Predicting Economic Sanctions: The Roles of the Democratic Peace and UN Security Council Membership

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Abstract

Investigating factors that predict countries using economic sanctions against one another is an open research area. In this paper, I focus on the importance of UN Security Council membership and democratic governance as determinants of the use of economic sanctions.

Using one traditional data source and two novel data sources, I show that a variety of rare events corrected regression specifications confirm that democratic countries are significantly less likely to use sanctions against one another, supporting similar findings from Cox & Drury (2006). The results also show that the permanent members of the UN Security Council are significantly more likely to use sanctions than non-members, and that these countries use sanctions more often than their economic size, wealth and trade relationships would suggest.

These findings are robust to including several important controls in the regression models, and remain both after redefining sanction events to include only the first sanction episode for a country dyad, and when possibly endogenous variables are lagged in the regression analysis.

1 Introduction

Although an extensive literature has sought to understand the effects of economic sanctions against target countries, a much smaller body of recent empirical work investigates the factors that influence the likelihood that sanctions will be used by one country against another. In this paper I focus on the latter question, and investigate the importance of two country dyad relationships that I show likely influence the probability that a country will use economic sanctions.

Firstly, I study the importance of shared democratic institutions, and specifically, test the extent to which previous reports that democratic countries sanction one another less often are robust to alternative definitions and additional controls. Secondly, I consider how and when United Nations Security Council (UNSC) members use economic sanctions, and compare the differences between members and non-members with respect to sanction events.

Another contribution of this paper is to introduce the use of two datasets that have not, to my knowledge, been used for these purposes in the past. The majority of peer-reviewed research concerning economic sanctions has used the influential Hufbauer *et al*. (2007) dataset, which relies on case studies of sanction events going back to the early 1900s. In the following analysis, I hope to compliment analyses of the traditional source using the King & Lowe (2006) and Morgan, Bapat & Krustev (2009) datasets, both of which were created using automated coding of news articles and other materials. The inclusion of these data offers two definitions of economic sanctions that differ from the case study literature, and can potentially support (or call into question) the robustness of previous findings.

In the following sections, I use standard regression techniques to show that after controlling for determinants such as economic size, per-capita GDP, bilateral trade, and other considerations, democracies are significantly less likely to use sanctions against one another than they are to use sanctions against non-democracies. This finding supports previous research on this question, and suggests that the results are robust to different specifications, regression models, and data sources for the dependent variable of interest.

I also find that permanent members of the UN Security Council use sanctions substantially more than non-UNSC members. The relationship is strong in each of the datasets I present

here, and is therefore not solely driven by the recent increase in UN-approved sanction measures. These countries use sanctions more often than their economic size, bilateral trade relationships, and per capita GDP would suggest.

In the following section, I briefly discuss the recent literature on UN Security Council membership and the theory of democratic peace applied to economic sanctions. From this basis I suggest two testable hypotheses. In Section 3 I describe the data used in the estimations that follow. In Section 4 I describe the empirical approach and in Section 5 provide the regression tables [PLEASE FIND TABLES FOLLOWING SECTION 6 IN THIS PRELIMINARY VERSION] and discussion. Section 6 concludes.

2 Literature

2.1 Democracy and Sanctions

The earliest widely acknowledged discussion of a theory of democratic peace is credited to Immanuel Kant, who suggested the idea in *Perpetual Peace* in 1795. In its modern form, the argument was made explicit in statistical analysis that appeared in Moaz & Russett (1993) and Russett *et al*. (1995) and was later supplemented in response to critiques (Chernoff, 2004; Kinsella, 2005; Rousseau, 2005). These analyses find that, with few exceptions, democracies are significantly less likely to go to war or be involved in violent conflict with one another.

Because democracies and armed conflicts are both relatively rare, the issue of causality is an open question in this literature, and there are many theories that attempt to explain why democracies choose to go to war against one another less often. The most mainstream points of view are that domestic considerations, such as perceptions of shared norms, and institutional constraints undermine any interest democratic countries may have for going to war with other democracies (Russet *et al*., 1995).

These theories have companions in the literature on economic sanctions. The Kaemfer and Lowenburg (1992) model suggests that domestic interests groups compete in a political market in hopes of implementing (or refraining from implementing) economic sanctions. Other analyses have assumed that democratic norms that are shared among democracies, including

respect for human rights and the rule of law, reduce the number of grievances that democratic countries have against other democratic countries that may be cause for using economic sanctions. Hufbauer *et al*. (2007) agree, and advance the perspective that the "political character" of the target countries is a central consideration in the case study literature on the use of economic sanctions.

Cox & Drury (2006) analyze cases of economic sanctions at the country dyad level[1] to show that this special case of peace between democratic regimes can be demonstrated statistically. The authors suggest that democracies more often target non-democracies because doing so is less politically costly, echoing the "shared values" reasoning to explain the relationship.

There are several reasons that we should seek confirmation of this finding however. Using the Hubaur *et al*. (2000) dataset, Lektzian & Souva (2003) also find that democracies are less likely to sanction other democracies, but show that according to their definition of success, autocratic regimes are less easily harmed by economic sanctions. This would suggest that although sanctions appear to be less common among democracies using case study data, there is a plausible motivation for democracies to change this behavior. Sanctions made by democracies against other democracies may be more effective than those that occur in other circumstances.

Several other questions arise from the analysis in the Cox & Drury (2006) study. An important sender and target characteristic that is not included their analyses is the total economic size of the sender and target (rather than solely the ratio of per capita GDP between the target and the sender), which is a strong predictor of sanction events, as noted by Hufbauer *et al*. (2007).

These observations suggest the first hypothesis I consider:

Hypothesis 1: Pairs of democratic countries should sanction one another less often than if one of the countries in the pair is not ruled by a democratic regime.

[1] A dataset later published in Hufbauer *et al*. (2007)

In the following sections, I include controls for economic size, bilateral trade and per capita GDP. To anticipate the results, I show that the democratic peace relationship reported in Cox & Drury (2006) also exists in the two alternative datasets I use in the analysis below, and is moreover robust to the inclusion of additional controls.

