

Understanding the Depth of Canadian-American Military Technical Cooperation

By Anessa L. Kimball and David Brulotte *

Abstract: Much of the emphasis of the research on North American relations is focused on NAFTA and NORAD as they represent major cooperative efforts involving a substantial amount of negotiation between the two countries with differing initial positions. However, there has been little systematic research examining cooperation that takes place at lower diplomatic levels (i.e. exchanges of diplomatic notes, memorandums of understanding etc). Cooperation at lower diplomatic levels may allow leaders to bypass the normal legislative approval mechanisms making them a nice way for leaders to exercise effective foreign policy autonomy especially when the domestic political environment constrains leaders. Using information provided by a new dataset on North American military technical cooperation between 1950 and 2005, this study explores the depth of military technical cooperation between the US and Canada. The goal of the study is to gain a more complete understanding of both the complexity and density of cooperative endeavors between these two close nations in order to shed light on how cooperative structures developed at lower diplomatic levels are an important element of foreign policy interactions among close allies. Insights drawn from this research may be of interest to scholars designing nascent European military technical cooperation.

* Assistant Professor of Political Science, Université Laval and MA student, School of Oriental and African Studies, University of London. Contact author: anessa.kimball@pol.ulaval.ca. Research assistance was provided by Aroa El-Horani and Alia Alatassi. We would like to thank Université Laval's New Researcher Start-up Fund as well as the Canadian Department of National Defense's Forum for Security and Defense and the Program for Peace and International Security at the Institute des Hautes Études Internationales at Université Laval for providing important financial sponsorship of this research project.

I. Introduction

Cooperation between Canada and the US has been analyzed in variety of studies assessing virtually all topics where cooperation and partnership has taken place between the two neighboring countries. Nevertheless, much of the current research focuses on cooperation via macro-diplomatic efforts consistent with the many studies analyzing the two major cooperative efforts between the two countries, NORAD and NAFTA (Pastor 2001; Mason 2003). It is becoming increasingly essential to revisit a number of these institutions to better understand their reach, depth and relevance in a changing global political order. Anecdotal evidence to support this claim is confirmed by the statements of the 2008 US presidential candidates suggesting NAFTA reform may be necessary in the near future.

Aside from important bilateral cooperative efforts, the US and Canada have also been collaborating within broader military institutions such as NATO over the last half-dozen decades. NATO has served as an important shared bridge between these two geographically large but differently endowed North American neighbors. For Canadian Forces, NATO has been the main force which brought Canadian troops into field operations in Afghanistan. To be sure the mission in Afghanistan represents a landmark operation in recent Canadian foreign policy as it has allowed Canada to gain much needed military credibility as well as further its capacity to support important democratization goals that underline much of the normative Canadian foreign policy agenda. Moreover, the mission in Afghanistan represents an important coalition building moment (Dell 2002; Gallis 2008) where even among allied countries there are conflicting interests with respect to how to divide the substantial task of securing and rebuilding Afghanistan.

Given the crucial role those three important bilateral and multilateral institutions have played in the foreign policy strategies of each state over the last few decades it is no surprise they have received the majority of scholarly attention however, we put forth that much can be learned about the nature of the cooperative relationship between the US and Canada by gaining a more systematic understanding of how cooperation is designed between these two states at lower diplomatic levels. States engage in a wide variety of cooperative endeavors at lower diplomatic notes through a variety of institutional mechanisms including exchanges of diplomatic notes, memorandums of understanding, and terms of reference. We feel that these agreements allow executives (especially the American ones) the proper mix of flexibility and commitment that has allowed a certain continuity in the US-Canadian foreign policy relationship the despite occasional disagreements that arise between the two neighbors. In particular, our interests lie in understanding the depth of bilateral cooperation as reflected by those lower level agreements.

Research on the depth of international cooperation is still in a nascent stage due to several factors. One factor which has slowed progress in this domain is a lack of empirical measures to adequately conceptualize cooperation depth (Downes, Roche and Barsoom 1998; Stinnett 2006). Additionally, there has been little systematic effort to collect large-N datasets which allow us to examine the depth of cooperation with exception of Stinnett's work on regional trade agreement depth (2006). In fact, most existing research on the depth of cooperation has addressed the deepening versus widening tradeoff with respect to European integration (Friedrichs, Mihov, and Popova

2005; Schneider and Cederman 1994; Moravcsik 1991). There has been surprisingly little research addressing the depth of security cooperation despite the fact that security cooperation is likely to be a domain “where national interests predominate...and improvements are hampered by the ‘instinct’ of national government to keep control over this particular area” (Fredrichs, Mihov, and Popov 2005, 5). These preferences arise in part from the Weberian conception of the government monopoly over force (1968, 2002) but also in part from concerns over relative gains and commitments problems as encouraged by the security dilemma (Powell 1999; Fearon 1995). Moreover, the design of cooperative security policies plays a crucial role in filling security needs in states with limited military capacity or middle powers such as Canada. Finally, in recent years there has been a renaissance of research examining the design of cooperative institutions (Koremenos, Lipson, and Snidal 2001; Langlois and Langlois 2001, 2005; Barkin 2005; Mitchell 1994) but little of this research has examined security cooperation in particular instead focusing more broadly on international institutions or international alliances (Leeds 2003). Thus, this project can make a substantial contribution by developing a coherent measure of cooperation depth and applying this measure to a defined set of cases of security cooperation.

II. Literature Review

The two North American neighbors are well adept at military coordination as over the years NATO has ensured their mutual commitment to the defense of one another. However, the recent NATO mission in Afghanistan highlights the fact that even close allies can have diverging interests and strategies with respect to the same issues. Moreover, the US presidential election has returned both NATO and North American issues to the political discourse as some candidates have mentioned the need to revisit both NATO commitments and NAFTA increasing the level of uncertainty surrounding future bilateral relations. NATO cooperation in Afghanistan has certainly strengthened coalition bonds but it has also brought into focus the gaps in US foreign policy that have arisen because of its over-commitment as the US has increasingly relied upon its NATO allies to shoulder the Afghanistan burden so that it may focus resources on Iraq and the global war on terror.

Despite a heavier burden of commitment being demanded from allies, the US is now more conscious that uneven military development in other countries in the past is affecting the American capacity to pursue its foreign policy goals today. The Afghanistan mission has not only uncovered operational inefficiencies but also important force limitations across NATO allies. Canadian military development has been more stochastic than that of its southern neighbor for a variety of reasons. Canadian military cooperation and collaboration has varied along with the political variation in Ottawa. Whereas the US military culture and development has been growing on a relatively stable pattern in the last fifty years, the Canadian military culture has been marked by a bumpy evolution, drastically fueled or dilapidated by the changing Governments in the House of Commons. Foreign campaigns have helped dictate the US military growth, steering and partnership building over the years. In Canada however, a different military culture, drastically different size of the military branch have been affected by political leaders as well as internal pressures differently than in the US. As a result of this asymmetric development, the partners have reacted differently over the years to similar strategic

situations based on how both history and the institutional structure of each state creates foreign policy constraints or opportunities. Thus, any effort to systematically understand bilateral American-Canadian military cooperation must take into account their respective differences into political structure as they shape not only foreign policy autonomy but also the capacity of leaders to change the current policy status quo. As such, our analysis of lower level diplomatic commitments allows us to consider how these relatively loose institutions still constrain executive policy opportunities.

