



CANADIAN GLOBAL AFFAIRS INSTITUTE  
INSTITUT CANADIEN DES AFFAIRES MONDIALES

## **KNOCKING NATO: STRATEGIC AND INSTITUTIONAL CHALLENGES RISK THE FUTURE OF EUROPE'S SEVEN-DECADE COLD PEACE\***

Anessa L. Kimball

### **SUMMARY**

Despite providing European stability through collective defence and crisis management in an exclusive club, NATO faces persistent challenges from strategic insecurities complicated by recent institutional uncertainties. The club's structure permits several goods-producing schemes, depending on how individual contributions combine, the qualities associated with a good's publicness (i.e., its possible substitutes or how it excludes benefits from non-members) and partner differences in capacity and willingness. NATO faces challenges from Russia ranging from cybersecurity and media manipulation to overt and covert military pressures. Recent deployments sink costs and tie hands, reassuring commitment credibility, and are essential given the uncertainty generated from U.S. President Donald Trump's ambiguous commitment to Article 5, compounded with the effects of Brexit on alliance politics and burden-sharing. Given the conjunction of strategic insecurities and institutional uncertainties, it is convenient to knock NATO, but rational institutionalist theory (RIT) is optimistic. RIT argues that the club's design permits strategic adaptation to new contexts and insecurities, but partners must signal commitment credibly to prevent uncertainties about cohesion. RIT favoured enlargement to shift burdens, and data confirm that the Americans, British and Germans shifted burdens to others, including Canada.

\* This research was financially supported by the Government of Canada via a partnership with Western Economic Diversification.

Moreover, any alternative to NATO is costly for less-endowed partners facing direct defence pressures. Canada's role as a broker of compromise and its willingness to make its commitments credible places it in future missions, regardless. Canadian leadership in reassuring and socializing new partners in Operation Reassurance offers an opportunity to retain its objective and subjective position as a key partner.

Keywords: NATO, rational institutionalism, collective action, Russia, strategic defence, Brexit, enlargement



CANADIAN GLOBAL AFFAIRS INSTITUTE  
INSTITUT CANADIEN DES AFFAIRES MONDIALES

## **MALMENER L'OTAN : LES DÉFIS STRATÉGIQUES ET INSTITUTIONNELS METTENT EN PÉRIL SOIXANTE-DIX ANS DE PAIX FROIDE EN EUROPE\***

Anessa L. Kimball

### **RÉSUMÉ**

Bien qu'elle assure la stabilité en Europe, grâce à la défense collective et à la gestion des crises dans un club exclusif, l'OTAN est confrontée à des défis persistants dus à une insécurité stratégique que les récentes incertitudes institutionnelles viennent compliquer. La structure du club prévoit plusieurs programmes de production de biens en fonction de la manière dont les contributions se combinent, du caractère public d'un bien (c'est-à-dire, ses substituts possibles ou la façon dont il exclut les non-membres) et des différences de capacité et de volonté des partenaires. L'OTAN fait face à des défis de la part de la Russie, allant de la cybersécurité et de la manipulation des médias aux pressions militaires manifestes ou secrètes. Les récents déploiements ont réduit les coûts et lié les mains, ce qui a restauré la crédibilité des engagements. Cela est essentiel face aux incertitudes causées par l'ambiguïté du président américain Donald Trump envers l'article 5 du Traité. Le tout est aggravé par l'effet du Brexit sur les politiques de l'alliance et sur la répartition des charges. Compte tenu de la conjoncture de l'insécurité stratégique et de l'incertitude institutionnelle, il est facile de malmener l'OTAN, mais la théorie de l'institutionnalisme rationnel (TIR) demeure optimiste. La TIR fait valoir que la conception même du club permet une adaptation stratégique à de nouveaux contextes, mais les partenaires doivent montrer un engagement

\* Cette recherche a été soutenue financièrement en partie par le gouvernement du Canada via Diversification de l'économie de l'Ouest Canada.

crédible afin d'éviter l'incertitude quant à la cohésion. La TIR favorise le transfert des charges et les données étudiées confirment que les Américains, les Britanniques et les Allemands ont transféré des charges à d'autres pays, dont le Canada. De plus, toute solution de remplacement à l'OTAN est coûteuse pour les partenaires les moins dotés confrontés à des pressions directes en matière de défense. Le rôle du Canada en tant que courtier du compromis, de même que sa volonté de rendre crédibles ses engagements, le placent dans de futures missions, quoi qu'il en soit. Le leadership canadien en matière de sécurisation et de socialisation des nouveaux partenaires dans le cadre de l'opération Réassurance est l'occasion de conserver sa position objective et subjective en tant que partenaire clé.

## POLICY RECOMMENDATIONS

- NATO's provision of club goods (e.g., collective and strategic defence, core tasks) will continue to contribute to future European stability despite the uncertainties that enlargement and Brexit create for cohesion. Partners should work to limit political tensions and spillovers after Brexit. Endowed partners must continue to invest in new partners' defence through the education and training of their military and police as well as providing them aid to prevent gaps in defence capabilities.
- Russia presents a strategic threat to (the cold) peace, directly and indirectly, despite differences in levels of threat perceived by partners. Reassurance and deterrence activities for partners facing high levels of insecurity remain key. The "sponsoring nation framework" is an effective mechanism with impressive potential to manage emerging transnational threats. It remains a critical club contribution unrivalled by goods provided by other institutions or bilateral arrangements, but it requires leadership and willingness by a subset of states to function effectively.
- Noisy signals regarding America's commitment to Article 5 under the Trump administration and the administration's transactional approach to co-operation have affected NATO partners. Burden-sharing remains an issue, although Canada increased its burden and data confirm the most endowed states benefited from it. Canada must maintain its financial and operational commitments to the alliance and seize opportunities to lead. Its role in socializing new partners contributing to the battlegroup led by Canada in Latvia is a critical contribution. Canada needs to continue to step into leadership roles in operations, when mandates converge with its security interests, to maintain its respected position in the club and retain its credibility among partners.

## INTRODUCTION

Despite its ability to evolve, NATO enters its eighth decade facing strategic and institutional challenges. NATO's adaptability derives from its institutional structure as well as the mechanisms employed by agents and principals in a complex delegation relationship (Koremenos et al. 2001; Hawkins et al. 2004). NATO first adapted to system-level change after the Cold War, then to different threat sources after 9/11, but institutional uncertainties remain over strategic problems, such as the distribution of resources, costs, and power within the club. Moreover, there is a rare conjunction of doubt in the credibility of the U.S. commitment to the alliance<sup>1</sup> as well as concerns about European cohesion, in light of the difficulty the U.K. faces in extracting itself from the EU. Notwithstanding the institutional uncertainties facing partners, the territorial status quo changed with recent Russian brinkmanship in eastern Europe, i.e., the Crimean annexation. NATO partners, as well as the institution itself, face challenges from

---

<sup>1</sup>

Recalling that a U.S. president has previously never wavered in the firmness of the Article 5 commitment (Gould 2019).

Russia that cross diverse domains, such as the territorial status quo, energy security, cybersecurity and counter-terrorism, even while NATO simultaneously reassures Russia over its concerns regarding strategic defence and enlargement of the alliance.<sup>2</sup>

Given the challenges NATO faces, knocking the alliance is convenient (Williams 2013; Chun 2013).<sup>3</sup> However, there is no reason to knock NATO after examining its institutional and bargaining aspects. This research contends that the treaty's rational institutional design and the absence of bargaining alternatives are strong arguments favouring its continuation. Moreover, despite the uncertainty of U.S. President Donald Trump's rhetoric (Gould 2019; Martill and Sus 2018, 857), in addition to the persistent issues of retaining alliance cohesion and predicting Russian behaviour, NATO remains a vital transatlantic link, not just structurally, but also strategically and militarily, for North America. Canada is uniquely positioned in NATO due to its geography and its bilateral defence and security relationship with the U.S.<sup>4</sup> that is second only to the Anglo-American relationship. Finally, Canada has close bilateral ties with the U.K. and France, reinforcing the transatlantic link.

