust standard errors clustered at the country level are reported in parentheses. The number of observations, the number of countries, and R^2 are reported in squared brackets. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. * significant at 10%; ** significant at 5%; *** significant at 1%.

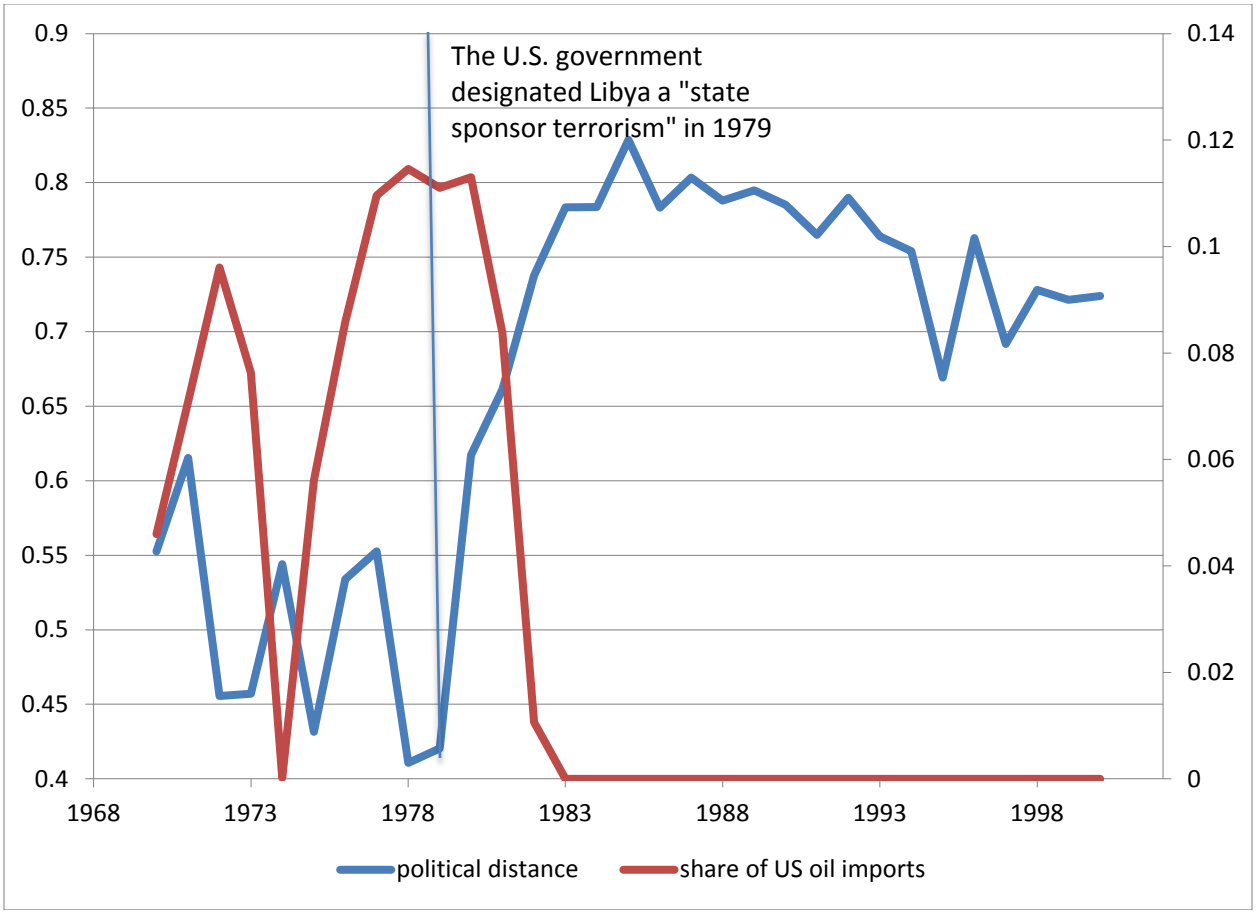

Figure 1
Political Distance and Oil Imports from Libya

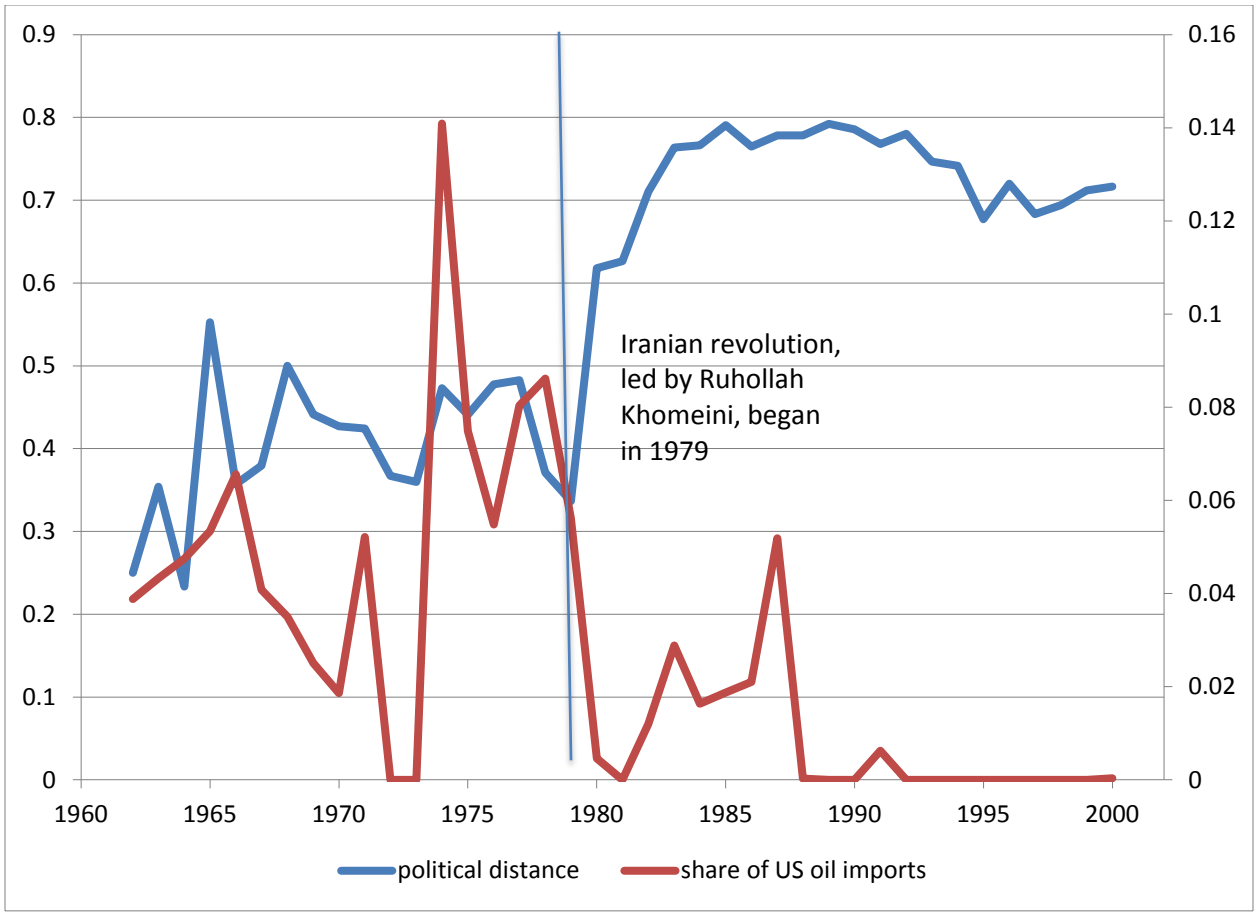

Figure 2
Political Distance and Oil Imports from Iran

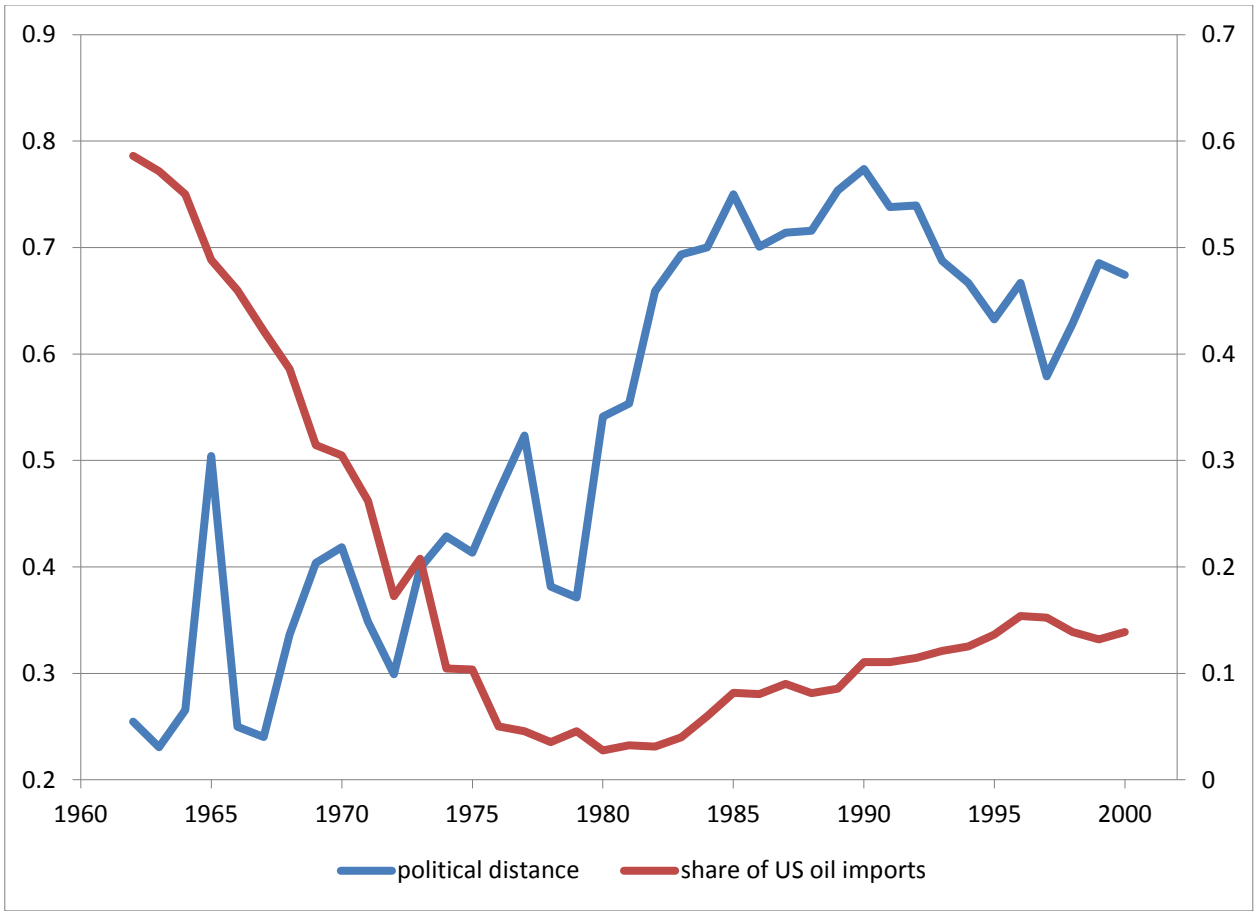

