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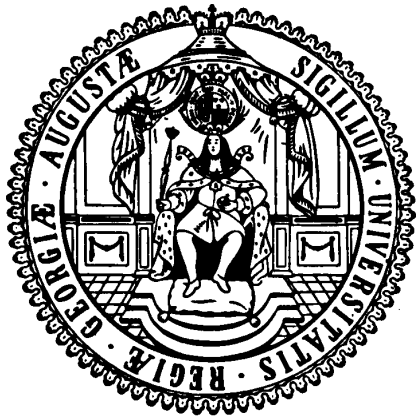

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Political Determinants of the Extensive and Intensive Margins of International Arms Transfers

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Political Determinants of the Extensive and Intensive Margins of International Arms Transfers

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Abstract
The main aim of this paper is to investigate the political determinants of international arms transfers. We distinguish between the decision to exports arms (extensive margin) and the value of the arms exported (intensive margin). A theoretically-justified gravity model of trade augmented with political factors is estimated using a two-stage panel-data approach for 104 exporting countries over the period 1950 to 2007. As main political factors the level of democracy in the trading partners as well as the political orientation of the ruling governments are considered. Furthermore we account for the political differences between trading partners, the political environment differences in their respective regions and the existence of military pacts. The main results indicate that political closeness between countries is an important determinant of transfers in arms and that economic and strategic interests are not the only drivers of the transfers.

JEL classification*:* F14, F51
Key Words: arms trade, political factors, democracy, conflict, gravity model, military pacts

I - Introduction

In the past few years, a number of investigations have stressed the importance of analysing the determinants of international trade at the industry/product level, in particular to be able to account for specific economic and political factors that are industry-specific. The armament industry is usually referred to as being particularly different from other industries with regard to the role played by the political environment on the decision to export. Many fast growing developing countries have been increasing their capacity to produce arms and are trying to establish a domestic military industry to be less dependent on imported arms (Brauer 2000). However, these countries have not yet been successful in becoming exporters of arms on a larger scale (Brauer 2007). For this reason, supply of military goods is very concentrated globally[1] and international trade of arms remains an important issue.

Understanding how the political environment affects the decision to export arms is crucial to provide a scientific basis to the public debate about the regulation of trade in mayor weapon systems. Furthermore, it is also relevant to investigate the relative importance of the main drivers of demand constraints in arms' trade, in particular conflicts, the degree of militarization of the society, the existence of military agreements and the effectiveness of embargoes. Despite the undisputed importance of the political environment in the transfer decision, little has been done so far to investigate the political factors determining transfers of arms between countries. To the best of our knowledge, there are only two studies (Akerman & Seim 2012; Comola 2012) that have made some progress in this direction.

The principal aim of this paper is to investigate a number of political factors that affect the decision to exports arms and the value of the transfer. As main factors we consider the level of democracy in the trading partners as well as the political orientation of the ruling governments. Moreover, we also account for the political differences between trading partners and the political environment in their respective regions and for military and strategic pacts. To our knowledge, this is the first study that consistently investigates the political determinants of the extensive and intensive margins of international trade in arms using up-to-date panel-data econometric models and a comprehensive sample of countries and years.

1 This is commonly attributed to the “military malthusianism”, which describes that unit costs of major weapon systems rise faster than government budget revenues and make it impossible for countries to achieve economies of scale and entirely cope with costs of development and production of arms for a country on its own (Brauer & Dunne 2011).

The main novelties with respect to previous studies are threefold. First, we focus not only on the level of democracy as Akerman & Seim (2012) do, but also on the political orientation of the ruling governments and on the political similarities between trading partners and the political environment of regions where there are located. Second, whereas a categorical variable with only three dimensions, limited time coverage and country-time variation were used by Comola (2012) to measure political orientation, we use instead a measure of political orientation based on the countries' voting behaviour in the United Nations General Assembly, which has more variability and an extended time coverage. Third, in our research we control for a number of factors that were not included in previous research and we also distinguish between the determinants of the decision to export (extensive margin of exports) and the determinants of the average amount exported (intensive margin of exports). Since both decisions are related, we use a Helpman et al. (2008) two-stage estimation procedure to control for selection-bias and firm heterogeneity. We also control for time-invariant unobservable heterogeneity by experimenting with different sets of fixed effects.

Our estimation framework is based on a theoretically-justified gravity model of trade, which is applied to data for more than 100 countries over the period 1950 to 2007. In order to test for the robustness of the results, we estimate the model using several variations of our dataset and estimation techniques. Furthermore we compare transfers of arms with trade in goods and evaluate differences in the impact of the two political dimensions.

The main results show that the political factors considered are relevant to explain the two trade margins of arms transfers. The end of the Cold War appears to have changed the impact and direction for several political factors, especially for those measuring the political environment in the region. Differences in the political orientation remain to have a significant negative impact on two countries probability to transfer arms.

This paper is structured as follows: section II describes the existing empirical literature in this field and section III gives an overview of the data used. Section IV presents the empirical analysis, section V discuss the main findings and section VI concludes.

II - Literature

In order to approve a transfer of arms, the countries involved have to evaluate whether the associated benefits outweigh the risks and costs attached to the transfer. Whereas the gains for the exporting country include revenues for the domestic industry in related sectors and in turn the protection of jobs in these industries, the costs are mainly related to political, economic and strategic factors (Brauer 2000 and 2007). Furthermore, exporting should also generate increasing economies of scale, resulting in lower costs and enhanced international competitiveness of involved firms. These gains can however be offset by potential negative effects, which are linked to the fact that the exporting country looses control over arms once they are exported. Thus, as arms could eventually be used against the exporter or his allies, the transfer of tools of destruction can be seen as problematic from a strategic standpoint. In addition, potential copyright infringements or negative reactions and pressure from third countries can emerge as a reaction on weapon exports, and especially in democratic countries, a negative reaction in the public opinion can be provoked.

While for the trade partners, the transfer can establish or strengthen their relationship, it can also lead to a transfer of knowledge[2], probable attempts to influence the importers' policy[3] and may start or fuel an arms race in the region of the importer. All effects have different implications for the potential trading partners depending on the conditions of the contract. In addition to the mostly self-serving reasons described above, arms transfers can also be the result of an altruistic behaviour with the aim to help the receiving country maintaining or re-establishing safety and security (Akerman & Seim 2012).

The described potential positive and negative effects create uncertainty about the real outcomes in different aspects related to the transfer. The political environment in the recipient country can be an indicator of the level of uncertainty as well as the political differences between supplier and recipient. Indeed, some authors find that countries may discriminate against certain political regimes. In particular, Blanton (2000) finds for the USA that exports of arms are more likely sent to

2 According to Brauer & Dunne (2009), the knowledge transfer of offset agreements is, if existing at all, relatively small.

3 Investigating arms exports of the USA, Sislin (1994) finds successful attempts to influence the partner countries under certain conditions, especially in the first decades of the cold war.

democratic countries. This can either be due to support of the USA for countries that are politically close or be du to the fact that the USA expect negative effects to be in general lower when exporting to democratic countries than when sending arms to autocratic regimes.

The political determinants of arms transfers have been investigated, to our knowledge, by only two studies. Both use the same dataset on transfers in arms and put the main emphasis on changes after the end of the cold war, but differ in the political aspects and time periods covered, the econometric approach and their main results.

The first study by Akerman & Seim (2012) investigates the impact of the level of democracy on the probability to trade arms for 34 countries and the years 1950-2007 using a linear probability model with fixed effects. They find that the squared difference in polity between trading partners has a large and significant negative impact on the target variable, but that the effect turns out to be positive and insignificant after the end of the cold war. The main shortcoming of this study is the use of a linear probability model, since the residuals violate assumptions about homoskedasticity and normality of errors and this results in invalid standard errors and hypothesis tests. A second limitation is that they only focus on the decision to transfer arms, thus disregarding the effect on the quantity transferred.

The second study by Comola (2012) extends the analysis by using the political orientation of the trading countries as a second political dimension. She investigates the effect of both political dimensions, namely democracy and political orientation, on the volume of arms exported from the 20 major exporters to all independent countries recognized by the United Nations in the period 1975-2004. The estimation method is a gravity-type Tobit model with exporter, importer and time fixed-effects. The main findings are that democracies tend to export and import more arms than autocracies and that while democracies export them mostly to rich countries, autocracies have the tendency to export to poor countries. Furthermore, sharing a political orientation has a positive impact on trade that sharply decreases after the end of the cold war, especially for democracies. It is worth noting that the measure of political orientation used, which is constructed using the World Bank Development Research Group's Database of Political Institutions, has several shortcomings. First, it only covers the time period after 1974 and in many cases has no information on the political orientation of the ruling party and thus has many missing values. Second, the variable is a subjective measure, which is not strictly comparable between countries[4] and

4 Governments of Clinton and Carter in the USA for example are defined as left-wing, thus with the identical political

distinguishes only three categories[5] that can not capture smaller changes in the political orientation. Third, it focuses on economic policy rather than on foreign policy aspects and has no variation over time for communist countries, while capitalist or market liberal countries have governments from all three categories. Finally, methodologically it fails to acknowledge the recent advances in gravity-modelling concerning panel data since it does not include dyadic fixed effects, but only exporter and importer fixed effects, which do not control for all the unobserved heterogeneity that is time-invariant and country-pair specific.

Both studies find that political determinants to be important in explaining international flows of MCWs and both describe a decrease in the importance of political differences between supplier and recipient after the end of the cold war. We will extend these studies by using a more comprehensive dataset that includes all exporters and importers trading arms, an extended set of policy variables and controls as well as a more suitable estimation technique that allows us to distinguish between the effect on the extensive and intensive margins of arms trade.

III - Data

In our analysis we combine information from different fields of research and various sources in order to control for different aspects of the transfer of arms. This section describes the data and the construction of variables. The study covers the period from 1950 to 2007 and uses data for 104 suppliers of arms and 154 recipients listed in Tables 5 and 6 in the Appendix.

III.I - Data on Arms Transfers

The identification of trade in arms and ammunitions in the available trade classifications is not straightforward. Although recent revisions of the categories listed in the Harmonized Commodity Description and Coding Systems (HS) allow us to isolate exports and imports of arms and ammunition[6], the data is mostly based on reports of the importing and exporting countries[7] and covered trade in arms is described as being “spotty” (Brauer 2007).

orientation as communist countries like the Democratic People's Republic of Korea.

5 The dataset distinguishes between regimes that are either left, right, centrist or cannot be assigned to any of the three.

6 For example the HS12 goods categories has an entry for “arms and ammunition and parts and accessories thereof” (HS12-93).

7 Due to confidentiality reasons, countries may not report all of its detailed trade. In data sources like UN Comtrade this trade will usually be included in a category called “others” and in the total trade value. In many cases, this makes it impossible to identify the sum of trade for a single commodity.

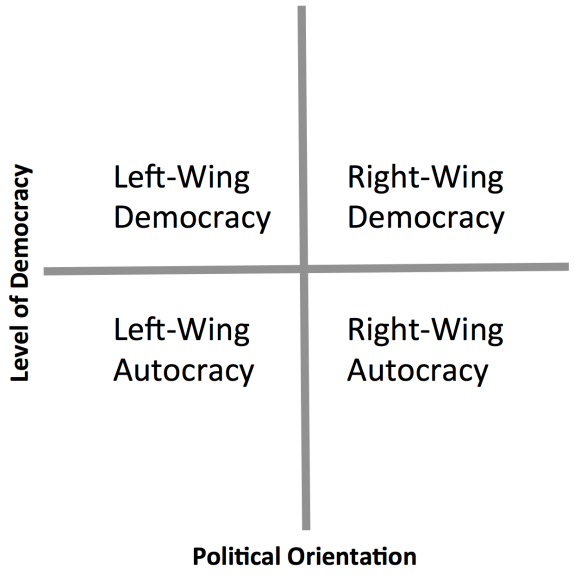
Therefore, we use data on arms transfers from the SIPRI Arms Transfers Database. It covers major conventional weapons (MCW) including air defence systems, aircrafts, anti-submarine warfare weapons, armoured vehicles, artillery, engines (for ships, armoured vehicles and aircrafts), missiles, satellites, sensors, ships and components such as guns and turrets for the years from 1950 until 2012. Information comes from various sources including the media, governments, non-governmental organizations and international institutions. The transfers can be of official and unofficial nature and not necessarily involves a direct payment. Transfers to rebel groups or non-governmental organizations within the recipient countries are excluded from our sample.

In addition to agreements of transfers, in a separate dataset SIPRI provides information on the volume transferred between the two parties for the year of the delivery. It is based on the known unit production costs of a core set of weapons and is intended to represent the transfer of military resources rather than the financial value or sales price of the transfer. For used arms the volume is discounted by 33 or 60 percent depending on whether or not it has been refurbished significantly. The volume is denoted as trend-indicator value (TIV) in million US$ at constant (1990) prices. Deliveries with a value of less than US$ 500,000 are denoted as a zero. When the transfer is carried out over several years, the value is split according to the deliveries for each single year.

III.II - Political Dimensions

In order to derive a simplified picture of the political landscape in the world, we distinguish between two different political dimensions: the level of democracy and the political orientation. We end up with four main groups of governments: left-wing democracies, right-wing democracies, left-wing autocracies and right-wing autocracies (Figure 1).

Figure 1: Political Dimensions



For the level of democracy, data comes from the polity2 variable in the POLITY IV database hosted by the Center for Systemic Peace and George Mason University. It ranges from -10 (strongly autocratic) to +10 (strongly democratic).

