Why Oil Importers Diversify their Import Sources Politically? Evidence from U.S. Firm-Level Data[*]

Mila Kashcheeva[*] and Kevin K. Tsui [†]

February 2014

Abstract

International politics affects oil trade. But why? We construct a firm-level dataset for all U.S. oil-importing companies over 1986-2008 to examine what kinds of firms are more responsive to change in "political distance" between the U.S. and her trading partners, measured by divergence in their UN General Assembly voting patterns. Consistent with previous macro evidence, we first show that individual firms diversify their oil imports politically, even after controlling for unobserved firm heterogeneity. We conjecture that the political pattern of oil imports from these individual firms is driven by hold-up risks, because oil trade is often associated with backward vertical FDI. To test this hold-up risk hypothesis, we investigate heterogeneity in responses by matching transaction-level import data with firm-level worldwide reserves. Our results show that long-run oil import decisions are indeed more elastic for firms with oil reserves overseas than those without, although the reverse is true in the short run. We interpret this empirical regularity as that while firms trade in the spot market can adjust their imports immediately, vertically-integrated firms with investment overseas tend to commit to term contracts in the short run even though they are more responsive to changes in international politics in the long run.

JEL classification: F13, F51, F59, Q34

Keywords: international politics, FDI-based imports, hold-up risk, energy security

[*] Support for this research was provided by IDE-JETRO. We thank seminar participants from the Hong Kong University of Science and Technology for helpful comments and discussions. All remaining errors are ours.
[*] Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO). 3-2-2 Wakaba, Mihama-ku, Chiba-shi, Chiba, 261-8545, Japan. Email: Mila_Kashcheeva@ide.go.jp
[†] The John E. Walker Department of Economics, Clemson University. 228 Sirrine Hall, Clemson, SC 29634. Email: ktsui@clemson.edu

1. Introduction

Since Churchill's days the key to "energy security" has been thought to be oil diversification, and perhaps because of that many oil-poor countries have developed overseas oil-development policy to ensure equity oil can be imported readily.[1] Oil investment by multinational companies is indeed the one of the oldest forms of foreign direct investment (FDI) in the developing world, and today there is more trade internationally in crude oil than any other goods. It is not difficult to understand that import decisions from national oil companies are subject to state influence.[2] However, when import decisions are decentralized among private firms, is oil trade still affected by international politics? At the end, is it irrational for ExxonMobil Corporation and ConocoPhillips, two of the largest US oil companies, to abandon their multibillion-dollar investments in the heavy oil deposits in Venezuela following the breakdown of the negotiations with Hugo Chavez's government in 2007?

Understanding the political determinants of oil trade is important, especially in a time of concern about sustainable development and energy security. In this paper, we ask the following questions: (1) Do political tensions between states reduce oil trade when import decisions are highly decentralized? (2) To the extent that misalignment in political interests between states is an impediment to private oil imports, what firms are more responsive to changes in such a "political distance"? For example, compared with other trading or financial companies, are FDI-based imports from firms with oil reserves overseas more sensitive to changes in international politics? Finally, (3) Are these FDI-based imports even more elastic when their trading partners are state-owned companies in developing countries where private property rights is less well protected?

[1] The idea of energy security can be traced back to the time when Winston Churchill changed coal to oil as a 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" (55 Parl. Deb., H.C. [5th ser.] [1913] 1465 [U.K.]).

[2] The China-Venezuela oil deal is a case in point. 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.

Unlike many policymakers, some economists maintain that the world oil market is "one great pool," because crude oil is fungible in an integrated oil exchange market (Adelman, 1984). According to this view, the composition of global oil trade is irrelevant because with an organized market that facilitates trade among strangers, there should be no political limit on oil trade. In practice, however, there are two main reasons why oil may only be partially fungible. First, many oil companies from major oil-exporting countries are state-owned ones. Although some of these state-owned companies sell oil in the spot markets, most of them are still using term contracts (Slade, Kolstad, and Weiner, 1993).[3] Compared with other firms that import mainly through spot oil trading, these oil-importing firms that are committed to term contracts may find it costly to adapt to changes in international politics in the short run.

