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Political Influence and Trade Uncertainty: Evidence from Sanction Threats and Impositions

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Abstract

This paper examines how uncertainty arising from sanction threats impacts international trade. By separately examining the threat stages of sanctions to the actual imposition of sanctions, we distinguish the impact of political uncertainty on trade from that of actual trade disruption. We find that US sanction threats significantly reduce US bilateral trade with target countries. The effect is larger when the target is a nondemocratic state and when sanctions are politically motivated.

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1. Introduction

The US made 263 sanction threats from 1992 to 2005, and imposed only 71 of them (for the rest, the US threatened target countries with possible actions but did not eventually impose any sanctions). These sanction threats often generated tangible impacts on the target countries, allowing the US to achieve its objective without actually imposing sanctions. For example, in 1993, the sanction threats by the US and EU nations led to a regime change in Guatemala. In 1975-76, the sanction threat by the US stopped South Korea's secret nuclear weapon development plans (Taylor 2014).

This paper studies the impact of sanction threats on trade flows, apart from actual impositions. Sanctions may affect trade flows through two channels: (1) actual trade disruption and (2) uncertainty. We used a data set of sanctions that distinguish periods of threat from the actual imposition of sanctions. By separately examining the threat stage, i.e. the period when the sanction is not imposed (yet), we thus empirically study how trade uncertainty affects trade flows.

In Figure 1, we document the average monthly trade volume between the US and target countries, where the x-axis indicates the number of months since the sanction threat was announced. The impact of sanction threats on trade flows seems evident. Figure 1 shows over a 40% drop in both US exports and imports in the first month of the threat stage.

For a more precise analysis, we run regressions that control for time and country fixed effects. Our empirical analysis also shows that US sanction threats significantly reduce US bilateral trade with target countries in the threat stage. US exports decrease by 12% in the threat stage, while US imports decrease by 9.8% overall. The impact of a sanction threat is sensitive to the political regimes of target countries and the issues involved. We find that politically motivated sanctions tend to produce larger effects than economically motivated ones, and that trade with nondemocratic countries is more sensitive to sanction threats.

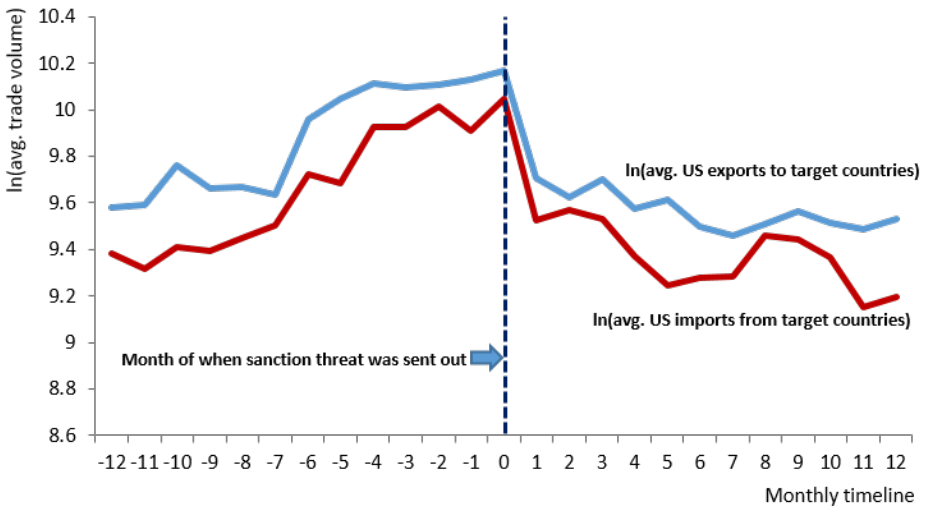

Figure 1: The impacts of sanction threats

The impact of sanctions has been examined in previous research (e.g., Etkes and Zimring, 2015). We contribute to the literature by examining the impact of sanction threats. The trade uncertainty impacts from policy changes have been studied in recent papers, including Pierce and Schott (2016) and Handley and Limao (2017). We show that political uncertainty generated by sanction threats is substantial enough to impact trade flows.

2. Data

Our main data source is the Threat and Imposition of Sanctions (TIES) data. We focus on the sanction threats and impositions of the US government from 1992 to 2005 because (i) the US was the main source of sanctions (428 US sanctions out of 802 total cases), (ii) given the US's geopolitical hegemony and economic power, US sanctions would have generated significant effects, and (iii) 1992 marks the end of the Cold War.

The TIES data include the date of when a sanction threat was made, as well as the date when the sanction was actually imposed, if the sanction was imposed, or the date when the threat was dismissed. During the threat stage, the sender country announces the possibility that it would sanction the target country in the near future but does not pursue any real action yet. By utilizing the timing of these events, we separately analyze the impact of sanction threats and impositions on trade flows.