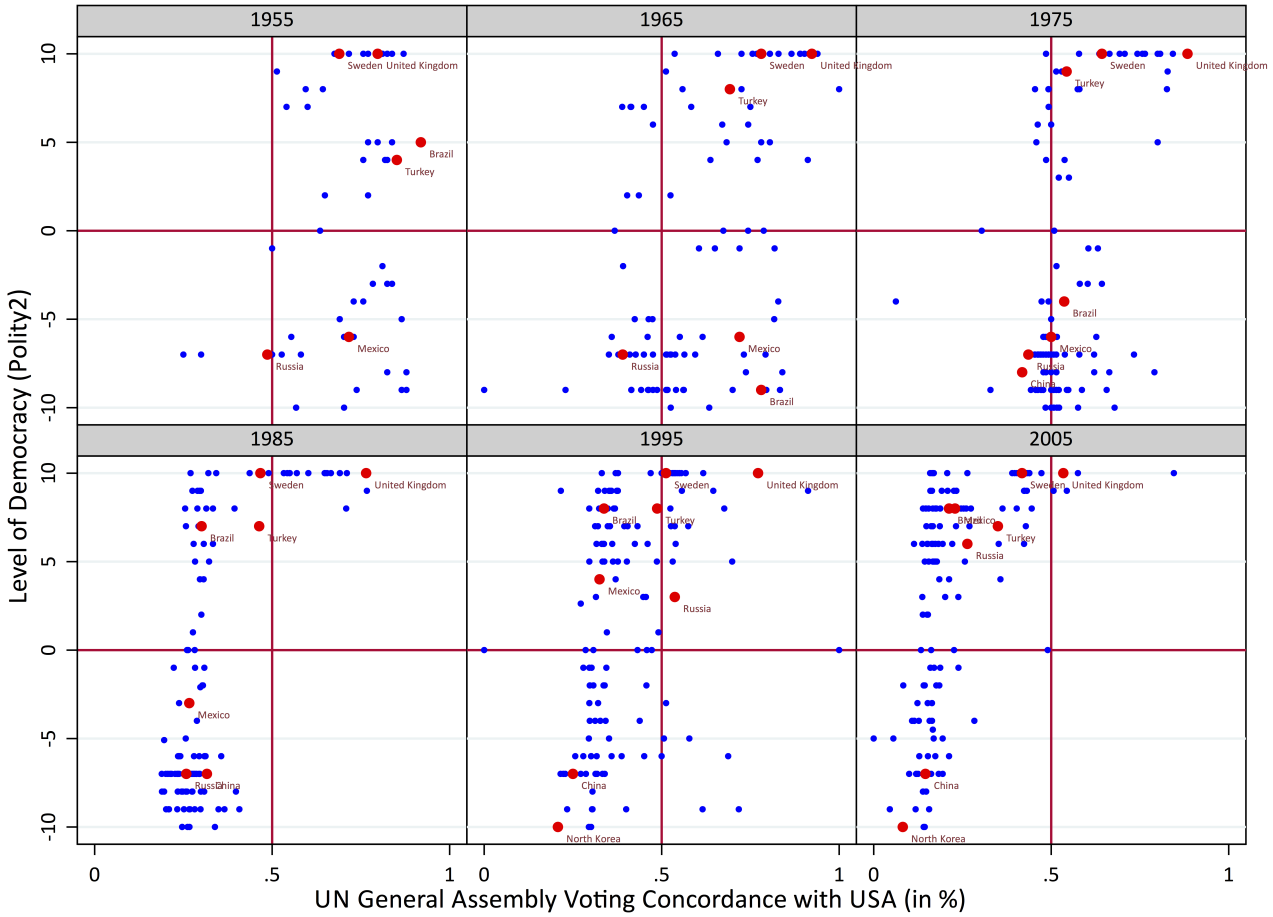
As described in section II, the most common measure for political orientation has several flaws. We therefore measure political orientation using a new approach, which clearly differs from Comola (2012). In the last sixty years, the world may have shifted from a bipolar system to a unipolar or multipolar system, but with the USA still remaining as a (sole) superpower. We assume that the political orientation of the USA is constant throughout our sample period, take the USA as a point of reference in political orientation and measure distance to the political orientation of the USA by using differences in the voting behaviour in the UN General Assembly (UNGA). We take UNGA Voting Data by Voeten and Strezhnev. The authors constructed a voting similarity index ranking from 0 to 1, which is computed with three categories (approval, abstain and disapproval for an issue) and where abstention is counted as half-agreement with a yes or no vote. The data is described by the authors as measuring common “interests” or “preferences” and we attribute differences in the UNGA voting behaviour to differences in the political alignment of the foreign policy. We believe that this captures political orientation in a more accurate way than the measure used by Comola (2012). To illustrate our argument, we give an example: The Labour government of Tony Blair in United Kingdom (1998-2010) and the Republican government of George W. Bush in the USA (2001-2008) have usually been perceived as being very similar with regard to foreign policy. Nevertheless, according to the dataset of the World Bank they are on opposite sides with

regard to political orientation, while their voting concordance in the UN General Assembly is one of the highest for all countries during that period. Furthermore, the two governments cooperated heavily in the exchange of arms. According to the SIPRI dataset, there are 44 agreements to transfer arms between both countries In the years 2001-2008, which is a very high number.

We do not only look at the two above-mentioned dimensions for supplier and recipient separately, but also bilaterally and regionally. In this way, we are able to account for the spatial dimension of political and international security aspects that could also affect arms transfers. Hence, we first use the level of both dimensions for supplier and recipient to control for its level of democracy and its political orientation. Second, we use the absolute difference of each dimension between supplier and recipient to control for differences between both countries in both dimensions. Third, we also include as regressors the average value of the political dimensions for all countries in the region, separately and in absolute differences. The latter is supposed to control for the political environment in the region of supplier and recipient to ensure that the effect of the political country variables are not just capturing the fact that countries with a certain political angle are often located close together geographically. For example countries surrounded by autocracies may in general have a different supply or demand for arms than those surrounded by democracies.

In what follows we examine the degree of correlation between both political dimensions. Figure 2 shows that democratic countries in general do not have higher voting concordance with the USA, although in the past two decades there has been a stronger relationship. Voting concordance with USA is on average declining over time and the level of democracy is rising after a downturn around the 1970s. The only persistent pattern we find is a group of highly democratic countries with relatively similar voting behaviour to the USA that mostly consists of northern democracies.

Figure 2: Political Orientation and Level of Democracy in Single Years



Notes: Marker indicate countries. The red markers shows a few countries as examples tracked over time; The figure only shows countries that were members of the UN and participated in the voting of the UN General Assembly.

III.III - Control Variables

Other variables included in the analysis come from a number of different sources. Information on gross domestic product (GDP) was extracted from the Maddison Project, that, to our knowledge, is the only source of GDP data that also covers socialist or communist countries. Cultural and geographical characteristics are measured with several variables taken from the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). We use data on conflicts provided by the dataset of armed conflicts from Centre for the Study of Civil War (CSCW) and the Uppsala Conflict Data Program (UCDP) at the Department of Peace and Conflict Research at Uppsala University and information on mandatory UN embargoes from the SIPRI Arms Embargoes Database. Data on the share of the military personnel comes from the National Material Capabilities (v4.0) dataset and information on military and strategic pacts comes from the Formal Alliances (v4.0) dataset of the Correlates of War Project (COW).

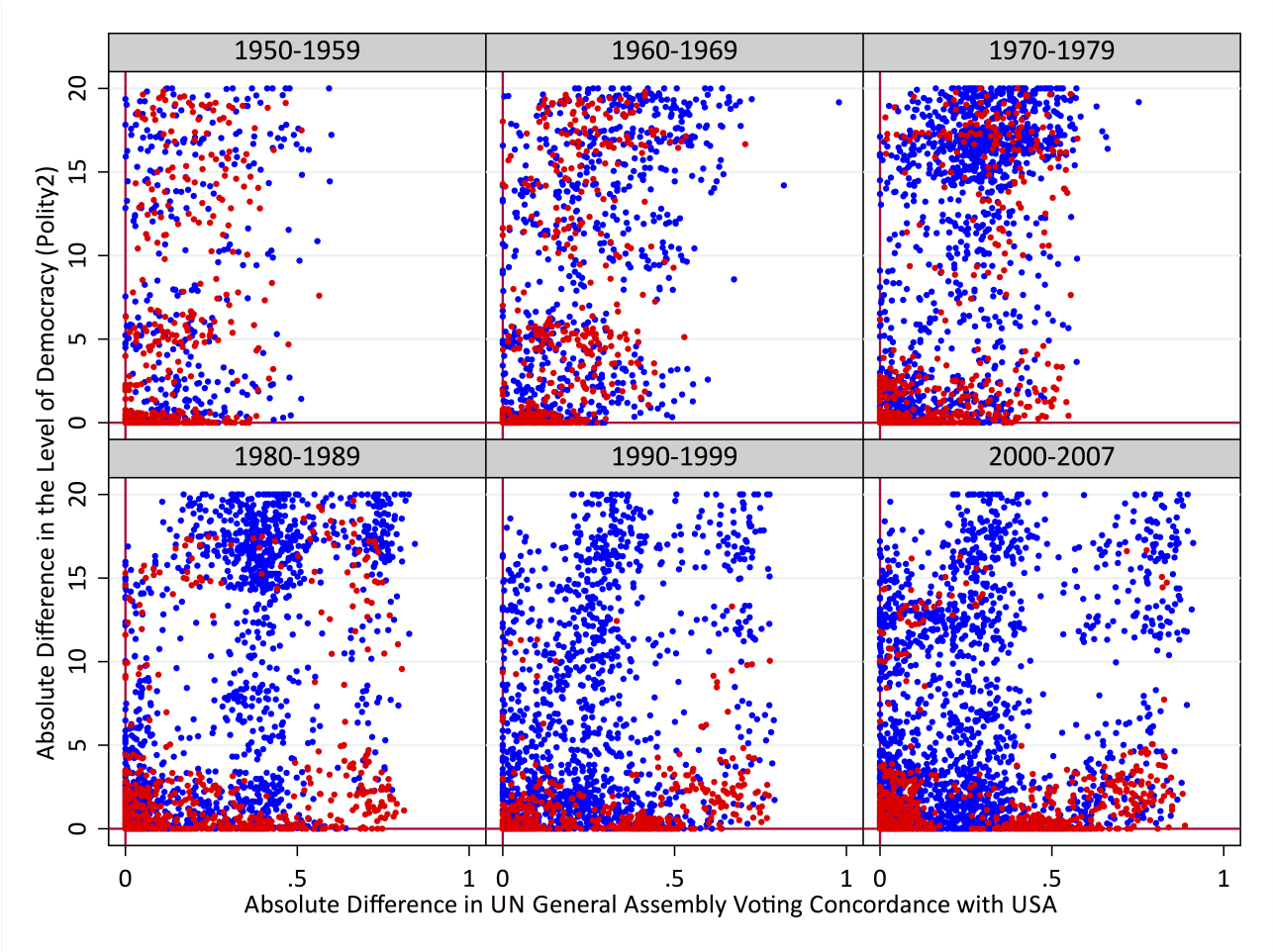
IV - Analysis

In this Section, we first conduct a simple descriptive analysis that looks at differences between country-pairs that trade and those that do not trade arms and at the political similarity between the trading countries. Second, we conduct an empirical analysis to investigate the determinants of the probability to trade arms and the volume of the transactions.

IV.I - Descriptive Analysis

The evolution of political similarity of countries trading arms for each decade is shown in Figure 3. The figure shows that in the 1950s transfers of arms mostly occurred between the members of a defence agreement and the largest amount of transfers was between countries with very similar levels of democracy and political orientation. In the following decades, transfers were increasingly taking place between countries more unequal in both political dimensions. Since the end of the cold war, transfers again have mostly been taking place between countries that are politically close in both dimensions. The share of transfers within defence agreements is declining over time. Interestingly, in the last three decades transfers within defence agreements have often been between countries that were very different in terms of political orientation, but did not differ in the level of democracy.

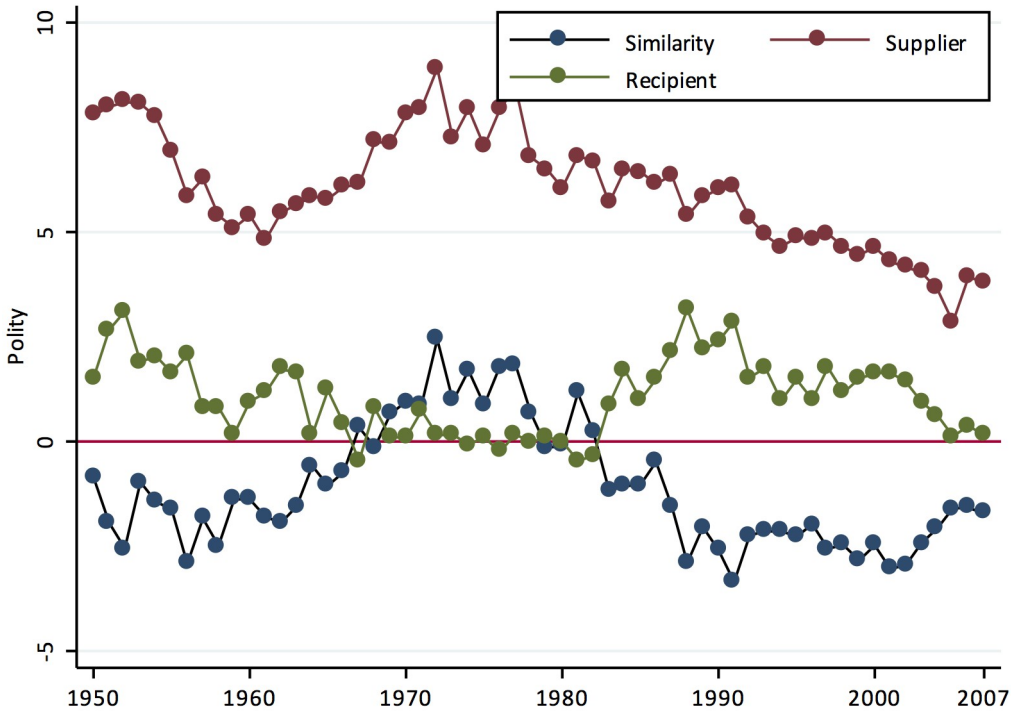
Figure 3: Similarity in Level of Democracy and Political Orientation Between Trading Partners



Notes: Blue and red markers indicate agreement on a transfer of arms in the given decade; Red markers indicate that a defence agreement between trading partners is in place; Location of Markers are slightly perturbed to avoid overprinting of markers.

When comparing over time the average level of democracy of countries that are involved in the transfer of arms with those not involved, it is striking that for the exporting country the average polity2 is much higher (Figure 4). The difference varies over time between four and nine points on the polity2 scale and is decreasing over time. For the importing country, polity tends to be slightly higher than for non-importers except for the period from the mid 1960s until the early 1980s when the difference is close to zero. For the same time period, absolute difference in polity2 between countries that trade arms is higher than for others. Apparently, in the "hottest phase" of the cold war, countries trading arms had more pronounced differences in the level of democracy than countries not involved in the transfer of arms. Before and after this period, differences in the level of democracy are smaller for country-pairs that trade arms.

Figure 4: Difference in Polity of Countries Transferring Arms

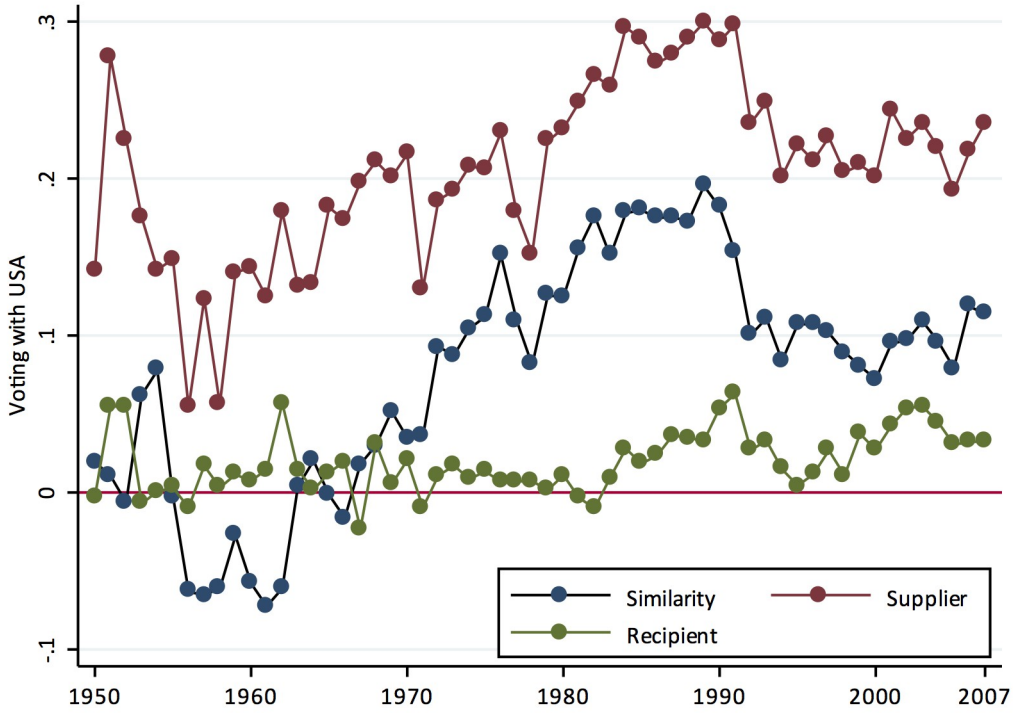


Notes: Graph shows the difference in the mean polity2 of countries transferring arms with the total sample. Negative values indicate lower polity for countries that transfer arms.