However, 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, refining capacity, and pipelines. Indeed, Hajzler (2012) shows that foreign firms in mining and petroleum are more vulnerable to expropriation.[4] International contracts are largely self-enforcing (Thomas and Worrall, 1994). When one party of an international oil agreement becomes a hostile dictator, there are nontrivial risks of royalty and tax renegotiation as well as forced divestment.[5] Therefore, the presence of political risk as such

[3] Unfortunately, existing evidence on the integrated-market view is based on movement of prices of different crudes traded in the spot market (e.g., Nordhaus, 2009). Although these spot and contract markets sell the same physical commodity, because of the many stipulations on the magnitude, price, and quality of the product delivered under long-term contractual arrangements, 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.

[4] 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).

[5] Expropriation in the mining and petroleum sector has a long history. For instance, Kobrin (1984) documents that mining and petroleum expropriations accounted for 32 percent of all nationalizations over the period 1960-1979 period.

suggests that import from international oil companies with investment overseas may be more responsive to changes in international politics in the long run.

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 private oil-importing firms in the United States diversifies their imports away from the political opponents of their government over the period 1986-2008. Consistent with previous macro evidence (Mityakov, Tang, and Tsui, forthcoming), we find American firms indeed diversify their oil imports politically, even after controlling for unobserved firm heterogeneity. Moreover, we find that large oil-importing firms are less responsive to changes in international politics in the short run, suggesting that these firms may be committed to term contracts within a year.

To test the hypothesis that vertically integrated firms are more responsive to political risk in the long run, we investigate heterogeneity in responses by matching transaction-level import data with firm-level worldwide reserves. Our results show that long-run oil import decisions are indeed more elastic for firms with oil reserves overseas than those without, whereas the reverse is true in the short run. Finally, we also show that this political trade pattern appears only in the sample of oil-exporting countries with higher risk of expropriation.

The paper proceeds as follows. Section 2 describes the data. Section 3 presents our initial evidence on the effects of international politics on oil imports from American firms. Our main results using matched data of oil imports and foreign equity oil are presented in Section 4. Section 5 concludes.

2. The Data and Descriptive Statistics

We combine data from the following sources for our analysis. First, our firm-level crude oil imports data are taken from the U.S. Energy Information Administration (EIA). The EIA dataset provides monthly oil imports data by transaction since 1986. We use this dataset to

construct annual oil imports figure by firm. We obtain firm-level information on oil reserves overseas from the Oil and Gas Journal (OGJ) 150/100 International dataset.

Data on political distance between country pairs are obtained from Dreher and Sturm (2012), which provides indices of political distance based on voting positions of country pairs in the United Nations General Assembly from 1970-2008. 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.[6] For instance, when two countries always cast the same vote for any proposal, their political distance is zero. Alesina and 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. Unlike other indices based on alliance portfolios, UN voting-based indices provide 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).

Data on standard gravity controls are taken from various sources. GDP and population data are taken from the Penn World Table. Our oil reserves data are obtained from EIA and BP Statistical Review of World Energy. 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.

In the full sample, we have 149,801 observations from 60 exporting countries. The descriptive statistics for the variables we use in our analysis are summarized in Table 1.

3. Political Limits on Oil Imports

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

In our analysis we employ the standard workhorse model in international trade: the gravity equation, which links trade flows between countries to distance between them and their (economic and/or demographic) sizes. Distance in this model is understood quite generally. It includes not only geographical distance but also could account for other factors that reduce trade. In our paper we focus on political relations as impediment to trade.

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

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

where $\alpha, \beta, \gamma,$ and δ are unknown parameters, and η_{it} is an error term. Provided M_{it} is strictly positive, we can log-linearizing the above equation to obtain the standard representation of gravity equation: $\ln M_{it} = \alpha + \beta \ln D_{it} + \gamma \ln Y_{it} + \delta \ln Y_t^{US} + \eta_{it}$.