As NATO faces its future, rational institutionalist theory (RIT) offers insights regarding the agreement's provisions and the structural mechanisms partners employ to adapt to insecurities and counter uncertainties among themselves. As a club, NATO is both flexible and robust, but its effectiveness relies on the use of appropriate institutional tools and its partners working to overcome uncertainties concerning the credibility of their respective commitments and club cohesion. This research mobilizes RIT to examine institutional and strategic aspects of the NATO agreement in the next section. The second section explores the strategic insecurities facing partners from Russian behaviour (Fryc 2016; Kuhn 2017; Kuhn and Péczli 2018; Ubriaco 2017), NATO's implementation of a strategic defence system and its reaction to transnational threats.<sup>5</sup> The third section explores institutional uncertainties facing partners, such as the credibility of America's commitment to collective defence, the externalities of (political, economic and security) Brexit (Dunn and Webber 2016; Hadfeld 2018), and the perennial debate about burden-sharing (Hartley and Sandler 1999; Sandler and Hartley 2001; Foucault and Mérand 2012). The bargaining literature points to the existence of available alternatives to manage the same concerns in analyses of institutional viability. An absence of alternatives ensures NATO's continued role. This paper concludes with recommendations for Canada given NATO's essential place in its foreign and defence policy.

---

<sup>2</sup> Considering NATO's role in Europe and transatlantic relations is the focus herein. However, Chinese challenges to the regional territorial status quo require increasing defence attention. In the absence of increases to defence allocations, most states without large endowments reallocate defence goods or pursue multilateralism in Asia (Kimball 2010).

<sup>3</sup> Fuerhard says it suffered an identity crisis (2017); New York Times editors offered "Why NATO matters" (8 July 2018).

<sup>4</sup> Kimball reports that "the U.S. manages over 450 bilateral formal and informal defence and security arrangements with its key allies in Europe and over 700 including key allies in Asia" (2017, 381).

<sup>5</sup> Transnational threats the institution faces include countering violent extremism and ensuring cyber-security. Each deserve attention (along with illicit criminal activity), but both are treated as transnational goods here (Sandler 2004).

## I. RATIONAL INSTITUTIONALIST THEORY AND THE NATO TREATY

Rationalists contend that states design agreements in response to strategic problems (Koremenos and Nau 2010; Kimball 2017). Properly designed defence pacts are reliable in times of war (Leeds 2003), but the nature of the obligations, precision of the language, and delegation aspects of the contract are key. “Delegation pertains to how the rule-making and adjudicative powers are organized in an arrangement, while precision refers to the scope and clarity of mandates. Obligations are the partners’ responsibilities” (Kimball 2017, 384). The level of discretion offered to agents in interpreting the contract matters, and in the context of complex principals (e.g., partner governments), there is slippage (Hawkins et al. 2004, 199-228; Sandler 2004, 71-73).

RIT scholars argue that an appropriate mix of flexibility and discretion, combined with clarity in partner obligations, are crucial to success, although overcoming the commitment problem<sup>6</sup> remains an obstacle. The North Atlantic Treaty is precise (it contains a total of 14 articles), but it retains flexibility with provisions such as Article 4 (consultations in case of threat to territorial integrity, political independence or security), Article 10 (new members), Article 12 regarding review and Article 13 on duration and withdrawal.<sup>7</sup> It offers opportunities for discretion in interpretation of Article 3 (national and collective military capabilities) and Article 5 (collective defence). Finally, it ties partners’ hands with ratification, its formal signal of commitment incurred with public reputational costs.

Flexibility and discretion in interpreting treaty provisions permit the maneuverability to manage uncertainty about the future state of the world or future behaviour by actors (Koremenos 2008; Koremenos and Nau 2010). The flexibility invoked by review procedures and the possibility for enlargement permits partners to manage future uncertainties, while renunciation with a notice period presents a final exit for individuals without ending the club (Koremenos and Nau 2010). Aside from the agreement’s provisions offering flexibility, the lack of precision in the language treating national and collective capabilities permits discretion in interpretation. Article 4 permits consultation when states are under threat, before it escalates to a call upon Article 5’s military response. Article 4 opens up other policy options apart from collective defence. NATO agreed on a benchmark for minimum defence spending among partners equivalent to two per cent of each partner’s GDP, but not without acrimony over that being used as both an objective and informative<sup>8</sup> criteria for defence capabilities (Foucault and Mérand 2012; Zyla 2009). Moreover, consensus decision-making results in dissent being a costly signal. New partners and/or less-endowed partners have less motivation to deploy costly signals.

---

<sup>6</sup> That is, will partners respect the commitments contracted? This is a task requiring willingness and (defence) capacity. Differences in endowments among partners shape the effectiveness of the club’s provision of key collective goods.

<sup>7</sup> According to Article 13, to withdraw, a state must submit a “notice of renunciation” to each partner government; it is a more costly public and diplomatic signal (North Atlantic Treaty, 1949).

<sup>8</sup> Others insist it is not just cash and contributions, but also dependability (Guardian 2019).

Differential endowments result in some members requiring investments to fulfill commitments. The U.S. is a substantial defence investor in new allies (Kavanagh 2014; Engel et al. 2016). However, a recently published sequential panel selection method model of NATO military spending from 1990 to 2015 shows that the spending of most allies converges with the U.K.'s level (Liu et al. 2018). With analysis confirming the U.K.'s spending commitment is the level that three-quarters of the partners converge upon, the security externalities and implications for NATO of Brexit are worth discussion.<sup>9</sup> Treaty provisions favouring adaptation (review, enlargement) and continuity (constant consultations, maintaining national and collective capacities) are present, but concerns about discretion regarding the implementation of Article 5 remain. RIT shows that a properly designed treaty: 1) manages strategic problems, 2) has opportunities for discretion concerning precision over which sort of collective bargaining takes priority (burden-sharing, capabilities), and 3) ensures flexibility with mechanisms to react to systemic changes, emerging challenges and insecurities.

Article 5's collective-defence provision lies at the heart of the treaty.<sup>10</sup> It is the legitimacy of that commitment that is at stake with NATO's enlargement to include new partners. The commitment problem has received much scholarly attention.<sup>11</sup> NATO expanded first into countries least likely to provoke a crisis with Russia (Wiarda 2002; Asmus 2008; Katchanovski 2011). Wiarda notes those first expansion candidates differ from previous members in their perception of the "automaticness" of the Article 5 defence commitment, as "naturally the CEE (central and eastern European) countries, fearing Russia, emphasize the language that seems to support the automatic response, while the U.S. and Western countries tend to stress the language implying discretion" (Wiarda 2002, 179). Smith and Timmons clarify that NATO was a deterrent for Russian aggression and acted as a reassurance commitment to partners: that the U.S. would be there just in case, much like a caretaker over a child or an invalid (2000, 80-89). "It is precisely this kind of vague but vital military reassurance that CEE states are seeking from the West, specifically from the U.S. through NATO" (Smith and Timmons, 2000, 86). Seeking reassurance and increasing commitment credibility in bargaining, by sinking costs and tying hands, is common behaviour, although sinking costs is a more informative signal than tying hands (Fearon 1997; Mattes and Savun 2010). The recent decision by NATO to place troops in Poland and Baltic partners, indicates a willingness to sink costs, as well as run the risk of tying hands by entrapment into conflict should relations worsen with Russia (Lanoszka 2018). If partners differ over interpretations of Article 5, then the alliance's cohesive foundations are at risk. The risks generated from uncertainty over the credibility of the American commitment are complicated by possible divisions in Europe.

---

<sup>9</sup>

Exceptions are Bulgaria, Portugal, Romania and France (Liu et al., 2018, 9).

<sup>10</sup>

The essence of the club is that it excludes non-partners from that benefit. Club goods are impure public goods whose benefits are fully excludable and partially rival (Sandler, 2004, 52-53). The EU's difficulty producing defence goods speaks to the challenges of rivalling the defence offerings of the exclusive NATO club.

<sup>11</sup>

It is more commonly known as the prisoner's dilemma. Such social behaviour ranging from arms races to disarmament is studied using non-co-operative games as the strategic context. Snidal contends most assume actors share the same understanding of it (1985).

Montenegro became the 29th NATO partner in 2017, followed by North Macedonia signing accession protocols in early 2019 under ratification with partner governments.<sup>12</sup> (For the U.S., aside from Senate approval, this includes presidential assent.) NATO's enlargement — adding 14 members over two decades — and a waiting list of candidates<sup>13</sup> is evidence of its institutional vitality, despite interrogations into the effects of its rapid enlargement<sup>14</sup> on (financial and operational) burden-sharing and effective decision-making under consensus rules. American bilateral defence investments in new partners create incentives for them to support its positions (Kavanagh 2014; Engel et al. 2016). Even with institutional incentives for consensus, individual partners have national incentives to support the U.S., regardless of the uncertainty about the current administration, because of the high costs paid to enter NATO (i.e., the opportunity costs of foregoing closer ties with Russia, sunk costs of defence planning and the costs of forgoing the alternative of unilateral defence provision). Relations with Russia remain a concern for partners, and the negative externalities from club actions are a source of strategic insecurity perceived individually.