Figure 5 analyses in a similar way differences in political orientation over time. On the one hand, we find that countries exporting arms tend to have on average a voting behaviour more similar to the US than countries that do not export arms, whereas importer of arms tend to show slightly higher orientation towards the USA than non-importers, but less pronounced than exporters and only for some years. On the other hand, similarity in political orientation tends to be lower between countries trading arms than between those not trading arms from the mid 1960s onwards. Political differences between trading countries and political orientation towards the USA of the suppliers of arms is increasing strongly over time.

To sum up, countries exporting arms appear to be more democratic and oriented towards the USA, while recipient countries are close to non-trading countries with regard to both dimensions. While countries trading arms appear to be closer in the level of democracy, they tend to be more different with regard to their political orientation than countries that do not trade arms.

Figure 5: Difference in Voting Concordance with USA of Countries Transferring Arms



Notes: Graph shows the difference in the mean voting concordance with the USA of countries transferring arms with the total sample. Negative values indicate lower voting concordance with the USA.

IV.II - Econometric Approach

Our econometric analysis is based on the gravity model of trade augmented with a number of variables that capture the political situation of supplier and recipient and others that are expected to influence trade in arms for the reasons explained below. The gravity model has been widely used to model bilateral trade flows and it is suitable to estimate the effect of specific economic and political factors on trade. It was first used to estimate trade flows by Tinbergen (1962) extended with theoretical foundations by Anderson (1979) and later by Anderson & van Wincoop (2003) taking into account relative trade costs in the form of multilateral resistance to trade[8].

We use standard gravity variables namely GDP and GDP per capita, distance between the country-pair and categorical variables that control for geographical and cultural closeness. In addition, we control for the demand and supply of arms due to conflicts in the recipient country, arms embargoes against the recipient country and military pacts and strategical agreements between supplier and recipient.

8 For a thorough description of the gravity model of trade see chapter V in Feenstra (2004).

In order to estimate determinants of arms transfer correctly, we also need information on the industrial capacity of the domestic arms industry and domestic demand for arms. As information on both for the time period of this study is hard to find, we add to the model the share of military personnel divided by the total population as a measure of the degree of militarization in a society and demand for equipment. Militarization can affect supply and demand for arms through various channels. First, a ceteris paribus higher degree of militarization and therefore higher domestic demand for arms is expected to strengthen the domestic arms industry. The reason for this is that domestic production of arms and equipment is usually preferred over foreign production for political and strategic reasons in particular if it can satisfy the needs of the military. Increased demand for domestic production makes exports of arms more likely due to the existence of economies of scale. Concerning the probability to import, a higher degree of militarization has an ambiguous effect: if higher domestic demand for arms contributes to the formation of a competitive arms industry that can satisfy the domestic demand, it should lead to less imports of arms. Otherwise, demand for foreign arms should be positive related to the size of the military industry.

Political factors, the main focus of this investigation, are modelled using several variables: First, we include the level of democracy and our measure of political orientation for supplier and recipient. Second, the absolute difference between supplier and recipient for both dimensions. And third, in order to capture the political environment in the region of the exporter and the importer, we include the average value for both variables of all countries that are geographically close.

The empirical model is specified as a probit model to estimate the determinants of the probability that countries i and j agree on a transfer of MCWs:

$$Pr(transfero_{ijt}=1|X)=\varphi(\alpha+X'\beta+\kappa_i+\lambda_j+\alpha_t+\varepsilon_{ijt}) \quad , \quad (1)$$

where the dependent variable, $transfero_{ijt}$, takes the value one if j placed an order of major conventional arms in i, or in the case of licensed production, a licence was issued in year t and zero otherwise. The vector of regressors X assumed to influence the outcome and consists of the following variables[9]: ln GDP_{it} and ln GDP_{jt} denote the natural logarithm of the gross domestic product for the supplier and the recipient in year t and ln $GDPpc_{it}$ and ln $GDPpc_{jt}$ the natural logarithm of gross domestic product per capita for both countries. Trade costs proxied by geographical and cultural distance are measured with the natural logarithm of distance between

9 See table 9 for an extensive description of all variables in the model.

capitals of i and j ($lnDistance_{ij}$), a dummy variable that takes the value one if i and j share a border ($Contiguity_{ij}$), a common language ($Language_{ij}$), or common colonial past ($Colony_{ij}$) and a variable that takes the value one if i or j and two if both are landlocked ($Landlocked_{ij}$).

The first political dimension in the model is the level of democracy. We account for the level of democracy for the supplier ($Polity_{it}$) and the recipient ($Polity_{jt}$), the absolute difference in the level of democracy between both ($Polity\_diff_{ijt}$) and the average level of democracy of the surrounding countries for the supplier ($Polity\_region_{it}$) and the recipient ($Polity\_region_{jt}$). Our measure for the second dimension political orientation is covered in a similar fashion for the supplier ($votewithUSA_{it}$), the recipient ($votewithUSA_{jt}$), the absolute difference between both variables ($votewithUSA\_diff_{ijt}$) and the average value of surrounding countries of the supplier ($votewithUSA\_region_{it}$) and the recipient ($votewithUSA\_region_{jt}$).

The degree of militarization is included for the supplier ($Militarization_{it}$) and the recipient ($Militarization_{jt}$). The dummy variable $Conflict_{jt}$ indicates involvement of the government of the recipient in a military conflict with another party and at least 25 battle related deaths. $Pact_{ijt}$ is a variable that takes the value one if countries i and j have any kind of military or strategic agreement in place in year t. This can either be to remain neutral, a promise not attack each other, to consult each other if a crisis occurs or to defend each other. $Embargo_{jt}$ takes the value one if a mandatory UN embargo is in place against country j in year t. Besides the nonlinear probit model, we estimate a linear probability model (LMP) that has the advantage of giving a rough but easily interpretable impression of the size of the effect for each variable in the model without calculating marginal effects.

The main concern regarding the estimation of equation (1) is that estimates are rendered biased by unobservable heterogeneity that is time invariant and country specific or time varying and common to all countries and correlated with the error term. Given the large number of observations of over 500.000 in our sample we have chosen to include fixed-effects by “brute-force” which has the disadvantage of having high demands in terms of computational power. According to Baltagi (2013), the bias is then considerably reduced when having a high number of observations. In order to control for the bilateral time-invariant heterogeneity we follow in a separate regression the approach by Mundlak (1978) and include in equation (1) the time averages of the time variant covariates as additional explanatory variables.

IV.III - Volume of Transferred Arms

Estimates on the probability to transfer arms do not account for the size of the transfer, only whether or not a transfer was agreed on. Thus, the transfer of a single armoured vehicle is given the same importance as the transfer of 200 fighter aircrafts. In order to account for the size of the transfer, we estimate a model with the same explanatory variables as in model (1) on a measure of the volume of transferred arms:

$$\ln Volume_{ijt} = \beta_0 + \beta_1 X + \kappa_i + \lambda_j + \alpha_t + \varepsilon_{ijt} \quad . \qquad (2)$$

The dependent variable is the natural logarithm of the value of transferred major conventional arms from country i to country j in year t measured with the TIV of the SIPRI Dataset on Transferred Arms. Different to model (1) where t specifies the year of the agreement about the transfer, for the transferred value t denotes the time of the delivery. Thus, a transfer that was agreed on in one year and appears in model (1) only one time can be conducted over several years and appear in model (2) several times, always with the transferred value of that year. As described in section III.I, transfers with a TIV of below 500,000 in constant (1990) US$ are denoted as zero and are therefore not included the regression.

IV.IV - Two-Stage Approach

The latter model has the disadvantage, that, because the dependent variable is transformed by taking the natural logarithm, all trade flows with a TIV of zero are not included in the model. This may cause a sample selection bias associated with unobserved barriers to transfers of arms that are correlated with observed ones and are important in explaining the volume of transfers between country i and j. The bias could be particularly large due to the very high fraction of zeros in the dependent variable of almost 98 percent. Furthermore, due to the wide range of industries involved in the military industrial complex and the importance of cooperations of firms and consortia we expect the firms in this sector to be very heterogeneous. When leaving this heterogeneity uncontrolled, estimates of the intensive margin will be biased.

Following Helpman et al. (2008), we estimate a two-stage model that allows us to control for unobserved firm heterogeneity and for sample selection bias. The estimation of the model consists on and extension of the Heckman two-stage approach commonly used to correct for selection bias. In this approach elements of the first stage estimation (a probit model on the probability to export

arms) are used in a second stage as proxies for firm productivity and as correction for sample selection bias. In the first stage, we estimate the probit model on the probability to transfer MCWs from country i to j in year t:

$$Pr(Transfer_{ijt}=1|X)=\varphi(\alpha+X'\beta+\kappa_i+\lambda_j+\alpha_t+\varepsilon_{ijt}) \quad , \quad (3)$$

The model differs from the model in Equation (1) as the dependent variable in Equation (3) is the probability of a transfer of arms from country i to country j in year t and not the probability of placing and order to transfer arms ($Transfer_{ijt}$)[10]. In the second stage, we estimate the volume of transferred MCWs from country i to j in year t. The model can be written as:

$$\ln Volume_{ijt}=\beta_0+\beta_1 X+\beta_2\hat{Z}+\beta_3 IMR+\kappa_i+\lambda_j+\alpha_t+\varepsilon_{ijt} \quad . \quad (4)$$

Following Helpman et al (2008) we include two additional terms as regressors in the second stage the linear prediction of the export down-weighted by its standard error ($\hat{Z}$) and the inverse mills ratio (IMR), both calculated using elements obtained from the estimation of equation (3). The former term corrects the bias generated by the underlying unobserved firm-level heterogeneity, whereas the latter is a correction for sample selection which addresses the biases generated by unobserved shocks.

In order to fulfil the exclusion restriction of the Heckman approach, we have to use and exclusion variable, which should only affects the probability to export, but not the volume and hence must not enter the second step model. The variable measuring mandatory UN embargoes is the best candidate. In fact, the assumption that mandatory embargoes, which have the purpose to eliminate trade of arms to a certain destination, only affect probability and not the volume seems intuitive and reasonable and indeed this variable yields no significant estimates when included in model (2). The intuition behind is that once a supplier of arms is willing to violate the embargo, he will do so regardless of the size of the deal.

IV.V - Trade in Arms versus Trade of Goods

In previous sections we have emphasized the importance of political factors in explaining a transfers of arms. However, we have not yet answered the question whether the impact of these factors is specific for the nature of transfers in arms or whether it applies for trade flows in general.

10 The SIPRI Arms Transfers Database provides information on the order of a transfer and the value of the transfer in separate datasets with different timings, which prevented us from matching both datasets.

A direct comparison of estimates for all goods provides evidence of how political orientation and level of democracy differ in the direction, extent and significance of the impact on trade in goods and transfers of arms[11].

In order to allow a direct comparison, we construct a dataset that covers the same panel of countries over the same years for trade in goods and transfers of arms. Unfortunately, that reduces the number of observations significantly, especially for communist countries and in the early years. Therefore, results are not directly comparable with the results of the previous sections. Information on trade flows of goods comes from the United Nations Comtrade Database for the years 1962-2007.

V - Findings

Panel estimates of equation (1), obtained for the variables measuring the different aspects of the two political dimensions are reported in Table 1. The complete tables can be found in the Appendix. Column (1) shows the results obtained from a linear probability model, columns (2) and (3) show estimates from a probit model with country and time fixed effects (2) and with country-decade and year fixed effects (3). Finally, columns (4) and (5) are panel estimates with dyadic random-effects and year and country fixed effects in (4) and using the Mundlak approach in column (5) to (7).

The variables that proxy for the country-specific political dimensions have in general a statistically significant impact on the probability to order a transfer of arms in most specifications. An increase in the polity index of the supplier increases the probability to transfer arms significantly, whereas for the recipient, the effect is always significant and negative. Concerning the differences in political factors between trading countries, both, an increase in the absolute difference between the polity index and an increase in the discrepancy in voting behaviour, have a significant negative impact on the probability of a transfer. As regards the regional political aspects, only voting with US in the region of the supplier has a positive and significant effect on the probability to order a transfer of arms. When relaxing the assumption of no correlation between unobserved

11 A comparison between trade in arms and other goods besides arms is not possible as, as described in section III.I, arms or components of arms (e.g. engines of ships) are often labeled as non-military goods or not reported due to confidentiality reasons.

heterogeneity and covariates by using the Mundlak approach in column (5), we find that estimates for all variables have the same sign and remain statistically significant, with the only exception of the similarity in the level of democracy, which turns insignificant.

Other explanatory variables are also relevant. While military pacts and conflicts in the recipient countries always increase the probability of a transfer significantly, embargoes against the recipient have a negative impact. Militarization of the society in the recipient country has a negative and significant effect on the probability to import arms. A higher domestic demand for arms from the military industry, ceteris paribus, could strengthen the domestic arms industry, which is capable of serving the domestic needs and in turn could lower the probability of order transfers of arms from abroad. This effect appears to overcompensate the demand effect. Estimates for standard gravity variables have mostly the expected sign. GDPs have a significant positive impact on the probability of a transfer in arms and GDPs per capita have a significant negative impact for the exporter and positive impact for the importer. Geographical variables also show expected results, with negative and significant coefficients for distance and positive and significant for contiguity. Cultural similarities, measured by colonial past and common official language always have a positive and significant impact.

When estimating the Mundlak approach for the time before and after the end of the Cold War, we find that direction and significance of some variables changes as shown in columns (6) and (7). For instance, less democratic countries are more likely to export arms after 1989. Also regional factors have after 1990 a significant impact on the likelihood to transfer arms. Before 1990, exporters and importers tend to trade more arms when they are surrounded by more democratic countries, whereas after 1990, exporters tend to export less arms if they are more surrounded by less democratic countries and the estimated coefficient for the importers' region turn out to be insignificant. The estimates for the political orientation of the exporter in both periods and for the importer after 1989. Interestingly, we find that the effect of the degree of militarization dramatically change after 1990. For the exporter, the estimate change from positive to negative meaning that a more militarized society has a positive impact on the probability to export arms before 1990 and a negative impact after then end of the Cold War. For the importer, the negative impact found for the full sample is only significant in the later period. Pacts between countries and conflicts in the recipient country both have a significant and positive impact on the probability of a

transfer in both time periods. Contrary to Comola (2012), we do find that differences in the political orientation has also a significant impact on the probability of two countries to trade arms after 1989.