With respect to the existing literature assessing the depth of international cooperation, our review of the literature suggests several weaknesses. First, the literature is based mainly on case studies as few researchers have gathered large datasets to conduct quantitative and empirical analyses (Stinett 2006 is an important exception in the international political economy domain). Second, most researchers have treated the depth of international cooperation as being dependant upon the willingness of leaders to cooperate or upon the convergence of their preferences (Moravcsik 1991, 1993a, 1993b). As such there has been little focus on the how the structure of the domestic institutions themselves may facilitate or inhibit leaders from making deep security commitments to one another. Finally, because Europe, as a continent, and the European Union, as a political body, have proved a fertile research niche, most of what has been written only concerns this integrated, but limited in geography, part of the globe. And again, even within Europe, integrative processes have been compared and analyzed in conjunction with national tradeoffs affecting domestic politics within respective countries (Milner 1997, Moravcsik 1993a). While there is some research on cooperation outside of the European region most of this research focuses on if and under what conditions states will cooperate focusing typically on a single cooperation endeavor not on how states design that cooperation across a set of institutions.¹ Thus our focus on the design of cooperation depth and our use of systematic data sets us apart from previous efforts and presents a new terrain for future research.

While some observers will emphasize their investigation of the depth of cooperation with respect to the ‘national interest’ of involved countries, others will highlight the importance of ‘national strategies’ or ‘powerful domestic economic interests’ (Moravcsik 1991) increasing the difficulty of developing a theoretical model to examine the depth of cooperation. Despite the limitations in the development of theoretical explanations, we can identify a number of military technical cooperation endeavors have taken place overtime as European military collaboration and joint ventures include the Tornado Fighter project in the 70’s and the European Fighter Aircraft project in the 80’s and among others which have emerged in the literature a projects detailed in specific ‘contracts’² between participant states. Among those projects mentioned some have met with success, while others have failed or have been intentionally left unheard of by the partners for various reasons that have been discussed by others (Moravcsik 1993a). Thus, the existing literature examines military technical cooperation but on a case-by-case basis and fails to consider important elements relating

¹ Leeds and co-authors (2002, 2003) and Powers (2004) are important exceptions to that claim which represent systematic research but their focus is on formal treaties dealing with security (Leeds) or regional trade (Powers) and moreover, neither of those scholars is interested in cooperation depth.

² The word ‘contract’ is to reflect the existence of a written document, though this document may take one of the several forms mentioned.

to the depth of that cooperation. Although some scholars have analyzed the depth of cooperative relationships (Stinnett 2006) those analyses have often focused on regional macro-political or economic bodies, such as the ASEAN, the South American MERCOSUR, African COMESA, the North-American NAFTA or again the EU and the EFTA, whose goals are more often to regulate economic transactions between the partners themselves rather than create a new cooperative institution or project related to security. Therefore, we feel this paper can fill several gaps in the literature. Nonetheless, previous approaches used to explain cooperation have focused on economic-based perspectives such as bargaining theories or economic asymmetries or considerations of how wealth and development might motivate cooperation between respective partners (Haggard 1997; Padoan 1997) or by measuring the number of partners and the impact of that number on the length and depth of the cooperative agreement (Olson 1965; Keohane 1984; Oye 1986). While earlier research provides an important theoretical base from which we can develop our arguments, the limitations of earlier research to single and comparative case studies provides opening for further developing our understanding of cooperation depth with respect to security.

III. Proposed Hypotheses

We hypothesize the factors, affecting the depth of military technical cooperation between the US and Canada, arise from mainly domestic and strategic circumstances. The following paragraphs will explain our hypothetical expectations with respect to the depth of military technical cooperation between partners. We focus on two sets of explanatory variables, one set encompassing international political economic and strategic factors we believe affect the depth of bilateral cooperation and the other set included domestic political factors accounting for the constraints facing leaders. Readers should keep in mind that the relationships proposed are directed towards understanding bilateral cooperation between the US and Canada and as this dyad represents a unique pairing some of the more general hypotheses related to the effects of contiguity, joint democracy, shared rivals and alliance ties have been omitted from this project as they would appear to be constant during the time period under analysis thus introducing collinearity unnecessarily into our econometric models and limiting our capacity to draw inferences from their effects.

It should be noted that several of the factors omitted from this analysis because of their limited variation over the time period are factors which would be identified as strategic factors (e.g. alliance ties and shared rivalries) affecting the depth of bilateral military technical cooperation in a model examining the behavior of all dyads. Our expectation is that all of those factors would positively affect the depth of cooperation. Our remaining strategic variable attempts to capture the balance of military threat. As military threats to the US-Canada dyad increase, it should be more likely to create deep cooperative agreements in order to combat this threat. This is consistent with both traditional realist and balance of threat theory (Waltz 1979; Walt 1986). Moreover, our argument is also consistent with rationalist expectations with respect to the commitment problem (Fearon 1995) as increasing military capacity makes it difficult for countries to credibly commit to not exploit their military advantages in the future. Thus, as the military capacity of the primary rival to the US-Canada dyad becomes more developed

we would expect the dyad to engage in cooperation at deeper levels in order to assuage security fears. We use rival military spending in order to capture threats to the dyad.

Hypothesis 1: As the ratio of rival military spending to total dyadic military spending increases, then the depth of security agreement cooperation should also increase.

Another strategic factor likely to affect the depth of military technical cooperation is economic interdependence between states. Existing arguments provide divergent expectations with respect to how economic interdependence could affect the depth of military cooperation. Arguments based on Kant and other traditional liberals (Russett and Oneal 2001) would suggest economic interdependence should increase the chances of security cooperation as the two are part of a virtuous and self-reinforcing circle. Thus, classic liberal arguments would posit higher levels of economic interdependence to be positively correlated with cooperation. This argument is broadly consistent with that proposed by Fredrichs, Mihov, and Popov (2005) with respect to creating synergies for cooperation. Yet, the classic liberal argument says little, if any, about the depth of cooperation as it concentrates on the interconnection between the components comprising the Kantian triangle (i.e. democracy, international organizations, free trade) . Thus, while we might expect cooperation to be more likely according to liberal arguments, there is no expectation as to the design or depth of that cooperation.

However, Reed (2003) suggests economic interdependence plays an important informational role between states. States which are economically interdependent experience less “noise” in their interactions and this increase in certainty allows them to predict each others behavior more correctly on average. In essence, the actors are less likely to incorrectly guess each other’s intentions. The rational institutional design program expects the depth of cooperation (what they call “centralization”) to increase with uncertainty about future actor behavior (Koremenos et al. 2001). In combining Reed’s (2003) claims with those of Koremenos and co-authors (2001) we would expect high levels of economic interdependence to decrease the depth of military technical cooperation as the interdependence itself serves as a proxy for diminishing uncertainty regarding the future behavior of actors.

Hypothesis 2: Increasing economic interdependence should decrease the depth of security technical cooperation.

The majority of the factors we hypothesize to predict the depth of cooperation between the US and Canada arises from the domestic political environment. Explanations for foreign policy behavior emanating from the domestic political environment have gained much popularity in the last fifteen years (Bueno de Mesquita and Lalman 1992; Fearon 1994; Bueno de Mesquita et al. 1999, 2003) despite the crucial theoretical link being made nearly two decades ago (Putnam 1988). Existing research links a variety of domestic political factors to foreign policy behavior including the extent to which the ruling party controls government (Clark 2000; Gowa 1994), the stability of government with respect to leader turnover (McGillvray and Smith 2004, 2005), the convergence/divergence of preferences among political elites (Moravscik 1991, 1993a,

1993b; Moravcsik and Nicolaidis 1999), the trade-off between guns and butter (Powell 1999; Kimball 2006) among other factors. Here we focus on factors representing the extent to which the ruling party controls the entire government, the difference in preferences between the two governments, and other elements affecting a state's demand for security cooperation with respect to how those factors should affect the depth of military technical cooperation.