2.2 United Nations Security Council Membership

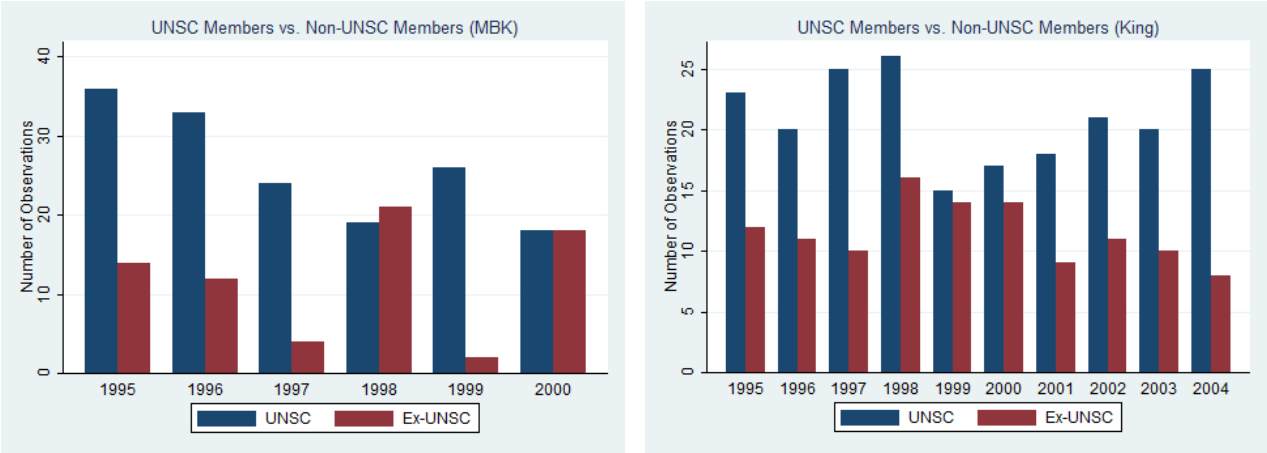
Until the end of the Cold War, a large share of international sanctions was launched by the United States. Most of these sanctions were implemented unilaterally without ever being referred to the UN Security Council. The US frequently sanctioned countries that were not aligned with the West, and most of all the USSR. Other common targets of unilateral US policy were countries that threatened to leave the West's sphere of influence, such as Nicaragua, or those countries that the US hoped to influence for specific policy objectives. In 1978 the US launched sanctions against Argentina, India and Brazil for example, over concerns of nuclear policy.

A similar practice was common for the Soviet Union, which commonly used economic sanctions against adversaries such as the United States, but also against more amenable regimes such as Yugoslavia, and countries that strayed from policies that benefited the USSR, such as sanctions against Finland in 1958 (Hufbauer *et al*., 2007).

With the notable exceptions of sanctions against Rhodesia and embargoes against South Africa, during the Cold War there were few sanctions programs that were authorized by the UN Security Council. Veto powers for permanent members meant that economic sanctions that were potentially damaging to one or more members were infeasible, leading to stalemates between rivals on the Security Council.

Since the early 1990s however, and the end of the Cold War, the most high-profile sanction events have been undertaken by members of the UN Security Council, and actions have been taken collectively in several instances. Examples of this recent turn around include actions against Iraq in 1990 and 1991, in addition sanctions against Yugoslavia and Haiti also in 1991. Later examples include sanction programs against Sierra Leone, Cambodia and Afghanistan.

Figure 1



This group faces specific costs to undertaking actions, but also benefits from considerable influence on the global stage. As each of the permanent member countries is able to veto propositions made by other states within the UN system, these members are shielded from sanction programs that have been legitimized via either the UN Security Council or General Assembly. This is in contrast to the considerations that non-permanent members must take into account. Although non-permanent members are tasked with increased responsibility concerning global affairs during their tenures in the Security Council, they do not have access to perpetual veto powers.

Simple descriptive statistics show that since the surge in UN-approved sanction use post-1990, the permanent members of the UNSC have used sanctions more often than other counties (Figure 1), and in addition have commonly resorted to unilateral action more often than other countries. The need for consensus still limits the application of sanctions that have been approved at the UN level however, and those few issues that do manage to rally sufficient multilateral agreement are often in response to violence, humanitarian, or security concerns in non-UNSC member countries.

These observations suggest the second hypothesis I consider:

Hypothesis 2: Members of the UN Security Council use sanctions more than non-members.

3 Data

The most commonly used dataset in the empirical literature on economic sanctions comes from Hufbauer *et al.* (2007), and previous versions of the dataset from the same authors. Although re-estimating findings on this dataset is not my primary objective in this paper, I include companion results using this data to show the similarities and differences between it, and the two alternatives that I focus on here. In all cases, an observation includes a target country, a sending country and the year. All countries with populations of more than 1 million people are included for each year covered in each dataset individually; including countries that have never or have not recently experienced sanctions.

Figure 2: Total Sanction Sending by Country (Hufbauer *et al*., 2007)