RIT shows that the flexible design of the North Atlantic Treaty permits adaptation to changing strategic contexts, while discretion permits some maneuverability, thus the consistent bargaining among partners. Despite a competent institutional design, classic commitment concerns require partners to publicly sink costs and tie hands through reassurance activities, a visible reminder that even with a robust club structure, insecurities remain unequally distributed across partners, so signalling commitment remains necessary to reinforce trust.

## II. STRATEGIC INSECURITIES

Although NATO's key mandate involves collective defence, several aspects of the alliance manage the strategic insecurities perceived by the partners by reducing transaction costs and uncertainty, providing information and co-ordinating actions, among other functions (Abbott and Snidal 1998). NATO's initial defined area of action implicitly contributed to the management of the partners' strategic insecurities regarding uncertainty about future Russian behaviour.<sup>15</sup> A concise review of NATO-Russia relations appears in the first portion of the section. Then, drawing from RIT, the research contends that the institution serves as an efficient framework for managing the delegation issues associated with

---

<sup>12</sup> Eleven partners have completed national procedures for ratifying Montenegro's accession protocols as of July 2, 2019.

<sup>13</sup> Bosnia-Herzegovina, Kosovo, Georgia and Ukraine.

<sup>14</sup> Thirteen new members bear 7.5 per cent of burdens, according to cost-share arrangements. Poland ranks 10th among the 29 partners at 2.77 per cent, accepting 44 per cent of the burden attributable to new partners ("Funding NATO" 2018, 9).

<sup>15</sup> RIT considers NATO's mandate enlargement out of area a strategic adaptation given uncertainty over Russia's potential descent — or resurgence. After 9/11, Americans sought assistance against extremism; mandate extension offered a strategic opening for NATO to act. Rynning notes that the 2010 Strategic Concept covers classic issues (defence and deterrence), then extends to missile attacks, cyber, energy security and emerging technologies (2014). The club's conception of security and its area of actions were extended, but its core tasks remained collective defence and security.

strategic defence. For economists, the NATO framework permits partners to manage potential security externalities through side agreements, such as those regarding investments in less-endowed partners, arms sales, etc. The final section discusses how the institution provides opportunities to develop defence goods for transnational challenges, such as cybersecurity and violent extremism.

NATO's sui generis partnering of the U.S., Canada and major European allies was a product of the historical conjuncture when uncertainty about the political environment generated substantial willingness to co-operate in providing a collective defence (from Soviet attack). Despite the Cold War ending decades ago and the agreed-upon conventional superiority of NATO (Kuhn and Péczeli 2017, 72), relations with Russia remained difficult, notwithstanding alliance enlargement. Russia retains a level of tension through misinformation and manipulation of the media (for instance, its internet troll armies); financial warfare, including currency speculation and destabilization of financial systems; trade warfare, through the blackmail of companies and manipulating energy prices; and cyberattacks against vulnerable infrastructure. In addition to non-kinetic activities, Russia employs military tactics such as consistent intrusions into the sovereign airspace and coastal waters of some partners (the Baltics, Sweden, Finland and Poland), massing large amounts of troops on Ukraine's border, threatening nuclear use, organizing "snap" large-scale ground exercises and hardening the Kaliningrad Oblast, specifically its anti-naval and air-denial aspects (Fryc 2016, 47). "The new security context once again revealed Europe's military weakness and inability to reassure its members without US-backed military support" (Fryc 2016, 48).

Although European stability is a public good, the NATO treaty structure resembles a club good as partners pay a "toll" to enter. The properties associated with the publicness of goods (i.e., non-rivalry of benefits, non-excludability of nonpayers<sup>16</sup>) shape how states pool efforts. Market failures arise from the inability of actors to exclude free-riders under the absence of an alternative institution to provide the same benefits. The club goods of collective security and defence are non-excludable from partners, provided commitments are credible. Strategic missile defence requires a minimal level of investment and equipment for effectiveness; therefore, it corresponds to a "threshold scheme," transforming its provision into an assurance game. Cost-sharing schemes induce partners to contribute (Sandler 2004, 64).

U.S. defence and security agreements (i.e., bilateral bargains) with partners facing strategic threats from Russia directly, such as Poland and the Baltics, contributed to the deployment of the club's strategic defence system, the European Phased Adaptive Approach. Less than a decade after its club entry, a 2008 missile defence agreement was signed with Poland (Kavanagh 2014), and, in 2018, the investment turned full circle as Poland inked its largest-ever arms transfer, buying US\$4.75 billion worth of U.S. Patriot missile systems (Kelly 2018). Poland was under pressure from a fortified Kaliningrad Oblast, Russia's annexation of Crimea and a potential deployment of Russian weapons in violation of the Intermediate-Range Nuclear Forces Treaty (Kuhn and Péczeli 2017,

---

<sup>16</sup> Also, its aggregation technology, for example how individual contributions combine to produce the overall level of the good (Sandler 2004, 60-68).

72). “Air defences are particularly important for Poland and neighboring Baltic states Lithuania, Latvia and Estonia. NATO planners say Russia is using its Baltic enclave of Kaliningrad as well as Crimea to pursue the capability to block off NATO’s air access to the Baltic states, about a third of Poland and to the Black Sea” (Kelly 2018). Russia could “cut off the Baltic states from NATO support by blocking the sole land supply route to Poland, namely the Suwalki Gap” (Fryc 2016, 54). Deploying a strategic defence system conveys noisy signals of intent, because, despite the name, Russia perceives it as offensive (Kuhn 2017, 23). Despite NATO reassurances with air policing and troop deployments in the region, “in the immediate vicinity of the NATO-Russia neighborhood, Russia enjoys conventional superiority everywhere in terms of quantity, quality and geographical depth” (Kuhn and Péczeli 2017, 72). That many partners deploy troops in NATO’s Enhanced Forward Presence not only creates sunk costs for them, but also risks entrapping them in the event of a crisis, increasing the credibility of the collective-defence commitment. However, concerning a possible deployment of a missile defence, the Supreme Allied Commander Europe, or SACEUR (effectively the U.S., since it is always an American) retains command control. Less-endowed states shoulder burdens of protection and assurance, while more-endowed states provide prevention and compellence<sup>17</sup> (Dorusson et al. 2009). Smaller states facing greater threats to their survival invest more in prevention than do less-threatened counterparts. Geography shapes which threats partners perceive as pressing; those in the north are concerned with Russia, while southern European partners are concerned with terrorism and cybersecurity. Moreover, expansion to the east increased strategic uncertainty (new allies bring more exposure to the alliance) and, institutionally, some partners presented weak links both operationally and concerning their level of commitment to Article 5. Finally, partners vary in their willingness to follow the club (for example, Turkey buying Russian missiles and Bulgaria’s reticence).<sup>18</sup>

NATO faces strategic insecurity from Russia, and deploying strategic defence in the geopolitical space sends conflicting signals if the alliance seeks to reassure its historic rival. The challenges NATO faces are not limited to other states; partners face strategic uncertainties from a number of transnational threats, including violent extremism<sup>19</sup> and ensuring cybersecurity. A multitude of factors, (globalization, interdependence, geography, etc.), contribute to the spillovers generating demands for transnational public goods (Sandler 2004, 75-98). The market failures and strategic problems shaping the demand for collective action may be located regionally and/or affect states transnationally. Despite partners choosing collaboration, in practice, states differ in their willingness and capacity to contribute. When a collective action yields multiple results varying in publicness, those joint goods consequently vary. Willingness varies because partners differ in how much they benefit from individual initiatives and when individual benefits increase, then the co-operation game transforms into an assurance game. In assurance games, actors contribute if their private share of the benefits is sufficiently

---

<sup>17</sup> Based on a study of EU burden-sharing.

<sup>18</sup> I am indebted to a reviewer for the final points.

<sup>19</sup> U.K. leadership in cross-border police, border management and judicial co-operation is an essential EU contribution to anti-terrorism co-operation to consider after Brexit (Hadfeld 2018, 180-181).

large (Sandler 2004, 54). As the share of a good's excludable benefits increases, markets and clubs tend to allocate resources more efficiently to its provision and the appropriate institutional design is increasingly important.

