

Women waging War and Peace

The relation between female legislators and armed conflict

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Executive Summary

Since the World Conference on Women of September 1995 by the United Nations, female political participation was put at the forefront of political decision-making (UN Women, 2020a). A country's achievement in women's political participation is typically measured by its share of women in national legislatures (UN Women, 2020b). The gender balance in politics is increasingly shifting towards more female participation. Simultaneously, numerous studies showed differences for men and women when it comes to decision-making processes, especially in regard to violent conflict. An analysis of 40 peace processes since the end of the Cold War shows that when women are exercising a strong influence on peace negotiations, the chances of successfully reaching an agreement went up. Moreover, the total number of countries involved in internationalized conflicts is exploding annually, calling for thorough investigation into conflict prevention, management and conciliation. This research therefore examined the influence of women legislators on decision-making in regard to conflict. After conducting a literature review, it was expected that an increase in the share of women in national parliaments decreases the share of military expenditure as part of GDP. Moreover, it was expected that an increase in the share of women in national parliaments decreases the number of armed conflicts a country engages in. Based on two standard multiple regression and one binary logistic regression, both hypotheses had to be rejected. Explanations for findings contrary to expectations referred mainly to the need to examine the concept studied in more nuance and to control for more interfering factors. Support for this recommendation was found in additional literature.

Preface

Since high school, I had this odd fascination with factors that could drive people to excessive behaviour, especially in regard to groups and conflicts. This kept being my drive for my time as an academic student. With writing and finishing my Master thesis, everything I have learned is accumulated and my time as a student is nearing an end. Over the last five years, I did not only get a chance to develop myself as an academic, but also more generally speaking as an independent individual who learned loads and is still constantly learning from others. During my time at Utrecht University, my eagerness and stubbornness to study what I envisioned for myself as opposed to the paths that were already laid out for me threw me into a variety of undertakings. It led me to study different types of courses belonging to different studies, different minors, at differing faculties, internships and side jobs with differing people. Choosing my Master program was no exception to this undefined rule. Since the start of my academic career, only some of the aspects of my life remained constant. These are the factors I do believe to remain unchanged. I want thank my beloved friends from my hometown for their endless support, good times and most of all patience with me over the last decade. Additionally, the friends I met in my junior year for their company, support, endless coffees in our beloved Langeveld building and good times. Although quite some of us took different paths from what we had imagined for ourselves when we met, it all turned out to be for the better. Perhaps most importantly I want to thank my parents, sister and partner, for blindly supporting me in whatever step I decided to take over not only the course of my academic career, but everything besides. Writing a Master thesis during a global pandemic is not an easy task, and I am therefore very grateful for the support and guidance of my supervisor Professor Dijkstra, my second corrector Professor Onderco and my fellow students.

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1. Introduction

The United Nations' Fourth World Conference on Women of September 1995 was of crucial importance for the global agenda on gender equality (UN Women, 2020a). One of the critical areas of concern revolved around women in power and decision-making, giving governments the impulse to ensure women's equal access and participation in leadership and political decision-making. A country's achievement in women's political participation is typically measured by its share of women in national legislatures (UN Women, 2020b). Following the Fourth World Conference on Women, the global proportion of women in national parliament rose from 12% in 1997 to 25% in 2019 (World Bank, 2019). Any effects of the shift in gender balance in legislatures are actively hypothesized upon, as for example former US President Barack Obama recently stated: "I'm absolutely confident that for two years if every nation on earth was run by women, you would see a significant improvement across the board on just about everything... living standards and outcomes" (BBC, 2019). During the currently ongoing COVID-19 pandemic, Germany, Taiwan, New Zealand, Iceland, Finland, Norway and Denmark are among the most effective responders to the virus in terms of low death rates. These countries have one thing in common: they are led by women (Wittenberg-Cox, 2020). Professor of sociology Kathleen Gersen argues: "... among the countries which have done a better job of handling this pandemic and the spill over effects that it has had, women are disproportionately represented to a rather startling degree" (Somvichian-Clausen, 2020). It is interesting to examine the actual effects of a larger share of women in national legislatures, since numerous studies showed differences for men and women when it comes to decision-making processes, especially on violent conflict.