There are several factors to take into consideration when examining the extent to which the ruling party actually controls the government. Comparative politics scholars suggest a primary difference among democracies is determined by whether the system is parliamentary or presidential with electoral rules that are majoritarian or plurality based (Lijphart 1984, 1994, 1999, Powell 1982, 2000 etc.). Both the US and Canada, being former British colonies, are based on the majoritarian Westminster electoral model but differ in the sense that the US has a presidential system, and thus a separation between the executive and legislature, while Canada has a parliamentary system resulting in a *de jure* fusion of those two government branches. While this implies that control of the government is usually centralized with one dominant party, there are a number of ways in which power can be divided among actors. With respect to the US, an important indication of government control is if a single party controls the Executive, the Senate and the House of Representatives as each of these institutions represents different political bases. Other research has explored the effect of unified government on trade policy (Gowa 1994) and conflict behavior (Clark 2000). When government is divided is it more difficult for leaders to enact divisive policies or policies requiring substantial resource commitments. In essence, the more political actors exercising influence over policy outcomes (i.e. veto players), then the more likely policies are to remain at the status quo (Tsebelis 1994a, 1994b, 2000). In contrast, unified government should make delegation more likely to the executive (Milner 1997; Martin 2000) since both the legislature and the executive are likely to share similar preferences.

Hypothesis 3: Unified government in the US should increase the depth of military technical cooperation.

Government control in Canada is a bit more difficult to capture since by nature the Executive and the Parliament are fused since the Prime Minister is from the party receiving the plurality of votes, which becomes the majority party in government. Additionally, in Canada during our time period there have been eight minority governments suggesting majoritarian control at times has been conditioned by the influence of other parties in the government whose participation was necessary to create the majority. Thus, minority governments are more susceptible to policy stagnation because of veto players (Tsebelis 1994a, 1994b, 2000) and with respect to our research question we would expect veto players to limit the depth of cooperation as a way to constrain the government. Consistent with our earlier arguments about veto players as majority party's control of the government increases then, we expect deeper level of bilateral military technical cooperation.

Hypothesis 4: As the percent of seats held by the majority party in the Canadian parliament gets larger, the depth of military technical cooperation should increase.

Another metric for capturing government control is to examine shuffles or changes to the executive's cabinet. Cabinet shuffles are usually taken as a signal of instability. "Reshuffles destroy the informational gains that prolonged ministerial tenure can bring, and in so doing undermine political (i.e., the cabinet's) control of the bureaucracy" (Kam and Indridason, forthcoming). There are two explanations for cabinet shuffles prominent in the literature. The first suggest cabinet reshuffles are a response to domestic troubles as a tactic to restore governmental competence. Whereas, Kam and Indridason (forthcoming) suggest shuffles help executives to deal with the moral hazard problem among ministers since shuffles are observed in the absence of scandal. According to those authors (forthcoming), "cabinet ministers have inherently mixed motives, depending on their party's continued electoral success to stay in power, but having every incentive to use their departments to serve their own ambitions (for a more prestigious cabinet post, the leadership, etc.)". Regardless of the motivations for the shuffle, cabinet shuffles suggest governmental instability, uncertainty and, perhaps, bureaucratic inefficiency. Some might believe cabinet shuffles signal deeper difficulties in the Canadian system than in the American one as executives are dependant upon party elite to retain office. Cabinet shuffles in parliamentary systems have been linked to several motivations including encouraging party discipline, fortifying strength relative to the minority, or other strategic reasons and usually several ministers will be shuffled at the same time. In contrast, cabinet shuffles in the US are typically considered as an executive power and are employed with much less frequency than in Canada. As cabinet changes more generally represent executive uncertainty and government instability, we posit that as the number of cabinet shuffles in either country increases, the shallower cooperation will be between the states.

Hypothesis 5: As the number of Canadian cabinet shuffles increases, then the depth of cooperation should decrease.

Hypothesis 6: As the number of American cabinet shuffles increases, then the depth of cooperation should decrease.

Since the US presidential electoral calendar is known, as it is constitutionally determined, we would suggest that election years add more uncertainty to US-Canadian relations. One only needs to peruse the Canadian media throughout this past year to quickly surmise there is substantial public and government uncertainty with respect to how certain presidential candidates may continue or change US policy with respect to important bilateral issues. Even though democracies generally fulfill their commitments according to existing research (Leeds 2003; see Gartzke and Gleditsch 2004 for an opposing view), there is reason to believe different presidential candidates may orient US foreign policy in different directions and have diverging preferences over the priorities for US foreign policy. Thus, we would expect agreements formed during presidential years to be less deep since leaders are uncertain about the state of the future (Koremenos et al. 2001).

Hypothesis 7: Agreements formed in US presidential election years should be less deep than those formed in non-presidential election years.

Hypotheses three through seven represent the extent to which a party controls the government and the government in power is stable. Alternatively, we could consider how partisan preferences play a role in determining the depth of security cooperation. Ideological distance between governments should increase the noise and uncertainty of policy signals sent between the countries. Much research has suggested that distance between parties within a government makes the creation of coherent foreign policy more difficult (Haas 2005; Clare 2006; Deleat & Scott 2006; Kupchan and Trubowitz 2007). Tsebelis' veto player argument (1995a, 1995b, 2000) is relevant here as he argues increasing ideological distance between veto players leads to policy stability or an incapacity to change from the status quo. However, few scholars have examined how ideological distance between foreign governments might affect their foreign policy behavior. We expect increasing ideological distance should decrease the depth of security policy cooperation.

Hypothesis 8: As the ideological distance between the majority party, in both governments, increases, then the depth of cooperation should decrease.

Finally, when considering a state's demand for military technical cooperation we are relegated to we are conscious of how power considerations play a central role. Powerful states, like the US, can pursue their security and defense policy unilaterally since they have the capacity to do so (Wohlforth 1999). American defense budgets generally represent 4% of all government spending comparative to less than 2% for most other industrialized democracies (www.nato.int) ensuring American military dominance for many years to come. Additionally, the diversity and depth of the American economy allows leaders to engage in deficit spending when necessary in order to meet the demands of the military burden. On the other hand, Canada's military power is comparatively weaker, less diversified, and highly contingent upon expenditures in other areas. In fact, one might consider Canada to be a classic nation with respect to the guns versus butter dilemma (Powell 1999). The guns-butter dilemma rests upon several assumptions: resources are scarce, budgets are finite, and the balance between these two goods determines current and future consumption possibilities. In abstract, the dilemma suggests the more a state allocates towards guns the less it has to allocate towards butter and while allocations towards security ensure the survival of the states allocations towards social goods enhance the survival of the leader in office. Thus, leaders have an incentive to strike an efficient and effective balance between these two primary goods. Canadian governments have a long-standing commitment to provide social welfare for their citizens since the "Medical Care Act" of 1966. Thus, to the extent that Canada allocates resources towards "butter" it has limited resources remaining for "guns". We expect as Canadian social expenditures increase, there should be a corresponding increase in the depth of cooperation so that Canada can get more "bang for its buck".

Hypothesis 9: Increasing social expenditures in Canada should increase the depth of military technical cooperation.