Under a joint-goods co-operation scheme, all partners receive some benefits, but the ratio of excludability is important (Sandler 2004, 54); for example, reducing violent extremism offers greater benefits to those directly affected by it, but all members benefit from reduced insecurities. Additionally, mutual trust is critical to overcoming incentives to protect classified information, because intelligence-sharing presents strategic risks that partners struggle to overcome. Institutional adaptations completed in 2006 included the creation of a NATO Intelligence Fusion Centre (NIFC) in the U.K. and the designation of an "intelligence chief" to serve as an information collector and transmitter falling under the command of SACEUR. Partners maintain a security link home through independent "National Rooms" outside the centre, designed to be small and uncomfortable (no chairs, minimal heat or air-conditioning) to encourage collaboration in the NIFC. The NIFC was established by active efforts from the U.S. starting in 2002, consistent with RIT arguments about partners with greater means/income subsidizing group efforts to solidify weak links. Gordon notes that, despite multiple obstacles, "(it) came to fruition under U.S. auspices. In official NATO terminology, the NIFC is a 'multi-national memorandum of understanding (MOU) organization' under U.S. sponsorship as the 'framework nation' and chartered by the NATO Military Committee on 13 December 2005. The North Atlantic Council on 18 October 2006 activated the NIFC as a 'NATO Military Body with International Military Headquarters Status'... (It) reached full operational capacity in December 2007" (Gordon 2015). By 2010, all partners had representation at the centre<sup>20</sup> and agreements were implemented for seven non-partners, including Sweden and Finland, to participate in the centre for specific missions (Gordon 2015). NATO partners use the structure of a "sponsor nation framework" to overcome differences in capacity and willingness to contribute to the production of joint defence goods for managing transnational threats that are non-uniform in their effect on partners. The flexible MOU structure permits adaptation and evolution as necessary to add members and adjust to different strategic contexts and future uncertainties (Kimball 2017).

Eighteen NATO partners sponsor its cyber-defence institution, NATO's Co-operative Cyber Defence Centre of Excellence, which is located in Estonia with contributing participation from Sweden, Finland and Austria. Cyberattacks as potential threats were included on the 2006 Riga agenda. Despite proposing a centre in 2004, Estonia increased its willingness to lead after cyberattacks it faced in 2007<sup>21</sup> highlighted its risks and exposed costly externalities from vulnerabilities. It founded the centre with Germany, Italy, Latvia, Lithuania, Slovakia and Spain in 2007. In the following years, others joined, including the U.S. in 2008. Its goals include improving cyber-defence,

---

<sup>20</sup> Except Luxembourg and Iceland.

<sup>21</sup> Co-ordinated cyberattacks on multiple public institutions, news agencies and banks amid a dispute with Russia over the relocation of a Soviet war memorial and war graves started in late April 2007. Russia refused to co-operate in investigations. An Estonian student in Tallinn, convicted of attacking a political party website, was fined the equivalent of less than US\$2,000 ("Estonia fines" 2008).

designing doctrine, providing information and awareness education and contributing to the analysis of legal aspects of cybersecurity. In addition, it has responsibilities that include developing policies and practices, training and developing exercises, and defending partners. Sponsorship requires financial and personnel contributions, and those with lower incomes may not have the capacity to sponsor but do receive some benefits. The flexibility of sponsorship permits partners to join. NATO manages the uncertainties associated with transnational threats using joint defence goods (such as the “sponsorship nation framework”) whereas, it provides “core” goods under a club scheme. Partners share burdens relative to incomes and willingness. Such arguments are key in examining burden-sharing: Risks shift in sectors (e.g., cybersecurity) increasing demands for collective action unequally and partners contribute in consequence. Spain and Italy sponsoring as framework nations is consistent with the observation that southern partners perceive terrorism and cybersecurity as greater risks (both countries contributed to the founding of the Cyber Defence Centre).<sup>22</sup> Contribution schemes are effective as they transform the good’s provision to an assurance game, once the threshold is met (Sandler 2004).

NATO partners face a multitude of strategic challenges requiring continued co-operation. The essential club goods of collective and strategic defence are provided collectively, whereas other goods follow alternative formats where partners with the willingness and resources sponsor the provision to the minimal threshold, adding others later. RIT contends that the appropriate functional forms for collective endeavors determine their optimal provision, and NATO’s “sponsor nation framework” permits partners to choose their level of commitment, while all partners receive some level of non-excludable club benefits. The various institutional mechanisms through which NATO commits partners are designed to promote collaboration and policy co-ordination.

### III. INSTITUTIONAL UNCERTAINTIES

NATO confronts multiple sources of institutional uncertainty in the short and medium term, discussed in the first and second parts herein. These are superimposed upon the long-term commitment of the partners to collective defence planning, given the special delegation relationships and constraints of the defence market (addressed in the remaining portion of this section). In the near term (until 2024), the credibility of the American commitment and the externalities of Brexit require attention. Partners must also address medium-term challenges, such as forging alliance cohesion among 30 members and burden-sharing issues, given the short-term uncertainties.

The future of NATO rests on “the degree to which allies agree on matters of policy and how they go about the process of implementation” (Dunn and Webber 2016, 476). Alliance cohesion is at risk from the externalities of the U.K.’s exit from the EU and the effects of enlargement. Increasing club size runs the risk of inefficiencies due to uncoordinated individual behaviours and because allocative efficiency becomes increasingly

---

<sup>22</sup>

Spain is a member of the Canadian battlegroup contributing 300 troops via a mechanized infantry battalion (“Enhanced Forward Presence” 2018) and among those increasing alliance burdens since enlargement.

difficult (Sandler 2004, 33). If group heterogeneity is related to endowments, less-endowed partners can increase capacity by bandwagoning with endowed partners, coalescing with other small partners, or seeking bilateral support from better-endowed partners, although any of those behaviours affect cohesion. Enlargement risks the level as well as the efficiency of the provision of the club's goods. New partners reduce collective capacities to the lowest effective individual level, lowering effectiveness (the weak-link hypothesis). Differences among partners in the quality and level of policy and in endowments result in inefficiencies even in homogenous groups, i.e., where partners share identities. As Dunn and Webber contend, "coherence in its social meaning arises when a group is bound together by a shared sense of belonging, inclusion and identity" (Dunn and Webber 2016, 476). The political and security community built in Europe for decades rests upon integration and using the institutions to manage disputes. Brexit challenges the foundations of integrationist identity, and to the extent NATO is intertwined in that identity<sup>23</sup> the alliance is affected by Britain's withdrawal from the EU. The implications involve sunk political capital, reputations, resources and more in what has become a protracted bargaining process,<sup>24</sup> but issues of non-excludability (of economic markets), asymmetric bargaining power, U.K. internal politics and patience (by the EU) contribute to continued bargaining failures (Barkin 2004).<sup>25</sup> Frustrated EU partners evoke the image of a cat not wanting to go out the door (Stone 2019).

Despite differences between NATO and the EU in institutional mandates (namely collective defence versus economic integration) and perceptions of their respective zones of action — i.e., NATO engages in war, while the EU manages crises (Smith and Timmins 2000, 85; Martill and Sus 2018, 857) — there is co-operation between them on cybersecurity and managing hybrid threats (von Voss and Schutz 2018). Martill and Sus argue that inter-EU dynamics will pull France and Germany closer after the U.K. exit (2018). A bilateral closeness between the continental neighbors with increasing distance across the channel affects NATO, if the Franco-German couple accelerates EU defence co-operation (Hadfeld 2018, 179; Martill and Sus 2018). The defence-economic effects of Brexit are unknown, but given the U.K.'s central role in European defence (acquisitions, participation in operations, R&D, test-and-evaluation partnerships, etc.), Hadfeld concludes that its "role as a European defence provider and as security underwriter will increase, not decrease" (2018, 179). Underwriting the defence of partners and bilateral training of partners are tools used by endowed partners and affect the club's defence burdens without directly allocating military aid.

Positive externalities of Brexit for NATO are possible. It "could become a platform for cooperation, since it offers an elegant solution to combine British independence from the EU with the necessity of close collaboration in the face of security challenges... NATO may act as a bridge between Brussels and London" (Martill and Sus 2018, 857).

---

<sup>23</sup> Rynning's nuanced view of the political versus military goals of the alliance is helpful. He notes that only eight per cent of the paragraphs in the Wales summit's final communiqué addressed "transatlantic fundamentals" (Rynning 2014, 1397).

<sup>24</sup> Recalling that parties surpassed the 730-day period specified by Article 50 on March 29, 2019.

<sup>25</sup> Barkin's model of the effects of rivalry and excludability on the provision of co-operation is relevant (2004).