While women are often characterized by being peaceful and collaborative, which can be beneficial in any political process, they are still underrepresented in processes that can bring peace or alter systems that initially sparked conflict (Kaufman, Williams & Kristen, 2010). Of all peace agreements between 1992 and 2011, only 4% of signatories and only 9% of negotiators was female. Prioritizing increased involvement of women in conflict resolution did and does not come without resistance. Sanam Anderlini, Executive Director of the International Civil Society Action Network, for example argued that success is based on effectiveness and not inclusiveness of peace negotiations (O'Reilly et al., 2015). In line with this argument, the introduction of gender quota is met with both high support and sometimes insurmountable resistance (Bittner, 2019). In conflicts in Syria, Yemen and the north-east of Nigeria, the portrayal of women as solely being a victim of conflict led to the exclusion of

women to take any meaningful seat at the negotiation table (O'Reilly, Súilleabháin & Paffenholz, 2015). When women do reach the negotiation table, implicit bias causes them to be disproportionately penalized for bargaining on one's own behalf, to more often being lied to and to be perceived as less competent as compared to men (Shonk, 2020). Moreover, women are more likely than men to face challenges, to face challenges of higher magnitude, and are perceived to be less able in handling issues of military expenses and foreign affairs (Atkinson & Windett, 2019). However, the body of literature supporting the importance of deliberately including women in peace processes and military affairs continues to grow.

According to O'Reilly et al. (2015), increased involvement of women significantly enhances the chances of establishing a robust peace deal. An analysis of 40 peace processes since the end of the Cold War shows that when women are exercising a strong influence on negotiations, the chance of successfully reaching an agreement went up. The participation of women in peace processes increases the chance of establishing a peace agreement lasting for over two years with 20% (UN Women, 2015). Moreover, the chance of a peace agreement lasting for over 15 years increased by 35% when women are involved in the peace process. However, it has to be noted that solely an increase in female participation is not sufficient for effectively influencing negotiations and implementations. Any benefits of increased female participation only come forward when participation means an active opportunity to exert influence. Times have been changing, with an increased amount of women attaining highly qualified positions in national and international top organizations and governmental institutions. Therefore, the current increase of women in national legislations might be promising in regard to building a more peaceful world.

At the time of writing, the number of conflicts globally is fast increasing. Whereas the first years of the century have been relatively peaceful, 2014 marked a year of several highly deadly wars and an increase in smaller conflict from then on forwards (PRIO, 2019). It cannot be said whether the increase in conflict since 2014 is temporary or whether it has to be perceived as the new status quo. Further trends reveal that whereas the overall death toll has been in decline together with the number of interstate wars, the amount of conflict categorized as relatively low-level is increasing rapidly. Myanmar is amongst the most conflict-ridden countries as well as the subject of numerous low-level conflicts. After the signing of the Nationwide Ceasefire Agreement in 2014, lethal casualties declined dramatically. In 2018, less than a 100 lethal casualties were recorded. A baffling outlier has been Afghanistan, fighting two wars that together account for over 49% of all fatalities in 2018. The total number of countries involved in internationalized conflicts is exploding annually, and

together with an increase in the total number of actors internationalized conflict is expected to be durable and protracted. Whereas it is almost impossible to predict future trends of armed conflict, the urgency of the issue addressed calls for thorough investigation into conflict prevention, management and conciliation. This research draws from current development in legislatures and conflict, and aims to make inferences about the effect of gender in constituencies in regard to militarization and armed conflict.

1.1 Research Question

This thesis aims to give insight in the effects of gender balance in legislators on decision-making regarding conflict. The research question of this thesis will therefore be:

“What is the influence of women legislators in national parliaments on decision-making regarding conflict?”

The sub-questions of the research will be answered by means of the literature review, theoretical framework and methodological analysis. The questions bring structure to the research and the answers will form the scientific foundation on which the answer regarding the research question will rely for its validity.

1. What has been known so far regarding the topic of women legislators, decision-making and international relations?
2. How can the concepts researched best be defined and examined?
3. What are the outcomes of the analyses?