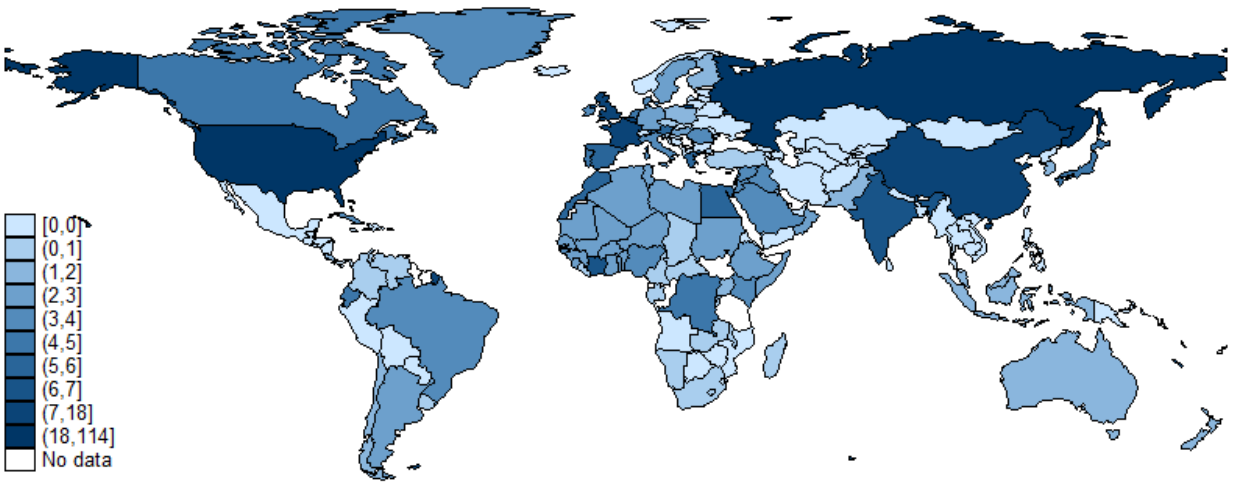
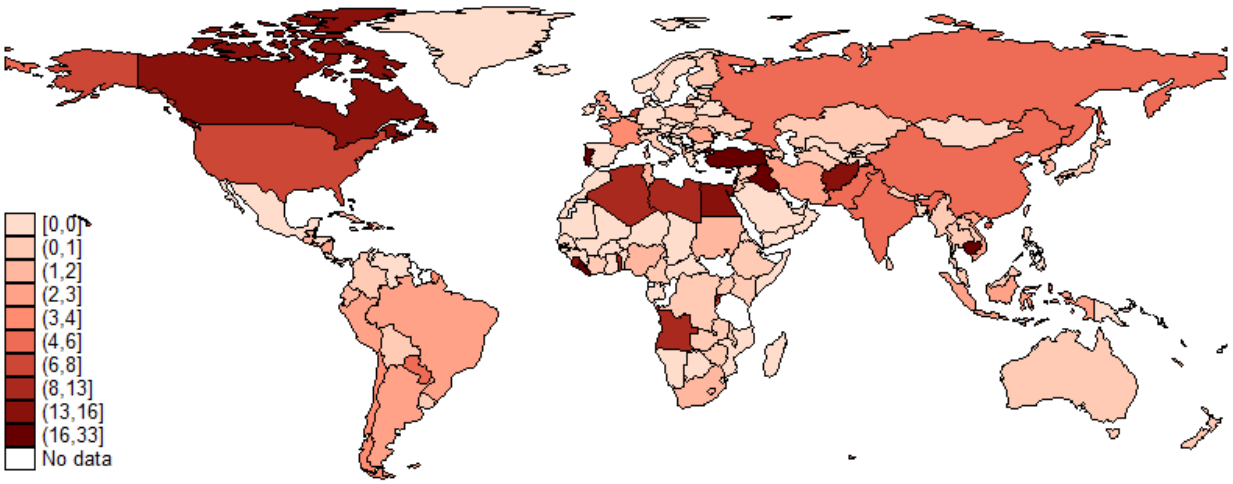


Figure 3: Total Sanction Recipient Events by Country (Hufbauer *et al*., 2007)



The Hufbauer *et al.* (2007) data are organized on the sanction event level, and include observations that were initiated by international organizations rather than undertaken unilaterally by states. I have recoded international organizations in the version that I use in this paper by creating a country pairing with each individual sending country that was a member of the organization at the time that the sanction was initiated. The only exception to this approach was the case of sanctions issued by the United Nations. In these cases, I have coded country pairs using the members (both permanent and non-permanent) of the Security Council at the time the sanction was initiated. Figure 2 provides a graphical representation of sanction events for the Hufbauer *et al.* (2007) data, and Figure 3 provides a similar description of targets.

In addition to the Hufbauer *et al.* (2007) dataset, I use two data sources derived from news articles to construct separate versions of a binary dependent variable describing the use or threat of sanctions.

The first of these alternatives was created by Morgan, Bapat & Krustev (2009). Coding for this dataset proceeded in two stages; a first 'candidate' list was created primarily from *Lexis-Nexis*, *Facts on File*, and *Keesing's Record of Contemporary Events*, searching for terms such as "sanction", "embargo", "trade war", "blockade", and "foreign aid reduction", among others. The list was then supplemented by searches in both the *New York Times* and *London Times* indexes. The search was limited to cover yearly event observations from 1970-2000.

The data were then amended by a human coder to fit the definition set out by the authors; namely, that the events involve at least one sender state and a target state, and that actions

were implemented or threatened by the sender in order to change the behavior of the target state. The data do not include events which were undertaken for purely domestic reasons, such as to benefit domestic producers (Morgan, Bapat & Krustev, 2009). Figure 4 provides a graphical representation of sanction events for the Morgan, Bapat & Krustev (2009) data, and Figure 5 provides a similar description of targets.

Figure 4: Total Sanction Sending by Country (Morgan, Bapat & Krustev., 2009)

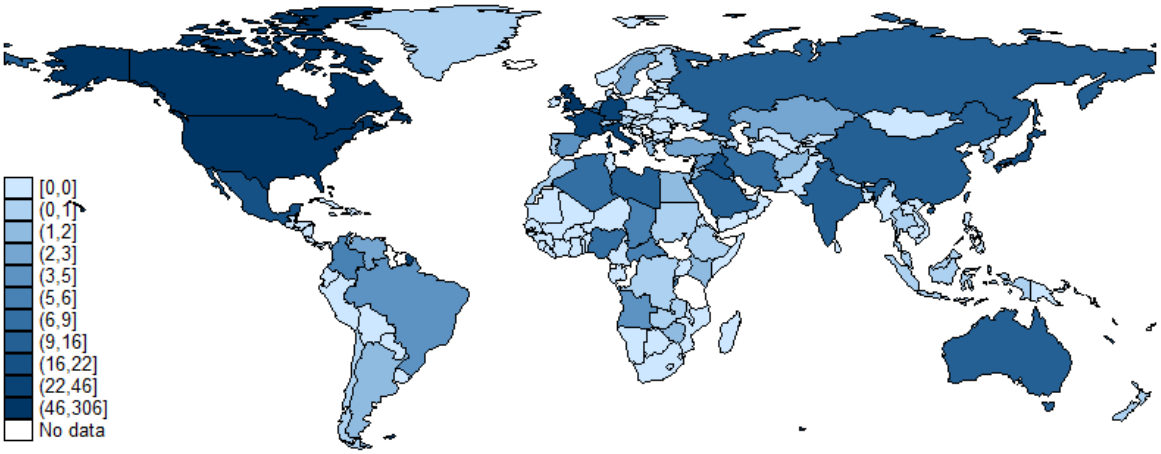
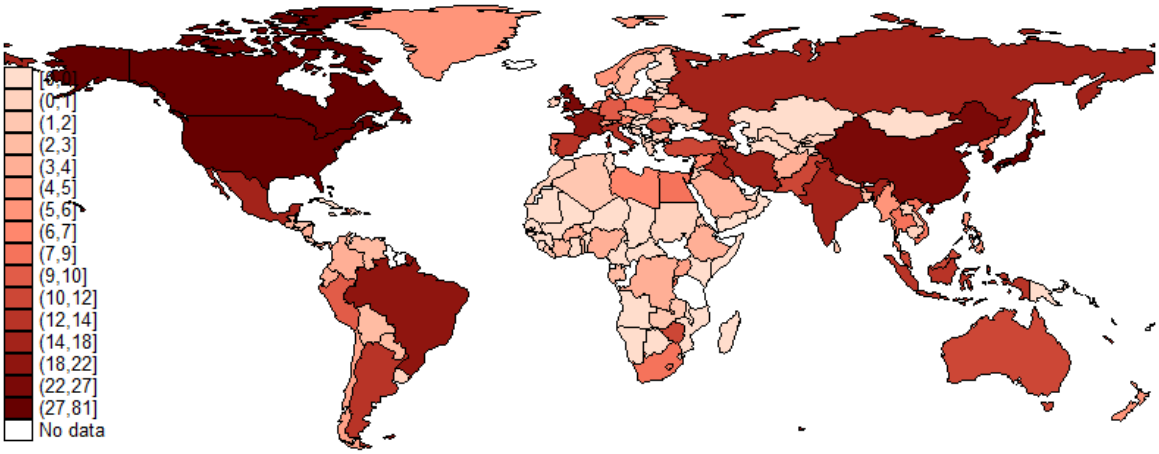