Since, with the departure of the U.K. from the EU, Germany and France will accept a larger EU role, the externalities for NATO are uncertain, but they include fewer political, financial and possibly defence resources from those states. Britain's reluctance to advance an independent European defence is blamed by some for the failure of EU defence collaboration (Martill and Sus 2018; Dunn and Webber 2018). In contrast, the U.K. will focus on NATO, because the Leave campaign favoured NATO, contending that the EU duplicated key functions of the alliance and thus undermined it (Dunn and Webber 2018, 472). NATO may receive increased political attention in the U.K., becoming an outlet for a frustrated U.K. in internal post-Brexit discourse. The U.K. could request a greater NATO burden in a type of moral-hazard doubling down. Due to shared membership in the institutions, it is difficult for the Franco-German couple to argue that U.K. resources "freed from EU budgets" should not go to NATO (Kimball 2010).<sup>26</sup> "It will be difficult in the short to medium term to prevent Brexit-induced squabbles from spilling over into NATO, thereby risking further diminution of alliance solidarity and credibility" (Martill and Sus 2018, 857). The negative effects of Brexit on the cohesion of the collective agent, NATO, combined with the risk that enlargement creates for the credibility of collective defence, are compounded by American rhetoric. Risks of agent slippage and inefficiency increase when heterogeneity within a collective agent exists (e.g., a divided NATO). An opportunist Russia, facing a divided NATO, is motivated to push into the grey zone, as uncertainty about a defender's defence pledge causes rivals to engage in risky behaviour, short of escalation (Leeds 2003; Smith 1996).

Although NATO partners have previously benefited from unambiguous signals of support from the U.S., the current presidential administration prefers uncertainty as a way to motivate action by partners. Trump's noise-filled signals to partners include calling NATO obsolete in 2016 and, in 2019, talking about U.S. withdrawal, striking at the core of the American reassurance commitment.<sup>27</sup> Also in 2016, he "implied that U.S. protection of Estonia, Latvia and Lithuania was contingent upon each country's financial contributions to NATO" (Ubriaco 2017). Partners with insecurities have no choice but to trust the U.S. commitment, because the alternative (going it alone or in smaller groupings) is too costly both economically and with regard to the risk posed by Russia.<sup>28</sup> When bargaining states consider the best alternative to the negotiated agreement, however, there is no alternative available. Trump's transactional approach (Wolf 2017, 107) to alliance politics features demands for more budget resources from partners to shift burden away from the U.S., rectifying the investment balance. (It is too early to predict the outcome of the 2020 U.S. presidential election; pragmatists focus on the short term, but are savvy enough to plan for long-term uncertainties — such as President Trump

---

<sup>26</sup> The U.S. wants partners to increase burdens, although recent models show that NATO partners converge at the level of Britain's military spending (Liu et al. 2018).

<sup>27</sup> In early 2019, a bipartisan group of senators drafted a bill to prevent the president from withdrawing from NATO (Grahmer 2019).

<sup>28</sup> Recalling that, aside from the NATO pact, no outside pacts with collective-defence commitments exist for most new partners; they are not looking for defence entrapment by any other actor but NATO. Two 1992 pacts are exceptions: One between the Czech Republic and Slovakia and the other between Croatia and Bosnia-Herzegovina. Only 11 per cent of the 278 pacts signed since 1991 contain defensive commitments. Data from Leeds et al. 2002, at [www.atop.org](http://www.atop.org).

until 2024.) Trump's close relationship with Russia does not facilitate the signalling of a credible American commitment to his NATO partners. Despite these uncertainties, NATO partners are unwavering in their willingness to make defensive commitments and investments. Moreover, the U.S. leads a battlegroup in Poland, to which it contributes 889 troops ("Enhanced Forward Presence" 2018). Importantly, the U.S. is positioned in the "Suwalki Gap," a most strategically important location. If there is to be land denial by Russia, it will tripwire into American troops.

Recalling that a pro-enlargement argument was that new partners would reduce individual NATO burdens, in 2001, the U.S. Congressional Budget Office (CBO) published an analysis of post-enlargement burden-sharing among the 19 NATO partners in 1999. Below, in Table 1, the percentages of the top nine contributors today appear with their corresponding contributions two decades ago using the CBO data (2001) and NATO's current cost-share arrangements for the common-funded budget ("Funding NATO" 2018-19). The U.S., U.K. and Germany shifted almost 13 per cent of burdens.<sup>29</sup> New partners accepted about 6.4 per cent and the remaining burden, 11.3 per cent, was shouldered by a combination of Turkey, Spain, France, Canada and Italy. Additionally, partners joining in 1999 doubled their burdens over decades.<sup>30</sup> As expected by RIT, the top three contributors, with the most bargaining power, benefited from positive economic effects from enlargement, followed by those ranking in the last slots of the top 10. Those in the middle accepted the greatest economic burden. As a percentage of what it contributed decades ago, Turkey shoulders 214-per-cent more, while Spain increased its contribution by 96 per cent. The U.K. reduced contributions by 32 per cent and Germany benefited from a 25-per-cent reduction in its share. In contrast, France and Canada stepped up by contributing 33-per-cent more. Despite criticism of Canada's contribution, the evidence is firm that it accepts its burden share.

The addition of North Macedonia will not shift numbers much. Given its resources, its contribution will range somewhere between that of Montenegro and Albania (less than one per cent). As the U.K. profited most from enlargement, partners irked by Brexit could, after the dust settles, enact retributions demanding a new cost-share agreement. The French and Germans gain by shifting some burden to the U.K., especially if EU defence initiatives advance politically, operationally, and financially after Brexit.

---

<sup>29</sup> France and U.K. rounded to 10.5. Belgium, the eighth-ranked contributor in 1999 and Denmark, the 10th, contributed about 6.3 per cent together and half as much currently. Together those five states shifted 16 per cent of their burdens.

<sup>30</sup> See Appendix, Table 1.

**TABLE 1: TOP CONTRIBUTORS BY PERCENTAGE OF NATO BUDGET IN 2018-19, COMPARED TO 1999**

Rank today (1999)	NATO with 19 members (1999)	NATO with 29 members (2018-19)	20-year difference (+/- percentage)	
1 (1) U.S.	25.2	22.2	-3.0	(-12%)
2 (2) Germany	19.6	14.8	-4.8	(-25%)
3 (4) France	7.9	10.499	+2.6	(+33%)
4 (3) U.K.	15.5	10.458	-5.0	(-32%)
5 (5) Italy	7.0	8.4	+1.4	(+20%)
6 (6) Canada	4.8	6.4	+1.6	(+33%)
7 (10) Spain	2.8	5.5	+2.7	(+96%)
8 (11) Turkey	1.4	4.4	+3.0	(+214%)
9 (7) Netherlands	4	3.2	-0.8	(-20%)
<b>Total of top nine</b>	<b>87.9%</b>	<b>85.9%</b>	<b>-2.0</b>	

Data confirm RIT expectations that adding members redistributed costs. Although new partners accepted about six per cent of the burden, enlargement shifted nearly 17 per cent of burdens away from top contributors and towards those in the middle (France, Italy and Canada together took on 5.6 per cent, while Turkey and Spain together stepped up to accept as much). New partners and those with greater perceived threats shoulder a greater burden to the increased benefit of a limited set of partners, although all members receive minimum benefits as predicted by rationalists. Notwithstanding that observation, insecure partners seek unambiguous signals of defence commitment (especially from the Americans), with the recent reassurance deployment in the Baltics and Poland occurring amid the backdrop of Brexit uncertainty combined with concerns about consensus and cohesion among 29 partners.

#### **IV.NO ALTERNATIVE AVAILABLE BUT NATO**

There would be a deep political and defence fracture in Europe if Trump were to invoke Article 13 to withdraw the U.S. from NATO. Considering a future NATO absent the U.S. is beyond the scope of this paper, but the risk of NATO falling apart is non-zero. Larger risks to cohesion due to internal divisions or the commitment trap, as well as strategic insecurities emanating from Russia, provide incentives for partners to continue investing in the institution. NATO provides essential defence-policy products (strategic defence, operational planning, defence goods, etc.). Partners could attain these things without NATO, but at greater costs. The alliance also ensures that partners maintain a level of defence capabilities that, due to domestic politics, governments might otherwise shirk from. Moreover, European partners are committed to strategic defence through NATO, as well as defence agreements with the U.S., but face the risks of provocation at a higher

level than North American partners do.<sup>31</sup> The strategic calculation of the costs and benefits of strategic defence also differ to the extent that partners feel individually at risk from attack. The end of America's recognition of the Intermediate-Range Nuclear Forces Treaty with Russia (renounced by both countries in 2019) — which was no longer sufficient to control proliferation, due to the entry of China in the game — produces strong negative security externalities for European states within the zone of missiles previously covered by the treaty (Kuhn and Péczeli 2017).<sup>32</sup> Such externalities are incentives to participate in collective efforts, even if they require relinquishing policy autonomy to SACEUR (thus the U.S.) over control of a missile-defence response.