Our point of departure from the traditional gravity model is our focus on international politics, and hence D_{it} measures the one-year lag of political distance between the United States and country i at year t. The coefficient of interest is β, the estimated impact of US foreign relations on the log of oil imports to the United States. Because crude oil export depends on oil endowment, we also control for oil reserves. In our first specification, we control for country fixed effects and country i's population. In our second specification, we also control for year fixed effects. Adding year fixed effects captures all time-specific characteristic (e.g., global oil price, as well as US GDP, oil reserves, etc.). In our full specification, we also control for firm fixed effects.

One consequence of the log-linearization is that zero trade observations are dropped from the sample. Because our focus is on oil imports of firms and the distribution of oil endowment is highly uneven across countries, the number of observations dropped is indeed quite large. 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, it is also consistent in the presence of heteroskedasticity.

Columns 1 to 3 of Table 2 present the results using the full sample. The first row reports the estimates of the political distance coefficient, our variable of interest. In all the three specifications, there is a negative and statistically significant association between our measure of political distance and oil imports. In our full specification, for example, a point estimate of -1.176 implies that a one standard deviation increase in political distance (0.122) is associated with a reduction in oil imports by 13 percent.[7]

To examine the heterogeneity in responses among firms, we divide the sample into large and small ones, depending on the size of their averaged annual imports over time. Columns 4 to 6 (7 to 9) report the results using the subsample of the firms with averaged imports above (below) the median. These estimates suggest that large firms are less responsive to changes in international politics. This result is consistent with the conjecture that large oil-importing firms that are committed to term contracts find it costly to adapt to changes in international politics in the short run.

4. Testing the Hold-Up Risk Hypothesis

Our hold-up risk hypothesis suggests that vertically integrated firms with equity oil overseas are more responsive to changes in international politics. To test this hypothesis, we divide our sample into the firms with oil reserves overseas and those without.

To facilitate comparison of the results using the full sample, the first three columns of Table 3 replicate the estimates reported in Table 2. Columns 4 to 6 (7 to 9) report the results using the subsample of the firms with (without) oil reserves overseas. These estimates suggest that, in the short run, firms with oil reserves overseas are less responsive

[7] Implied responses to changes in political distance are computed as: $\exp(\Delta x^{*}\beta)-1$, where Δx is change in distance measure in question and β is estimated coefficient.

to changes in international politics. This result is not surprising, since vertically integrated firms tend to be large oil importers.

Table 4 reports the estimates for the effects of concurrent and different lagged political distance using the subsample of firms with oil reserves overseas. Consistent with our hold-up risk hypothesis, column 1 to 5 show that the effect of political distance is increasing over time. When the concurrent and all lagged measures of political distance are included in the regression, column 6 shows that the most significant (both economically and statistically) effect is due to the four-year lagged political distance.

Similar results are reported in Table 5, using the subsample of firms without oil reserves overseas. Interesting, unlike those with oil reserves overseas, concurrent political distance discourages oil imports (column 5). Moreover, the magnitude of the effect is stable over time (columns 1-5). When the concurrent and all lagged measures of political distance are included in the regression, column 6 shows that only the second and third-year lagged measure of political distance are statistically significant. Moreover, the magnitude of these estimates is smaller than the four-year lagged effect in the subsample of firms with oil reserves overseas. In other words, vertically integrated firms with equity oil overseas are responsive to changes in international politics in the long run.

Finally, Table 6 presents the results using the subsamples of exporting countries with and without experience of expropriation over the sample period. Columns 1 to 3 replicate the estimates using the full sample. The rest of the table shows that, consistent with the hold-up risk hypothesis, the political effect on oil imports is indeed driven by countries with higher expropriation risk, measured by experience of expropriation.