Figure 5: Total Sanction Recipient Events by Country (Morgan, Bapat & Krustev., 2009)

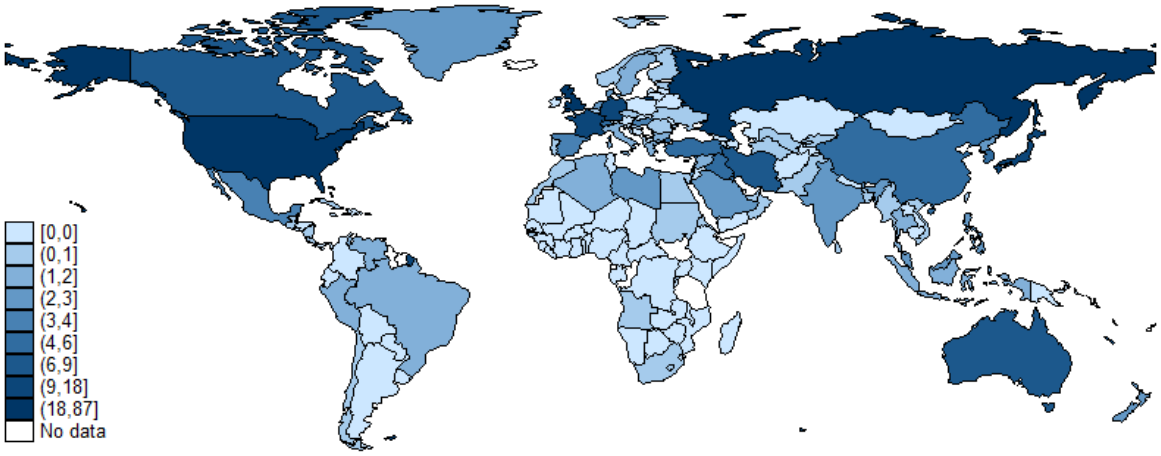


An alternate version of the data with similar characteristics can be extracted from a dataset generated by King & Lowe (2006), which I use in the following analysis as a separate version of the dependent variable. The data were derived from an automated content analysis of *Reuters* reports and list all uses of the terms “sanctions”, “embargoes”, and related concepts (such as

"withdrawal of economic aid"). Like the Morgan, Bapat & Krustev dataset, the King & Lowe data are not solely measures of the use of sanctions or embargoes, but include the threats of economic coercion.[2] The King & Lowe dataset covers the period between 1995 and 2004.

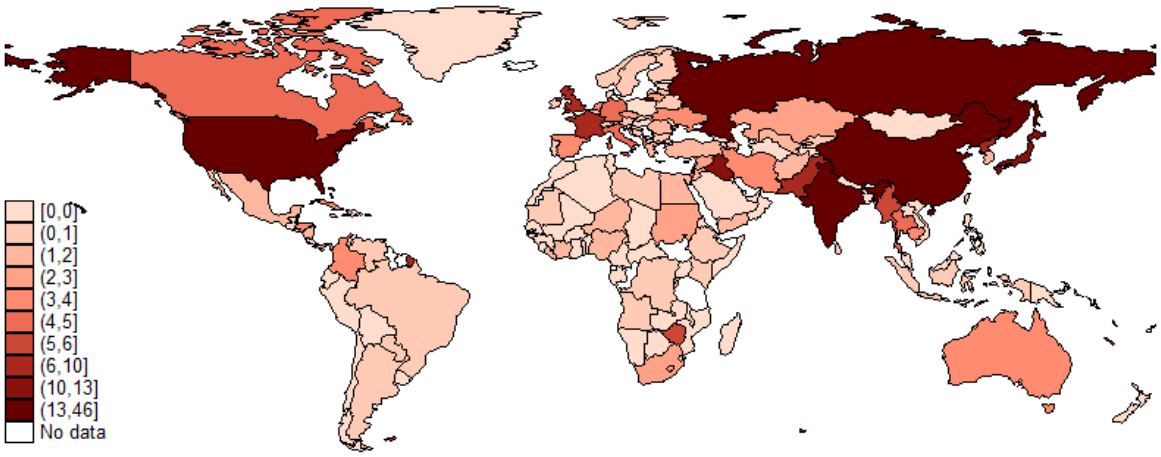
For all three versions of the dependent variable, a non-event indicates that at no point in a given year was it reported in the news services (or in case studies) that the sending country threatened or initiated a sanction against the target country. If multiple events are recorded over a given year for a one sender against the same target, only a single observation per year appears in the data I use. Each year is considered independently, so a previous sanction does not preclude an analysis of additional sanctions in later years. Figure 6 provides a graphical representation of sanction events for the King & Lowe data, and Figure 7 provides a similar description of targets.