Table 1: Probability to Agree on a Transfer of Arms

	(1) LPM	(2) Probit	(3) Probit 1950-2007	(4) RE Probit	(5) Mundlak	(6) Mundlak 1950-1989	(7) Mundlak 1990-2007
$Polity_{it}$	0.00037***	0.0183***	-0.00805	0.0213***	0.0193***	0.00598	-0.0191**
$Polity_{jt}$	-0.00010**	-0.0159***	-0.0179***	-0.0123***	-0.00753***	-0.00698**	0.00519
$Polity\_dif\ f_{ijt}$	-0.00038***	-0.0152***	-0.0135***	-0.0102***	-0.00264	-0.000231	0.00359
$Polity\_region_{it}$	0.000010	0.00643	0.0136*	0.00820	0.00687	0.0302***	-0.0383**
$Polity\_region_{jt}$	0.000021	-0.00220	0.0124	-0.00364	-0.00314	0.0168**	-0.000119
$votewithUSA_{it}$	-0.0090***	0.641***	0.691***	0.579***	0.436***	-0.163	0.289
$votewithUSA_{jt}$	-0.00623***	-0.855***	-0.966***	-0.759***	-0.689***	-0.930***	-0.214
$votewithUSA\_dif\ f_{ijt}$	-0.0457***	-1.392***	-1.928***	-1.196***	-0.941***	-0.911***	-0.528**
$votewithUSA\_region_{it}$	0.0299***	0.516***	0.210	0.530***	0.559***	0.593***	0.0924
$votewithUSA\_region_{jt}$	0.00393	-0.0141	0.443	0.0517	0.109	0.0357	0.508
$Militarizat\ on_{it}$	-0.0140	-1.572	1.155	-1.226	-0.724	9.344***	-36.67***
$Militarizat\ on_{jt}$	-0.0441	-2.971*	-1.157	-4.497**	-4.401**	-3.139	-8.332**
$Pact_{ijt}$	0.0397***	0.497***	0.544***	0.412***	0.355***	0.433***	0.202***
$Conf\ lct_{jt}$	0.00496***	0.182***	0.131***	0.190***	0.189***	0.166***	0.203***
$Embargo_{jt}$	-0.00925***	-0.541***	-0.147	-0.628***	-0.644***	-	-0.545***
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dum.	Yes***	Yes***	No	Yes***	Yes***	Yes***	Yes***
Country-Decade	No	No	Yes***	No	No	No	No
$Observat\ ons$	530,205	530,205	333,932	530,205	530,205	273,521	186,549
R^2 (Pseudo R^2)	0.165	(0.440)	(0.421)	-	-	-	-

*Notes: *** p<0.01, ** p<0.05, * p<0.1;*

Regression results for the models (2) and (4) on the transferred volume of arms are shown in Table 2 for the political variables and for all variables in Table 12 in the Appendix. The dependent variable is the average value of the arms transferred. In order to control for various biases described in section IV.IV, we include results for a Helpman et al (2008) approach in column (5) to (7) of Table 2 and in Table 13 in the Appendix.

The political variables estimates are slightly different to the ones shown for the probability to order a transfer described above. While polity of the supplier yields now non-significant estimates, the polity index of the recipient is negative and statistically significant, indicating that a one point

increase in the level of democracy decreases the transferred volume for the recipient by around 1.2 percent (column (7)). Absolute differences in polity has a significant negative impact on the volume of transferred arms of 1.7 percent (column (4)) but it turns insignificant when controlling for sample selection bias in columns (6) and (7). Voting concordance with the USA in the UN General Assembly yields mixed results for the supplier and the recipient that again, turn out to be non-significant when using the Helpman et al (2008) approach. Interestingly, the regional political factors present different results. Indeed, when the surrounding countries of the exporter have a more similar voting pattern to the US they tend to transfer less arms. When the opposite is true for the importer region, imports of arms increase. This results are in sharp contrast to those obtained from estimating model (1). In this case, the probability of agreeing to a transfer increased when the exported voting pattern is more in concordance with the US, although the amount transferred tend to be lower.

The variables military pact and conflict are only affecting arms transfers in the panel estimates when we do not apply the two-stage approach. In this case, a military or strategic pact signed between supplier and recipient increases the volume of arms transferred by about 47 percentage points (column 5). When an armed conflict is taking place in the recipient country, the volume of arms transfers received by the country increases by around 10 percentage points (column 5). Estimates are smaller and even loss statistically significance when using the Helpman et al (2008) two-stage approach with fixed- or random-effects. A mandatory embargo by the UN against the recipient, has a non-significant effect on the volume of arms exported. This variable is therefore excluded from the second stage in columns (5) to (7) in order to fulfil the exclusion restriction of the model. The degree of militarization of the society yields mixed estimates for supplier and recipient. While the effect is negative but insignificant for the supplier, it is positive and significant as long as the country-fixed effects are not varying by decade. It lies then between 14 and 41 percent for an increase of one percentage point in the share of military personnel of the total population.

The volume of arm transfers tends to be higher for suppliers and recipients with higher GDP and lower GDP per capita. Geographical characteristics such as landlockedness and contiguity in most regressions yield positive and significant estimates. At first, It may seem surprising that distance between supplier and recipient also has a significant positive impact on the volume of arms exported when assuming that larger distance reflects higher transport costs. The positive effect of

distance could be explained by the fact that suppliers prefer selling arms to destinations further away to lower the probability of facing these arms in battle. While common colonial past of supplier and recipient has a positive impact on the volume trade, the common language effect is negative.

We find lower impacts of political variables on the volume for estimations with the included controls for sample selection bias and firm heterogeneity and variables measuring political differences between supplier and recipient to turn out to be insignificant. The same happens with variables controlling for conflicts and pacts between supplier and recipient in fixed- and random-effects regressions. The fact that the Inverse Mills Ratio is insignificant in the second stage for the random-effects estimation indicates that there is no evidence that a selection bias is quantitatively important in that model.

The impact of political variables on the volume of trade changes with the end of the cold war. Estimates for separate fixed-effects regressions for the time during and after the cold war in columns (8) and (9) show that the effects of political orientation in the region measured for the full sample are driven by the time until 1989. The same applies for the impact of the degree of militarization in the recipient country, pacts and conflicts. Furthermore, in the period after 1989, less democratic countries tend to export more arms.

Table 2: Volume of Transferred Arms

					2nd Stage	2nd Stage	2nd Stage		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	OLS	OLS	FE	RE	OLS	FE	RE	FE	FE
				1950-2007				1950-1989	1990-2007
$Polity_{it}$	0.0119	-0.00006	0.00130	0.00538	0.0143*	-0.0140	-0.00930	0.0284	-0.0836**
$Polity_{jt}$	-0.0242***	-0.0122*	-0.0238***	-0.0233***	-0.0262***	-0.0119*	-0.0121**	-0.00786	-0.00112
$Polity\_dif f_{ijt}$	-0.0204***	-0.0138***	-0.0156***	-0.0173***	-0.0226***	-0.00537	-0.00728	0.00397	-0.0163
$Polity\_region_{it}$	0.0235**	-0.0163	0.0205*	0.0255**	0.0231**	0.0134	0.00814	0.0125	-0.00351
$Polity\_region_{jt}$	0.00603	0.0213	-0.0110	-0.00735	0.00527	0.00222	0.0104	-0.00213	0.0570
$votewithUSA_{it}$	0.450*	1.076**	-0.0569	-0.00343	0.518**	-0.422	-0.494*	0.196	-0.550
$votewithUSA_{jt}$	-0.598***	-0.992***	-0.212	-0.268	-0.681***	0.257	0.297	0.0668	0.433
$votewithUSA\_dif f_{ijt}$	-1.614***	-1.928***	-0.848***	-1.038***	-1.778***	-0.0464	-0.0576	-0.414	-1.298
$votewithUSA\_region_{it}$	-1.042***	0.443	-0.683**	-0.868***	-0.911***	-1.118***	-1.222***	-1.026*	1.153
$votewithUSA\_region_{jt}$	-0.250	0.400	0.544**	0.338	-0.266	0.747***	0.539**	1.304***	-1.120
$Militarizat\ on_{it}$	-3.511	-14.19	-3.293	-1.688	-4.286	1.149	4.512	-12.62	-24.92
$Militarizat\ on_{jt}$	14.86***	1.721	15.09***	13.69***	15.05***	14.37***	12.56***	13.88**	1.477
$Pact_{ijt}$	0.246***	0.355***	0.368***	0.319***	0.382***	-0.0302	-0.177	0.526***	0.0665
$Conf\ lct_{jt}$	0.0730*	0.0169	0.138***	0.114***	0.0924**	-0.0216	-0.0781	0.179**	0.00911
$Embargo_{jt}$	-0.129	-0.0540	-0.165	-0.183	-	-	-	-	-0.358
$\hat{Z}$	-	-	-	-	-0.124	0.0668	0.190***	-	-
Inverse Mills Rat o	-	-	-	-	53.41**	-0.123***	-0.00157	-	-
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes**
Country Dummies	Yes***	No	-	Yes***	Yes***	-	Yes***	-	-
Country-Decade Dum	No	Yes***	No	No	No	No	No	No	No
Observat ons	12,700	12,700	12,700	12,700	12,699	12,699	12,699	7,639	5,061
R^2	0.400	0.470	0.169	0.382	0.400	0.171	0.386	0.068	0.021

*Notes: *** p<0.01, ** p<0.05, * p<0.1;*

We identify differences between the political determinants of trade in arms and trade in goods by estimating in identical models for the probability to export arms and goods. The sample is reduced to ensure that the estimations are comparable as described in section IV.V. When comparing the results for the probability to transfer arms with those for trade in goods in Table 3, we find that both political dimensions affect both types of trade, but the magnitude and sometimes the direction of the effect differ. For the trade volume of arms, the exporting countries tend to export more arms when they are more democratic oriented towards the USA, but slightly less so for the volume of goods. The importing countries tend to export more goods when they are more democratic, not less democratic as for trade in arms. Political differences between exporter and importer appear to affect the volume in the same direction, but much stronger for arms.

Table 3: Probability to Trade - Arms vs. Goods (1962-2007)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Probit	Probit	Probit	Probit	Probit RE	Probit RE	Probit RE	Probit RE
	Arms	Goods	Arms	Goods	Arms	Goods	Arms	Goods
$Polity_{it}$	0.0135***	0.0074***	-0.00690	0.00740***	0.0227***	0.0203***	0.0149***	0.0075***
$Polity_{jt}$	-0.0159***	0.0042***	-0.0184***	-0.00185	-0.0112***	0.0092***	-0.0131***	0.0044***
$Polity\_diff_{ijt}$	-0.0140***	-0.0106***	-0.0131***	-0.0129***	-0.0065***	-0.0027***	-0.0099***	-0.0050***
$Polity\_region_{it}$	0.00456	0.000709	0.00943	-0.00518	0.0178***	0.0148***	0.00606	-0.00658**
$Polity\_region_{jt}$	-0.0126**	-0.00523**	0.00788	-0.0108**	-0.0173***	0.0107***	-0.0129**	-0.00365
$votewithUSA_{it}$	0.602***	-0.186***	0.526**	0.380***	1.969***	0.224***	0.546***	-0.550***
$votewithUSA_{jt}$	-0.109	0.303***	-0.630***	-0.00535	-0.215*	0.302***	-0.0748	0.270***
$votewithUSA\_diff_{ijt}$	-0.969***	-1.126***	-1.205***	-1.522***	-0.941***	-0.154***	-0.899***	-0.390***
$votewithUSA\_region_{it}$	0.653***	-0.0189	0.467	-0.516***	1.245***	-0.645***	0.703***	-0.530***
$votewithUSA\_region_{jt}$	0.348**	0.0342	0.551*	0.199	-0.106	-0.316***	0.467**	-0.370***
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	Yes***	Yes***	No	No	No	No	Yes***	Yes***
Country-Decade Dum.	No	No	Yes***	Yes***	No	No	No	No
Observations	340,391	370,438	232,005	347,400	373,290	373,290	373,290	373,290
Pseudo R^2	0.415	0.512	0.398	0.529	-	-	-	-

*Notes: *** p<0.01, ** p<0.05, * p<0.1;*

Table 4: Trade Volume - Arms vs. Goods (1962-2007)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS	OLS	OLS	OLS	FE	FE	RE	RE
	Arms	Goods	Arms	Goods	Arms	Goods	Arms	Goods
$Polity_{it}$	0.00972	0.0122***	0.000451	0.00209	0.0301	0.00301**	0.0122	0.00288**
$Polity_{jt}$	-0.0202***	0.00189*	-0.0122	-0.0054***	0.00154	-0.0049***	-0.00601	-0.0048***
$Polity\_dif\ f_{ijt}$	-0.0145***	-0.0071***	-0.0139**	-0.0059***	0.00236	-0.0029***	-0.00655	-0.0025***
$Polity\_region_{it}$	0.00441	0.0124***	-0.0134	-0.00125	-0.0237	0.00512	-0.0146	0.00451
$Polity\_region_{jt}$	-0.00661	-0.00407	0.0208	-0.0101**	0.0163	-0.00625*	0.0164	-0.00667*
$votewithUSA_{it}$	0.927***	-0.564***	1.817***	-0.0604	0.754	0.274***	1.127**	0.249***
$votewithUSA_{jt}$	-0.181	0.0418	-1.008**	0.0607	-0.103	-0.170***	-0.519	-0.147**
$votewithUSA\_dif\ f_{ijt}$	-1.323***	0.0976***	-1.761***	0.0394	-0.325	-1.218***	-0.941***	-1.120***
$votewithUSA\_region_{it}$	-0.853**	-0.432***	-0.0115	-0.433**	0.551	-0.517***	0.255	-0.514***
$votewithUSA\_region_{jt}$	-0.741**	0.692***	-0.0213	0.329**	0.271	0.287**	0.136	0.292**
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	Yes***	Yes***	No	No	-	-	No	No
Country-Decade Dum	No	No	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Observat ɒns	10,282	285,374	10,282	285,374	10,282	285,374	10,282	285,374
R^2	0.343	0.728	0.407	0.748	0.001	0.400	0.381	0.742

*Notes: *** p<0.01, ** p<0.05, * p<0.1;*

In order to validate the results obtained by estimating models (1) to (4) we carry out two robustness checks. The first check intends to evaluate the possible endogeneity of the political factors, the second aims at analysing whether the variation in the sample of countries affects the results.

In the previous regressions, it could be claimed that the measure for the second political dimension could yield an endogeneity bias. Indeed, voting behaviour could be altered by a potential recipient of arms in order to please or appease the potential supplier and make the deal more likely to happen. We investigate the existence of an endogeneity bias by using a three year lag of all variables measuring political orientation. The results are shown in Table 14 in the Appendix. According to our estimates, the bias, if existing at all, is quantitatively very small and does not affect the main results. The second robustness check consists of excluding the USA from the sample. We do so because the second political dimension, which is voting concordance with the USA in UN General Assembly, is using the USA as a reference point. Hence, the value for the country specific measure always takes the value of one for the US and the bilateral measure always takes the value of the country specific measure for the partner country. The obtained estimation results (Tables 15 and 16 in the Appendix) are very similar to the results shown above, indicating that the findings are neither dominated by largest supplier of arms, nor by the lack of variation in political orientation of the largest exporter.