5. Concluding Remarks

This paper provides new evidence of the relationship between international politics and oil imports using firm-level data. Using country-level data, Mityakov, Tang, and Tsui (forthcoming) shows that major powers (e.g., the United States, the United Kingdom, and Japan) diversify their oil imports (but not other imports) away from their political

opponents. Netherlands, the only non-major power top oil importer with global oil giant operating overseas, also exhibits similar trade pattern. Although these results are consistent with the hold-up risk hypothesis, country-level analysis is susceptible to endogeneity problem, because of the concern of "oil diplomacy." Our firm-level analysis provides further evidence that private firms indeed diversify politically in the presence of hold-up risk. In other words, even when international politics matter for oil trade, the politics-trade relationship has an economic origin. Our results reconfirm the hold-up risk hypothesis that highlights the cost of expropriation to developing countries that rely on exports of natural resource and resource-driven foreign direct investment.

References

Adelman, Morris Albert "International Oil Agreements." *Energy Journal.* 5(3), 1984: 1-9.

Klein, Benjamin, Robert G. Crawford and Armen A. Alchian. "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process." *Journal of Law and Economics*. 21(2), October 1978: 297-326.

Dreher, Axel and Jan-Egbert Sturm. "Do the IMF and the World Bank influence voting in the UN General Assembly?" *Public Choice*. 151(1), April 2012: 363-397.

Guriev, Sergei, Anton Kolotilin, and Konstantin Sonin. "Determinants of Nationalization in the Oil Sector: A Theory and Evidence from Panel Data." *Journal of Law, Economics, and Organization*. 27(2), August 2011: 301-323.

Hajzler, Christopher. "Expropriation of Foreign Direct Investments: Sectoral Patterns from1993 to 2006." *Review of World Economics*. 148(1), April 2012: 119–149.

Mityakov, Sergey, Heiwai Tang, and Kevin K. Tsui. "International Politics and Import Diversification." *Journal of Law and Economics*. Forthcoming.

Kobrin, Stephen J. "Expropriation as an Attempt to Control Foreign Firms in LDCs: Trends from 1960 to 1979. " *International Studies Quarterly*. 28(3), September 1984: 329-348.

Nordhaus, William D. "The Economics of an Integrated World Oil Market." Address prepared for Annual Conference of Energy Information Agency, 2009, and June 2009 meeting of International Energy Workshop.

Santos Silva J. M. C. and Silvana Tenreyro. “The Log of Gravity.” *Review of Economics and Statistics*. 88(4), November 2006: 641-658.

Slade, Margaret E., Charles D. Kolstad and Robert J. Weiner. “Buying Energy and Nonfuel Minerals: Final, Derived, and Speculative Demand.” in Allen V. Kneese and James L. Sweeney, ed., *Handbook of Natural Resource and Energy Economics*. Volume 3, North Holland, 1993: 935-1009.

Thomas, Jonathan and Tim Worrall. “Foreign Direct Investment and the Risk of Expropriation.” *Review of Economic Studies*. 61(1), January 1994: 81-108.

Wolak, Frank A. “Why Do Firms Simultaneously Purchase in Spot and Contract Markets? Evidence from the United States Steam Coal Market.” in Professor Badi H. Baltagi and Professor Efraim Sadka (ed.) *Agricultural Markets* (Contributions to Economic Analysis, 234). Emerald Group Publishing Limited, 1996: 109-168.

Table 1: Descriptive statistics

Variable	Mean	Standard Deviation	Min	Max
Sample : 149801 observations, 1986-2008				
Oil Imports	350.048	4061.913	0	197479
Political distance (UNGA voting)	0.757	0.122	0.272	0.956
Log exporter's oil reserves	1.191	2.577	-5.006	5.587
Log exporter's GDP	8.495	1.180	5.117	11.646
Log exporter's population	9.599	1.707	5.328	14.091