Figure 6: Total Sanction Sending by Country (King & Lowe, 2006)



[2] For a full list of countries included in these data please see Appendix

Figure 7: Total Sanction Recipient Events by Country (King & Lowe, 2006)



The two alternative datasets are dissimilar in several respects. The Morgan, Bapat & Krustev data include more trade-related sanctions, and human coders excluded cases when a sanction was being undertaken for the benefit of domestic industries or for domestic concerns, according to the interpretation of the human coder. The King & Lowe data presumably contain some sanction events undertaken for the benefit of domestic industries, and trade-related issues were treated as a separate category in the King & Lowe data. The difference between the sources may also be an important consideration, as the news services used by the two sources did not overlap.

The explanatory variables included in the analysis below come from a range of sources. To investigate the democratic peace**,** I construct a binary variable which takes a value of 1 when both the sender and the target countries are democracies, which I define using the Polity IV dataset, as a polity2 score of greater than or equal to 6 (Marshall, Jaggers, & Gurr, 2010)**.**

To investigate Hypothesis 2 concerning the likelihood that UNSC members use sanctions more often than non-members, I match a dataset of both permanent and non-permanent UNSC member countries by year, from 1946 to 2004.

The control variables included in the regressions analyses below also come from several distinct sources. I use the value of trade (excluding services) between country pairs in millions of USD from Barbieri & Keshk (2012), which is distributed as a compliment to Correlates of War Project's datasets. I also include total GDP and per capita GDP from the Penn World Tables

(2011). The distance between countries has been shown to be significant in some analyses, and I use distance between capitals from Gleditsch (2012) as an additional control.

4 Empirical Approach

I estimate the probability of "the use or threat of sanctions" $Y_i(i = 1, \dots, n)$, a binary outcome that follows a Bernoulli probability function taking a value of 1 with probability π_i and 0 with probability 1-π_i. The probability π_i varies over n as an inverse logistic function of a vector x_i that includes a constant term and $k - 1$ explanatory variables:

$$Y_i \sim Bernoulli(Y_i|\pi_i) \qquad (2)$$
$$\pi_i = \frac{1}{1 - e^{-x_i\beta}}$$

The use of sanctions by one country against another is very rare; very small values of π_i pose challenges for estimating what would be, in a balanced outcome context, a simple logistic regression problem. The difficulty arises due to the fact that with a larger number of non-cases, the variance for positive cases will be smaller than for non-cases, as is demonstrated using Monte Carlo simulations in King & Zeng (2001). Additional positive event observations are therefore more informative than non-cases (Imbens, 1992).

I use the procedure outlined by King & Zeng (2001) to correct for the underestimation of the coefficients. However, clustering standard errors at the dyad level is not easily implemented using this approach. As a robustness check, I re-estimate each specification using the complimentary log-log approach that similarly corrects for the rarity of a positive outcome of a binary variable, and which moreover allows for straightforward standard error clustering. The differences between the two approaches do not materially affect the results reported in the following section, and the tables below include the results from both regression methods.

Temporal relation is also a concern in the context of this paper, as it is reasonable to assume that the threat or use of sanctions between two countries depends to some extent on whether the two countries have a history of using sanctions against one another. Such a relationship leads to standard errors which systematically underestimate variability, invalidating a

regression model that does not include variables associated with the time passed since the last realization of an event. Beck, Katz, & Tucker (1998) provide such a method using cubic splines, which I include in all analyses reported in the following sections.

5 Results and Discussion

5.1 Results

Hypothesis 1: Pairs of democratic countries should sanction one another less often than if one of the countries in the pair is not ruled by a democratic regime.

The analysis shows that democratic countries are significantly less likely to use economic sanctions against other democracies. Although the strength of the relationship is slightly less in the regressions reported here than in Cox & Drury (2006), the negative and statistically significant coefficients indicate that the relationship is robust to including several additional control explanatory variables and on three separate versions of the dependent variable.

Table 1 shows that using the King & Lowe data, dyads in which both countries are democracies are significantly less likely to experience sanctions. The results are broadly similar using corrected logistic regression (columns 1-3) and using complimentary log-log regression (columns 4-6). Removing the control for total GDP in both the sender and target country from the regression decreases the significance of the result on joint democracy, indicating the importance of economic size as a covariate to explain the variance in sanction events. Table 2 shows similar results using the longer duration Morgan, Bapat & Krustev dataset.

Table 3 reports the regression results using the traditional Hufbauer *et al.* dataset, and show a similar, negative and statistically significant coefficient. Cox & Drury (2006) report a smaller p-value in their analysis of the same data source, but this difference is almost certainly due to several modifications made in the analysis here. Firstly, the data I employ in this analysis include sanction events from 1946, whereas Cox & Drury (2006) limit their data to the years between 1978 and 2000. I have also recoded events that involved international organizations to create country pairs for each country that was a member of the international organization at the time that a sanction was initiated. Cox & Drury (2006) use an alternative method of ranking

the interests of members in the international organization, and include only those countries that played leadership roles in initiating sanctions.

Nonetheless, a companion result to that described in Cox & Drury (2006) is robust and apparent in all data sources I discuss here. An important point in this respect is that the addition of several controls, and most notably the control for the size of the target and sending economy, do not significantly undermine the core result.

Importantly, an additional analysis which includes separate variables for sender and target polity 2 scores – reported in Tables 4 and 5 respectively – results in no systematic relationship between democracy and sanction events in general. It appears that it is specifically the coincidence of democracy in both the sender and target country which is related to lower sanction incidence.

Hypothesis 2: Members of the UN Security Council use sanctions more than non-members.

UN Security Council members indeed appear to be much more likely to use sanctions (and in some cases, to be sanctioned), even after controlling for other determinants such as economic size and the amount of bilateral trade. In Tables 1 and 2, showing the results on the King & Lowe (2006) and Morgan, Bapat & Krustev (2009) data respectively, the positive coefficients indicate that if one (or both) of the countries in a dyad is a member of the Security Council, a sanction event is significantly more likely than otherwise. Tables 10 and 11 make this result more explicit, showing that a dyad pair in which the sender is a Security Council member is positive and statistically significant in both data sources. In the King & Lowe (2006) data, the same regressions reveal that UNSC members are more often targeted by sanctions as well. Over the longer time period in the Morgan, Bapat & Krustev (2009) data however, the significance appears to be driven primary by the sender's status as a member (or non-member) of the Security Council. This may indicate that the trend to sanction UNSC members more often is relatively recent.