VI - Conclusion

The results presented in this paper show the impact of a number of political factors on the probability and volume of arms transfers. We find that both, the level of democracy and the political orientation of the supplier and recipient countries as well as the differences between them, are important determinants of the probability to trade arms. While suppliers with higher levels of democracy have a higher probability to transfer arms, we find the opposite result for the recipient countries. In addition, when a country is more oriented towards the USA or both countries tend to be close in both political dimensions, it is more likely that they agree to trade arms. Our results also suggest that although the political environment in the broader geographical regions of the supplier and the recipient has no consistent effect on the likelihood to trade arms, it is nevertheless an important determinant of the volume of arms traded.

Countries involved in conflicts are more likely to import arms and countries with an UN embargo imposed against them are less likely to import arms. All our results are robust to a number of sensitivity tests, including sample selection bias, the large amount of zero trade flows, reverse causality between UNGA voting behaviour and agreements to transfer arms. Moreover, the effects are not dominated by a single country in the sample. We find that political determinants also play an important role in explaining flows of goods between countries, but that the impact is larger for transfers of arms.

Our results suggest that political closeness between a pair of countries is an important determinant of transfers in arms and that economic and strategic interests are not the only drivers of the transfers. Any attempt to regulate trade in mayor conventional weapons should therefore reflect the political interests involved. UN embargoes appear to be successful in decreasing the probability to transfers arms.

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Appendix

Table 5: List of Suppliers

Country Name				
Algeria	Czechoslovakia	Japan	Norway	Sweden
Angola	DR Congo	Jordan	Oman	Switzerland
Argentina	Denmark	Kazakhstan	Pakistan	Syria
Australia	Egypt	Kenya	Panama	Taiwan
Austria	Estonia	Kuwait	Peru	Thailand
Bahrain	Finland	Kyrgyzstan	Philippines	Turkey
Bangladesh	France	Latvia	Poland	Uganda
Belarus	Gabon	Lebanon	Portugal	Ukraine
Belgium	Georgia	Libya	Qatar	United Arab Emirates
Bosnia and Herzegovina	Germany	Lithuania	Romania	United Kingdom
Brazil	Ghana	Malawi	Russia	United States of America
Bulgaria	Greece	Malaysia	Saudi Arabia	Uruguay
Cambodia	Guatemala	Mexico	Senegal	Uzbekistan
Canada	Hungary	Moldova	Serbia	Venezuela
Chad	India	Morocco	Singapore	Vietnam
Chile	Indonesia	Netherlands	Slovakia	Yemen Arab Republic
China	Iran	New Zealand	South Africa	Yemen People's Republic
Colombia	Iraq	Nicaragua	South Korea	Yugoslavia
Croatia	Ireland	Niger	Soviet Union	Zambia
Cuba	Israel	Nigeria	Spain	Zimbabwe
Czech Republic	Italy	North Korea	Sudan	

Table 6: List of Recipients

Country Name				
Afghanistan	Congo	India	Mozambique	South Korea
Albania	Costa Rica	Indonesia	Myanmar	Spain
Algeria	Croat a	Iran	Namibia	Sri Lanka
Angola	Cuba	Iraq	Nepal	Sudan
Argent na	Czech Republic	Ireland	Netherlands	Swaziland
Armenia	Czechoslovakia	Israel	New Zealand	Sweden
Australia	DR Congo	Italy	Nicaragua	Switzerland
Austria	Denmark	Jamaica	Niger	Syria
Azerbaijan	Djibout	Japan	Nigeria	Taiwan
Bahrain	Dominican Republic	Jordan	North Korea	Tajikistan
Bangladesh	East Timor	Kazakhstan	Norway	Tanzania
Belarus	Ecuador	Kenya	Oman	Thailand
Belgium	Egypt	Kuwait	Pakistan	Togo
Benin	El Salvador	Kyrgyzstan	Panama	Trinidad and Tobago
Bolivia	Equatorial Guinea	Laos	Paraguay	Tunisia
Bosnia and Herzegovina	Eritrea	Latvia	Peru	Turkey
Botswana	Estonia	Lebanon	Philippines	Turkmenistan
Brazil	Ethiopia	Lesotho	Poland	Uganda
Bulgaria	Finland	Liberia	Portugal	United Arab Emirates
Burkina Faso	France	Libya	Qatar	United Kingdom
Burundi	Gabon	Lithuania	Romania	United States of America
Cambodia	Gambia	Madagascar	Russia	Uruguay
Cameroon	Georgia	Malawi	Rwanda	Venezuela
Canada	Germany	Malaysia	Saudi Arabia	Vietnam
Cape Verde	Ghana	Mali	Senegal	Yemen
Central African Republic	Greece	Mauritania	Sierra Leone	Yemen Arab Republic
Chad	Guatemala	Maurit us	Singapore	Yemen People's Republic
Chile	Guinea	Mexico	Slovakia	Yugoslavia
China	Guinea-Bissau	Moldova	Slovenia	Zambia
Colombia	Honduras	Mongolia	Somalia	Zimbabwe
Comoros	Hungary	Morocco	South Africa	

Table 7: Transfers of Arms by Supplier

Country	Decade							Country	Decade						
	1	2	3	4	5	6	All		1	2	3	4	5	6	All
Algeria	-	1	0	1	0	0	2	Lithuania	-	-	-	-	0	1	1
Angola	-	-	1	1	1	0	3	Malawi	-	0	0	0	1	0	1
Argentina	0	4	6	7	4	4	25	Malaysia	0	0	1	1	1	0	3
Australia	2	6	15	11	8	16	58	Mexico	1	0	0	0	0	0	1
Austria	0	2	8	14	9	21	54	Moldova	-	-	-	-	6	6	12
Bahrain	-	-	0	0	0	1	1	Morocco	0	1	1	0	0	0	2
Bangladesh	-	-	0	1	0	0	1	Netherlands	22	43	74	70	77	91	377
Belarus	-	-	-	-	25	19	44	New Zealand	0	3	4	2	3	2	14
Belgium	2	14	1	10	13	24	64	Nicaragua	2	0	0	3	11	0	16
BIH	-	-	-	-	0	1	1	Niger	-	0	1	0	0	0	1
Brazil	0	4	22	53	12	18	109	Nigeria	-	0	0	1	0	0	1
Bulgaria	0	0	0	5	25	17	47	North Korea	-	-	-	-	8	3	11
Cambodia	0	0	0	0	3	0	3	Norway	2	8	7	12	17	22	68
Canada	46	51	59	71	52	44	323	Oman	-	-	1	1	1	1	4
Chad	-	0	0	2	0	0	2	Pakistan	0	1	1	1	1	6	10
Chile	0	0	2	7	5	2	16	Panama	0	0	1	0	0	0	1
China	-	-	53	144	127	108	432	Peru	0	0	0	2	0	3	5
Colombia	0	0	0	0	0	1	1	Poland	2	9	15	8	29	21	84
Croatia	-	-	-	-	0	1	1	Portugal	0	0	17	3	1	2	23
Cuba	0	0	2	0	0	0	2	Qatar	-	-	0	0	4	1	5
Czech Republic	-	-	-	-	33	30	63	Romania	0	0	7	11	11	4	33
Czechoslovakia	4	19	15	7	4	-	49	Russia	215	628	905	828	303	300	3,179
DR Congo	-	0	1	0	0	0	1	Saudi Arabia	1	1	3	5	1	1	12
Denmark	0	6	1	9	15	12	43	Senegal	-	0	1	0	0	0	1
Egypt	7	9	11	34	5	0	66	Singapore	-	1	4	13	4	7	29
Estonia	-	-	-	-	1	0	1	Slovakia	-	-	-	-	17	9	26
Finland	1	4	2	4	18	19	48	South Africa	-	2	2	-	25	45	74
France	92	328	542	449	230	165	1,806	South Korea	-	-	-	-	12	13	25
Gabon	-	0	1	0	0	0	1	Spain	1	2	15	49	36	41	144
Georgia	-	-	-	-	2	2	4	Sudan	0	1	0	1	0	0	2
Germany	-	-	137	155	235	180	707	Sweden	5	14	48	67	53	73	260
Ghana	-	0	1	0	0	1	2	Switzerland	-	-	-	-	-	29	29
Greece	0	0	0	0	2	3	5	Syria	0	1	2	10	2	1	16
Guatemala	1	0	0	0	0	0	1	Taiwan	0	1	0	-	-	-	1
Hungary	1	1	1	2	3	4	12	Thailand	0	0	0	0	0	1	1
India	0	0	4	2	5	14	25	Turkey	0	0	1	0	5	20	26
Indonesia	0	1	2	1	3	1	8	Uganda	-	1	0	0	0	0	1
Iran	0	3	3	3	4	13	26	Ukraine	-	-	-	-	88	139	227
Iraq	2	0	2	11	0	0	15	UAE	-	-	1	3	5	7	16
Ireland	0	0	1	0	1	2	4	United Kingdom	311	280	310	307	183	83	1,474
Israel	3	10	45	59	81	156	354	USA	849	1,042	1,225	1,127	980	718	5,941
Italy	6	65	181	151	108	118	629	Uruguay	0	1	0	0	0	1	2
Japan	5	12	6	4	2	1	30	Uzbekistan	-	-	-	-	0	2	2
Jordan	1	0	4	8	3	5	21	Venezuela	0	1	1	0	0	3	5
Kazakhstan	-	-	-	-	12	2	14	Vietnam	-	-	0	0	0	1	1
Kenya	-	0	0	1	1	0	2	Yemen AR	0	0	0	1	-	-	1
Kuwait	-	1	1	2	2	0	6	Yemen PR	-	0	2	1	-	-	3
Kyrgyzstan	-	-	-	-	2	3	5	Yugoslavia	3	8	13	12	3	1	40
Latvia	-	-	-	-	1	0	1	Zambia	-	0	0	1	0	0	1
Lebanon	0	1	0	0	1	0	2	Zimbabwe	-	-	-	0	0	1	1
Libya	0	0	6	32	3	7	48	Total	1,587	2,590	3,798	3,799	2,947	2,673	17,394

Table 8: Summary Statistics

	Obs.	Mean	Std. Dev.	Min	Max
$Transfer_{ijt}$	530,205	0.0172	0.1302	0	1
ln $Value_{ijt}$	12,700	3.0766	1.7752	0	8.43
ln GDP_{it}	530,205	10.9758	1.7168	6.80	16.06
ln GDP_{jt}	530,205	10.2121	1.9067	4.99	16.06
ln $GDPpc_{it}$	530,205	1.4370	1.1026	-2.88	3.75
ln $GDPpc_{jt}$	530,205	1.1143	1.1399	-2.88	3.92
ln $Distance_{ij}$	530,205	8.6510	0.7974	2.35	9.90
$Contiguity_{ij}$	530,205	0.2968	0.4995	0	2
$Language_{ij}$	530,205	0.0185	0.1347	0	1
$Colony_{ij}$	530,205	0.1415	0.3485	0	1
$Landlocked_{ij}$	530,205	0.0268	0.1615	0	1
$Polity_{it}$	530,205	1.0452	7.7146	-10	10
$Polity_{jt}$	530,205	0.3727	7.4651	-10	10
$Polity\_similarity_{ijt}$	530,205	8.0176	6.5430	0	20
$Polity\_neigbours_{it}$	530,205	0.3585	4.0740	-8.6	10
$Polity\_neigbours_{jt}$	530,205	-0.1974	4.0644	-9	10
USA_{it}	530,205	0.4681	0.2107	0	1
USA_{jt}	530,205	0.4434	0.2054	0	1
$USA\_similarity_{ijt}$	530,205	0.1616	0.1493	0	1
$USA\_neighbours_{it}$	530,205	0.4532	0.1577	0.14	0.98
$USA\_neighbours_{jt}$	530,205	0.4392	0.1646	0.14	0.98
$Militarization_{it}$	530,205	0.0082	0.0084	0	0.08
$Militarization_{jt}$	530,205	0.0069	0.0078	0	0.08
$Conflict_{jt}$	530,205	0.1720	0.3774	0	1
$Pact_{ijt}$	530,205	0.0855	0.2797	0	1
$Embargo_{jt}$	530,205	0.0054	0.0732	0	1

Table 9: Variables

Variable	Description
	Dependent Variables
$Trade_{ijt}$	=1 if arms were exported from i to j in year t
$Volume_{ijt}$	value of arms exported from i to j in year t
	Gravity Variables
$ln\ GDP_{it}$	natural logarithm of GDP in 1990 US$ for i
$ln\ GDP_{jt}$	natural logarithm of GDP in 1990 US$ for j
$ln\ GDPpc_{it}$	natural logarithm of GDP per capita in 1990 US$ for i
$ln\ GDPpc_{jt}$	natural logarithm of GDP per capita in 1990 US$ for j
$ln\ Distance_{ij}$	natural logarithm of Distance between capitals of i and j in km
$Contiguity_{ij}$	=1 if i and j share a common border
$Language_{ij}$	=1 if a language is spoken by at least 9% of the population in i and j
$Colony_{ij}$	=1 if i and j share a common colonial history
$Landlocked_{ij}$	=1 if i or j are landlocked and 2 if both
	Political Variables
$Polity_{it}$	interpolated and prolonged polity2 of i in year t*
$Polity_{jt}$	interpolated and prolonged polity2 of j in year t*
$Polity\_similarity_{ijt}$	absolute difference of $Polity_{it}$ and $Polity_{jt}$ in year t
$Polity\_neigbours_{it}$	mean of polity2 index for contiguous countries and within 3000km of i in year t*
$Polity\_neigbours_{jt}$	mean of polity2 index for contiguous countries and within 3000km of j in year t*
USA_{it}	UN General Assembly Voting similarity index (agree3un) for i with the USA in year t
USA_{jt}	UN General Assembly Voting similarity index (agree3un) for i with the USA in year t
$USA\_similarity_{ijt}$	absolute difference of USA_{it} and USA_{jt} in year t
$USA\_neighbours_{it}$	mean of agree3un index for contiguous countries and within 3000km of i in year t
$USA\_neighbours_{jt}$	mean of agree3un index for contiguous countries and within 3000km of j in year t
	Military, Alliances and Conflicts
$Militarization_{it}$	share of military personnel of total population for i in year t
$Militarization_{jt}$	share of military personnel of total population for j in year t
$Pact_{ijt}$	=1 if any kind of military pact is in place between i and j in year t
$Conflict_{jt}$	=1 if an armed conflict is ongoing in j in year t
$Embargo_{jt}$	=1 if a mandatory embargo was imposed by the UN against c in year t

* the polity2 variable was interpolated and prolonged over interruption and transition periods.