1.2 Research Approach

The thesis will take on a deductive approach whereby the sub-questions determine the structure of the research. The research will start with a literature review in order to determine what has been found in the scientific field so far and how this can function as a framework on which the hypothesis will be built and tested. The literature review will give insight in female legislators, their policy agendas and role in conflict conciliation processes and outcomes.

Attention will also be given to gender roles within society, how these have varied over time and what this means for decision-making. The concepts that will be researched are operationalized and the hypotheses will be derived. This relates to sub-question 2.

This research will take on a quantitative cross-sectional research design. Cross-sectional designs are used to assess the order of effects of a minimum of two factors (Edmonds & Kennedy, 2016). Since the research will make use of control variables that are likely to interfere with any effects of the share of women legislators on overall decision-making processes regarding conflict, a cross-sectional design whereby the individual effects of multiple independent variables can be examined is suitable for the research. The control variables that will be accounted for will be derived from the literature review. The unit of analysis for all concepts will be at the level of the respective countries included in the analysis. More substantiation and information on the analysis will be given in the method and results chapters of this thesis.

1.3 Academic Relevance

The academic relevance of this research lies in its ability to bridge a gap in the literature by bringing together different scientific fields. Large-scale societal phenomena and issues cannot be properly explained by a single discipline, which underlines the need for multidisciplinary research (Proctor & Vu, 2019). Therefore, this research will build on articles from both social-behavioural journals as well as journals that focus on international relations. By bringing together different types of expertise, novel insights, solutions and interventions can be developed that would not have been established otherwise. The bringing together of multiple disciplines can come at a challenge, since each scientific discipline uses its own language, epistemology, approaches, criteria and publication outlets. Nonetheless, research by Proctor & Vu (2019) showed that numerous multidisciplinary research has been successfully conducted and lead to projects with broad impact. This research aims to further contribute to the rise of multidisciplinary research by combining findings of different scientific fields as a strong base for assessing the effect of women legislators on global decision-making regarding conflict.

1.4 Societal Relevance

Besides the academic relevance, this research also brings strong societal relevance. The United Nations' Fourth World Conference on Women, also called the Beijing Conference, of 1995 is named to be the onset of women's global collective action to alter peace agreements by linking war, violence, masculinity and nationalism (Nhengu, 2019). The women-led United Nation's Security Council Resolution 1325 on women, peace and security of 2000 stressed the importance of women's involvement in peace processes worldwide (United

Nations Security Council, 2000). Meanwhile, conflict and conflict-related casualties have been in decline globally (PRIO, 2018). Any found positive relations between these two global trends will spark both women's empowerment and equality and help to further decline global conflict, by giving stronger incentives to actively interrelate the two. The research contributes to Sustainable Development Goal (SDG) 5: "Achieve gender equality and empower all women and girls", and SDG 16: "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels" of the United Nation's 2030 Agenda for Sustainable Development (United Nations, 2020).

2. Literature Review

Armed and other forms of conflict and terrorism are highly persistent in many parts of the world and are an ongoing reality for both men and women in nearly every region (European Institute for Gender Equality, n.d.). Women are particularly affected by armed conflict as victims of gender-based violence, combatants of armed groups, and peace and reconstruction actors. Over 80% of displaced persons concern women and children. Moreover, women often take on the role of caregiver for those injured and find themselves being sole parents, sole caretakers of elderly or sole household managers. Women are still widely unrepresented in decision-making positions regarding defence and foreign affairs, conflict resolution and peacekeeping (Randsley de Moura, Leicht, Leite, Crisp & Gocłowska, 2018). Meanwhile, renown international institutions call for more women to be involved in legislation and conflict conciliation efforts, and the proportion of seats occupied by women within national parliaments is on a rise (Conciliation Resources, n.d.; European Parliament, 2019; International Peace Institute, 2013; United Nations, 2017; World Bank, 2020). As aforementioned, outcomes for a shift in gender balance in higher positions in international relations are hypothesized upon. Simultaneously, within the academic world, the field of behavioural international relations has been winning territory over the last two decades (Kertzer & Tingley, 2018). This newly rising scientific field brings attention to personal preferences, beliefs, irrationality and bias regarding decision-making in international relations (Cupać, 2018).