We also control for the effect of phased agreements on the depth of cooperation. Downes, Rocke and Barsoom (1998) provide evidence to support the claim that phased agreements enable deeper cooperation among partners as each newly negotiated phase of the agreement allows the signatories to revisit and amend the earlier agreement based on information revealed in the inter-negotiation intervals with the result being an end agreement which is much deeper than a single-shot negotiated agreement. Thus, we expect phased agreements to be positively related to cooperation depth. We are also interested in exploring if the depth of cooperation is distinctly different between the cold war and the post-cold war period, thus we control for the cold war period. Having identified the factors we believe to be related to the depth of military technical cooperation, in the next section we will detail the operationalization of these variables and research design.

IV. Research Design

A. Operationalization of variables

This project is interested in understanding the depth of military technical cooperation agreements formed by the US and Canada between 1950 until 2005. As such, the unit of analysis is the agreement-year. The agreement data used in this project is a new data-set collected by one of this paper's co-authors. These agreements include all formal, non-treaty, agreements signed between the US and Canada during the time period. These agreements were collected from a variety of sources including the each government's treaty division, the UN treaty series, and other electronic sources. For each agreement a detailed questionnaire was filled out comprising of some 70 questions ranging from the historical details of the agreement to the technical details describing the nature of the cooperation between the signatories. A numeric coding scheme was then applied to the question so that the textual responses could be converted to numeric codes that appear in the data matrix.³ The result is 73 agreements for the time period described.

As mentioned earlier, there is a lack of literature attempting to quantify the depth of cooperation. Stinnett (2006) provides a nice basic framework to consider conceptualizing depth but his work is with respect to the depth of regional trade agreements and thus represents a different issue area within which much more systematic work has been done. Nonetheless, we take Stinnett as a starting point and consider which factors would reflect increasing policy coordination in the area of security. Similar to Stinnett, we create an index reflecting the depth of cooperation between states.

[Insert Table 1 about here]

Table 1 in the appendix includes a list of all questions used to measure the depth of cooperation. This variable ranges between 0-31 with a mean of 13.4 and a standard deviation of 8.44.⁴ The Depth of Cooperation Count is used at the dependant variable for the analyses here. Using the data collected in this project we also measure the phases of

³ A copy of the questionnaire and numeric coding form is available from the authors upon request.

⁴ This variable is a simple count of the number of shallow and deep commitments where shallow commitments are equal to 1 and deep commitments are equal to 2. Please contact the authors for more information on which questions from Table 1 were classified as reflected shallow versus deep commitments.

the agreements, this variable is relatively easy to code from the text of the agreements as they often cross-reference the earlier relevant agreement(s). This variable equals 1 if the agreement has multiple phases.

We have identified a set of independent variables that we believe help to explain the depth of cooperation⁵. These variables include rival military spending relative to the dyads total spending, economic interdependence, the presence of divided government in the US, the strength of the parliamentary majority in Canada, Canadian cabinet shuffles relative to total shuffles, the presence of a presidential election year in the US, the ideological distance between the governments and the level of Canadian social security expenditures. The ratio of rival military spending over total dyadic military spending is calculated using data from the Composite Index of National Capabilities (Singer, Bremer, and Stuckey 1972). This index measures demographic, industrial, and military capacity. For the period of 1950 until 1990 use Soviet military spending and after 1990 we use Chinese military spending. The data on military spending was generated using the EUGene program (Bennett and Stamm 2000). This variable ranges between .06 and 1.5 indicating increasing rival military dominance relative to the US-Canadian dyad with a mean of .76 and a standard deviation of .43.

We also hypothesize that bilateral trade is negatively related to cooperation depth. Bilateral trade data comes from Barbieri's work on the link between economic interdependence and conflict (2002). We use her measure of economic interdependence which accounts for both the salience and symmetric of interdependence between the two states (see Barbieri 2002 for a more complete description). Unified government data comes from the data collected by Gowa (1994) with updates for the 81st – 86th and 109th US Congresses coded from information provided on the US Congress website by the authors. We code a binary variable equal to 1 if the Democratic Party controls the Executive and both chambers of Congress and 0, otherwise. Data for majority party control in Canada was collected from information provided by Elections Canada. We use the percent of seats in parliament controlled by the majority party which ranges between 41-78% for the time period.

Cabinet shuffle data was collected from existing archival resources for the US⁶ and data for Canadian cabinet shuffles was provided by Kam and Indridason (2005, forthcoming) with updates collected from the website of the Ministry of the Prime Minister of Canada. We use the variable which simply counts the number of shuffles within the Canadian cabinet in a given month. US presidential election years are also available from the Gowa data (1994). Ideological distance data comes from the Kim-Fording Government and Party Ideology indices (Kim and Fording 1998; 2003) which were calculated by the Comparative Manifesto Project (Budge et al. 2001; Klingemann et al. 2006). The Comparative Manifesto Project codes party ideology based on party platforms with 0 indicating right and 100 indicating left governments. We include a measure that accounts for the absolute difference between the government ideology score for each Canadian government and the party ideology score for the party in power of the

⁵ All variables were lagged to ensure the appropriate temporal relationship between the independent variables and the dependant variable.

⁶ US Cabinet shuffle data was collected on an annual basis from information provided by Presidential libraries and the website of the President of the United States. Please contact the authors for a complete list.

executive for each agreement. This measure ranges from .4 (indicating ideologies that are quite close) to 42 with a mean of 16 and a standard deviation of 11. Finally, social expenditures data come from Statistics Canada website and are measured in millions of dollars. Due to differences in temporal span some models may constrain the number of variables in order to maximize the number of observations available. Where possible the authors tried to update existing data until 2005 or seek data as far back as 1950 depending on the existing sources.

B. Methodology

Since the nature of the dependent variable is essentially an ordinal count of the depth of cooperation in each military technical agreement, the appropriate methodological approach is to use a Poisson model to examine the effect of our proposed independent variables on the depth of US-Canadian military technical cooperation. This model generates a predicted count of the depth of cooperation based on the parameters of the model. The specification of the Poisson model can be found in Long (1997, 223).⁷ Given the limited size of our dataset, we choose not to overburden the model by including too many independent variables in one model.⁸ Thus, we estimate a model based on the exterior environment that included the level of trade dependence between the US and Canada as well as the military spending of their largest rival over total dyadic military spending. This model allows insight into the influence of international political and security factors on the depth of cooperation. Then, we estimate an interior environment model captures the dynamics of the domestic political environment in both countries in its inclusion of variables reflecting the extent to which each executive is constrained by his/her legislature and the amount of stability in the executives own cabinet. Finally, based on the findings of the two previous models we will present a unified model representing what we feel to be the best mix of international and domestic factors to explain the depth of military technical cooperation between these two close allies. We understand that this tactic is not optimal, however, given the constraints of our dataset we choose to maximize the variety of variables we use to test our intuitions as this project represents one of the first attempts, known to the authors, to understand the depth of security cooperation depth based on systematic analyses.

Below we give the specification of each empirical model for the readers:

Model A: International Politics

$$E(\text{depth of cooperation}) = \alpha + \beta_1 (\text{Ratio of military spending of largest rival to dyadic total}) - \beta_2 (\text{economic interdependence}) + \beta_{10} (\text{Cold War}) + \beta_{11} (\text{multiphase agreement}) + \epsilon_i$$

Model B: Domestic Politics

⁷ Though we use a Poisson model to estimate the relationships here, it is possible that there may be some contagion among the data suggesting cooperation encourages deeper cooperation. Preliminary tests do not suggest that the variance is greater than the mean for the dependant variable used in this dataset suggesting it is not necessary to use a negative binomial regression model to account for the contagion.