Table 10: Probability to Agree on a Transfer of Arms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	LPM	Probit	Probit 1950-2007	RE Probit	Mundlak	Mundlak 1950-1989	Mundlak 1990-2007
ln GDP$_{it}$	0.0180***	0.713***	0.355**	0.729***	0.722***	0.755***	0.307*
	(0.00122)	(0.0455)	(0.165)	(0.0507)	(0.0516)	(0.137)	(0.161)
ln GDP$_{jt}$	0.00404***	0.0574	0.213	0.0571	0.0218	0.409***	0.225
	(0.00114)	(0.0385)	(0.147)	(0.0468)	(0.0477)	(0.0873)	(0.154)
ln GDPpc$_{it}$	-0.0133***	-0.526***	-0.538***	-0.550***	-0.542***	-0.286*	-0.451**
	(0.000951)	(0.0541)	(0.184)	(0.0606)	(0.0614)	(0.147)	(0.192)
ln GDPpc$_{jt}$	0.00377***	0.185***	0.212	0.244***	0.287***	-0.126	-0.0364
	(0.00114)	(0.0370)	(0.137)	(0.0442)	(0.0451)	(0.0835)	(0.152)
ln Distance$_{ij}$	0.00175***	-0.162***	-0.169***	-0.282***	-0.255***	-0.321***	-0.193***
	(0.000369)	(0.0130)	(0.0135)	(0.0250)	(0.0253)	(0.0347)	(0.0338)
Cont ġuity$_{ij}$	0.00848***	0.0784**	0.0970***	0.00317	-0.0119	0.00565	0.105
	(0.00183)	(0.0322)	(0.0331)	(0.0679)	(0.0677)	(0.0931)	(0.0867)
Language$_{ij}$	-0.0086***	0.0744***	0.0689***	0.122***	0.114**	0.00317	0.198***
	(0.000730)	(0.0230)	(0.0239)	(0.0469)	(0.0469)	(0.0628)	(0.0623)
Colony$_{ij}$	0.0580***	0.518***	0.552***	0.588***	0.599***	0.901***	0.269***
	(0.00309)	(0.0264)	(0.0276)	(0.0667)	(0.0671)	(0.0856)	(0.0884)
Landlocked$_{ij}$	0.0592***	-0.229	0.508	-0.635*	-0.311	1.649	-0.672
	(0.00877)	(0.247)	(0.329)	(0.342)	(0.565)	(1.464)	(0.741)
Polity$_{it}$	0.00037***	0.0183***	-0.00805	0.0213***	0.0193***	0.00598	-0.0191**
	(3.54e-05)	(0.00264)	(0.00604)	(0.00301)	(0.00305)	(0.00515)	(0.00953)
Polity$_{jt}$	-0.00010**	-0.0159***	-0.0179***	-0.0123***	-0.00753***	-0.00698**	0.00519
	(4.65e-05)	(0.00195)	(0.00307)	(0.00219)	(0.00230)	(0.00332)	(0.00575)
Polity_dif f$_{ijt}$	-0.00038***	-0.0152***	-0.0135***	-0.0102***	-0.00264	-0.000231	0.00359
	(2.85e-05)	(0.00139)	(0.00149)	(0.00183)	(0.00213)	(0.00307)	(0.00466)
Polity_region$_{it}$	0.0000103	0.00643	0.0136*	0.00820	0.00687	0.0302***	-0.0383**
	(0.000118)	(0.00490)	(0.00819)	(0.00549)	(0.00552)	(0.00846)	(0.0170)
Polity_region$_{jt}$	0.0000205	-0.00220	0.0124	-0.00364	-0.00314	0.0168**	-0.000119
	(0.000132)	(0.00427)	(0.00866)	(0.00477)	(0.00484)	(0.00759)	(0.0146)
votewithUSA$_{it}$	-0.0090***	0.641***	0.691***	0.579***	0.436***	-0.163	0.289
	(0.00280)	(0.0932)	(0.173)	(0.105)	(0.107)	(0.162)	(0.267)
votewithUSA$_{jt}$	-0.00623***	-0.855***	-0.966***	-0.759***	-0.689***	-0.930***	-0.214
	(0.00224)	(0.104)	(0.179)	(0.108)	(0.110)	(0.157)	(0.289)
votewithUSA_dif f$_{ijt}$	-0.0457***	-1.392***	-1.928***	-1.196***	-0.941***	-0.911***	-0.528**
	(0.00187)	(0.0762)	(0.102)	(0.0856)	(0.0919)	(0.126)	(0.211)
votewithUSA_region$_{it}$	0.0299***	0.516***	0.210	0.530***	0.559***	0.593***	0.0924
	(0.00429)	(0.123)	(0.283)	(0.144)	(0.145)	(0.204)	(0.662)
votewithUSA_region$_{jt}$	0.00393	-0.0141	0.443	0.0517	0.109	0.0357	0.508
	(0.00391)	(0.131)	(0.274)	(0.149)	(0.150)	(0.224)	(0.515)
Militarizat ȯn$_{it}$	-0.0140	-1.572	1.155	-1.226	-0.724	9.344***	-36.67***
	(0.0364)	(2.290)	(4.239)	(2.465)	(2.477)	(3.350)	(8.026)
Militarizat ȯn$_{jt}$	-0.0441	-2.971*	-1.157	-4.497**	-4.401**	-3.139	-8.332**
	(0.0504)	(1.523)	(2.728)	(1.795)	(1.810)	(2.383)	(3.992)
Pact$_{ijt}$	0.0397***	0.497***	0.544***	0.412***	0.355***	0.433***	0.202***
	(0.00129)	(0.0229)	(0.0250)	(0.0352)	(0.0356)	(0.0505)	(0.0616)
Conf lct$_{jt}$	0.00496***	0.182***	0.131***	0.190***	0.189***	0.166***	0.203***
	(0.000648)	(0.0205)	(0.0285)	(0.0225)	(0.0225)	(0.0317)	(0.0443)
Embargo$_{jt}$	-0.00925***	-0.541***	-0.147	-0.628***	-0.644***	-	-0.545***
	(0.00196)	(0.135)	(0.169)	(0.139)	(0.140)		(0.161)
Constant	-0.304***	-8.242***	-5.527**	-7.468***	-15.16***	-16.88**	-12.20***
	(0.0261)	(0.780)	(2.630)	(0.942)	(3.125)	(7.313)	(4.300)
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dum.	Yes***	Yes***	No	Yes***	Yes***	Yes***	Yes***
Country-Decade	No	No	Yes***	No	No	No	No
Observat ȯns	530,205	530,205	333,932	530,205	530,205	273,521	186,549
R^2 (pseudo R^2)	0.165	(0.440)	(0.421)	-	-	-	-

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 11: Volume of Transferred Arms

					2nd Stage	2nd Stage	2nd Stage		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	OLS	OLS	FE	RE	OLS	FE	RE	FE	FE
				1950-2007				1950-1989	1990-2007
ln GDP$_{it}$	1.014***	1.185***	0.937***	0.902***	1.071***	0.412	0.334*	1.145	0.405
	(0.132)	(0.449)	(0.163)	(0.133)	(0.135)	(0.284)	(0.178)	(0.713)	(0.508)
ln GDP$_{jt}$	0.939***	0.931***	1.161***	1.060***	0.952***	0.993***	0.888***	1.732***	0.129
	(0.102)	(0.322)	(0.0968)	(0.0906)	(0.103)	(0.119)	(0.0969)	(0.328)	(0.531)
ln GDPpc$_{it}$	-1.037***	-0.945*	-0.984***	-0.984***	-1.142***	-0.648**	-0.597***	-0.839	-0.540
	(0.179)	(0.509)	(0.231)	(0.184)	(0.188)	(0.285)	(0.201)	(0.894)	(0.535)
ln GDPpc$_{jt}$	-0.474***	-0.435	-0.588***	-0.538***	-0.473***	-0.759***	-0.737***	-0.937***	0.519
	(0.0952)	(0.300)	(0.0924)	(0.0864)	(0.0954)	(0.119)	(0.0951)	(0.248)	(0.495)
ln Distance$_{ij}$	0.103***	0.106***	-	0.0443	0.0886***	-	0.309***	-	-
	(0.0285)	(0.0304)		(0.0476)	(0.0300)		(0.0709)		
Cont guity$_{ij}$	0.532***	0.526***	-	0.245**	0.549***	-	0.183	-	-
	(0.0648)	(0.0684)		(0.114)	(0.0656)		(0.113)		
Language$_{ij}$	-0.325***	-0.341***	-	-0.224***	-0.320***	-	-0.306***	-	-
	(0.0528)	(0.0575)		(0.0866)	(0.0528)		(0.0867)		
Colony$_{ij}$	0.352***	0.436***	-	0.165*	0.452***	-	-0.400***	-	-
	(0.0543)	(0.0592)		(0.0993)	(0.0879)		(0.149)		
Landlocked$_{ij}$	1.672***	-0.288	-	3.253***	1.723***	-	3.039***	-	-
	(0.603)	(0.841)		(0.648)	(0.604)		(0.647)		
Polity$_{it}$	0.0119	-0.00006	0.00130	0.00538	0.0143*	-0.0140	-0.00930	0.0284	-0.0836**
	(0.00768)	(0.0173)	(0.00992)	(0.00834)	(0.00784)	(0.0117)	(0.00886)	(0.0195)	(0.0375)
Polity$_{jt}$	-0.0242***	-0.0122*	-0.0238***	-0.0233***	-0.0262***	-0.0119*	-0.0121**	-0.00786	-0.00112
	(0.00469)	(0.00738)	(0.00548)	(0.00471)	(0.00490)	(0.00703)	(0.00526)	(0.0107)	(0.0146)
Polity_dif f$_{ijt}$	-0.0204***	-0.0138***	-0.0156***	-0.0173***	-0.0226***	-0.00537	-0.00728	0.00397	-0.0163
	(0.00398)	(0.00456)	(0.00541)	(0.00430)	(0.00425)	(0.00664)	(0.00476)	(0.0107)	(0.0145)
Polity_region$_{it}$	0.0235**	-0.0163	0.0205*	0.0255**	0.0231**	0.0134	0.00814	0.0125	-0.00351
	(0.0109)	(0.0166)	(0.0107)	(0.0102)	(0.0109)	(0.0123)	(0.0107)	(0.0174)	(0.0387)
Polity_region$_{jt}$	0.00603	0.0213	-0.0110	-0.00735	0.00527	0.00222	0.0104	-0.00213	0.0570
	(0.00921)	(0.0179)	(0.00888)	(0.00842)	(0.00920)	(0.0110)	(0.00905)	(0.0199)	(0.0356)
votewithUSA$_{it}$	0.450*	1.076**	-0.0569	-0.00343	0.518**	-0.422	-0.494*	0.196	-0.550
	(0.252)	(0.424)	(0.270)	(0.241)	(0.254)	(0.329)	(0.261)	(0.581)	(0.963)
votewithUSA$_{jt}$	-0.598***	-0.992***	-0.212	-0.268	-0.681***	0.257	0.297	0.0668	0.433
	(0.227)	(0.358)	(0.236)	(0.215)	(0.236)	(0.317)	(0.243)	(0.517)	(0.874)
votewithUSA_dif f$_{ijt}$	-1.614***	-1.928***	-0.848***	-1.038***	-1.778***	-0.0464	-0.0576	-0.414	-1.298
	(0.187)	(0.221)	(0.228)	(0.193)	(0.216)	(0.436)	(0.275)	(0.522)	(0.852)
votewithUSA_region$_{it}$	-1.042***	0.443	-0.683**	-0.868***	-0.911***	-1.118***	-1.222***	-1.026*	1.153
	(0.298)	(0.587)	(0.290)	(0.274)	(0.310)	(0.328)	(0.286)	(0.587)	(1.443)
votewithUSA_region$_{jt}$	-0.250	0.400	0.544**	0.338	-0.266	0.747***	0.539**	1.304***	-1.120
	(0.280)	(0.557)	(0.269)	(0.257)	(0.280)	(0.282)	(0.260)	(0.500)	(0.953)
Militarizat on$_{it}$	-3.511	-14.19	-3.293	-1.688	-4.286	1.149	4.512	-12.62	-24.92
	(6.089)	(10.83)	(6.969)	(6.121)	(6.124)	(7.290)	(6.226)	(13.13)	(24.39)
Militarizat on$_{jt}$	14.86***	1.721	15.09***	13.69***	15.05***	14.37***	12.56***	13.88**	1.477
	(3.278)	(5.486)	(3.251)	(3.038)	(3.278)	(3.264)	(3.040)	(6.811)	(11.41)
Pact$_{ijt}$	0.246***	0.355***	0.368***	0.319***	0.382***	-0.0302	-0.177	0.526***	0.0665
	(0.0486)	(0.0572)	(0.0699)	(0.0568)	(0.105)	(0.200)	(0.111)	(0.164)	(0.373)
Conf lct$_{jt}$	0.0730*	0.0169	0.138***	0.114***	0.0924**	-0.0216	-0.0781	0.179**	0.00911
	(0.0441)	(0.0617)	(0.0431)	(0.0407)	(0.0462)	(0.0845)	(0.0551)	(0.0753)	(0.127)
Embargo$_{jt}$	-0.129	-0.0540	-0.165	-0.183	-	-	-	-	-0.358
	(0.311)	(0.373)	(0.314)	(0.284)					(0.318)
$\hat{Z}$	-	-	-	-	-0.124	0.0668	0.190***	-	-
					(0.0843)	(0.0683)	(0.0382)		
Inverse Mills Rat o	-	-	-	-	53.41**	-0.123***	-0.00157	-	-
					(25.62)	(0.0371)	(0.0292)		
Constant	-18.68***	-22.28***	-18.19***	-19.52***	-18.39***	-9.008**	-12.38***	-27.43***	-2.285
	(2.159)	(6.868)	(2.083)	(2.119)	(2.177)	(4.438)	(2.592)	(8.456)	(8.576)
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes**
Country Dummies	Yes***	No	-	Yes***	Yes***	-	Yes***	-	-
Country-Decade Dum.	No	Yes***	No	No	No	No	No	No	No
Observat ons	12,700	12,700	12,700	12,700	12,699	12,699	12,699	7,639	5,061
R^2	0.400	0.470	0.169	0.382	0.400	0.171	0.386	0.068	0.021