If the collective-defence provision is invoked due to an “armed attack” against a partner and states fail to honour their commitments, then logics explaining outcomes depend on the attack's severity and the certainty of its source. Russia's approach relies on dissimulating the source of attacks and expansion by stealth, combined with a hybrid strategy using low-level tension or aggression aimed at indirectly achieving strategic objectives (Fryc 2016, 53). Collective response is complicated in the absence of an attributable source. Despite openly hardening defences in regions bordering the alliance — particularly the Kaliningrad region (Fryc 2016; Kuhn and Péczeli 2017) — Russia is unlikely to risk open armed attack on a NATO ally. It applies pressure in the grey zone, in non-partner states. Despite doors having been opened by NATO in the past for Ukraine and Georgia to consider joining the alliance, current partners have no commitment to defend Ukrainian and Georgian territorial integrity from Russia, because they are not NATO partners. Partners signal the credibility of commitments to collective defence by maintaining national capabilities, participating in exercises and missions, contributing “brick and mortar” assets and sharing the financial burden. There is little chance of alliance disintegration, despite the challenges presented by Brexit and Trump, but Russian regional activities and the strategic uncertainties from the recent American withdrawal from the INF treaty<sup>33</sup> are putting stress on the alliance.<sup>34</sup> Partners placed themselves in tripwire positions with deterrence deployments in the Baltics and Poland (Enhanced Forward Presence is four battlegroups led by the U.K., Canada, the U.S., and Germany)<sup>35</sup> signalling reassurance to partners while raising risks for contributors. Sinking costs and

---

<sup>31</sup> Russian activities in the Arctic are not overtly militarized. North American partners face strategic challenges from China and, to a lesser extent, from North Korea. Both states have the capacity to reach key partners. Both countries are under-linked to the U.S. in terms of security and defence agreements, suggesting they are outside the established defence-diplomacy networks, while the Japanese, South Koreans and Australians have more agreements with the U.S. but substantially fewer than its European partners (Kavanagh 2014). The strategic and institutional situation also differs in North America due to the NORAD binational command (Kimball 2018).

<sup>32</sup> Chinese forward deployment of missiles affects the strategic situation in the Pacific. Although the U.S. and Canada, along with regional partners, face strategic pressures, most new NATO allies remain committed to the priority of securing and stabilizing Europe.

<sup>33</sup> In 2017, U.S. withdrawal was so unlikely that Kuhn and Péczeli did not consider it in their study of whether Russian behaviour concerning the INF treaty was compliant, defiant, or ambiguous (2018).

<sup>34</sup> Partners also contribute by supporting neighbours under threat. Canada renewed its military training mission in Ukraine until 2022. Partners show commitment to the alliance with out-of-alliance reassurance measures.

<sup>35</sup> Twenty partners contribute to four battlegroups located individually in Poland, Lithuania, Latvia, and Estonia. The Czech Republic and Iceland participate in multiple groups, while the U.K. leads and contributes 120 troops to the U.S. group (“Enhanced Forward Presence,” 2018).

tying hands are effective signal methods as partners clarify “noisy signals of credibility” by putting lives at risk. Poland and Estonia face territorial threats and host troops from three of the four top club contributors. Soldiers, by their presence in Europe decades after the Second World War and the Cold War, confirm the club’s utility and viability. In addition, there remains a strong demand by partners for its defence goods.

Canada’s Operation Reassurance in Latvia includes committing up to 835 soldiers until 2022, with 540 on the ground and the remaining onboard a frigate or with the five CF-188 Hornet aircraft that serve in an air-policing role (DND, 2019). Despite lamenting the credibility of Canada’s commitment to NATO, data from budget shares in Table 1 offer firm evidence contradicting such claims. Canada, with other partners — namely Turkey, Spain, Italy, and France — took on more of a burden to relieve the burden on the Americans, British and Germans. There is no doubt about Canada’s willingness to contribute to NATO. What is a matter of debate is how to ensure space for Canadian national defence interests in a club where, formally, members each have an equal voice, but distinctions remain over financial and functional contributions directly on the ground and indirectly through bilateral support to other partners. Canada over-contributes functionally, given its current role in the Baltics.<sup>36</sup> Canadians also provide an important club good in socializing new partners through leadership of the group in Latvia; this is a contribution not to underestimate. As long as the Canadian public views NATO as a good investment and feels the institution’s mandate converges with national interests and helps to meet the defence needs of Canada, there is no alternative available but NATO for Canada and its partners.

There is no reason to knock NATO, because it is institutionally robust and provides an appropriate forum for managing the threats facing its partners. As long as partners invest in the institution, even given the vagaries of internal politics in the U.S. and U.K., NATO will continue to play a vital role in defending Europe and beyond. RIT contends that NATO is the only institution capable of delivering the club goods of collective defence, co-operation and European stability through crisis management in the face of strategic threats to peace, both direct and indirect, from Russia as well as emerging dynamic transnational threats. RIT points to the balance between the precision of the obligations and openings for discretion as well as the various co-operation schemes designed to encourage sponsorship from those partners that are more capable and more willing to offer it. In addition, enlargement shifted burdens as anticipated, although uncertainty remains over cohesion given increasing diversities among partners. The Cold War ended with the dissolution of the Soviet Union, and NATO plays a key role in maintaining the subsequent peace. With no alternative available, NATO is an essential institution, but to remain effective, its partners need cohesion, unity of purpose and credibility of commitment to preserve the cold peace with Russia and defend their fellow partners from the plethora of other threats that they face.

---

<sup>36</sup> Evaluating that claim with Table 1, Germany out-contributes Canada by more than double, the U.K. outspends Canada by nearly 40 per cent, and the U.S. spends 3.5 times more than Canada does, yet each leads a group. Canada is functionally doing a task equal to partners contributing substantially more. Moreover, it coordinates the greatest number of new partners (six, who together shoulder four per cent of the club’s burden) and total partners (eight with Spain and Italy) in its battlegroup. Sandler (2004) contends there are efficiency losses with increasing partner numbers and heterogeneity, so the capabilities of less-endowed/lower-quality partners are aggregated at a lesser rate than more endowed/more experienced states.

## REFERENCES

- Abbott, K. and D. Snidal. 1998. "Why states act through formal international organizations." *International Organization* 42 (1): 3-32.
- Asmus, R. 2008. "Europe's Eastern promise: Rethinking NATO and EU enlargement." *Foreign Affairs* 87 (1): 95-106.
- Barkin, S. 2004. "Time Horizons and multilateral enforcement in international cooperation." *International Organization* 48: 363-382.
- BBC. 2008. "Estonia fines man for 'cyber war.'" BBC News, January 25, 2008.
- Chun, K-W. 2013. "NATO: Adaptation and relevance for the 21st century." *Journal of International and Area Studies* 20 (2): 67-82.
- Congressional Budget Office (CBO). 2001. "NATO burden-sharing and enlargement." August 2001, Washington, D.C.: U.S. Congressional Budget Office.
- Department of National Defence of Canada. 2019. "Operation Reassurance." Available at <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html>. Accessed March 25, 2019.
- Dorusson, H, E. Kirchner and J. Sperling. 2009. "Sharing the burden of collective security in the European Union." *International Organization* 63 (4): 789-810.
- Duke, S. 2008. "The Future of NATO-EU Relations: A Case of Mutual Irrelevance through Competition." *European Integration* 30 (1): 27-43.
- Dunn, D. and M. Webber. 2016. "The UK, the European Union and NATO: Brexit's unintended consequences." *Global Affairs* 2 (5): 471-480.
- Engel, E., A. Grissom, J. Godges, J. Kavanagh and H. Schatz. 2016. *Estimating the Value of Overseas Security Commitments*. RR518, Santa Monica, Calif.: RAND Corporation.
- Fearon, J. 1997. "Signaling foreign policy interests." *Journal of Conflict Resolution* 41 (1): 68-90.
- Foucault, M. and F. Mérand. 2012. "The challenge of burden-sharing." *International Journal* 67 (2): 423-429.
- Fryc, M. 2016. "From Wales to Warsaw and beyond: NATO's strategic adaptation to the Russian resurgence on Europe's Eastern Flank." *Connections: Quarterly Journal* 15 (4): 45-65.
- Fuerherd, P. 2017. "NATO survives its Identity Crisis." JSTOR Daily. Available at <https://daily.jstor.org/nato-survives-its-identity-crisis/>. Accessed June 27, 2019.
- Gordon, J. 2015. "NATO Intelligence Fusion Centre (NIFC)." In Gregory Moore (ed.) *Encyclopedia of U.S. Intelligence*, Vol. 2. New York: Taylor and Francis, 645-60.