Gendered variation in attitudes regarding international relations has been ascribed to biological differences, differences in the way threats and risks are perceived by men and women, the extent of political mobilization of women and a stronger preference of consensus in decision-making for women (Eichenberg & Read, 2016). Attitudes from men and women are particularly found to differ in regard to the use of force and warfare. This chapter first reviews the use of the field of behavioural international relations in making inferences about gender in politics. Following this scientific approach, it then reviews the literature on the role of women legislators in regard to information processing, decision-making, prioritized policy agendas, conflict conciliation processes and outcomes.

2.1 Behavioural International Relations

Over the last two decades, the scientific field of international relations has been susceptible to change (Kertzer & Tingley, 2018). In 2001, a review essay published by Goldgeier and Tetlock analysed the use of political psychology in international relations. This review

focused around classical paradigms of international relations such as realism, constructivism and liberal institutionalism, and what psychological findings could contribute. Since then, renewed interest in combining psychology and international relations arose (Kertzer & Tingley, 2018). Events on the world stage such as 9/11 and the global war on terror, war in the Middle-East, Brexit and the election of Trump sparked further interest in the psychological processes involved in development of extremism, terrorism, public opinion and perceived leadership. The examination of these relations fall under the scientific field of behavioural international relations.

While paradigms of international relations allowed for individual preferences and beliefs to differ in the past, the focus was never before on exploring the effects of these variations in significant detail (Hafner-Burton, Haggard, Lake & Victor, 2017). Compared to other scientific fields, behavioural international relations has just seen the light of day. However, the gains to be attained by focusing on biases and heterogeneity in preferences and decision-making seem promising. The study of international relations consists of rational choice and irrational behavioural paradigms (Mintz, 2007). For example, a focus on heterogeneity of individuals can help to explain causes and consequences of heterogeneity in decision-making by actors highly relevant in international relations. Underlying factors of heterogeneity are age, gender and career but also for example reasoning or management styles, socialization processes or emotional states. The study of behavioural international relations revolves around identifying systematic differences in preferences, beliefs and decision-making processes affecting strategic problems and choices.

Preferences. So far, three sets of differentiation of rationalist models in regard to preferences have been identified by the so-called behavioural revolution. First, the assessment of risk is uneven, with risk aversion to be high in respect to potential gains and low for potential losses in respect to the status quo (Hafner-Burton et al., 2017). In contrast to what is assumed by expected utility theory, outcomes of decisions are not valued in absolute terms but in regard to the values ascribed to potential gaining or losing (Cupaç, 2018). Secondly, assessment of the future is assumed to be the same when comparing costs against benefits for any given time periods for standard rational models. In contrast, experimental research has suggested the influence of persistent time inconsistency. This caused variation in the extent to which decision-makers take the shadow of the future into account in negotiations and allows settlement on international agreements to be better explained. Lastly, cooperative behaviour has shown to be more prominent in public good games than what would be predicted by

standard theory. This inclination helps to explain why self-interested states join and comply with international organizations when formal enforcement is limited or negligible.

Beliefs. In most earlier rational models, actors are assumed to be all-knowing beings about not only their own preferences and viewpoints but also those of others. The concept of bounded rationality was then introduced, arguing that in the circumstance of disinformation or missing information, solutions or decisions are attained that are as adequate as possible instead of optimal (Battaglio, Belardinelli, Bellé, & Cantarelli, 2018). In regard to the literature on conflict, the analysis of Philip Tetlock is the most wide ranging investigation of weak statistical inference in forecasting capabilities of foreign policy experts (Hafner-Burtion et al., 2017). Tetlock and Gardner argue that even highly renowned experts are weak in making predictions regarding their respective fields (Roche, 2016). Moreover, misperception is not limited to strategies and opponents but also encompasses capabilities of the self and the presence of overconfidence (Hafner-Burtion et al., 2017).