⁸ Our intension is to expand this dataset to include all cooperation between Europe and North America, thus as we expand the dataset we can develop more precise empirical models.

$$E(\text{depth of cooperation}) = \alpha + \beta_3 (\text{Unified US Government}) + \beta_4 (\text{Strength of majority party in Canadian parliament}) - \beta_5 (\text{Number of Canadian cabinet reshuffles}) - \beta_6 (\text{US cabinet reshuffles}) - \beta_7 (\text{US Presidential election year}) - \beta_8 (\text{Absolute ideological distance between the parties in power}) + \beta_9 (\text{Canadian social policy expenditures}) + \beta_{10} (\text{Cold War}) + \beta_{11} (\text{multiphase agreement}) + \epsilon_i$$

Model C: Unified & Refined Model

$$E(\text{depth of cooperation}) = \alpha + \beta_1 (\text{Ratio of military spending of largest rival to dyadic total}) + \beta_3 (\text{Unified US Government}) + \beta_4 (\text{Strength of majority party in Canadian parliament}) - \beta_5 (\text{Number of Canadian cabinet reshuffles}) - \beta_6 (\text{US cabinet reshuffles}) - \beta_8 (\text{Absolute ideological distance between the parties in power}) + \beta_{10} (\text{Cold War}) + \beta_{11} (\text{multiphase agreement}) + \beta_{12} (\text{Liberal US President}) + \epsilon_i$$

V. Analysis and Discussion

[Insert Table 2 about here]

Table 2 presents results for Poisson models estimated the expected count of the depth of US-Canadian based on military technical agreements. The second column of table 2 presents the hypothesis number and expected direction for each variable. In column 3, Model A presents coefficient results for an empirical model estimating the depth of military technical cooperation between the US and Canada based on international political factors. In this model we examine the effects of rival military spending and bilateral economic interdependence on dyadic cooperation depth. The results of this model are indeterminate with respect to whether a systematic effect can be identified though the economic interdependence is negatively correlated with the depth of cooperation as we argue earlier in the paper. While these results are not entirely encouraging, we believe increasing the number of cases will increase our capacity to draw inferences from the relationship.⁹ With respect to the control variables, we find that the cold war does not appear to have a systematic influence on cooperation depth and that multiple phase agreements actually appear decrease the depth of cooperation contrary to our expectation. However, upon further analysis we find this is related to the fact that many multiphase agreements actually include extensions of earlier agreements that for the most part do not change or update the terms of the original agreements, thus they are no deeper. The argument presented by Downes, Rocke and Barsoom (1998) upon which we based our expectation assumed that each phase of the agreement was renegotiated to increase the depth and this does not appear to be the pattern within these data.¹⁰

Model B examines the effects of a variety of domestic political variables on bilateral cooperation depth. Of the seven factors we identify as influencing the depth of

⁹ It should be noted that Model A has the smallest number of observations since the economic interdependence data end in 1992 and the military expenditure data end in 2000 though the rest of our extend until 2005.

¹⁰ The authors estimated Model A excluding agreements that are simple extensions of earlier agreements and found that economic interdependence is negatively related to cooperation depth and significant as expected suggesting the relationship between the informational effectiveness of follow-on agreements and cooperation depth deserves further study.

cooperation, we find significant relationships for three of those factors. Our results suggest shuffles in the Executive Cabinets in both countries tend to decrease cooperation depth adding support to our claims about how internal instability ought to deter actors from creating deep agreements. Moreover, based on the magnitude of the coefficients cabinet instability in Canada appears to be more detrimental to the depth of bilateral military technical cooperation than cabinet instability in the US. As Canada increases its social policy expenditures, bilateral military technical agreements are likely to increase in depth suggesting there is support for the claim that leaders must balance between providing sufficient social and national security. Among the other factors we argued should affect cooperation depth, we find no systematic relationship for the extent to which the executive controls policy making authority (via US unified government or the strength of the majority party in the Canadian parliament), the ideological distance between the ruling parties in each states, and whether there was a US presidential election in the previous year. Finally, we find that phased agreements again are shallower than, single phased agreements.

Based on our findings in Model B, we decide to add another variable to Model C that captures whether the US president is a Liberal. Even though conventional wisdom suggests that Republican leaders ought to be more attentive to national security concerns, we know this wisdom should be conditioned by the knowledge that Conservative leaders also prefer policy autonomy. In contrast, Liberal US presidents should be more likely to seek deeper cooperative commitments as a way to encourage policy coordination and reciprocity. Model C presents results for a unified and refined model based on the results of our earlier models. In this model, we omit two variables (economic interdependence and Canadian social policy expenditures) which constrain the number of cases available for analysis due to their limited time period, thus omitting these variables allows us to maximize the number of observations, and we exchange the variable that captures whether the US executive is a Liberal replaces the variable capturing the previous year was a presidential election year. Our model suggests 4 of our remaining 7 hypothetical expectations are met. In fact, our unified and refined model confirms our expectations that rival military expenditures and Liberal US presidents positively affect cooperation depth, while executive cabinet instability in both countries continues to deter leaders from deepening cooperation.

However, contrary to our expectations we find that the presence of unified government in the US actually encourages states to make more shallow agreements. Though that finding is inconsistent with our expectations, one reasonable explanation suggests that Canadian leaders may actually be wary of an unconstrained US executive and that too much power delegated to the US executive may actually deter deeper bilateral cooperation as no formal legislative approval is required for the types of cooperative arrangements examined here as mentioned before. Moreover, this finding interestingly suggests that even though leaders may strategically select these types of lower level diplomatic commitments it does not mean they will make deeper commitments to each other. This finding is extremely interesting given the arguments of Martin (2000) and Milner (1997) with respect to the double-cutting effect of domestic institutions on international cooperation as these authors suggest oversight by other domestic political institutions enhances the credibility of commitments but makes it more

difficult for cooperation to arise thus decreasing the probability of cooperation while simultaneously increasing the probability of compliance.

[Insert Figure 1 about here]

While the coefficients themselves provide some intuition as to the direction and magnitude of the independent variables with respect to our phenomenon of interest, we find that presenting expected values of the dependant variable while holding some variables constant and changing others allows a clearer picture of some of the elements we discuss here. Figure 1 compares the expected depth of bilateral cooperation between the US and Canada between a model reflecting the average of the data¹¹ and models reflecting the maximum number of cabinet changes and the maximum ratio of rival military spending as the strength of the majority party's control in the Canadian parliament increases. The figure suggests that the magnitude of the effects of domestic political instability is stronger than the effects of rival military spending thus suggesting that internal politics play a crucial role in how states design cooperation. The findings here add further support to the claims of Putnam (1988) and others about the interdependencies between the domestic and international environments.

[Insert Figure 2 about here]

Figure 2 continues to suggest that the magnitude of influence of domestic factors on cooperation depth is quite substantial as having a unified government in the US decreases cooperation depth by about 20% as the majority party in the Canadian parliament gets stronger. Moreover, if there is unified US government and cabinet instability in Canada is at its maximum (i.e. equal to 5) and cabinet instability in the US is moderate (i.e. that 50% of posts have changed) then cooperation depth is expected to decrease by about 60% again pointing towards the interconnections between domestic political actions and foreign policy behavior. The results presented are both illuminating and provide a nice base for future work on cooperation depth.