Figure 3
Political Distance and US Oil Imports from Venezuela

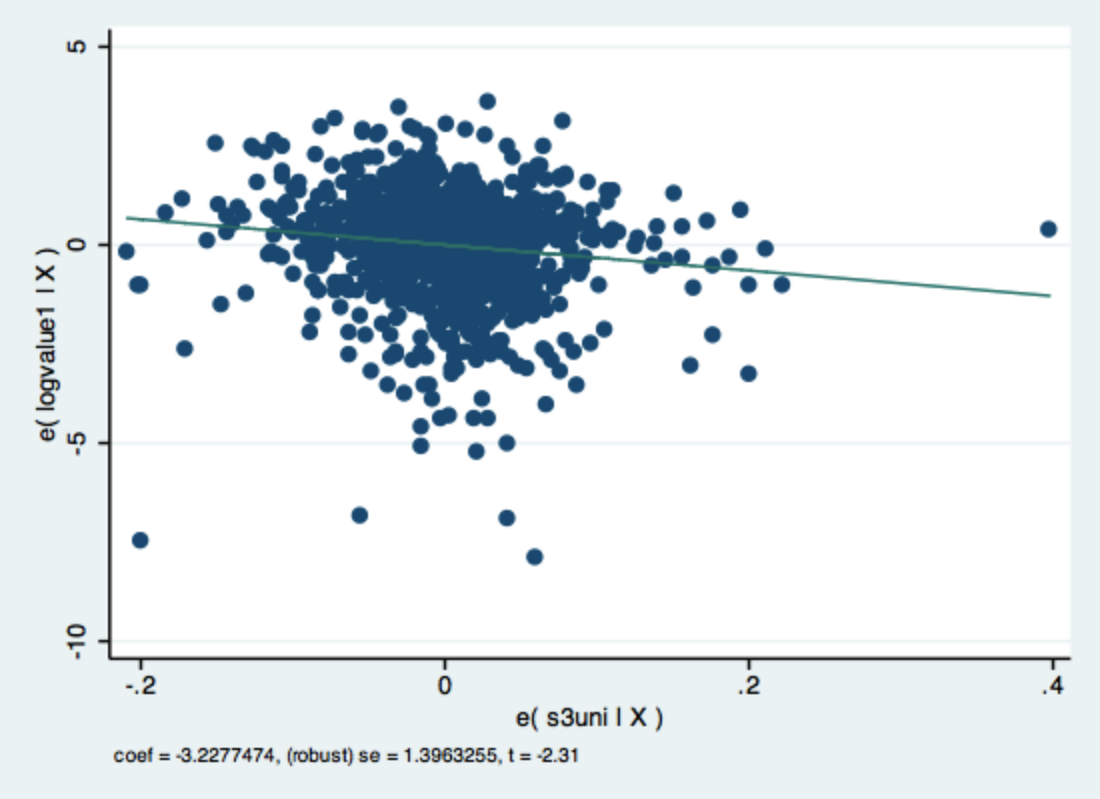

Figure 4
Political Distance and US Oil Imports: Fixed-Effects OLS Estimate
Notes: Partial residual plot using the specification reported in Table 4 column 10