Table 2: Political Distance and Oil Imports: Response Heterogeneity by Firm Size

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Political distance	-1.298***	-1.180***	-1.176***	-1.231***	-1.080**	-1.077**	-4.021***	-6.700**	-6.698**
	(0.284)	(0.454)	(0.453)	(0.288)	(0.500)	(0.500)	(1.252)	(2.701)	(2.700)
Oil reserves	0.027	0.035	0.034	0.029	0.037	0.037	-0.087	-0.061	-0.061
	(0.026)	(0.031)	(0.031)	(0.027)	(0.032)	(0.032)	(0.080)	(0.114)	(0.114)
GDP	0.466***	0.456*	0.459*	0.458***	0.434*	0.436*	0.944	2.231***	2.231***
	(0.166)	(0.255)	(0.256)	(0.165)	(0.259)	(0.259)	(0.556)	(0.480)	(0.480)
Population	0.545	-0.187	-0.188	0.559	-0.166	-0.165	-0.076	-2.243	-2.246
	(0.461)	(0.799)	(0.799)	(0.480)	(0.813)	(0.813)	(1.162)	(2.175)	(2.176)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Firm FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	148254	148254	148254	74742	74742	74742	51977	51977	51977
(# of countries)	(60)	(60)	(60)	(60)	(60)	(60)	(40)	(40)	(40)

Note: Country-level cluster robust standard errors are in parentheses. Political distance is measured with a 1-year lag. Other control variables are measured in log. In columns (1)-(3), the regressions are estimated based on the full sample, in columns (4)-(6) only firms with total imports greater than the median value of average annual imports (i.e., average annual imports by firm > 12695.13) are included in the subsample and in columns (7)-(9) the subsample includes the rest of the firms (i.e., average annual imports by firm <= 12695.13).

Table 3: Political Distance and Oil Imports: Response Heterogeneity by Oil Reserves Overseas

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Political distance	-1.298***	-1.180***	-1.176***	-0.985**	-1.043**	-1.038**	-1.810***	-1.695**	-1.695**
	(0.284)	(0.454)	(0.453)	(0.495)	(0.446)	(0.446)	(0.336)	(0.758)	(0.758)
Oil reserves	0.027	0.035	0.034	-0.010	-0.018	-0.020	0.066**	0.082**	0.082*
	(0.026)	(0.031)	(0.031)	(0.32)	(0.035)	(0.035)	(0.033)	(0.047)	(0.047)
GDP	0.466***	0.456*	0.459*	0.590	0.645***	0.650***	0.338	0.283	0.281
	(0.166)	(0.255)	(0.256)	(0.155)	(0.195)	(0.195)	(0.259)	(0.379)	(0.380)
Population	0.545	-0.187	-0.188	-0.427	-0.356	-0.363	1.626**	-0.162	-0.159
	(0.461)	(0.799)	(0.799)	(0.438)	(1.046)	(1.047)	(0.782)	(0.939)	(0.940)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Firm FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	14824	148254	148254	35225	35225	35225	103940	103940	103940
(# of countries)	(60)	(60)	(60)	(58)	(58)	(58)	(55)	(55)	(55)

Note: Country-level cluster robust standard errors are in parentheses. Political distance is measured with a 1-year lag. Other control variables are measured in log. In columns (1)-(3), the regressions are estimated based on the full sample. In columns (4)-(6) only firms with world-wide reserves are included in the subsample, and in columns (7)-(9) the subsample includes the rest of the firms.

Table 4: Political Distance and Oil Imports: Lagged Effects in the Subsample of Firms with Reserves Overseas

	(1)	(2)	(3)	(4)	(5)	(6)
Political distance$_{t-1}$	-1.038**	-	-	-	-	0.217
	(0.446)	-	-	-	-	(0.412)
Political distance $_{t-2}$	-	-1.579***	-	-	-	-0.837**
	-	(0.526)	-	-	-	(0.368)
Political distance $_{t-3}$	-	-	-1.659**			-0.128
	-	-	(0.672)	-	-	(0.296)
Political distance $_{t-4}$	-	-	-	-2.343***	-	-2.011***
	-	-	-	(0.800)	-	(0.719)
Political distance $_{t}$	-	-	-	-	-0.430	0.616
	-	-	-	-	(0.412)	(0.522)
Oil reserves	-0.020	-0.026	-0.030	-0.036	-0.020	-0.040
	(0.035)	(0.033)	(0.031)	(0.030)	(0.036)	(0.028)
GDP	0.650***	0.696***	0.780***	0.887***	0.665***	0.889***
	(0.195)	(0.183)	(0.189)	(0.205)	(0.200)	(0.233)
Population	-0.363	-0.487	-0.459	-0.438	-0.340	-0.453
	(1.047)	(1.027)	(1.016)	(0.990)	(1.080)	(0.983)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	35225	33166	31774	30353	35254	30295
(# of countries)	(58)	(57)	(57)	(57)	(58)	(57)