We examine sanctions based on the issues involved and the regime type of target countries. We define a sanction to be economic if the issue involved in the TIES data is coded as either "Trade Practices" or "Implement Economic Reform." Otherwise, we define sanctions as politically motivated. The regime types of the target countries come from the Polity IV data set. We define a country as democratic if the polity index is positive (or nondemocratic if it is negative). We take average values in the initial years (1992 and 1993) because the contemporaneous year polity indexes will likely be impacted by sanctions as they roll out. We obtain the US monthly exports and imports from United States International Trade Commission (USITC).

3. Summary Statistics

Table 1 summarizes the distribution of sanction threats and impositions based on regime characteristics and the issues involved. Between 1992 to 2005, the US was involved in 428 sanction cases as a sender country and actually imposed sanctions on 235 of them.[1] This table shows that sanctions against nondemocratic countries were more likely to involve political causes. Among the 81 US sanctions against nondemocratic countries, 75% of them were motivated by political issues. However, among the 294 sanctions against democratic countries, 36% of them were motivated by political issues.

Political sanctions tend to be more credible and prolonged than economic sanctions. Table 2 shows the imposition rates, excluding 165 US sanctions that were imposed immediately, without a threat stage. The imposition rate for political sanctions is about 40%, while that for economic sanctions is only about 13%. Moreover, political sanctions are imposed for a longer period of time. Table 3 indicates that political sanctions on average were imposed for 15.39 months, while economic sanctions on average were imposed for 2.95 months.

[1] Among the 374 non-US cases from 1992 to 2005, 260 sanctions were actually imposed.

4. Econometric specification and results

4.1. Predictions

We predict that (1) bilateral trade flows between the US and the target countries would decrease in the threat stage, (2) the impact of sanctions against nondemocratic countries would be larger than those against democratic countries, and (3) sanctions motivated by political issues would have a larger impact on trade flows than sanctions that arise due to economic issues.

4.2. Empirical Specification

In order to confirm our predictions above, we run the following regressions:

$$\ln\text{EXP}_{i,m,y} = \alpha_1 \cdot T_{i,m,y} + \alpha_2 \cdot I_{i,m,y} + d_i + d_m + d_y + \epsilon_{i,m,y} \quad (1)$$

$$\ln\text{IMP}_{i,m,y} = \alpha_3 \cdot T_{i,m,y} + \alpha_4 \cdot I_{i,m,y} + d_i + d_m + d_y + \epsilon_{i,m,y}$$

where $\text{EXP}_{i,m,y}$($\text{IMP}_{i,m,y}$) refers to the value of US exports (imports) to (from) country i in month m of year y, d_i refers to target-country fixed effect, d_m refers to month fixed effect, and d_y refers to year fixed effect. We define $T_{i,m,y}$ as the indicator for the threat stage and $I_{i,m,y}$ as the one for the actual imposition period of sanctions. In specification (1), α_1 and α_3 indicate the impact of sanctions on trade flows during the threat stage, while $\alpha_2$and α_4 indicate the impact during the actual imposition stage. Since α_1 and α_3 show the uncertainty effects of sanctions, these two coefficients are of our primary interests.

4.3. Empirical Results

Table 4 shows the regression results with respect to specification (1). Columns 1 and 2 show that α_1, α_2, and α_3 are negative and significant, while α_4 is insignificant. The negative α_1 and α_3 confirm our first prediction that US imports and exports would decrease in the threat stage. US exports decreased by 12% in the threat stage, while US imports decrease by 9.8% overall. The negative α_2 implies that US exports decreased in the imposition period as well. The insignificant α_4 suggests that US imports from target countries do not significantly decrease under the actual imposition of sanctions. Since the residuals on (1) could be autocorrelated, we cluster standard errors by countries. Columns 3 and 4 show the corresponding regression results: α_3 is no longer significant, while α_1 is still significant. Hence, the impact of sanction threats on US imports may be sensitive to the type of target countries, which we explore next.

In Table 5 we separately run regressions in equation (1) for nondemocratic and democratic countries to examine the impact of sanctions by the target country's level of democracy. Columns 1 and 2 show significantly negative α_1, α_2, α_3, and $\alpha_4$for nondemocratic countries. However, columns 3 and 4 show insignificant α_1, α_2, α_3, and α_4 for democratic countries. Consistent with our second prediction, nondemocratic countries are more affected by US sanctions.