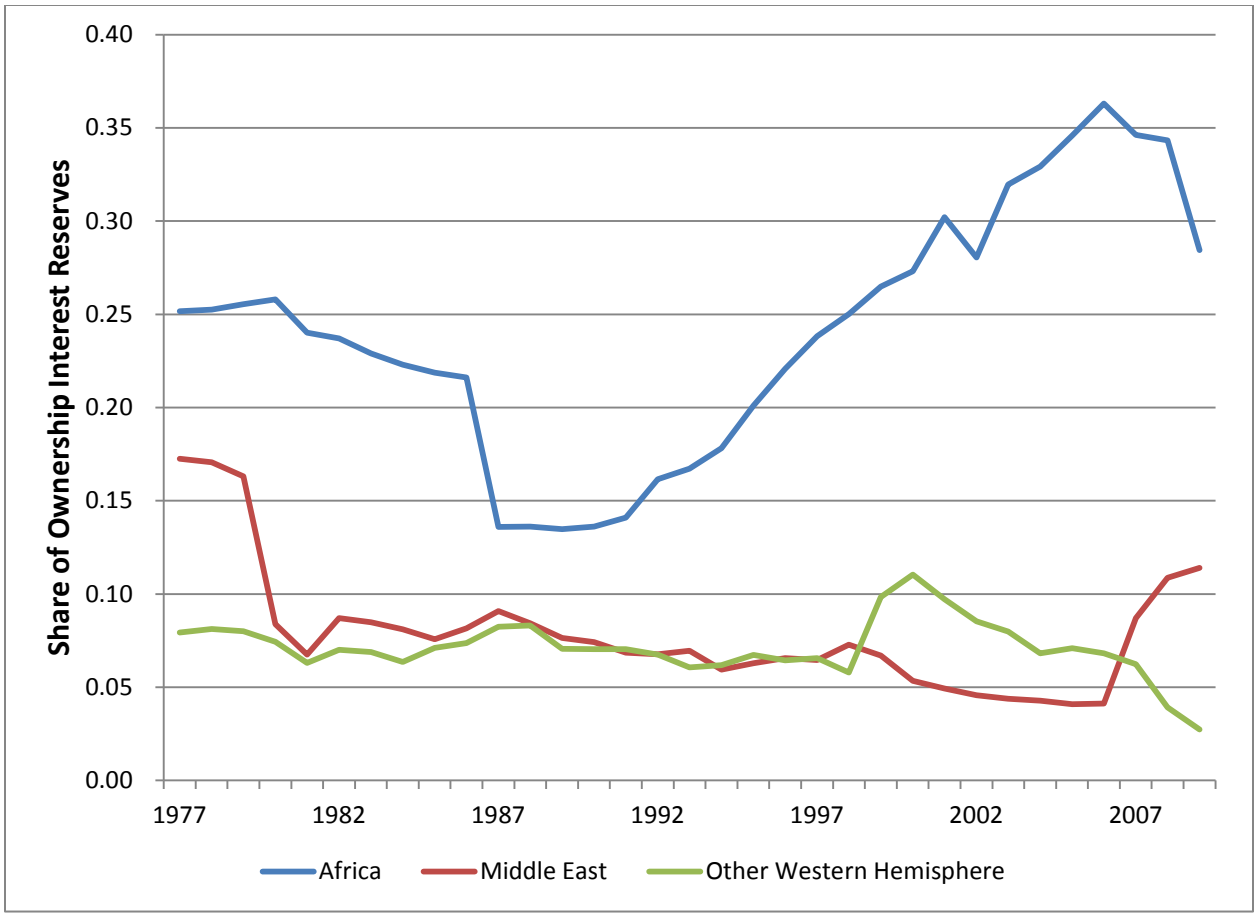

Figure 5
Time Series of Foreign Ownership Interest Reserves by Region

Appendix

Table A1

Summary Statistics for US Oil Imports, Distances, and Other Exporters' Characteristics

Variable	Mean	Std. Dev.	Min	Max	Observations
Oil Imports	474,671	1,454,310	0	14800000	2421
Political distance	0.528	0.190	0	1	2421
Import sanctions	0.022	0.148	0	1	2421
Export sanctions	0.011	0.103	0	1	2421
GATT/WTO membership	0.640	0.480	0	1	2421
Regional trade agreement	0.014	0.118	0	1	2421
Oil import tariffs	5.865	3.480	0.000	21.000	1728
Log geographical distance	8.975	0.528	6.307	9.692	2308
Colonial-tie	0.061	0.240	0	1	2308
Linguistic distance	0.854	0.152	0.520	1.000	2308
Religious distance	0.725	0.260	0.324	1.000	2308
Genetic distance	0.070	0.071	0.000	0.229	2308
Log exporter's GDP	8.713	1.064	5.744	11.489	2421
Log exporter's population	9.662	1.591	4.901	14.054	2421
Log exporter's oil reserves	-0.021	3.004	-9.498	5.591	2421
Exporter's democracy	-0.162	7.801	-10	10	2421
Civil war	1.568	0.707	1	4	292
Militarized interstate disputes	3.739	0.489	2	4	92