Note: Country-level cluster robust standard errors are in parentheses. The regressions in the table are estimated based on the sample of companies with world-wide reserves.

Table 5: Political Distance and Oil Imports: Lagged Effects in the Subsample of Firms without Reserves Overseas

	(1)	(2)	(3)	(4)	(5)	(6)
Political distance$_{t-1}$	-1.695**	-	-	-	-	-0.463
	(0.758)	-	-	-	-	(0.397)
Political distance $_{t-2}$	-	-1.883***	-	-	-	-0.728*
	-	(0.673)	-	-	-	(0.4119)
Political distance $_{t-3}$	-	-	-1.724***			-0.665***
	-	-	(0.578)	-	-	(0.252)
Political distance $_{t-4}$	-	-	-	-1.622**	-	-0.708
	-	-	-	(0.655)	-	(0.563)
Political distance $_{t}$	-	-	-	-	-1.429***	-0.651
	-	-	-	-	(0.712)	(0.471)
Oil reserves	0.082*	0.080*	0.078*	0.076*	0.084*	0.085**
	(0.047)	(0.043)	(0.041)	(0.040)	(0.049)	(0.038)
GDP	0.281	0.322	0.361	0.439	0.320	0.343
	(0.380)	(0.389)	(0.411)	(0.433)	(0.382)	(0.363)
Population	-0.159	-0.425	-0.687	-0.962	-0.112	-0.939
	(0.940)	(1.055)	(1.176)	(1.309)	(0.956)	(1.320)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	103940	97824	93774	89634	104030	89454
(# of countries)	(55)	(54)	(54)	(54)	(55)	(54)

Note: Country-level cluster robust standard errors are in parentheses. The regressions in the table are estimated based on the sample of companies without world-wide reserves.

Table 6: Political Distance and Oil Imports: Response Heterogeneity by Exporter's Expropriation Risk

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Political distance	-1.298***	-1.180***	-1.176***	-1.165***	-1.367***	-1.365***	-1.691*	0.132	0.140
	(0.284)	(0.454)	(0.453)	(0.274)	(0.413)	(0.412)	(0.980)	(3.028)	(3.030)
Oil reserves	0.027	0.035	0.034	0.043	0.044	0.044	0.029	0.014	0.014
	(0.026)	(0.031)	(0.031)	(0.028)	(0.040)	(0.040)	(0.063)	(0.080)	(0.080)
GDP	0.466***	0.456*	0.459*	0.419**	0.354	0.356	0.551	0.747	0.748
	(0.166)	(0.255)	(0.256)	(0.189)	(0.333)	(0.332)	(0.414)	(0.554)	(0.555)
Population	0.545	-0.187	-0.188	0.553	-0.296	-0.297	0.845	2.054	2.064
	(0.461)	(0.799)	(0.799)	(0.475)	(0.976)	(0.976)	(1.318)	(1.499)	(1.501)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Firm FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	148254	148254	148254	73646	73646	73646	74608	74608	74608
(# of countries)	(60)	(60)	(60)	(28)	(28)	(28)	(32)	(32)	(32)

Note: Country-level cluster robust standard errors are in parentheses. Political distance is measured with a 1-year lag. Other control variables are measured in log. In columns (1)-3), the regressions are estimated based on the full sample. In columns (4-(6) only imports from the countries with the history of expropriations are included in the subsample, and in columns (7)-(9) the subsample includes the rest of the countries. The results of the regression presented in Column (9) should be interpreted with caution because the estimates for the firm fixed effects were not properly estimated.