- Gould, J. 2019. "Trump says U.S. backs NATO 100%, after report of discussed withdrawal." Defence News, January 17, 2019. Available at <https://www.defencenews.com/congress/2019/01/17/trump-says-us-backs-nato-100-after-report-he-discussed-withdrawal/>. Accessed March 25, 2019.
- Guardian. 2019. "Germany rebukes Trump over criticism of NATO spending." The Guardian, February 15, 2019. Available at <https://www.theguardian.com/world/2019/feb/15/germany-tilts-at-trump-over-nato-decency-dependency-munich-security-conference>. Accessed March 25, 2019.
- Grahmer, R. 2019. "Trump can't do that, can he?" Foreign Policy, January 16, 2019. Available at <https://foreignpolicy.com/2019/01/16/trump-cant-do-that-can-he-nato-russia-congress/>. Accessed March 25, 2019.
- Hadfeld, A. 2018. "Britain against the world? Foreign and security policy in the 'age of Brexit.'" In B. Martill and U. Staiger (eds.), *Brexit and Beyond*. London: University College London Press, 174-182.
- Hartley, K. and T. Sandler. 1999. "NATO burden-sharing: Past and future." *Journal of Peace Research* 46 (6): 665-680.
- Hawkins, D., D. Lake, D. Nielson and M. Tierney. 2008. *Delegation and Agency in International Organizations*. Cambridge, U.K.: Cambridge University Press.
- Katchanovski, I. 2011. "Puzzles of EU and NATO accession in post-Communist Countries." *Perspectives on European Politics and Society* 12 (3): 304-319.
- Kavanagh, J. 2014. *U.S. security related agreements in force since 1955: Introducing a new database*. RR763, Santa Monica, Calif.: RAND Corporation.
- Kelly, L. 2018. "Poland signs \$4.75 billion deal for U.S. Patriot missile system facing Russia." Reuters, March 28, 2018. Available at <https://www.reuters.com/article/us-raytheon-poland-patriot/poland-signs-4-75-billion-deal-for-u-s-patriot-missile-system-facing-russia-idUSKBN1H417S>. Accessed April 1, 2019.
- Kimball, A. 2010. "Political survival, the distributional dilemma and alliance formation." *Journal of Peace Research* 47 (4): 407-419.
- Kimball, A. 2017. "Examining informal defence and security arrangements' legalization: Canada-US agreements, 1950-2005." *International Journal* 72 (3): 380-400.
- Kimball, A. 2018. "Future uncertainty, strategic defense, and North American defense cooperation: Rational institutionalist arguments pragmatically suggest NORAD's adaptation over replacement." In C. Leuprecht, J. Sokolsky and T. Hughes (eds.), *North American Strategic Defense in the 21st Century*. Springer-Verlag International Publishing.
- Koremenos, B., C. Lipson and D. Snidal. 2001. "The rational design of international institutions." *International Organization* 55 (4): 761-800.
- Koremenos, B. 2008. "When, what and why do states choose to delegate?" *Law and Contemporary Problems* 71 (1): 151-192.

- Koremenos, B. and A. Nau. 2010. "Exit, no exit." *Duke Journal of Comparative and International Law* 21 (1): 81-119.
- Kuhn, U. 2017. "US-Russian relations and the future security of Europe." *Arms Control Today*, Jan/Feb: 18-25.
- Kuhn, U and A. Péczeli. 2017. "Russia, NATO and the INF Treaty." *Strategic Studies Quarterly*, Spring: 66-99.
- Lanoszka, A. 2018. "Tangled up in rose? Theories of alliance entrapment and the 2008 Russo-Georgian war." *Contemporary Security Policy* 39 (2): 234-257.
- Leeds, B., J. Ritter, S. Mitchell and A. Long. 2002. "Alliance treaty obligations and provisions, 1815-1944." *International Interactions* 28: 237-260.
- Leeds, B. 2003. "Alliance reliability in times of war: Explaining state decisions to violate treaties." *International Organization* 57 (4): 801-827.
- Liu, T.-Y., C.-W. Su, R. Tao and H. Cong. 2018. "Better is the Neighbor?" *Defence and Peace Economics*, 1-13.
- Martill, B. and M. Sus. 2018. "Post-Brexit EU/UK security cooperation: NATO, CDSP+, or 'French connection'?" *British Journal of Politics and International Relations* 20 (4): 846-863.
- Mattes, M. and B. Savun. 2010. "Information, agreement design and the durability of civil war settlements." *American Journal of Political Science* 54 (2): 511-524.
- New York Times. 2018. "Why NATO Matters," July 8, 2018. Available at <https://www.nytimes.com/2018/07/08/opinion/editorials/why-nato-matters.html>. Accessed June 27, 2019.
- North Atlantic Treaty. 1949. *Treaties and International Agreements Series*. (TIAS) 2390.
- North Atlantic Treaty Organization. 2019. "Funding NATO." Available at [https://www.nato.int/cps/en/natolive/topics\\_67655.htm](https://www.nato.int/cps/en/natolive/topics_67655.htm). Accessed April 1, 2019.
- North Atlantic Treaty Organization. 2018. "Enhanced Forward Presence." Available at <https://shape.nato.int/efp/efp/map>. Accessed June 27, 2019.
- Rynning, S. 2014. "The geography of Atlantic peace: NATO 25 years after the fall of the Berlin Wall." *International Affairs* 90 (6): 1383-1401.
- Sandler, T. and K. Hartley. 2001. "Economics of alliances: The lessons for collective action." *Journal of Economic Literature* 39 (3): 869-896.
- Sandler, T. 2004. *Global Collective Action*. Cambridge, U.K.: Cambridge University Press.
- Stone, J. 2019. "France's EU Minister names her cat 'Brexit' because 'he meows loudly but won't go through the door,'" March 18, 2019. Available at <https://www.independent.co.uk/news/world/europe/brexit-france-theresa-may-deal-nathalie-loiseau-cat-a8828026.html>. Accessed March 29, 2019.

- Smith, A. 1995. "Alliance Formation and War." *International Studies Quarterly* 39 (4): 405-425.
- Smith, M. and G. Timmins. 2000. "The EU, NATO and the extension of institutional order in Europe." *World Affairs* 163: 80-89.
- Snidal, D. 1985. "Coordination Versus Prisoners' Dilemma: Implications for International Cooperation." *American Political Science Review* 79: 923-942.
- Ubricco, J. 2017. "NATO's Baltic problem: How populism, Russia and the Baltic can fracture NATO." *Harvard International Review* 38 (1): 13.
- Von Voss, A. and T. Schutz. 2018. "The UK's potential role in enabling EU-NATO cooperation after Brexit." *International Institute for Strategic Studies*: Berlin.
- Wiarda, H. 2002. "The politics of European enlargement: NATO, the EU and the new US-European relationship." *World Affairs* 164 (4): 178-197.
- Williams, M. 2013. "Enduring, but irrelevant: Britain, NATO and the future of the Atlantic alliance." *International Politics* 50 (3): 360-386.
- Wolf, R. 2017. "Donald Trump's status driven foreign policy." *Survival*, 59 (5): 99-116.
- Zyla, B. 2009. "NATO and post-Cold War burden-sharing: Canada, 'the laggard'?" *International Journal* 64 (2): 337-359.

## SUPPLEMENTARY MATERIALS

**APPENDIX TABLE 1: NATO COMMON BUDGET SHARES AS A PERCENTAGE,  
FOR PARTNERS JOINING AFTER 1998**

Partner	Per cent, 2018-19
Poland (1999 share = 1.3)	2.77
Czech Republic (1999 share = 0.5)	0.979
Hungary (1999 share = 0.3)	0.704
Bulgaria	0.339
Estonia	0.116
Latvia	0.148
Lithuania	0.238
Slovenia	0.211
Slovakia	0.479
Albania	0.084
Croatia	0.278
Montenegro	0.027
Romania	1.1384
<b>Total per cent (1999 share = 2.1)</b>	<b>7.511</b>

Sources: "Report on NATO burden-sharing and enlargement" (CBO, 2001); "NATO Funding, 2018-19" (2019).