Decision-making processes. Within international relations, decisions can be argued to reflect attainment of maximal utility when stakes are high and organizational resources are abundant (Hafner-Burtion et al., 2017). However, framing processes are argued to highly influence decision-making processes, whereby what is familiar is prized by political decision-makers (Chong & Druckman, 2007). The way in which information is acquired, presented and aligns with existing belief systems all influence decision-making (Mintz, 2007). Hermann, Preston, Korany and Shaw (2001) found personal characteristics of political leaders to affect both choice and behaviour in foreign policy.

The rising field of behavioural international relations give incentive to believe the importance of explaining heterogeneity and therefore gender effects within political-decision making. This research therefore follows this approach in combining insights from behavioural sciences with what has been found in international relations and policy-making regarding decision-making processes. The following sub-chapters will illustrate this approach.

2.2 Women and Policy Agendas

Seemingly conflicting results regarding the relation between gender and policy agendas have been found. An increase of female legislators is for example related to an increase in spending on social welfare, child health and environmental regulations (Atchison & Down, 2019; Chen, 2010; Swiss, Fallon & Burgos, 2012). Little, Dunn and Deen (2001) found American female state legislators to hold a distinctive policy agenda from their male colleagues. According to this research, women support more traditional issues that concern women such as social

services, health care and children's issues. The female participants from this research were also less likely to advocate for budget matters, public safety issues, institutional regulation and taxes. Effects were found even after controlling for race, political party, political experience, type of leadership position and region. This aligns with the finding of Hicks, Hicks & Maldonado (2015) that an increase in female politicians leads to the redistribution of foreign aid towards health and education. Additionally and in line with the 'caring' female stereotype, an increase in the share of female politicians was found to be positively related to the amount of foreign aid, both in absolute numbers and relative to overall GDP of the respective country.

Bendix and Jeong (2019) examined the interrelations between gender, constituency preferences and decisions regarding national security issues within America. It was found that women initially vote more 'dovish' than their male counterparts in the House and Senate. The label of dove characterizes decision-makers who favour accommodation and conciliation towards adversaries (Brown, 2017). Moreover, doves are more likely to end war by negotiated settlement, even when it takes concessions and compromise. However, in contrast with aforementioned studies, this effect dissolved when the variables were controlled for by constituency preferences. It is not the increase in elected women that pushes for more mild strategies. Instead, a more liberal electorate favours more dovish policies and increases the share of liberal members, including liberal women. Another study in America did find that women tend to advocate for policies that relate more directly to women than to men (Lawless, 2015). That is, women that replaced men within the same district are likely to bring up so-called 'women's issues' like gender equality, child care, abortion, part time work and minimum wage. However, Lawless (2015) found that both men and women are at foremost partisan individuals. Political preferences overruled the gender effect for the research by Lawless (2015) and Bendix and Jeong (2019). An explanation for these findings is sought for in the behavioural sciences and given in the following subchapter.

2.3 Women and Cognitive Processes Regarding Societal Issues

Research in cognitive sciences found considerable differences in the way men and women process incoming information (Dykiert, Gale & Deary, 2009; Halpern, 2013). These differences cannot solely be attributed to the social environment, but are ascribed to genetical differences (Jeaong & Harrison, 2017; Savic, Garcia-Falgueras, & Swaab, 2010, for a review). Amen and others (2017) conducted a functional brain imaging study and found that the prefrontal cortex, the part of the brain associated with empathy, self-awareness,

collaboration and concern, is significantly more active for women than for men. This inherent preference of women for social interest and empathy is already salient in infants and children (Christov-Moore et al., 2014). According to Baron-Cohen (2010), the differences between men and women revolve around the extent of empathy. Women are generally more concerned with fairness, respond with more empathy to distress of others and value reciprocal relationships more strongly than men. Interestingly, whereas feelings of empathy are dependent on how others are perceived to act fair for men, feelings of empathy had no relation with perceived fairness of others for women (Singer et al., 2006).