Likewise, membership in the UNSC is statistically significant in the Hufbauer *et al.* (2007) dataset. I am unaware of any other analysis using this dataset that has made the relationship

clear. In Table 3 the coefficient is positive and of similar magnitude to that of the alternative datasets indicating that the relationship between a sending country's membership on the UNSC and behavior with respect to sanctions is a long-standing one, and not limited to post-Cold War international policies or solely due to the recent increase in the use of the UN as a venue to coordinate sanction policy.

It does not appear to be the case however that the non-permanent members of the Security Council are more likely to use sanctions during their membership period. In contrast, limiting the UNSC membership variable to only permanent seats results in a significant and positive coefficient in the regression analysis, indicating that that China, the United States, Russia/the Soviet Union, the United Kingdom and France use sanctions more often than their economic size, trade, and wealth explain, and significantly more than non-permanent members on the Security Council.

5.2 Endogeneity

Because the use of sanctions against a country can affect the target country's trade patterns, economic size, and other variables included in the regression analysis I preform, there is reason to be concerned that reverse causality is a potential source of endogeneity. Indeed, Hufbauer *et al*. (2007) estimate that successful sanctions have an average economic impact of a 2.4 per cent decrease in total GDP for the target country. One should therefore suspect that the national economies of targeted countries may be altered due to sanction policies.

As a first step to understanding the extent and importance of endogeneity in this analysis, I re-estimate the corrected logistic and complementary log-log regression models while lagging the values of possibly endogenous variables. The results of this approach are reported in Tables 6 and 7.

As a second step, I redefine a positive outcome as observations in which a sanction event is recorded for the first time in the dataset for that country pair. Re-estimating the regression thus excludes cases with a higher likelihood of endogeneity due to the lasting effects of previous sanction events. The results of this procedure are reported in Tables 8 and 9.

There does not appear to be a substantial difference in the results due to these two alterations in the empirical approach, although the degree of statistical significance does change in some instances. This may indicate that endogeneity is not especially concerning in this context; however, as the data do not provide a full history of sanctions, and possible channels of reverse causality are potentially unaccounted for, the issue of possible endogeneity is not completely answered here.

6 Conclusion

It has been argued in the recent literature that several issues directly affect the likelihood that one country will use sanctions against another. In this paper I have investigated the extent to which democracies refrain from using economic sanctions against one another and the importance of membership in the UN Security Council with respect to sanction use

Using two variations of regression models that correct for rare events and three separate datasets, I show several persistent regularities in the relationships between sanction events and the variables of interest.

Countries that are permanent UN Security Council members are substantially more likely to use sanctions. These results are robust to a range of controls and the data sources used. Several variations of the regression models used in this paper indicate that democracies are substantially less likely to initiate sanctions against other democracies, and that this result is not driven by democracies using sanctions less often.

The results generally support claims made in the recent literature and suggest that these findings are robust to the specific definitions used, the (modern) time period under study, and the statistical approach employed. Preliminary investigations into possible endogeneity likewise do not raise large concerns about the stability of these results, although more attention is needed with respect to the possibility for endogeneity and missing variable biases.

Table 1: Corrected Logistic and Complimentary Log-Log Regressions Using King & Lowe (2006)

	Corrected Logit			CLogLog		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full	Per Capita GDP	Total GDP	Full CLogLog	Per Capita GDP	Total GDP
Democratic Sender and Target	-0.544***	-0.318*	-0.543***	-0.517***	-0.309*	-0.524***
	(0.154)	(0.143)	(0.130)	(0.151)	(0.142)	(0.127)
Membership in Security Council	0.752***	1.405***	0.734***	0.756***	1.398***	0.732***
	(0.149)	(0.140)	(0.147)	(0.149)	(0.140)	(0.148)
Value of Sndr imprt from Trgt/Sndr total imprt	0.068	0.300***	-0.004	0.061	0.300***	-0.006
	(0.062)	(0.039)	(0.053)	(0.062)	(0.039)	(0.053)
Value of Trgt imprt from Sndr/Trgt total imprt	0.154*	0.403***	0.249***	0.158*	0.401***	0.250***
	(0.074)	(0.040)	(0.073)	(0.073)	(0.039)	(0.072)
ln Target Per-Capita GDP	-0.227**	-0.075		-0.212**	-0.075	
	(0.069)	(0.071)		(0.069)	(0.070)	
ln Sender Per-Captia GDP	0.269***	0.449***		0.263***	0.450***	
	(0.075)	(0.077)		(0.074)	(0.076)	
ln Sender Total GDP	0.574***		0.560***	0.559***		0.552***
	(0.087)		(0.089)	(0.086)		(0.087)
ln Target Total GDP	0.521***		0.523***	0.513***		0.519***
	(0.080)		(0.080)	(0.079)		(0.078)
Time Since Last Event	-0.559***	-0.596***	-0.578***	-0.546***	-0.593***	-0.570***
	(0.147)	(0.145)	(0.146)	(0.142)	(0.142)	(0.141)
ln km distance between Capitals	-0.309**	0.236**	-0.273**	-0.293**	0.240***	-0.259**
	(0.095)	(0.074)	(0.093)	(0.093)	(0.073)	(0.091)
Constant	-15.402***	-7.086***	-14.961***	-15.399***	-7.170***	-14.982***
	(1.991)	(1.122)	(1.595)	(1.961)	(1.105)	(1.575)
log_likelihood				-1405.782	-1473.286	-1418.372
LR_chi_square				1081.742	692.858	925.988

* p<0.05, ** p<0.01, *** p<0.001

Table 2: Corrected Logistic and Complimentary Log-Log Regressions Using Morgan, Bapat & Krustev (2009)