Notes: The raw data of the militarized disputes variable can take 5 values, depended on the hostility level of dispute: 1 = no militarized action, 2 = threat to use force, 3 = display of force, 4 = use of force, and 5 = war. There are also 4 types of civil war: 1 = civil war for central control, 2 = civil war over local issues, 3 = regional internal, and 4 = intercommunal.

Table A2
Pairwise Correlations between Various Distance Measures

	Political distance	Import sanctions	Export sanctions	GATT/WTO membership	Regional trade agreement	Log geographical distance	Colonial-tie	Linguistic distance	Religious distance	Genetic distance	Militarized disputes
Political distance	1.000										
Import sanctions	0.142	1.000									
Export sanctions	-0.027	-0.016	1.000								
GATT/WTO membership	-0.164	-0.066	-0.104	1.000							
Regional trade agreement	-0.097	-0.019	-0.013	0.090	1.000						
Log geographical distance	0.179	-0.040	0.022	-0.054	-0.244	1.000					
Colonial-tie	-0.226	-0.040	-0.026	0.169	-0.031	-0.075	1.000				
Linguistic distance	0.362	0.001	0.074	-0.307	-0.024	0.424	-0.219	1.000			
Religious distance	0.306	0.040	0.105	-0.284	-0.024	0.481	-0.300	0.609	1.000		
Genetic distance	0.224	-0.006	-0.065	0.082	-0.059	0.218	-0.175	0.506	0.061	1.000	
Militarized disputes	0.061	0.245	0.046	-0.159	0.043	-0.081	-0.046	0.030	0.065	-0.063	1.000

Table A3
Political Distance and US Oil Imports: Different Subsamples and Subperiods