Yildirim (2018) examined the relation between the heightened empathic response to external cues for women and the policy agenda's brought forward by women. Reformulated, the relatively low cognitive threshold of urgency for women as compared to men was expected to surpass a larger number of societal issues as needed to be addressed. It was therefore expected that women in parliament bring forward more diverse policy agendas than men. In line with the hypothesis, female representatives were found to speak about a broader range of issues within parliament than men. Schmitt and Brant (2019) also examined relations between gender and legislative behaviour in regard to the size of policy agendas. The findings indicate that when seeking political leadership, women set the ceiling in the amount of issues that are feasible to be juggled. As a result, women were found to be more active than men in introducing legislation. Women were also found to be more effective in pulling proposals through the entire legislative process. Additional research by Nowness and Freeman (2019) indicated that women attend to more information as compared to men before making any legislative decisions. Moreover, women were found to attend to more types and sources of information before making any political decisions. Nowness and Freeman (2019) argue this to be due to the nature of information that comes from these sources: women generally tend to excel at analysing and comprising dense information in comparison to men.

These findings bring implications for the interpretation of studies in the foregoing 'women and policy agendas' subchapter: Both Yildirim (2018) as Schmitt and Brant (2019) that it is not necessarily the case that women care more for certain 'soft or traditional' issues than men, but that women have a higher issue-carrying capacity and therefore care for a wider diversity of issues than men. An increased share of women in national legislators may therefore push policy issues that were formerly relatively underserved by male counterparts. This is supported by Clayton and Zetterberg (2018), who found an increase of female legislators as a result of gender quotas to be related with an increase in spending in the health sector and a slight decrease for all other sectors, including military expenditure. It is further

argued that a broad interest in a range of issues leads to better context for decision making (Yildirim, 2018). Therefore, an increase of female representation in legislatures was implied to lead to more effective parliamentary debates. 'Effectiveness' was undefined within this research. The characteristics of female leadership are therefore examined in the following subchapter.

2.4 Women as Leaders

Numerous psychological studies showed differences for men and women when it comes to leadership and decision-making processes (Jeaong & Harrison, 2017). Apart from biological differences as described earlier, some of these differences are social in nature. These differences are derived from and explained by the role-congruity theory of leadership, explained in this subchapter.

Role-congruity theory involves the contrast between social expectations about a desired role and expectations of someone possibly taking on this role (Eagly, 2018). The idea is that a mismatch between these expectations puts someone at a disadvantage in taking on this role. Role-congruity theory is best examined regarding the role of leadership. It is generally believed that leaders possess *agentic* and individual characteristics as being ambitious, self-sufficient, dominant and having confidence (Aronson, Wilson & Akert, 2013). These characteristics are also traditionally associated with men. *Communal* characteristics as being kind and considerate are less associated with leadership qualities. These characteristics are traditionally associated with women. The mismatch between the social expectations regarding leaders (having agentic characteristics) and women (having communal characteristics) not only causes difficulty for women to become leaders, but also to fulfil the this role successfully when obtained.

Research supports inherent differences in support of political decision-making by men and women. For example, the support of negotiation proposals is partially dependent on whether the proposal is made by a male or a female. Maoz (2009) found that women are generally perceived as generating policies of lower-quality, therefore gaining less support. Atkinson and Windett (2018) found that women face considerably more challenges than men when running for Congress, such as being perceived as less able to important issues like defence and foreign affairs. This is partially explained by existing stereotypes and attitudes, whereby women are seen as warm but incompetent and men as competent but not warm (Heilman, 2012). In addition, women *are* favoured over men for top-level positions that fall

within a risky context, which is called the *glass cliff phenomenon*. The female stereotypes of social skill and openness to change lead women to be preferred at time of organizational crisis. Similarly, Randsley de Moura, Leicht, Leite, Gocłowska and Crisp (2018) found that assertive women more often attain leadership positions in uncertain social, economic or political times. This increases the chances of being (perceived) as a less successful leader.