Why do sanctions affect nondemocratic countries more than democratic ones? One point that was evident from the summary statistics was that nondemocratic countries are more likely to be sanctioned for political issues, and these politically motivated sanctions are imposed with a higher probability and tend to last longer, which creates a greater degree of market uncertainty. In order to examine the impact of political sanctions, we run regressions separately for politically and economically motivated sanctions. Columns 1 and 2 in Table 6 show significantly negative α_1, α_2, and α_3 and an insignificant α_4 for politically motivated sanctions. Columns 3 and 4 show significant α_2 and insignificant α_1, α_3, and α_4 for economically motivated sanctions. This

confirms our third prediction that sanctions triggered by political issues have larger impacts on trade than sanctions triggered by economic issues.

Why might there be differential responses to sanctions based on the issues involved? One possible answer is that politically triggered sanctions are often directly related to the sovereignty and credibility of the target countries' regimes (e.g., North Korea's nuclear development). Therefore, the target countries may be less willing to respond to the market uncertainty created by US threats. However, target countries may find it relatively easier to respond to economic threats. For example, in the late 1960s, the US government threatened to impose anti-dumping penalties on Japanese and European steel exporters. Both Japan and the European Community agreed to voluntarily refrain from steel exports to the US between January 1969 and December 1971 (Flath 2014).

5. Conclusion

This paper examines the trade uncertainty generated by sanction threats. We provide a novel way of examining the impact of this uncertainty on trade by analyzing the threat stage of sanctions, and by differentially examining sanctions that were triggered by political issues versus economic ones.

6. Reference

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7. Tables

Table 1: Impositions/Cases

	Nondemocratic	Democratic	No Data	All
Political	33/61	62/106	10/21	105/188
Economic	10/20	113/188	7/32	130/240
All	43/81	175/294	17/53	235/428

Notes: No Data refers to the countries without a POLITY2 variable.

Table 2: Impositions/Cases (with imposition stages)

	Nondemocratic	Democratic	No Data	All
Political	14/42	33/76	8/19	55/137
Economic	1/11	10/85	5/30	16/126
All	15/53	43/161	13/49	71/263

Table 3: Average Length of Imposition Stages

	Nondemocratic	Democratic	No Data	All
Political	14.47	15.71	15.83	15.39
Economic	1	1.84	6.46	2.95
All	11.17	8.92	10.13	9.6

Table 4: Base Results

	(1)	(2)	(3)	(4)
VARIABLES	ln(exports)	ln(imports)	ln(exports)	ln(imports)
Threat	-0.122***	-0.0980***	-0.122**	-0.0980
	(0.0188)	(0.0230)	(0.0477)	(0.0683)
Imposition	-0.206***	-0.0220	-0.206***	-0.0220
	(0.0177)	(0.0217)	(0.0753)	(0.0637)
CountryFe	Y	Y	Y	Y
YearFe	Y	Y	Y	Y
MonthFe	Y	Y	Y	Y
Clustering			Y	Y
Sample countries	All	All	All	All
Sample sanctions	All	All	All	All
Observations	30,716	29,720	30,716	29,720
R-squared	0.919	0.914	0.919	0.914

Standard errors in parentheses: *** p < 0.01, ** p < 0.05, * p < 0.1

Table 5: Nondemocratic vs. Democratic Countries

VARIABLES	(1) ln(exports)	(2) ln(imports)	(3) ln(exports)	(4) ln(imports)
Threat	-0.288**	-0.449***	-0.0455	0.0128
	(0.122)	(0.162)	(0.0455)	(0.0669)
Imposition	-0.530***	-0.268*	-0.0977	0.0623
	(0.148)	(0.143)	(0.0816)	(0.0682)
CountryFe	Y	Y	Y	Y
YearFe	Y	Y	Y	Y
MonthFe	Y	Y	Y	Y
Clustering	Y	Y	Y	Y
Sample countries	Nondemocratic	Nondemocratic	Democratic	Democratic
Sample sanctions	All	All	All	All
Observations	9,653	8,961	21,063	20,759
R-squared	0.840	0.851	0.944	0.936

Standard errors in parentheses: *** p < 0.01, ** p < 0.05, * p < 0.1

Table 6: Political vs. Economic Sanctions

VARIABLES	(1) ln(exports)	(2) ln(imports)	(3) ln(exports)	(4) ln(imports)
Threat	-0.151**	-0.192**	-0.0228	0.167
	(0.0608)	(0.0811)	(0.0726)	(0.140)
Imposition	-0.210*	-0.00231	-0.139*	-0.0282
	(0.120)	(0.0963)	(0.0732)	(0.0810)
CountryFe	Y	Y	Y	Y
YearFe	Y	Y	Y	Y
MonthFe	Y	Y	Y	Y
clustering	Y	Y	Y	Y
Sample countries	All	All	All	All
Sample sanctions	Political	Political	Economic	Economic
Observations	27,246	26,851	24,168	24,020
R-squared	0.883	0.887	0.913	0.905

Standard errors in parentheses: *** p < 0.01, ** p < 0.05, * p < 0.1