VI. Conclusions

This paper has developed a preliminary theoretical model for considering the factors that affect the depth of military technical cooperation between allies. This model was tested on a new dataset representing military technical cooperation agreements signed between the US and Canada between 1950 and 2005. This dataset is a first attempt at systematically understanding the design features of military technical cooperative agreements. This dataset will be used by scholars wishing to understand the interrelationships among bilateral cooperation projects as well as the design of those cooperation endeavors. Empirical results presented here suggest that both international and domestic factors are important in shaping the depth of military technical cooperation between the US and Canada. A quick inspection of the figures presented in this paper suggests that the magnitude of the effects of domestic political variables (i.e. cabinet instability) is stronger than those for international variables (i.e. rival military spending) providing evidence to support the claims of liberal scholars that the domestic political environment is an important factor shaping foreign policy. Moreover, the results suggest

¹¹ This model uses the average value of all ordinal and interval independent variables and the mode for dichotomous dependant variables for calculations. For further information see Long (1997, 217-230).

that engaging in cooperative endeavors as lower diplomatic levels does not necessarily make leaders more likely to make deeper commitments.

Despite the interesting results uncovered among the cases in this dataset, we would like to expand the dataset to include all military technical cooperation between Europe and North America as a first step and then continue on to collect all of the cases in the world during our target time period. The existing data suggest some interesting patterns arise after two key events that drastically reshaped the strategic balance: the end of the Cold War and the events of September 11, 2001. Agreements formed after these two events are much more precise on with respect to scope, function, purpose and threat. Expanding our dataset would give us a more clear view of the evolution of military technical cooperation over the last half century.

Aside from increasing the number of cases available for analysis, we would also like to continue on to develop more complex theoretical models integrating military technical cooperation supported via international institutions and formal treaties to understand what encourages leaders to select one institutional design over other possible options under what conditions. Moreover, we would like to consider integrating some potentially important but difficult to measure missing factors into our empirical model like the role of reputation and history. In closing, we are encouraged by our findings based on this subset of military technical cooperation data and believe that much more work can be done to gain a more complete understanding of this important, but understudied, area of foreign policy behavior.

References

- Barbieri, Katherine. 2002. *The Liberal Illusion: Does Trade Promote Peace?* Ann Arbor: University of Michigan Press.
- Barkin, Samuel. 2004. "Time Horizons and Multilateral Enforcement in International Cooperation." *International Studies Quarterly*. 48: 363-382.
- Bennett, D. Scott, and Allan Stam. 2000. "EUGene: A Conceptual Manual." *International Interactions*. 26:179-204. (<http://eugenesoftware.org>) [v.3.03]
- Budge, Ian; Hans- Dieter Klingemann; Andreas Volkens; Judith Bara; & Eric Tanenbaum with Richard C. Fording; Derek J. Hearl, Hee Min Kim, Michael McDonald and Silvia Mendez. 2001. *Mapping Policy Preferences. Estimates for Parties, Electors, and Governments 1945-1998*. Oxford: Oxford University Press.
- Bueno de Mesquita, Bruce and David Lalman. 1992. *War and Reason: Domestic and International Imperatives*. New Haven, CT: Yale University Press.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge MA: The MIT Press.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson and Alastair Smith. 1999. "An Institutional Explanation of the Democratic Peace." *American Political Science Review* 93 (4): 791-807.
- Clare, Joe. 2006. "Institutional Differences, Ideological Distance, and Democratic Conflict Behavior." Paper presented at the annual meeting of the International Studies Association, Town & Country Resort and Convention Center, San Diego, California, USA, Mar 22, 2006.
- Clark, David H. 2000. "Agreeing to Disagree: Domestic Institutional Congruence and US Dispute Behavior." *Political Research Quarterly*. 53(2): 375-401.
- Deleat, C. James and James M. Scott. 2006. "Treaty-Making and Partisan Politics: Arms Control and the US Senate, 1960-2001." *Foreign Policy Analysis*. 2(2): 177-200.
- Dell, Melissa. 2002. "Learning Curve: The US and the Future of Pakistan." *International Law*. 24(1):
- Downs, George W.; David M. Roake & Peter N. Barsoom. 1998. "Managing the Evolution of Multilateralism." *International Organization*. 52(2): 397-419.
- Fearon, James D. 1994. "Domestic Political Audiences and the Escalation of International Disputes." *American Political Science Review*. 88: 577-592.

Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization*. 49(3): 379-414.

Friedrichs, Jörg; Jordan Mihov & Maria Popova. 2005, "Synergies and Tradeoffs in International Cooperation: Broadening, Widening, and Deepening." *European Integration online Papers*. 9(13): 26 pgs.

Gallis, Paul. 2008. "NATO in Afghanistan: A Test of the Transatlantic Alliance" *Congresional Research Service*. CRS Report # RL33627.

Gartzke, Erik & Kristian Gleditsch. 2004. "Why Democracies May be Less Reliable Allies." *American Journal of Political Science*. 48(4): 775-795.

Gowa, Joanne S. 1994. *Allies, Adversaries, and International Trade*. Princeton, NJ: Princeton University Press.

Haas, Mark L. 2005. *The Ideological Origins of Great Power Politics: 19789-1989*. Ithaca, NY: Cornell University Press.

Haggard, Stephan. 1997. "Regionalism in Asia and the Americas". In *The Political Economy of Regionalism*, ed. Edward D. Mansfield and Helen V. Milner. New York: Columbia University Press.

HeeMin Kim and Richard C. Fording. 1998. "Voter Ideology in Western Democracies, 1946-1989." *European Journal of Political Research*. 33:73-97.

HeeMin Kim and Richard C. Fording. 2003. "Voter Ideology in Western Democracies: An Update." *European Journal of Political Research*. 42:95-105.

Kam, Christopher and Indridi Indridason. 2005. "The Timing of Cabinet Reshuffles in Five Westminster Parliamentary Systems." *Legislative Studies Quarterly*. 30: 327-363.

Kam, Christopher and Indridi Indridason. Forthcoming. "Cabinet Reshuffles and Ministerial Drift." *British Journal of Political Science*.

Keohane, Robert. 1984. *After Hegemony: Cooperation and Discord in World Political Economy*. Princeton, NJ: Princeton University Press.

Kimball, Anessa L. 2006. *Alliances from the Inside-Out: A Domestic Politics Theory of Alliance Formation*. Ph.D. dissertation deposited at Binghamton University, SUNY.

Klingemann, Hans-Dieter; Andrea Volkens; Judith Bara; Ian Budge and Michael McDonald. 2006. *Mapping Policy Preference II: Estimates for Parties, Electors and Governments in Eastern Europe, the European Union, and the OECD, 1990-2003*. Oxford: Oxford University Press.

Koremenos, Barbara; Charles Lipson & Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization*. 55: 761-800.

Kupchan, Charles and Peter L. Trubowitz. 2007. "Grand Strategy for America Divided." *Foreign Affairs*. 86(4).

Langlois, Catherine C. & Jean-Pierre Langlois. 2001. "Engineering Cooperation : A Game Theoretic analysis of Phased International Agreements." *American Journal of Political Science*. 45(3): 599-619.

Langlois, Catherine C. & Jean-Pierre Langlois. 2005. "Provisions for Non-compliance and Treaty Value: A Game Theoretic Perspective." *International Studies Quarterly*. 48:383-408.

Leeds, Brett Ashley, Jeffrey M. Ritter, Sara McLaughlin Mitchell, and Andrew G. Long. 2002. "Alliance Treaty Obligations and Provisions, 1815-1944." *International Interactions*. 28: 237-260.

Leeds, Brett Ashley. 2003. "Alliance Reliability in Times of War: Explaining State Decisions to Violate Treaties." *International Organization*. 57: 801-827.