	FE-Probit	FE-OLS	FE-PPML
	(1)	(2)	(3)
Baseline Specification	-0.323	-3.228**	-4.398***
	(0.270)	(1.396)	(1.327)
	[1,871, 57; 0.415]	[1,150, 65; 0.770]	[2,421, 82]
Cold War Period	-0.507	-3.404*	-3.825**
(1962-1989)	(0.339)	(1.944)	(1.620)
	[1,215, 50; 0.433]	[745, 57; 0.805]	[1,606, 72]
Post-Cold War Period	-3.249**	-4.065*	-2.676**
(1990-2000)	(1.434)	(2.160)	(1.328)
	[359, 34; 0.381]	[405, 57; 0.879]	[815, 78]
Post-Oil Import Quota Era	-1.189**	-5.013**	-4.521***
(1974-2000)	(0.583)	(2.103)	(1.349)
	[1,209, 50; 0.413]	[939, 64; 0.742]	[1,839, 81]
UN Comtrade Data	-1.169	-5.437**	-3.819***
(1984-2000)	(0.877)	(2.284)	(1.227)
	[598, 38; 0.328]	[629, 60; 0.812]	[1,217, 80]
Excluding Observations	-0.358	-2.759**	-4.308***
with Sanctions	(0.269)	(1.377)	(1.390)
	[1,823, 57; 0.423]	[1,119, 65; 0.783]	[2,341, 81]
Excluding Observations	-0.264	-3.197**	-4.211***
with Interstate War	(0.265)	(1.417)	(1.099)
	[1,815, 57; 0.422]	[1,116, 65; 0.771]	[2,351, 82]
Excluding Exporters that Ever	-0.362	-3.526**	-3.738***
be at War with	(0.274)	(1.699)	(1.068)
	[1,518, 47; 0.421]	[895, 52; 0.784]	[1,942, 66]
Thacker's Coding	-1.002**	-5.325***	-4.385***
(All Votes)	(0.474)	(1.803)	(1.141)
	[1,297, 49; 0.448]	[895, 58; 0.721]	[1,821, 76]
Thacker's Coding	-0.515	-0.231	-0.172
(Key Votes)	(0.373)	(0.808)	(0.513)
	[534, 34; 0.331]	[568, 54; 0.782]	[1,117, 74]

Notes: Robust standard errors clustered at the country level are reported in parentheses. The number of observations, the number of countries, and R^2 are reported in squared brackets. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. Interstate war occurrs when the hostility level is greater than or equal to 4. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A4
Heterogeneous Political Effect on Non-Petroleum Goods Imports by Exporter: Democracy vs. Expropriation Risk

	FE-Probit	FE-OLS	FE-PPML	FE-PPML	FE-PPML
	(1)	(2)	(3)	(4)	(5)
			Panel A: The Effect of Democracy		
		All Countries		Democratic	Nondemocratic
Political Distance	-0.136**	-1.318***	-1.317***	-1.003***	-0.432
	(0.054)	(0.452)	(0.326)	(0.380)	(0.350)
Political Distance	-0.003	0.041	0.107***		
× Democracy	(0.006)	(0.029)	(0.034)		
Obs. (# of countries)	1,926 (57)	4,540 (149)	4,977 (158)	3,082 (154)	2,471 (110)
R^2	0.525	0.903			
			Panel B: The Effect of Expropriation Risk		
		All Countries		Low Risk	High Risk
Political Distance	-0.101*	-1.163***	-0.540	-0.094	0.793*
	(0.060)	(0.436)	(0.331)	(0.315)	(0.450)
Political Distance	-0.008	-0.038	-0.048*		
× Expropriation Risk	(0.007)	(0.054)	(0.026)		
Obs. (# of countries)	1,966 (58)	4,823 (158)	5,553 (181)	3,224 (161)	1,879 (64)
R^2	0.514	0.902			
			Panel C: The Effect of Democracy vs. Expropriation Risk		
				Nondemocratic	Nondemocratic
		All Countries		& Low Risk	& High Risk
Political Distance	-0.128**	-1.283***	-1.369***	-0.538**	0.880*
	(0.053)	(0.480)	(0.401)	(0.273)	(0.273)
Political Distance	-0.003	0.041	0.109***		
× Democracy	(0.006)	(0.030)	(0.037)		
Political Distance	-0.008	-0.021	0.032		
× Expropriation Risk	(0.006)	(0.055)	(0.033)		
Obs. (# of countries)	1,926 (57)	4,540 (149)	4,977 (158)	1,135 (88)	1,102 (54)
R^2	0.526	0.903			

Notes: Notes: Robust standard errors clustered at the country level are reported in parentheses. All regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, log exporter's oil reserve, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. In Panels B and C, we also control for expropriation risk. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A5
Political Distance and Non-Petroleum Goods Imports into Other Countries