	Corrected Logit			CLogLog		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full	Per Capita GDP	Total GDP	Full CLogLog	Per Capita GDP	Total GDP
Democratic Sender and Target	-0.250**	-0.231**	-0.246**	-0.224*	-0.214*	-0.218**
	(0.090)	(0.089)	(0.082)	(0.087)	(0.086)	(0.079)
Membership in Security Council	0.747***	1.242***	0.727***	0.756***	1.233***	0.734***
	(0.101)	(0.095)	(0.100)	(0.101)	(0.095)	(0.100)
Value of Sndr imprt from Trgt/Sndr total imprt	0.079*	0.199***	0.045	0.076*	0.197***	0.046
	(0.034)	(0.023)	(0.031)	(0.033)	(0.023)	(0.030)
Value of Trgt imprt from Sndr/Trgt total imprt	0.248***	0.419***	0.289***	0.249***	0.410***	0.283***
	(0.043)	(0.028)	(0.040)	(0.041)	(0.027)	(0.039)
ln Sender Total GDP	0.504***		0.518***	0.483***		0.500***
	(0.046)		(0.044)	(0.044)		(0.043)
ln Target Total GDP	0.374***		0.379***	0.351***		0.358***
	(0.038)		(0.036)	(0.037)		(0.035)
ln Target Per-Capita GDP	-0.084*	0.197***		-0.068	0.185***	
	(0.042)	(0.043)		(0.040)	(0.042)	
ln Sender Per-Captia GDP	0.132**	0.578***		0.124**	0.568***	
	(0.047)	(0.059)		(0.046)	(0.057)	
Time Since Last Event	-0.402***	-0.424***	-0.403***	-0.375***	-0.409***	-0.377***
	(0.039)	(0.038)	(0.039)	(0.037)	(0.037)	(0.037)
ln km distance between Capitals	0.209***	0.529***	0.215***	0.203***	0.508***	0.206***
	(0.054)	(0.046)	(0.052)	(0.052)	(0.044)	(0.050)
Constant	-15.444***	-12.561***	-15.250***	-15.047***	-12.303***	-14.844***
	(0.811)	(0.697)	(0.722)	(0.766)	(0.655)	(0.683)
log_likelihood				-3260.827	-3393.339	-3265.402
LR_chi_square				3249.957	2603.851	3200.539

* p<0.05, ** p<0.01, *** p<0.001

Table 3: Corrected Logistic and Complimentary Log-Log Regressions Using Hufbauer *et al*. (2007)

	(1) Relogit	(2) CLogLog
Democratic Sender and Target	-0.567**	-0.574***
	(0.175)	(0.174)
Membership in Security Council	0.790***	0.788***
	(0.114)	(0.114)
Value of Sndr imprt from Trgt/Sndr total imprt	0.042	0.042
	(0.032)	(0.032)
Value of Trgt imprt from Sndr/Trgt total imprt	0.062	0.063
	(0.045)	(0.045)
ln Sender Total GDP	0.531***	0.530***
	(0.054)	(0.054)
ln Target Total GDP	0.055	0.054
	(0.050)	(0.050)
ln Target Per-Capita GDP	-0.435***	-0.434***
	(0.057)	(0.057)
ln Sender Per-Captia GDP	0.003	0.005
	(0.058)	(0.058)
Time Since Last Event	-0.149**	-0.147**
	(0.056)	(0.056)
ln km distance between Capitals	-0.454***	-0.452***
	(0.079)	(0.079)
Constant	-5.314***	-5.379***
	(0.918)	(0.916)
log_likelihood		-1923.486
LR_chi_square		451.163

* p<0.05, ** p<0.01, *** p<0.001

Table 4: Divided Polity2 Scores Using King & Lowe (2006)

	(1) ReLogit	(2) ClogLog
Sender Polity2 Score	-0.027*	-0.026
	(0.014)	(0.014)
Target Polity2 Score	0.004	0.005
	(0.012)	(0.011)
Membership in Security Council	0.824***	0.825***
	(0.154)	(0.154)
Value of Sndr imprt from Trgt/Sndr total imprt	0.054	0.050
	(0.070)	(0.069)
Value of Trgt imprt from Sndr/Trgt total imprt	0.179*	0.184*
	(0.075)	(0.074)
ln Sender Total GDP	0.541***	0.529***
	(0.089)	(0.087)
ln Target Total GDP	0.538***	0.532***
	(0.086)	(0.085)
ln Target Per-Capita GDP	-0.318***	-0.306***
	(0.076)	(0.075)
ln Sender Per-Captia GDP	0.277**	0.271**
	(0.093)	(0.092)
ln km distance between Capitals	-0.262**	-0.247**
	(0.097)	(0.095)
Time Since Last Event	-0.531***	-0.523***
	(0.147)	(0.142)
Constant	-14.968***	-14.980***
	(2.125)	(2.091)
log_likelihood		-1347.733
LR_chi_square		981.189

* p<0.05, ** p<0.01, *** p<0.001

Table 5: Divided Polity2 Scores Using Morgan, Bapat & Krustev (2009)

	(1) ReLogit	(2) ClogLog
Sender Polity2 Score	0.003	0.006
	(0.008)	(0.008)
Target Polity2 Score	-0.006	-0.005
	(0.007)	(0.007)
Membership in Security Council	0.752***	0.759***
	(0.101)	(0.101)
Value of Sndr imprt from Trgt/Sndr total imprt	0.075*	0.073*
	(0.035)	(0.034)
Value of Trgt imprt from Sndr/Trgt total imprt	0.244***	0.244***
	(0.044)	(0.042)
ln Sender Total GDP	0.504***	0.484***
	(0.046)	(0.045)
ln Target Total GDP	0.374***	0.354***
	(0.039)	(0.038)
ln Target Per-Capita GDP	-0.099*	-0.084
	(0.046)	(0.044)
ln Sender Per-Captia GDP	0.087	0.073
	(0.054)	(0.053)
Time Since Last Event	-0.402***	-0.376***
	(0.039)	(0.037)
ln km distance between Capitals	0.210***	0.203***
	(0.054)	(0.052)
Constant	-15.063***	-14.654***
	(0.796)	(0.751)
log_likelihood		-3252.274
LR_chi_square		3184.296

* p<0.05, ** p<0.01, *** p<0.001

Table 6: Lagged Variables of Concern Using King & Lowe (2006)

	(1) ReLogit	(2) ClogLog
Democratic Sender and Target	-0.482**	-0.442**
	(0.164)	(0.160)
Membership In UNSC	0.786***	0.797***
	(0.156)	(0.157)
Constant	-12.206***	-12.433***
	(2.104)	(2.094)
Temporal Splines	Yes	Yes
Distance Between Capitals Control	Yes	Yes
L.Bilateral Trade Controls	Yes	Yes
L.Per Capita GDP Controls	Yes	Yes
L.Total GDP Controls	Yes	Yes
log_likelihood		-1274.339
LR_chi_square		1218.218

* p<0.05, ** p<0.01, *** p<0.001

Table 7: Lagged Variables of Concern Using Morgan, Bapat & Krustev (2009)