Lijphart, Arend. 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries*. New Haven CT: Yale University Press.

Lijphart, Arend. 1994. *Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies, 1945-1990*. Comparative European Politics Series. Oxford: Oxford University Press.

Lijphart, Arend. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries*. New Haven, CT: Yale University Press.

Long, J. Scott. 1997. *Regression Models for Limited Dependent Variables*. Thousand Oaks, CA: Sage.

Martin, Lisa. 2000. *Democratic Commitments: Legislatures and International Cooperation*. Princeton, NJ: Princeton University Press.

Mason, Dwight. 2003. "The Future of Canadian-US defense relations." *American Review of Canadian Studies*.

McGillivray, Fiona and Alastair Smith. 2005. "The Impact of Leadership Turnover and Domestic Institutions on International Cooperation." *Journal of Conflict Resolution*. 49 (5): 639-660.

McGillivray, Fiona and Alastair Smith. 2004. "The Impact of Leadership Turnover on Relations Between States." *International Organization*. 58: 567-600.

- Milner, Helen. 1997. *Interests, Institutions, and Information: Domestic Politics and International Relations*. Princeton, NJ: Princeton University Press.
- Mitchell, Ronald B. 1994. "Regime Design Matters: International Oil Pollution and treaty compliance." *International Organization*. 48(3): 425-458.
- Moravcsik, Andrew. 1991. "Negotiating the Single European Act: National Interests and Conventional Statecraft in the European Community." *International Organization*. 45:19-46.
- Moravcsik, Andrew. 1993a. "Armaments Among Allies: European Weapons Collaboration, 1875-1985" in Evans, P. B., H. K. Jacobson et R. D. Putnam. *Double Edged Diplomacy: International Bargaining and Domestic Politics*. University of California Press.
- Moravcsik, Andrew. 1993b. "Preferences and Power in the European Community: A Liberal Intergovernmentalist Approach." *Journal of Common Market Studies*. 31(\$): 473-524.
- Moravcsik, Andrew and Kalypso Nicolaidis. 1999. "Explaining the Treaty of Amsterdam: Interests, Influences, Institutions." *Journal of Common Market Studies*. 37(1): 59-85.
- North Atlantic Treaty Organization. 2008. Information on the Defense Expenditures of NATO members. (Accessed on 1 April 2008 at http://www.nato.int/issues/defence_expenditures/index.html.)
- Olson, Mancur. 1965. *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.
- Oye, Kenneth. 1984. *Cooperation Under Anarchy*. Princeton NJ: Princeton University Press.
- Padoan, Pier Carlo. 1997. "Regional Agreements as Clubs: The European Case." In *The Political Economy of Regionalism*, ed. Edward D. Mansfield and Helen V. Milner. New York: Columbia University Press.
- Pastor, Robert A. 2001. *Toward a North American Community: Lessons from the Old World for the New*. Washington, D.C. Institute for International Economics.
- Powell Jr., G. Bingham. 1982. *Contemporary Democracies: Participation, Stability and Violence*. Cambridge, MA: Harvard University Press.
- Powell Jr., G. Bingham. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. New Haven, CT: Yale University Press.

- Powell, Robert. 1999. *In the Shadow of Power: States and Strategies in International Politics*. Princeton, NJ: Princeton University Press.
- Powers, Kathy. 2004. "Regional Trade Agreements as Military Alliances." *International Interactions*. 30(4): 373-395.
- Putnam, Robert. 1988. "Diplomacy and Domestic Politics: The Logic of Two-Level Games," *International Organization*, 42(3): 427-60.
- Reed, William. 2003. "Information and Economic Interdependence." *Journal of Conflict Resolution*. 47(1): 54-71.
- Russett, Bruce and John R. Oneal. 2001. *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: W.W. Norton & Co.
- Schneider, Gerald and Lars-Erick Cederman. 1994. "The Change of Tide in Political Cooperation: A Limited Information Model of European Integration." *International Organization*. 48: 633-662.
- Singer, J. David, Stuart Bremer, and John Stuckey. 1972. "Capability, Uncertainty, and Major Power War, 1820-1965." In Russett, Bruce (ed.) *Peace, War, and Numbers*. New York: Sage Publications.
- Statistics Canada. 2008. Various data series on Canadian social security expenditures. (Accessed on 1 April 2008 at www.statscan.ca.)
- Stinnett, Doug. 2006. "Accounting for the Depth of Cooperation: The Design of Regional Trade Agreements." Paper prepared for presentation at the Annual Meeting of the American Political Science Association, Philadelphia, PA.
- Tsebelis, George. 1995a. "Veto Players and Law Production in Parliamentary Democracies." in Herbert Doring (Ed.) *Parliaments and Majority Rule in Western Europe*. New York: St. Martin's Press.
- Tsebelis, George. 1995b. "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartyism." *British Journal of Political Science*. 25(3): 289-325.
- Tsebelis, George. 2003. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- Walt, Stephen M. 1987. *The Origins of Alliances*. Ithaca: Cornell University Press.
- Waltz, Kenneth N. 1979. *Theory of International Politics*. New York: McGraw Hill Inc.

Weber, Max (1968 [1922]) *Economy and Society: An Outline of Interpretive Sociology*. Berkeley: University of California press (3 volumes).

Wohlforth, William C. 1999. "The Stability of a Unipolar World." *International Security*. 21(1): 5-41.

Table 1: Questions used for Measuring the Depth of Military Technical Cooperation*

Question #	Question text
10	Are there conditions under which members may renounce the agreement? (Y, N) If yes, describe these provisions. <i>Variable coding: Binary</i>
11	Are there provisions for amending the agreement? (Y, N) If yes, describe these provisions. <i>Variable coding: Binary</i>
12	Are there specific provisions in the agreement concerning the renewal of the agreement? (Y, N) If yes, describe the provisions. <i>Variable coding: Binary</i>
23	Describe the goals/motives/objectives of the agreement. (Ex: technological improvement, extension of previous project, exchange of information and research collaboration, logistical support, amending a previous agt., adaptation to a new strategic context) <i>Variable coding: Interval</i>
27	Describe the obligations of the agreement partners. <i>Variable coding: n/a</i>
28	Are any obligations contingent upon the availability of funds? (Y, N) If yes, describe. <i>Variable coding: Binary</i>
29	Are any of the obligations listed above contingent upon something else? (Y, N) If yes, describe. <i>Variable coding: Binary</i>
30	Describe the nature of the limits to the obligations listed in #27. <i>Variable coding: n/a</i>
31	Are there any territorial restrictions? (Y, N) If yes, describe. <i>Variable coding: Binary</i>
32	Are there any specified limitations to the scope of the agreement? (Y, N) If yes, describe. <i>Variable coding: Binary</i>
33	Are any of the limitations (including in scope) related to compliance with domestic law? (Y, N) If yes, describe. <i>Variable coding: Binary</i>
35	Does this agreement require cross-bureaucratic coordination within each state? (Ex. Coordination between the State dept. and the dept. of Defense) (Y, N) If yes, describe <i>Variable coding: Binary</i>
36	Does the agreement require cross-bureaucratic coordination between the countries? (Ex. Between two foreign ministries) (Y, N) If yes, describe. <i>Variable coding: Binary</i>
37	Does the agreement require coordination across branches of the military in

both states? (Y, N) If yes, describe.

Variable coding: Binary

38 Are there any other additional limits to the agreement obligations or conditions under which the agreement obligations do not apply that were not listed in #27. (Y, N) If yes, describe.