Men and women generally tend to have different conflict management styles (Shepherd, 2015). Several types of conflict management styles exist, and men tend to use the styles of competing (satisfying one's own needs over the other) or avoiding (neglecting concerns of the other and self by postponing the issue) more often than women. In turn, women are more cooperative, using the styles of collaborating (attempting to satisfy needs of the self and other) and compromising (finding middle ground). Being cooperative can be of great use in the context of international relations. Kuhn and Poole (2000) found that groups that developed cooperative conflict styles made more effective decisions than groups that used the competing or avoiding conflict styles as generally preferred by men. Cooperative behaviour produces more constructive outcomes between conflicting parties and supports relationships. In line with this assumption, the stereotypical leader role is slowly extended by the expectation that leaders need to be socially skilled, which is perceived to be a typical female trait (Eagly, 2018).

Violating stereotypes elicits social disapproval (Eagly, 2018). Female leaders violate stereotypes by the leader- and gender roles that place conflicting demands on them. Women that enact dominate, assertive behaviour are found to experience backlash. Within the literature, this is described as “negative characteristics ascribed to a women exhibiting agentic behaviour (Okimoto & Brescoll, 2010, p.924).” This phenomenon is extensively argued for by a meta-analysis by Williams and Tiedens (2016), which showed that the direct expression of dominance by women by making demands sparks dislike and similar responses. Yildirim, Kocapinar and Ecevit (2019) examined the effects of speechmaking on career prospects for both female and male members of parliament (MPs). Active engagement in parliamentary activities was found to be beneficial for career prospects of male MPs, but not for female counterparts. In contrast, female MPs were less likely to get promoted after engaging in substantial parliamentary activities for enhancing one's career. Yildirim et al. attribute this finding as backlash resulting from women acting ‘too assertive or agentic’ compared to social expectation. Additionally, when someone has expectations about another person, this causes this person to behave accordingly, eliciting the expected response and making the

expectations a reality (Aronson, Wilson & Akert, 2013). This phenomenon is called *self-fulfilling prophecy*, and may lead women in parliament to behave more communal and cooperative than without these initial expectations.

Two premises are concluded from these notions (Eagly, 2018). First, leadership is facilitated when someone fits a demographic group whose cultural stereotype aligns with the stereotype of leaders. That is, men and leaders are both perceived to have agentic characteristics, and therefore men are often perceived to be more eligible leaders than women. Second, being perceived as a good leader is facilitated by having characteristics that matches the group prototype, and vice versa. The interrelation of these two premises can cause positive attributes to be perceived as negative in some contexts. Eagly (2018) gives the example of empathy and compassion, typically positively evaluated and assigned to women, to be evaluated negatively or as inappropriate leadership for a military officer in combat.

2.5 Increased Female Representation and Gender Quota

Leaders of political parties are found to be the central figures in parliamentary democracies (Cross & Blais, 2012). Political leaders have the most power in steering party positions, function as the main spokesperson and exert the most influence over career paths of co-partisans. Female representation in these positions is argued to reflect levels of gender equality and broader democratic principles (Kittilson, 2011). The way towards these highly valued positions within the political sphere is made more easily passable by increased instalment of gender quotas. Already in 2016, over 100 countries installed gender quota. With 126 countries, over half of all countries worldwide use gender quota for the instalment of parliaments in 2020 (IDEA, 2020). A research towards the effects of share of women in parliaments would be incomplete without taking account of the context surrounding the shift in gender balance in legislations.

Several research outcomes indicate the success of instalment of gender quotas for overall quality of politics. Besley et al. (2017) for example found positive effects of party-based gender quota on men's competence in parliaments, due to a push for more competent men to take the place of less successful male leaders. Other research indicates that the women elected via systems of gender quota were at least as competent as their male counterparts (Catalano Weeks & Baldez, 2014). Baltrunaite et al. (2014) found an increase of educational level for both male and female politicians. Additionally, Geissel and Hust (2005) found relatively high political ambition and motivation among women that were selected due to

gender quota systems as compared to women elected before the instalment of gender quota for a given parliament.