	FE-Probit	FE-OLS	FE-PPML
	(1)	(2)	(3)
United States	-0.129**	-1.255***	-0.839***
	(0.052)	(0.450)	(0.318)
	[1,926, 57; 0.524]	[4,540, 149; 0.903]	[4,977, 158]
United Kingdom	-0.618***	-0.503	-0.657
	(0.101)	(0.497)	(0.508)
	[614, 28; 0.409]	[4,673, 149; 0.902]	[4,977, 158]
France	-0.515**	-0.291	-1.665*
	(0.233)	(0.406)	(0.990)
	[463, 21; 0.436]	[4,712, 149; 0.894]	[4,977, 158]
Japan	-0.662***	-0.892	-3.293**
	(0.221)	(0.650)	(1.509)
	[982, 31; 0.338]	[4,596, 148; 0.871]	[4,977, 158]
China	-0.351	-2.047	-0.913*
	(0.334)	(1.404)	(0.540)
	[4,594, 133; 0.563]	[2,658, 147; 0.739]	[4,938, 157]
Italy	-0.489*	-0.917**	-1.587
	(0.281)	(0.427)	(1.067)
	[308, 16; 0.397]	[4,724, 149; 0.891]	[4,977, 158]
Spain	-0.130	0.013	-1.994
	(0.109)	(0.484)	(1.227)
	[1,173, 41; 0.458]	[4,556, 149; 0.849]	[4,977, 158]
Netherlands	-0.859***	-0.470	-1.969*
	(0.173)	(0.462)	(1.168)
	[811, 31; 0.385]	[4,621, 149; 0.886]	[4,977, 158]
South Korea	1.439**	0.562	1.681*
	(0.727)	(1.257)	(0.951)
	[3,806, 114; 0.460]	[3,100, 145; 0.840]	[4,938, 157]
India	-0.606*	-1.238	-2.974
	(0.341)	(1.199)	(1.822)
	[3,593, 114; 0.496]	[3,214, 145; 0.795]	[4,977, 158]
Top 10 Importers			
Political distance		-1.064***	
× Major powers		(0.137)	
Political distance		-0.789***	
		(0.124)	
		[43,478, 159; 0.777]	

Notes: Except for the last specification, robust standard errors clustered at the country level are reported in parentheses. In the last specification, robust standard errors clustered at the country-pair level are reported. The number of observations, the number of countries (the number of county-pairs for the last specification), and R^2 are reported in squared brackets. Except for the last specification, all regressions control for political distance, import and export sanctions dummies, GATT/WTO membership dummy, regional trade agreement dummy, log exporter's GDP, log exporter's population, log exporter's oil reserve, civil war dummies, exporter's democracy, militarized interstate disputes, year and country fixed effects. In the last specification, we control for political distance, interaction of political distance and major power dummies, import and export sanctions dummies, regional trade agreement dummy, militarized interstate disputes, as well as importer-year fixed effects and exporter-year fixed effects. * significant at 10%; ** significant at 5%; *** significant at 1%.