### **About the Author**

**Anessa Kimball** completed a B.A. in International Relations at Kent State University, USA (2000) including an honor's thesis on French-NATO relations while minoring in North Atlantic Security (i.e. NATO) Studies. At SUNY-Binghamton (M.A. 2004 & Ph.D. 2006, political science), Kimball's research linked notions of political survival with the distributional dilemma offering a contracting model of defence alliances appearing the *Journal of Peace Research* (2010). Since 2006, she is a professor in the department of political science and the École supérieur des hautes études internationales at Université Laval. Her research applies rational institutionalist and delegation approaches to the quantitative study of international defence cooperation with special interest in US-Canadian and allied cooperation. Professor Kimball published an original dataset of Canada-US informal defence and security arrangements, which included a model of agreement institutionalisation in *International Journal* (2017). From 2019-2026, she is co-director, Security of the SSHRC sponsored Canadian Defence and Security Network.

## ABOUT THE SCHOOL OF PUBLIC POLICY

The School of Public Policy has become the flagship school of its kind in Canada by providing a practical, global and focused perspective on public policy analysis and practice in areas of energy and environmental policy, international policy and economic and social policy that is unique in Canada.

The mission of The School of Public Policy is to strengthen Canada's public service, institutions and economic performance for the betterment of our families, communities and country. We do this by:

- *Building capacity in Government* through the formal training of public servants in degree and non-degree programs, giving the people charged with making public policy work for Canada the hands-on expertise to represent our vital interests both here and abroad;
- *Improving Public Policy Discourse outside Government* through executive and strategic assessment programs, building a stronger understanding of what makes public policy work for those outside of the public sector and helps everyday Canadians make informed decisions on the politics that will shape their futures;
- *Providing a Global Perspective on Public Policy Research* through international collaborations, education, and community outreach programs, bringing global best practices to bear on Canadian public policy, resulting in decisions that benefit all people for the long term, not a few people for the short term.

The School of Public Policy relies on industry experts and practitioners, as well as academics, to conduct research in their areas of expertise. Using experts and practitioners is what makes our research especially relevant and applicable. Authors may produce research in an area which they have a personal or professional stake. That is why The School subjects all Research Papers to a double anonymous peer review. Then, once reviewers comments have been reflected, the work is reviewed again by one of our Scientific Directors to ensure the accuracy and validity of analysis and data.

### The School of Public Policy

University of Calgary, Downtown Campus  
906 8th Avenue S.W., 5th Floor  
Calgary, Alberta T2P 1H9  
Phone: 403 210 3802

---

#### DISTRIBUTION

Our publications are available online at [www.policyschool.ca](http://www.policyschool.ca).

#### DISCLAIMER

The opinions expressed in these publications are the authors' alone and therefore do not necessarily reflect the opinions of the supporters, staff, or boards of The School of Public Policy.

#### COPYRIGHT

Copyright © Kimball 2019. This is an open-access paper distributed under the terms of the Creative Commons license [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/), which allows non-commercial sharing and redistribution so long as the original author and publisher are credited.

#### ISSN

ISSN 2560-8312 The School of Public Policy Publications (Print)  
ISSN 2560-8320 The School of Public Policy Publications (Online)

#### DATE OF ISSUE

October 2019

#### MEDIA INQUIRIES AND INFORMATION

For media inquiries, please contact Morten Paulsen at 403-220-2540. Our web site, [www.policyschool.ca](http://www.policyschool.ca), contains more information about The School's events, publications, and staff.

#### DEVELOPMENT

For information about contributing to The School of Public Policy, please contact Catherine Scheers by telephone at 403-210-6213 or by e-mail at [catherine.scheers@ucalgary.ca](mailto:catherine.scheers@ucalgary.ca).

## RECENT PUBLICATIONS BY THE SCHOOL OF PUBLIC POLICY

SOCIAL POLICY TRENDS: PERCENTAGE OF ALBERTA AND ONTARIO HOUSEHOLDS RELIANT ON SOCIAL ASSISTANCE

<https://www.policyschool.ca/wp-content/uploads/2019/10/Social-Policy-Trends-AB-ON-Social-Assistance-by-Households-October-9-2019.pdf>  
Margarita Wilkins | October 2019

THE VARIOUS STRUCTURES FOR GRANTING PETROLEUM LICENCES AROUND THE WORLD

<https://www.policyschool.ca/wp-content/uploads/2019/10/GrantingPetroleumLicence-LivingstonEgbert.Oct7-version-2-FINAL-USE.pdf>  
Darryl Egbert and Brian Livingston | October 2019

PUBLIC SECTOR WAGES IN ALBERTA: HOW DO THESE COMPARE TO OTHER PROVINCES AND THE PRIVATE SECTOR?

[https://www.policyschool.ca/wp-content/uploads/2019/10/Public-Sector-Wages-Mueller.Oct3\\_.pdf](https://www.policyschool.ca/wp-content/uploads/2019/10/Public-Sector-Wages-Mueller.Oct3_.pdf)  
Richard E. Mueller | [https://www.policyschool.ca/wp-content/uploads/2019/10/Public-Sector-Wages-Mueller.Oct3\\_.pdf](https://www.policyschool.ca/wp-content/uploads/2019/10/Public-Sector-Wages-Mueller.Oct3_.pdf)

SLAMMING THE GOLDEN DOOR: CANADA-U.S. MIGRATION POLICY AND REFUGEE RESETTLEMENT

<https://www.policyschool.ca/wp-content/uploads/2019/10/CIT-Refuge-Resettlement-Falconer.Oct3-FINAL-USE.pdf>  
Robert Falconer | October 2019

SLAMMING THE GOLDEN DOOR: CANADA- U.S. MIGRATION POLICY AND ASYLUM SEEKERS

[https://www.policyschool.ca/wp-content/uploads/2019/10/CIT-Asylum-Seekers-Falconer.Oct2\\_.pdf](https://www.policyschool.ca/wp-content/uploads/2019/10/CIT-Asylum-Seekers-Falconer.Oct2_.pdf)  
Robert Falconer | October 2019

ECONOMIC POLICY TRENDS: THE EFFECT OF ALBERTA'S RECESSION ON CANADA'S NATIONAL ECONOMY, 2014 TO 2019

<https://www.policyschool.ca/wp-content/uploads/2019/09/Economic-Policy-Trends-TOMBE-FINAL-USE-1.pdf>  
Trevor Tombe | September 2019

SOCIAL POLICY TRENDS: SUICIDE AND THE ECONOMY

<https://www.policyschool.ca/wp-content/uploads/2019/09/Social-Policy-Trends-Suicide-Trends-September-2019-FINAL.pdf>  
Ronald Kneebone | September 2019

CLIMATE CHANGE SOLUTIONS-SENSIBLE OR MISGUIDED?

<https://www.policyschool.ca/wp-content/uploads/2019/09/Climate-Change-Isaacs.pdf>  
Eddy Isaacs | September 2019

THE EFFECT OF CORPORATE INCOME TAX ON THE ECONOMIC GROWTH RATES OF THE CANADIAN PROVINCES

<https://www.policyschool.ca/wp-content/uploads/2019/09/Canada-CIT-Dahlby-Ferede.pdf>  
Ergete Ferede and Bev Dahlby | September 2019

SIMULATING THE GROWTH EFFECTS OF THE CORPORATE INCOME TAX RATE CUTS IN ALBERTA

<https://www.policyschool.ca/wp-content/uploads/2019/09/Alberta-CIT-Dahlby-Ferede.pdf>  
Ergete Ferede and Bev Dahlby | September 2019

THE ROLE OF STORAGE IN ALBERTA'S ELECTRICITY MARKET: SUMMARY OF A SCHOOL OF PUBLIC POLICY ROUNDTABLE EVENT

<https://www.policyschool.ca/wp-content/uploads/2019/09/AB-Electricity-Shaffer.pdf>  
Blake Shaffer | September 2019

NURTURING GLOBAL GROWTH COMPANIES: TIME FOR A NEW POLICY TOOLKIT

<https://www.policyschool.ca/wp-content/uploads/2019/09/Global-Growth-Companies-Lortie.pdf>  
Pierre Lortie | September 2019

THE WESTERN ALLIANCE IN THE FACE OF THE RUSSIAN (DIS)INFORMATION MACHINE: WHERE DOES CANADA STAND?

[https://www.policyschool.ca/wp-content/uploads/2019/09/Final-Version\\_Western-Alliance-Sukhankin.pdf](https://www.policyschool.ca/wp-content/uploads/2019/09/Final-Version_Western-Alliance-Sukhankin.pdf)  
Sergey Sukhankin | September 2019