Variable coding: Binary

41 Are the agreement obligations symmetric? (That is, do all members commit to the same obligations?) (Y, N) If no, explain.

Variable coding: Binary

42 Will the agreement benefit all signatories equally? (Y, N) If no, explain.

Variable coding: Binary

43 Does the agreement have any provisions requiring that the contracting parties consult before making commitment to third parties (i.e. States, IGOs, Businesses)? (Y, N) If yes, describe these provisions.

Variable coding: Binary

47 Does the agreement discuss mediation/arbitration or other means of settling disputes among the signatories? (Y, N) If yes, describe.

Variable coding: Binary

48 Does the agreement require official contact among the military forces of the participating states? (Y, N) If yes, describe.

Variable coding: Binary

50 Does the agreement provide for an integrated command of military forces while it is in effect? (Y, N) If yes, describe the nature and organization of command. Note if the command is to rotate between participants or not.

Variable coding: Binary

51 Does the agreement require the subordination of the forces of one or more member states to another at any time? (Y, N) If yes, describe.

Variable coding: Binary

52 Does the agreement establish any organizations? (include provisions for regularly scheduled meetings) (Y, N) If yes, describe.

Variable coding: Binary

53 Does the agreement provide for joint military bases, or for one or more states to place troops in the territory of one or more of the other states? (Y, N) If yes, describe.

Variable coding: Binary

54 Does the agreement specify contribution levels (funds, troops, components)? (Y, N) If yes, describe.

Variable coding: Binary

55 Are there any conditions regarding contribution levels? (Y, N) If yes, describe.

Variable coding: Binary

56 Does the agreement contain any provisions regarding the coordinated increase of armaments, reduction of armaments, prohibition of weapons etc?

(Y, N) If yes, describe such provisions.

Variable coding: Binary

57 Are there any other provisions in the agreement that describe the means through which the states will coordinate their military efforts and policies?

(Y, N) If yes, describe.

Variable coding: Binary

64 Are there any companion agreements referenced in this agreement? (Y, N) If yes, describe.

Variable coding: Binary

65 Does the agreement include statements regarding non-military cooperation (e.g. economic, cultural, scientific exchange)? (Y, N) If yes, describe.

Variable coding: Binary

66 Does the agreement mention unresolved conflicts among the parties? (Y, N) If yes, describe.

Variable coding: Binary

68 Does the agreement propose any other agreements regarding issues among the contracting parties? (Y, N) If yes, describe.

Variable coding: Binary

70 Does the agreement include provisions for economic aid or other enticements (include trade concessions, side payments, contracts for national companies related to the agreement etc)? (Y, N) If yes, describe these provisions.

Variable coding: Binary

71 Does the agreement describe the circumstances under which one party may intervene in the internal political of another party or specifically commit the state to non-intervention? (Y, N) If yes, describe.

Variable coding: Binary

72 Does the agreement describe any provisions relevant to delays to cooperation caused by internal/domestic political processes? (Yes, No) If yes, describe.

Variable coding: Binary

*Drawn from the Military-Technical Cooperation Agreement Coding sheet (Version 2). Entire questionnaire available upon request.

Note: **Bolded** question numbers or text indicate agreement design elements considered as “deep” for this analysis.

Table 2: Poisson Model Results Estimating the Depth of US-Canadian Military Technical Cooperation

	H#: Direction	Model A: International Politics	Model B: Domestic Politics	Model C: Unified & Refined
Rival Military spending/Total dyadic military spending	H1: +	-0,0165 (,1817)	---	0,3005* (,1747)
Economic interdependence	H2: -	-0,0020 (,0018)	---	---
Unified US Government	H3: +	---	-0,0488 (,1167)	-0,6006* (,1517)
% Parliamentary majority in Canada	H4: +	---	-0,0056 (,0044)	0,0045 (,0044)
Canadian cabinet reshuffles	H5: -	---	-0,1435* (,0556)	-0,1615* (,0559)
US Cabinet reshuffles	H6: -	---	-0,0043* (,0024)	-0,0049* (,0023)
US Presidential election year	H7: -	---	0,0655 (,1024)	---
Liberal US President	N/A: +	---	---	0,5196* (,1498)
Ideological distance between parties in power	H8: -	---	0,0041 (,0036)	-0,0022 (,0046)
Canadian social policy expenditures	H9: +	---	0,1263* (,0521)	---
Phased Agreements	CV: +	-0,3063* (,0758)	-0,2719* (,0826)	-0,2765* (,0769)
Cold War	CV: +/-	-0,0216 (,2683)	0,1656 (,1574)	-0,2035 (,1915)
Constant	N/A	2,6657* (,2535)	2,0207* (,6206)	2,5291* (,3320)
Number of Observations		55	59	63
Log likelihood		-258,136	-268,005	-275,753
LR chi-squared		20,12*	40,98*	50,74*

Standard errors reported in parantheses below coefficient estimates.

* p< .05

Figure 1: Expected MTC Cooperation Depth based on Model C

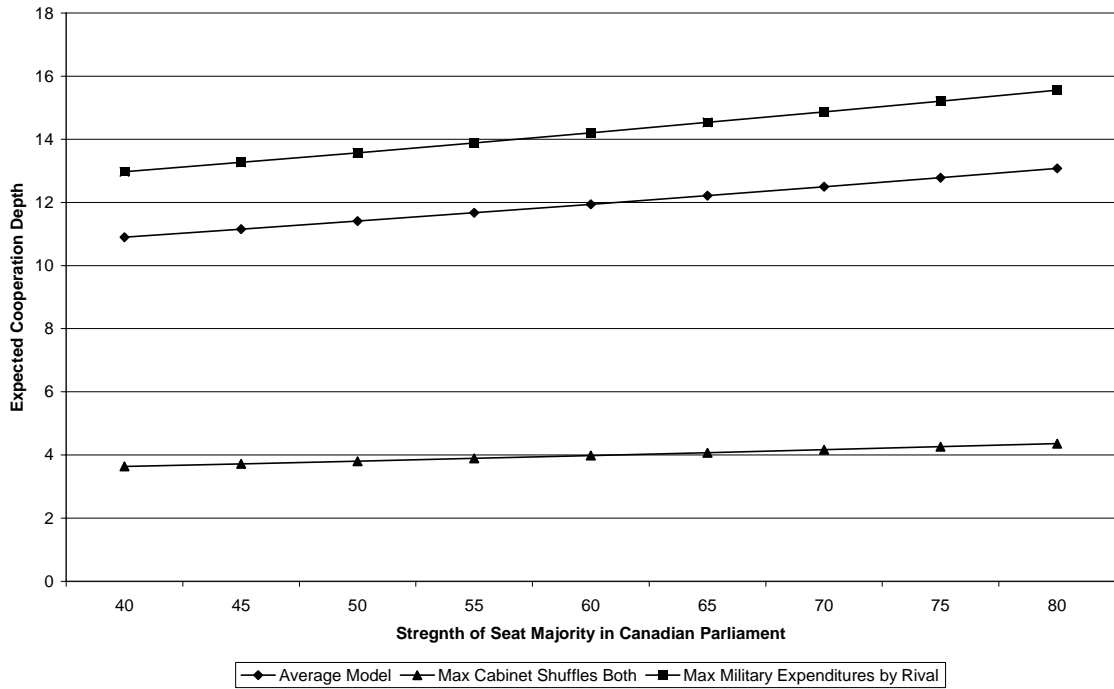


Figure 2: Expected Cooperation Depth under Unified US Government and Cabinet Instability