	(1) Relogit	(2) Cloglog
Democratic Sender and Target	-0.252**	-0.225*
	(0.092)	(0.088)
Membership In UNSC	0.716***	0.725***
	(0.103)	(0.103)
Constant	-14.004***	-13.697***
	(0.866)	(0.821)
Temporal Splines	Yes	Yes
Distance Between Capitals Control	Yes	Yes
L.Bilateral Trade Controls	Yes	Yes
L.Per Capita GDP Controls	Yes	Yes
L.Total GDP Controls	Yes	Yes
LR_chi_square		3521.201

* p<0.05, ** p<0.01, *** p<0.001

Table 8: First Sanction Event Dependent Variable Using King & Lowe (2006)

	(1) Cloglog	(2) Relogit
Democratic Sender and Target	-0.400*	-0.417*
	(0.168)	(0.170)
Membership In UNSC	0.720***	0.718***
	(0.158)	(0.159)
Constant	-14.239***	-14.200***
	(2.103)	(2.119)
Temporal Splines	Yes	Yes
Bilateral Trade Controls	Yes	Yes
Distance Between Capitals Control	Yes	Yes
Per Capita GDP Controls	Yes	Yes
Total GDP Controls	Yes	Yes
log_likelihood	-1266.297	
LR_chi_square	820.971	

* p<0.05, ** p<0.01, *** p<0.001

Table 9: First Sanction Event Dependent Variable Using Morgan, Bapat & Krustev (2009)

	(1) Cloglog	(2) Relogit
Democratic Sender and Target	-0.209*	-0.223*
	(0.098)	(0.099)
Membership In UNSC	0.757***	0.754***
	(0.107)	(0.107)
Constant	-14.396***	-14.512***
	(0.889)	(0.908)
Temporal Splines	Yes	Yes
Bilateral Trade Controls	Yes	Yes
Distance Between Capitals Control	Yes	Yes
Per Capita GDP Controls	Yes	Yes
Total GDP Controls	Yes	Yes
log_likelihood	-3049.383	
LR_chi_square	1914.927	

* p<0.05, ** p<0.01, *** p<0.001

Table 10: UNSC Membership by Sender/Target Using King & Lowe (2006)

	(1) Relogit	(2) Cloglog
Democratic Sender and Target	-0.536***	-0.507***
	(0.154)	(0.152)
Sender UNSC	0.742***	0.713***
	(0.162)	(0.160)
Target UNSC	0.396**	0.380*
	(0.151)	(0.148)
Constant	-14.868***	-14.816***
	(2.034)	(2.001)
Temporal Splines	Yes	Yes
Bilateral Trade Controls	Yes	Yes
Distance Between Capitals Control	Yes	Yes
Per Capita GDP Controls	Yes	Yes
Total GDP Controls	Yes	Yes
Conflict Controls	Yes	Yes
log_likelihood		-1406.419
LR_chi_square		1176.086

* p<0.05, ** p<0.01, *** p<0.001

Table 11: UNSC Membership by Sender/Target Using Morgan, Bapat & Krustev (2009)

	(1) Relogit	(2) Cloglog
Democratic Sender and Target	-0.248**	-0.215*
	(0.091)	(0.087)
Sender UNSC	0.875***	0.838***
	(0.107)	(0.106)
Target UNSC	0.127	0.104
	(0.102)	(0.097)
Constant	-15.124***	-14.690***
	(0.823)	(0.780)
Temporal Splines	Yes	Yes
Bilateral Trade Controls	Yes	Yes
Distance Between Capitals Control	Yes	Yes
Per Capita GDP Controls	Yes	Yes
Total GDP Controls	Yes	Yes
log_likelihood		-3259.454
LR_chi_square		3555.339

* p<0.05, ** p<0.01, *** p<0.001

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8 Appendix

Countries Included in Study		
Afghanistan	Germany	Norway
Albania	Ghana	Oman
Algeria	Greece	Pakistan
Andorra	Grenada	Palau
Angola	Guatemala	Panama
Antigua & Barbuda	Guinea	Papua New Guinea
Argentina	Guinea-Bissau	Paraguay
Armenia	Guyana	Peru
Australia	Haiti	Philippines
Austria	Honduras	Poland
Azerbaijan	Hong Kong	Portugal
Bahamas	Hungary	Qatar
Bahrain	Iceland	Romania
Bangladesh	India	Russia
Barbados	Indonesia	Rwanda
Belarus	Iran	Samoa
Belgium	Iraq	San Marino
Belize	Ireland	Sao Tome and Principe
Benin	Israel	Saudi Arabia
Bhutan	Italy	Senegal
Bolivia	Ivory Coast	Seychelles
Bosnia and Herzegovina	Jamaica	Sierra Leone
Botswana	Japan	Singapore
Brazil	Jordan	Slovakia
Brunei	Kazakhstan	Slovenia
Bulgaria	Kenya	Solomon Islands
Burkina Faso	Kiribati	Somalia
Burundi	Kuwait	South Africa
Cambodia	Kyrgyzstan	South Korea
Cameroon	Laos	Spain
Canada	Latvia	Sri Lanka

Countries Included in Study (Cont.)		
Cape Verde	Lebanon	St. Kitts and Nevis
Central African Republic	Lesotho	St. Lucia
Chad	Liberia	St. Vincent and the Grenadines
Chile	Libya	Sudan
China	Liechtenstein	Suriname
Colombia	Lithuania	Swaziland
Comoros	Luxembourg	Sweden
Congo	Macedonia	Switzerland
Costa Rica	Madagascar	Syria
Croatia	Malawi	Taiwan
Cuba	Malaysia	Tajikistan
Cyprus	Maldives	Tanzania
Czech Republic	Mali	Thailand
Democratic Republic of the Congo	Malta	Togo
Denmark	Marshall Islands	Tonga
Djibouti	Mauritania	Trinidad and Tobago
Dominica	Mauritius	Tunisia
Dominican Republic	Mexico	Turkey
East Timor	Moldova	Turkmenistan
Ecuador	Monaco	Tuvalu
Egypt	Mongolia	Uganda
El Salvador	Morocco	Ukraine
Equatorial Guinea	Mozambique	United Arab Emirates
Eritrea	Myanmar	United Kingdom
Estonia	Namibia	United States of America
Ethiopia	Nauru	Uruguay
Federated States of Micronesia	Nepal	Uzbekistan
Fiji	Netherlands	Vanuatu
Finland	New Zealand	Venezuela
France	Nicaragua	Vietnam
Gabon	Niger	Yemen
Gambia	Nigeria	Yugoslavia
Georgia	North Korea	Zambia
		Zimbabwe