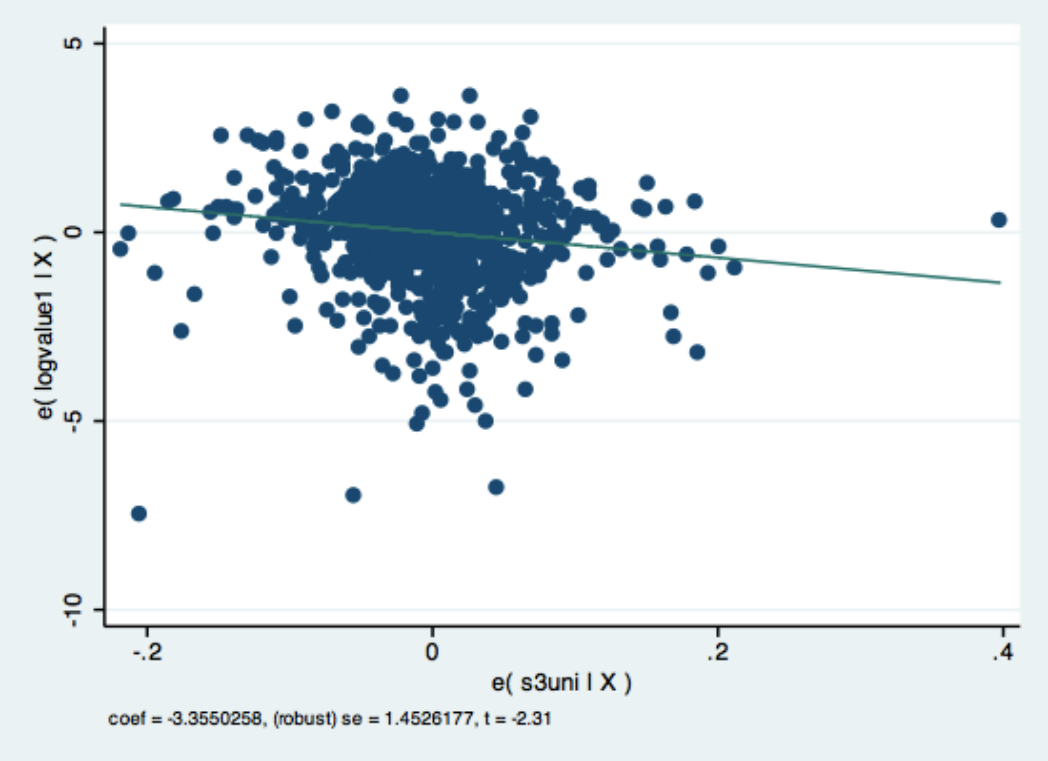

Figure A1
Political Distance and US Oil Imports: Fixed-Effects OLS Estimate using the Subsample that excludes Canada, Iran, Libya, Mexico, and Saudi Arabia

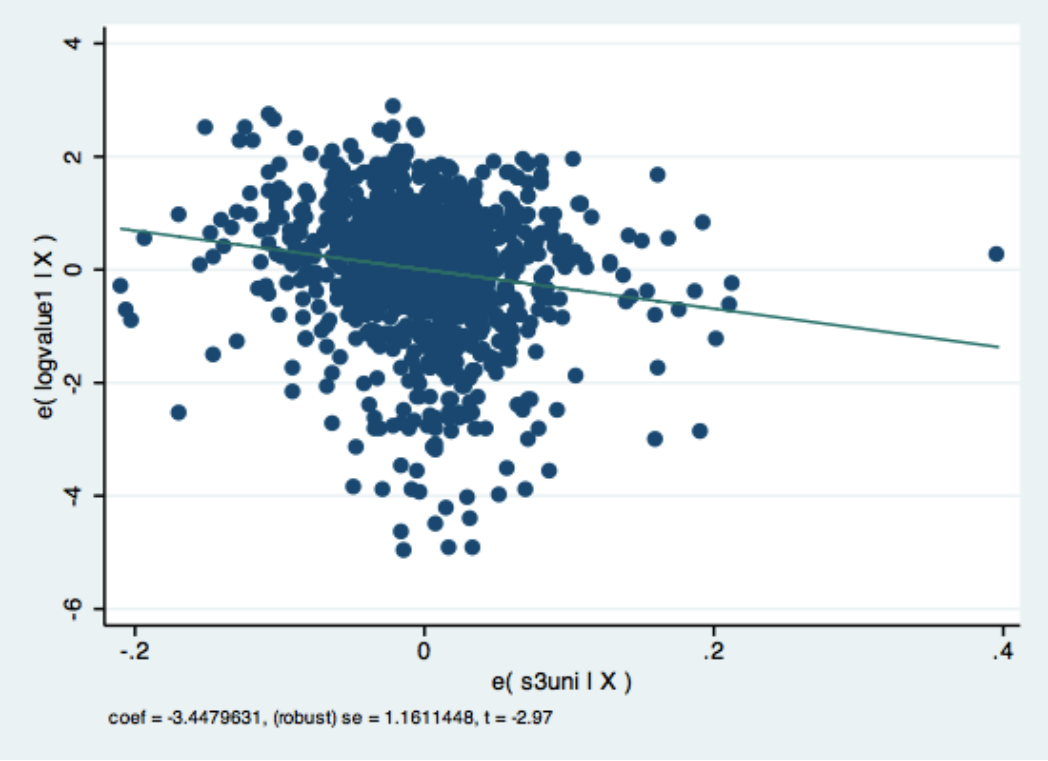

Figure A2
Political Distance and US Oil Imports: Fixed-Effects OLS Estimate using the Subsample that excludes observations with 5% largest and 5% smallest residuals from the full sampless