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 12: Probability to Trade - Arms vs. Goods (1962-2007)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Probit	Probit	Probit	Probit	Probit RE	Probit RE	Probit RE	Probit RE
	Arms	Goods	Arms	Goods	Arms	Goods	Arms	Goods
ln GDP$_{it}$	0.981***	0.331***	1.525***	0.150*	0.440***	0.718***	1.092***	0.404***
	(0.0828)	(0.0325)	(0.283)	(0.0869)	(0.0133)	(0.0117)	(0.0891)	(0.0369)
ln GDP$_{jt}$	-0.132***	0.536***	-0.0486	0.131	0.130***	0.626***	-0.161***	0.799***
	(0.0484)	(0.0292)	(0.163)	(0.0831)	(0.0112)	(0.0115)	(0.0598)	(0.0350)
ln GDPpc$_{it}$	-0.789***	0.242***	-1.307***	0.126	-0.252***	0.252***	-0.874***	0.407***
	(0.0824)	(0.0283)	(0.271)	(0.0786)	(0.0228)	(0.0142)	(0.0909)	(0.0318)
ln GDPpc$_{jt}$	0.332***	-0.179***	0.440***	-0.00122	0.0451**	-0.113***	0.412***	-0.298***
	(0.0432)	(0.0262)	(0.152)	(0.0774)	(0.0187)	(0.0149)	(0.0527)	(0.0315)
ln Distance$_{ij}$	-0.195***	-0.654***	-0.205***	-0.689***	-0.231***	-0.924***	-0.296***	-1.039***
	(0.0147)	(0.00930)	(0.0149)	(0.00986)	(0.0218)	(0.0262)	(0.0266)	(0.0257)
Cont ̇guity$_{ij}$	0.0772**	-0.0511	0.0849**	-0.0951**	-0.0253	-0.164	0.0150	-0.0722
	(0.0380)	(0.0439)	(0.0385)	(0.0449)	(0.0856)	(0.141)	(0.0721)	(0.0995)
Language$_{ij}$	0.122***	0.302***	0.119***	0.309***	0.201***	0.870***	0.155***	0.578***
	(0.0252)	(0.0129)	(0.0257)	(0.0131)	(0.0472)	(0.0535)	(0.0489)	(0.0441)
Colony$_{ij}$	0.447***	0.452***	0.486***	0.533***	0.645***	1.384***	0.489***	0.531***
	(0.0290)	(0.0788)	(0.0301)	(0.0933)	(0.0807)	(0.229)	(0.0681)	(0.177)
Landlocked$_{ij}$	-1.089***	-1.006***	0.455	-2.450***	-0.0408	-0.256***	-1.215***	-0.817**
	(0.315)	(0.200)	(0.351)	(0.158)	(0.0380)	(0.0319)	(0.409)	(0.353)
Polity$_{it}$	0.0135***	0.0074***	-0.00690	0.00740***	0.0227***	0.0203***	0.0149***	0.00751***
	(0.00328)	(0.000896)	(0.00705)	(0.00147)	(0.00257)	(0.00109)	(0.00377)	(0.00115)
Polity$_{jt}$	-0.0159***	0.0042***	-0.0184***	-0.00185	-0.0112***	0.00924***	-0.0131***	0.00440***
	(0.00248)	(0.000919)	(0.00362)	(0.00163)	(0.00247)	(0.00112)	(0.00281)	(0.00117)
Polity_dif f$_{ijt}$	-0.0140***	-0.0106***	-0.0131***	-0.0129***	-0.0065***	-0.0027***	-0.0099***	-0.0050***
	(0.00189)	(0.000590)	(0.00201)	(0.000665)	(0.00234)	(0.000912)	(0.00237)	(0.000907)
Polity_region$_{it}$	0.00456	0.000709	0.00943	-0.00518	0.0178***	0.0148***	0.00606	-0.00658**
	(0.00584)	(0.00231)	(0.0107)	(0.00488)	(0.00506)	(0.00285)	(0.00669)	(0.00315)
Polity_region$_{jt}$	-0.0126**	-0.00523**	0.00788	-0.0108**	-0.0173***	0.0107***	-0.0129**	-0.00365
	(0.00491)	(0.00253)	(0.00975)	(0.00484)	(0.00451)	(0.00303)	(0.00560)	(0.00335)
votewithUSA$_{it}$	0.602***	-0.186***	0.526**	0.380***	1.969***	0.224***	0.546***	-0.550***
	(0.126)	(0.0604)	(0.220)	(0.0946)	(0.120)	(0.0656)	(0.147)	(0.0699)
votewithUSA$_{jt}$	-0.109	0.303***	-0.630***	-0.00535	-0.215*	0.302***	-0.0748	0.270***
	(0.133)	(0.0517)	(0.227)	(0.0780)	(0.112)	(0.0583)	(0.144)	(0.0609)
votewithUSA_dif f$_{ijt}$	-0.969***	-1.126***	-1.205***	-1.522***	-0.941***	-0.154***	-0.899***	-0.390***
	(0.0946)	(0.0414)	(0.121)	(0.0488)	(0.106)	(0.0522)	(0.116)	(0.0528)
votewithUSA_region$_{it}$	0.653***	-0.0189	0.467	-0.516***	1.245***	-0.645***	0.703***	-0.530***
	(0.162)	(0.0833)	(0.357)	(0.166)	(0.151)	(0.102)	(0.187)	(0.107)
votewithUSA_region$_{jt}$	0.348**	0.0342	0.551*	0.199	-0.106	-0.316***	0.467**	-0.370***
	(0.163)	(0.0954)	(0.324)	(0.166)	(0.166)	(0.113)	(0.189)	(0.119)
Militarizat ̇on$_{it}$	-2.521	-27.13***	0.246	-6.588***	25.46***	-26.84***	-3.475	-29.00***
	(3.185)	(1.170)	(6.031)	(2.054)	(2.086)	(1.238)	(3.349)	(1.373)
Militarizat ̇on$_{jt}$	-6.182***	-2.548***	-0.0703	1.233	-3.829**	1.716*	-7.792***	2.267**
	(1.934)	(0.988)	(3.429)	(1.628)	(1.762)	(1.024)	(2.194)	(1.099)
Pact$_{ijt}$	0.316***	0.728***	0.311***	0.785***	0.309***	0.0432	0.312***	0.410***
	(0.0270)	(0.0215)	(0.0285)	(0.0225)	(0.0406)	(0.0492)	(0.0409)	(0.0455)
Conf lct$_{jt}$	0.168***	-0.0374***	0.116***	-0.0278*	0.220***	-0.0925***	0.166***	-0.0706***
	(0.0231)	(0.0114)	(0.0316)	(0.0153)	(0.0238)	(0.0134)	(0.0258)	(0.0137)
Embargo$_{jt}$	-0.568***	-0.518***	-0.204	-0.324***	-0.722***	-0.554***	-0.692***	-0.647***
	(0.149)	(0.0446)	(0.189)	(0.0746)	(0.159)	(0.0511)	(0.160)	(0.0517)
Constant	-10.03***	-0.573	-18.31***	7.992***	-0.722***	-0.554***	(1.399)	(0.792)
	(1.215)	(0.607)	(3.939)	(1.571)	-9.128***	-4.247***	-10.35***	-0.181
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	Yes***	Yes***	No	No	No	No	Yes***	Yes***
Country-Decade Dum.	No	No	Yes***	Yes***	No	No	No	No
Observat ̇ons	340,391	370,438	232,005	347,400	373,290	373,290	373,290	373,290
Pseudo R^2	0.415	0.512	0.398	0.529	-	-	-	-

*Notes: (robust) standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 13: Volume of Trade - Arms vs. Goods (1962-2007)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS	OLS	OLS	OLS	FE	FE	RE	RE
	Arms	Goods	Arms	Goods	Arms	Goods	Arms	Goods
ln GDP$_{it}$	-0.331	1.073***	-0.672	0.824***	-1.935**	1.060***	-1.242	1.036***
	(0.248)	(0.0341)	(0.749)	(0.107)	(0.834)	(0.0682)	(0.761)	(0.0683)
ln GDP$_{jt}$	0.645***	1.390***	0.965**	0.752***	0.915***	1.020***	0.910***	0.996***
	(0.126)	(0.0273)	(0.384)	(0.0832)	(0.326)	(0.0606)	(0.320)	(0.0607)
ln GDPpc$_{it}$	0.138	0.656***	0.544	0.0583	1.551*	-0.125**	0.969	-0.107*
	(0.286)	(0.0357)	(0.737)	(0.104)	(0.847)	(0.0636)	(0.763)	(0.0636)
ln GDPpc$_{jt}$	-0.206*	-0.308***	-0.420	0.141*	-0.247	0.0156	-0.338	0.0273
	(0.113)	(0.0249)	(0.348)	(0.0764)	(0.295)	(0.0558)	(0.289)	(0.0558)
ln Distance$_{ij}$	0.0993***	-1.357***	0.0835**	-1.372***			-0.00474	-1.434***
	(0.0310)	(0.00684)	(0.0328)	(0.00674)	-	-	(0.0543)	(0.0229)
Contiguity$_{ij}$	0.659***	0.487***	0.617***	0.471***			0.338***	0.525***
	(0.0724)	(0.0256)	(0.0740)	(0.0254)	-	-	(0.130)	(0.0845)
Language$_{ij}$	-0.315***	0.631***	-0.325***	0.636***			-0.253***	0.672***
	(0.0566)	(0.0132)	(0.0601)	(0.0129)	-	-	(0.0961)	(0.0452)
Colony$_{ij}$	0.337***	1.129***	0.376***	1.153***			0.208*	1.200***
	(0.0592)	(0.0195)	(0.0634)	(0.0187)	-	-	(0.110)	(0.0998)
Landlocked$_{ij}$	1.105	-0.00829	-0.346	-2.982***			-0.644	-2.650***
	(0.737)	(0.165)	(0.869)	(0.160)	-	-	(1.067)	(0.241)
Polity$_{it}$	0.00972	0.0122***	0.000451	0.00209	0.0301	0.00301**	0.0122	0.00288**
	(0.00905)	(0.00111)	(0.0199)	(0.00201)	(0.0252)	(0.00132)	(0.0210)	(0.00132)
Polity$_{jt}$	-0.0202***	0.00189*	-0.0122	-0.0054***	0.00154	-0.0049***	-0.00601	-0.0048***
	(0.00593)	(0.00110)	(0.00847)	(0.00188)	(0.0102)	(0.00133)	(0.00827)	(0.00133)
Polity_dif f$_{ijt}$	-0.0145***	-0.0071***	-0.0139**	-0.0059***	0.00236	-0.0029***	-0.00655	-0.0025***
	(0.00511)	(0.000692)	(0.00582)	(0.000690)	(0.00954)	(0.000679)	(0.00661)	(0.000661)
Polity_region$_{it}$	0.00441	0.0124***	-0.0134	-0.00125	-0.0237	0.00512	-0.0146	0.00451
	(0.0137)	(0.00261)	(0.0230)	(0.00512)	(0.0202)	(0.00370)	(0.0198)	(0.00371)
Polity_region$_{jt}$	-0.00661	-0.00407	0.0208	-0.0101**	0.0163	-0.00625*	0.0164	-0.00667*
	(0.0104)	(0.00274)	(0.0202)	(0.00500)	(0.0175)	(0.00362)	(0.0170)	(0.00363)
votewithUSA$_{it}$	0.927***	-0.564***	1.817***	-0.0604	0.754	0.274***	1.127**	0.249***
	(0.335)	(0.0597)	(0.542)	(0.101)	(0.555)	(0.0700)	(0.502)	(0.0701)
votewithUSA$_{jt}$	-0.181	0.0418	-1.008**	0.0607	-0.103	-0.170***	-0.519	-0.147**
	(0.296)	(0.0567)	(0.435)	(0.0889)	(0.455)	(0.0626)	(0.403)	(0.0627)
votewithUSA_dif f$_{ijt}$	-1.323***	0.0976***	-1.761***	0.0394	-0.325	-1.218***	-0.941***	-1.120***
	(0.224)	(0.0342)	(0.245)	(0.0359)	(0.388)	(0.0387)	(0.286)	(0.0376)
votewithUSA_region$_{it}$	-0.853**	-0.432***	-0.0115	-0.433**	0.551	-0.517***	0.255	-0.514***
	(0.391)	(0.0896)	(0.761)	(0.178)	(0.678)	(0.127)	(0.663)	(0.127)
votewithUSA_region$_{jt}$	-0.741**	0.692***	-0.0213	0.329**	0.271	0.287**	0.136	0.292**
	(0.348)	(0.0855)	(0.649)	(0.161)	(0.571)	(0.118)	(0.565)	(0.118)
Militarization$_{it}$	-10.89	-20.70***	-5.412	0.392	-15.13	2.173	-7.117	2.054
	(7.804)	(1.658)	(15.08)	(2.719)	(16.29)	(1.748)	(14.41)	(1.752)
Militarization$_{jt}$	8.293**	-6.301***	-0.0534	3.540*	4.053	4.034***	1.788	3.959***
	(4.089)	(1.136)	(6.847)	(1.936)	(6.207)	(1.283)	(6.031)	(1.285)
Pact$_{ijt}$	0.244***	0.166***	0.286***	0.163***	0.226*	0.373***	0.284***	0.382***
	(0.0575)	(0.0152)	(0.0646)	(0.0152)	(0.128)	(0.0266)	(0.0836)	(0.0245)
Conflict$_{jt}$	-0.000576	-0.00338	-0.0243	0.00698	0.0106	0.000587	0.00423	0.000913
	(0.0495)	(0.0130)	(0.0671)	(0.0167)	(0.0608)	(0.0119)	(0.0590)	(0.0119)
Embargo$_{jt}$	0.131	-0.347***	-0.00512	-0.254***	-0.147	-0.202***	-0.106	-0.200***
	(0.340)	(0.0582)	(0.410)	(0.0749)	(0.366)	(0.0511)	(0.346)	(0.0512)
Constant	0.306	-1.931***	0.149	10.97***	10.38	-7.083	8.222	6.402***
	(3.457)	(0.602)	(10.32)	(1.758)	(9.570)	(1,711)	(10.24)	(1.211)
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	Yes***	Yes***	No	No	-	-	No	No
Country-Decade Dum.	No	No	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Observations	10,282	285,374	10,282	285,374	10,282	285,374	10,282	285,374
R^2	0.343	0.728	0.407	0.748	0.001	0.400	0.381	0.742

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 14: Probability to Transfer Arms with Lagged Measures of Political Orientation (1953-2007)

	(1)	(2)	(3)	(4)	(5)	(6)
	Probit	Probit	Probit	Probit	RE Probit	RE Probit
ln GDP$_{it}$	0.456***	0.761***	0.545***	0.641***	0.475***	0.786***
	(0.00670)	(0.0499)	(0.0447)	(0.167)	(0.0128)	(0.0557)
ln GDP$_{jt}$	0.111***	-0.00329	-0.0200	0.183	0.124***	-0.0345
	(0.00398)	(0.0442)	(0.0426)	(0.173)	(0.0108)	(0.0528)
ln GDPpc$_{it}$	-0.0976***	-0.557***	-0.393***	-0.719***	-0.150***	-0.600***
	(0.0185)	(0.0580)	(0.0538)	(0.188)	(0.0209)	(0.0658)
ln GDPpc$_{jt}$	0.0304***	0.281***	0.301***	0.226	0.0697***	0.379***
	(0.00817)	(0.0418)	(0.0403)	(0.158)	(0.0183)	(0.0502)
ln Distance$_{ij}$	-0.131***	-0.155***	-0.151***	-0.160***	-0.265***	-0.274***
	(0.00794)	(0.0136)	(0.0132)	(0.0141)	(0.0217)	(0.0261)
Cont ġuity$_{ij}$	0.0183	0.0967***	0.0974***	0.117***	-0.102	-0.000692
	(0.0288)	(0.0337)	(0.0338)	(0.0348)	(0.0851)	(0.0714)
Language$_{ij}$	0.0872***	0.0729***	0.0715***	0.0699***	0.202***	0.114**
	(0.0164)	(0.0240)	(0.0237)	(0.0248)	(0.0473)	(0.0489)
Colony$_{ij}$	0.479***	0.469***	0.446***	0.498***	0.675***	0.521***
	(0.0222)	(0.0277)	(0.0270)	(0.0290)	(0.0822)	(0.0696)
Landlocked$_{ij}$	-0.0819***	-0.284	0.255	0.375	-0.0457	-0.761**
	(0.0183)	(0.276)	(0.264)	(0.330)	(0.0382)	(0.368)
Polity$_{it}$	0.0090***	0.0164***	0.0156***	-0.00572	0.0213***	0.0194***
	(0.00141)	(0.00280)	(0.00266)	(0.00633)	(0.00230)	(0.00321)
Polity$_{jt}$	-0.0129***	-0.0156***	-0.00689***	-0.0177***	-0.0123***	-0.0127***
	(0.00132)	(0.00206)	(0.00176)	(0.00329)	(0.00208)	(0.00233)
Polity_dif f$_{ijt}$	-0.0180***	-0.0157***	-	-0.0141***	-0.0114***	-0.0109***
	(0.00122)	(0.00145)		(0.00155)	(0.00193)	(0.00191)
Polity_region$_{it}$	0.0274***	0.00390	-	0.00475	0.0194***	0.00674
	(0.00218)	(0.00514)		(0.00845)	(0.00450)	(0.00583)
Polity_region$_{jt}$	-0.0130***	-0.00444	-	0.0129	-0.0162***	-0.00578
	(0.00249)	(0.00455)		(0.00884)	(0.00413)	(0.00506)
votewithUSA$_{it-3}$	1.419***	0.698***	-0.00542	1.228***	1.296***	0.666***
	(0.0683)	(0.0974)	(0.0790)	(0.159)	(0.0948)	(0.108)
votewithUSA$_{jt-3}$	-0.579***	-0.747***	-0.167**	-0.809***	-0.485***	-0.647***
	(0.0677)	(0.108)	(0.0812)	(0.169)	(0.0953)	(0.111)
votewithUSA_dif f$_{ijt-3}$	-0.844***	-1.324***	-	-1.828***	-0.814***	-1.117***
	(0.0634)	(0.0775)		(0.101)	(0.0841)	(0.0872)
votewithUSA_region$_{it-3}$	0.880***	0.666***	-	0.543**	0.877***	0.742***
	(0.0792)	(0.126)		(0.234)	(0.126)	(0.147)
votewithUSA_region$_{jt-3}$	-0.498***	-0.104	-	0.000836	-0.319**	-0.107
	(0.0997)	(0.135)		(0.257)	(0.140)	(0.154)
Militarizat ɒn$_{it}$	29.92***	-4.302*	-1.901	-1.533	22.16***	-3.578
	(0.702)	(2.592)	(2.439)	(4.853)	(1.630)	(2.740)
Militarizat ɒn$_{jt}$	2.979***	-3.235*	-1.837	-4.466	-3.454**	-4.625**
	(0.707)	(1.675)	(1.646)	(3.153)	(1.560)	(2.002)
Pact$_{ijt}$	0.359***	0.471***	0.659***	0.515***	0.386***	0.408***
	(0.0177)	(0.0241)	(0.0223)	(0.0262)	(0.0371)	(0.0373)
Conf lct$_{jt}$	0.205***	0.170***	0.165***	0.121***	0.211***	0.179***
	(0.0154)	(0.0216)	(0.0213)	(0.0298)	(0.0226)	(0.0239)
Embargo$_{jt}$	-0.455***	-0.477***	-0.471***	-0.199	-0.730***	-0.589***
	(0.135)	(0.142)	(0.149)	(0.163)	(0.158)	(0.154)
Constant	-8.390***	-8.531***	-6.350***	-9.602***	-8.383***	-7.609***
	(0.160)	(0.867)	(0.807)	(2.903)	(0.292)	(1.046)
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	No	Yes***	Yes***	No	No	Yes***
Country-Decade Dum.	No	No	No	Yes***	No	No
Observat ɒns	470,169	466,039	466,039	291,724	470,169	470,169
R^2	0.347	0.439	0.429	0.417	-	-

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 15: Probability to Transfer Arms (without USA)

	(1)	(2)	(3)	(4)	(5)	(6)
	Probit	Probit	Probit	Probit	RE Probit	RE Probit
ln GDP$_{it}$	0.438***	0.709***	0.572***	0.369**	0.437***	0.715***
	(0.00710)	(0.0463)	(0.0424)	(0.165)	(0.0128)	(0.0520)
ln GDP$_{jt}$	0.100***	0.0498	0.00415	0.241	0.115***	0.0356
	(0.00398)	(0.0418)	(0.0405)	(0.156)	(0.0106)	(0.0505)
ln GDPpc$_{it}$	-0.103***	-0.528***	-0.437***	-0.570***	-0.140***	-0.542***
	(0.0172)	(0.0545)	(0.0510)	(0.184)	(0.0200)	(0.0615)
ln GDPpc$_{jt}$	0.0168**	0.185***	0.229***	0.115	0.0503***	0.245***
	(0.00811)	(0.0396)	(0.0383)	(0.144)	(0.0175)	(0.0474)
ln Distance$_{ij}$	-0.178***	-0.206***	-0.217***	-0.210***	-0.306***	-0.300***
	(0.00795)	(0.0143)	(0.0138)	(0.0151)	(0.0209)	(0.0255)
Cont guity$_{ij}$	-0.0234	0.0492	0.0350	0.0734**	-0.116	-0.00261
	(0.0287)	(0.0339)	(0.0340)	(0.0351)	(0.0808)	(0.0681)
Language$_{ij}$	0.0515***	0.0799***	0.0861***	0.0695***	0.140***	0.126***
	(0.0186)	(0.0258)	(0.0255)	(0.0267)	(0.0478)	(0.0488)
Colony$_{ij}$	0.544***	0.491***	0.450***	0.517***	0.786***	0.572***
	(0.0227)	(0.0278)	(0.0274)	(0.0293)	(0.0809)	(0.0677)
Landlocked$_{ij}$	-0.0550***	0.663***	0.573***	0.202	-0.0351	0.334
	(0.0167)	(0.198)	(0.186)	(0.333)	(0.0353)	(0.308)
Polity$_{it}$	0.00710***	0.0169***	0.0129***	-0.00777	0.0196***	0.0187***
	(0.00144)	(0.00276)	(0.00254)	(0.00608)	(0.00235)	(0.00319)
Polity$_{jt}$	-0.00775***	-0.0126***	-0.0052***	-0.0190***	-0.0074***	-0.0099***
	(0.00130)	(0.00203)	(0.00175)	(0.00321)	(0.00205)	(0.00229)
Polity_dif f$_{ijt}$	-0.0176***	-0.0149***	-	-0.0148***	-0.0107***	-0.0103***
	(0.00121)	(0.00143)		(0.00154)	(0.00190)	(0.00188)
Polity_region$_{it}$	0.0305***	0.0118**	-	0.0218**	0.0258***	0.0128**
	(0.00230)	(0.00578)		(0.0104)	(0.00479)	(0.00643)
Polity_region$_{jt}$	-0.0120***	-0.00423	-	0.00857	-0.0137***	-0.00575
	(0.00267)	(0.00459)		(0.00912)	(0.00424)	(0.00519)
votewithUSA$_{it}$	1.542***	0.876***	0.155*	0.624***	1.468***	0.889***
	(0.0782)	(0.111)	(0.0845)	(0.185)	(0.111)	(0.123)
votewithUSA$_{jt}$	-1.095***	-1.421***	-0.675***	-0.963***	-1.265***	-1.392***
	(0.0758)	(0.120)	(0.0860)	(0.195)	(0.112)	(0.126)
votewithUSA_dif f$_{ijt}$	-0.938***	-1.455***	-	-1.791***	-1.095***	-1.322***
	(0.0733)	(0.0877)		(0.108)	(0.0989)	(0.0998)
votewithUSA_region$_{it}$	0.807***	0.212	-	0.439	0.523***	0.176
	(0.0850)	(0.183)		(0.370)	(0.158)	(0.203)
votewithUSA_region$_{jt}$	-0.412***	0.207	-	0.172	-0.170	0.122
	(0.110)	(0.147)		(0.301)	(0.152)	(0.167)
Militarizat on$_{it}$	26.75***	-1.343	-1.225	0.479	19.90***	-1.570
	(0.701)	(2.426)	(2.371)	(4.558)	(1.584)	(2.601)
Militarizat on$_{jt}$	2.019***	-3.117*	-2.503	-1.713	-2.989**	-4.429**
	(0.751)	(1.623)	(1.604)	(2.845)	(1.519)	(1.916)
Pact$_{ijt}$	0.283***	0.407***	0.575***	0.445***	0.324***	0.367***
	(0.0195)	(0.0255)	(0.0237)	(0.0277)	(0.0374)	(0.0375)
Conf lct$_{jt}$	0.214***	0.176***	0.175***	0.133***	0.226***	0.187***
	(0.0154)	(0.0215)	(0.0212)	(0.0299)	(0.0227)	(0.0241)
Embargo$_{jt}$	-0.437***	-0.504***	-0.530***	-0.137	-0.675***	-0.592***
	(0.123)	(0.133)	(0.135)	(0.167)	(0.144)	(0.141)
Constant	-7.315***	-8.387***	-6.464***	-6.202***	-6.908***	-7.613***
	(0.176)	(0.711)	(0.644)	(2.214)	(0.303)	(0.865)
Year Dummies	Yes***	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dum.	No	Yes***	Yes***	No	No	Yes***
Country-Decade Dum.	No	No	No	Yes***	No	No
Observat ons	519,244	511,637	511,637	310,618	519,244	519,244
R^2	0.276	0.379	0.368	0.357	-	-

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*

Table 16: Volume of Transferred Arms (without USA)

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) FE	(6) RE	(7) FE	(8) RE
ln GDP$_{it}$	0.363***	1.021***	1.228***	1.058***	0.926***	0.916***	0.835**	0.998***
	(0.0161)	(0.136)	(0.439)	(0.129)	(0.171)	(0.138)	(0.386)	(0.369)
ln GDP$_{jt}$	0.277***	0.470***	0.559*	0.443***	0.666***	0.612***	0.788**	0.692**
	(0.0113)	(0.115)	(0.337)	(0.112)	(0.117)	(0.106)	(0.308)	(0.300)
ln GDPpc$_{it}$	-0.112***	-1.049***	-0.952*	-1.096***	-0.934***	-0.986***	-0.686	-0.854**
	(0.0320)	(0.182)	(0.499)	(0.180)	(0.240)	(0.189)	(0.458)	(0.434)
ln GDPpc$_{jt}$	-0.0754***	-0.0340	-0.348	-0.00556	-0.181*	-0.152	-0.351	-0.387
	(0.0250)	(0.104)	(0.315)	(0.103)	(0.109)	(0.0992)	(0.285)	(0.276)
ln Distance$_{ij}$	-0.0346*	-0.0716**	-0.0903**	-0.0804**	-	-0.0360	-	-0.0539
	(0.0202)	(0.0329)	(0.0354)	(0.0324)		(0.0512)		(0.0573)
Cont guity$_{ij}$	0.0654	0.322***	0.308***	0.288***	-	0.147	-	0.108
	(0.0617)	(0.0706)	(0.0754)	(0.0704)		(0.115)		(0.127)
Language$_{ij}$	-0.142***	0.00651	0.00304	0.0519	-	-0.0666	-	-0.0785
	(0.0488)	(0.0640)	(0.0709)	(0.0638)		(0.0966)		(0.109)
Colony$_{ij}$	0.156***	-0.0293	0.0331	-0.0804	-	-0.0291	-	0.0815
	(0.0554)	(0.0638)	(0.0726)	(0.0636)		(0.104)		(0.115)
Landlocked$_{ij}$	-0.139***	0.0523	-1.420*	-0.0374	-	0.968	-	-0.801
	(0.0467)	(0.477)	(0.862)	(0.454)		(0.599)		(1.057)
Polity$_{it}$	-0.0182***	0.0110	0.00276	0.00409	-0.00439	0.00262	0.0167	0.00963
	(0.00542)	(0.00820)	(0.0170)	(0.00760)	(0.0104)	(0.00884)	(0.0200)	(0.0175)
Polity$_{jt}$	-0.0139***	-0.0257***	-0.0140*	-0.0119***	-0.0259***	-0.0254***	-0.00920	-0.0120*
	(0.00432)	(0.00510)	(0.00822)	(0.00418)	(0.00568)	(0.00497)	(0.00800)	(0.00725)
Polity_dif f$_{ijt}$	-0.0229***	-0.0220***	-0.0195***	-	-0.0143***	-0.0177***	-0.00842	-0.0137***
	(0.00415)	(0.00413)	(0.00478)		(0.00550)	(0.00438)	(0.00666)	(0.00510)
Polity_region$_{it}$	0.0357***	0.0279*	0.00676	-	0.0173	0.0272*	-0.0148	-0.00483
	(0.00786)	(0.0142)	(0.0251)		(0.0162)	(0.0146)	(0.0233)	(0.0225)
Polity_region$_{jt}$	-0.00806	-0.00522	0.00466	-	-0.0218**	-0.0163	0.00734	0.00499
	(0.00645)	(0.0106)	(0.0198)		(0.0109)	(0.0100)	(0.0188)	(0.0181)
votewithUSA$_{it}$	-0.327	0.376	0.627	-0.172	0.439	0.338	0.286	0.426
	(0.238)	(0.309)	(0.465)	(0.259)	(0.329)	(0.293)	(0.436)	(0.413)
votewithUSA$_{jt}$	-1.466***	-0.469*	-0.385	-0.260	-0.721**	-0.541**	-0.329	-0.400
	(0.233)	(0.277)	(0.408)	(0.223)	(0.286)	(0.259)	(0.396)	(0.372)
votewithUSA_dif f$_{ijt}$	-0.271	-0.703***	-0.733**	-	-0.679**	-0.717***	-0.358	-0.549**
	(0.222)	(0.238)	(0.292)		(0.273)	(0.232)	(0.331)	(0.275)
votewithUSA_region$_{it}$	-1.468***	-1.279**	0.364	-	-0.446	-1.008*	0.945	0.743
	(0.290)	(0.510)	(0.900)		(0.575)	(0.519)	(0.905)	(0.871)
votewithUSA_region$_{jt}$	1.090***	-0.0990	0.216	-	0.603*	0.362	0.417	0.467
	(0.259)	(0.344)	(0.648)		(0.346)	(0.321)	(0.597)	(0.587)
Militarizat on$_{it}$	29.39***	2.644	-5.227	1.730	3.242	4.232	-1.679	-3.506
	(2.976)	(6.528)	(12.16)	(6.404)	(8.092)	(6.808)	(12.72)	(11.58)
Militarizat on$_{jt}$	31.97***	9.010**	1.896	9.470***	12.07***	9.608***	5.172	2.930
	(2.235)	(3.535)	(5.834)	(3.552)	(3.623)	(3.326)	(5.315)	(5.199)
Pact$_{ijt}$	0.255***	0.228***	0.317***	0.262***	0.374***	0.298***	0.596***	0.408***
	(0.0434)	(0.0556)	(0.0680)	(0.0552)	(0.0778)	(0.0629)	(0.107)	(0.0798)
Conf lct$_{jt}$	0.0649	0.0450	0.00191	0.0600	0.130***	0.0986**	0.0476	0.0307
	(0.0409)	(0.0492)	(0.0686)	(0.0494)	(0.0499)	(0.0462)	(0.0628)	(0.0605)
Embargo$_{jt}$	-0.399	-0.225	-0.112	-0.241	-0.200	-0.217	-0.457	-0.221
	(0.425)	(0.306)	(0.366)	(0.309)	(0.308)	(0.278)	(0.335)	(0.316)
Constant	-2.383***	-11.03***	-15.74***	-12.08***	-13.07***	-12.13***	-16.00***	-15.51***
	(0.521)	(1.994)	(5.615)	(1.756)	(2.269)	(2.010)	(5.502)	(4.836)
Year Dummies	Yes***	Yes***	Yes**	Yes***	Yes***	Yes***	Yes***	Yes***
Country Dummies	No	Yes***	No	Yes***	-	Yes***	-	No
Country-Decade Dum.	No	No	Yes***	No	No	No	Yes***	Yes***
Observat ons	9,803	9,803	9,803	9,803	9,803	9,803	9,803	9,803
R^2	0.243	0.389	0.472	0.385	0.169	0.374	0.0606	0.445

*Notes: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1;*