Since gender quotas successfully increase the number of elected women, the push for more women in parliament may be strengthened further from within the political system. O'Brien and Rickne (2016) describe the theory of *critical mass*, arguing that when a large amount of women is in high political seats, coalitions will be formed that demand cultural, behavioural and social change both within parties as overall legislation, including further increase in the share of women in top positions. This is supported by Swiss et al. (2012), who found increased performance on issues of child care after the amount of women in parliament surpassed a minimum of 20%. Moreover, countries with more female legislators in lower levels of parliament are more likely to have a women as head of government of state (Jalalzai, 2013). O'Brien and Rickne (2016) found gender quotas to lead to increased female political participation, but there was no effect on the length of being in office. It was also found that the general strong ability of women to mobilize support for females in charge further facilitated the found effects. Moreover, Schramm and Stark (2020) found female heads of government less likely to be questioned in terms of leadership capabilities in countries with high levels of gender equality and female empowerment.

It has to be noted that questions have been raised for whether the instalment of gender quotas does more harm than good for how women, and taken together with the associations typically assigned to women, are perceived as credible. As briefly touched upon in the introduction of this research, critics of gender quota feel that these type of policies may lead to loss of competence over current popular demand of diversity in corporations and political institutions. Whether this is true or not, the idea of this occurring might lead to backlash against women hired or elected for being credible and competent leaders, independent of gender. Moreover, the instalment of a gender quota is argued to be undemocratic since it constraints voting power of the public (IDEA, 2020). Lastly, gender quotas are argued to violate the principles of liberal democracy and equal opportunity for all. While the examination of the long-term effects of gender quota is beyond the scope of the current research, the relevance of quota for explaining shifts in gender balance within political institutions is high.

2.6 The Use(lessness) of Generalizing Social Research

The aforementioned sources preliminary stem from social psychological research. While the use of social psychological findings in research of international relations is promising, it is

important to address both advantages as possible disadvantages. An important critique regarding the field of social psychology is its reliance on Western, often American research participants (İslamoğlu, Börü & Birsal, 2008; Mintz, 2007). Psychology studies and findings are argued to be WEIRD: biased towards westernized, educated, industrialized, rich and democratic societies (Schulz, Bahrami-Rad, Beauchamp & Henrich, 2018). The aforementioned articles are no exception to this notion. What is considered to be appropriate behaviour differs around the globe. American men are socialized to take on a dominant position and communicate in a direct manner, while American women are socialized to be more receptive and take on a caring role. Brewer, Mitchell and Weber (2002) argue that while biological sex maybe influences preferred conflict management styles, the ways gender roles are defined is more determinant for preferred conflict management styles. Socialization processes differ around the world and are susceptible to cultural change. The generalization of findings from social psychology studies for a global perspective therefore has to be taken with caution.

At the same time, it is important to keep in mind that social theories can never fully be proven or stated to be true at all times (Mintz, 2007; Stroebe, Gadenne & Nijstad, 2018). In contrast to most social research, the concept of generalizability (external validity) is based on inductivist principles (Stroebe, Gadenne & Nijstad, 2018). This mean that general statements derived from observational statements. If the number of observational statements are sufficiently high, include varying cases and none contradicts the general statement, inference from the observation is stated to be justified. For social theories, scientific support is gained or lost by testing observations deductively. A theory can only factually gain or lose scientific support for the observations it has been tested for. Moreover, all used academic sources live up to the methodological standard of what is generally agreed upon for having sound external validity. Especially in a world as heavily subjected to globalization as today, it is particularly interesting to directly research to what extent social theories reflect phenomena on a global scale. Hence the focus of this research is on testing the effect of female legislators in national parliaments on variability in military action globally, both in absolute numbers and relative to other policy areas. The following subchapter dives into what has been known up until the time of writing between female participants in peace processes and the effect on peace outcomes.

Women and Conflict

Several studies found the share of women legislators involved in peace building processes to have an effect on the outcomes. Generally speaking and enjoying broad scientific support,

women are found to be highly compromising and men highly competitive when faced with conflict (Dildar & Amjad, 2017). Eichenberg (2016) examined the support for the use of force in regard to military aid in El Salvador and the recent wars in Iraq, Afghanistan, Syria and Libya. It was found that women show generally less support for military undertakings for any purpose, any action or for any historical event examined as compared to men. In 2018, Krause, Krause and Bränfors found women's participation in peace negotiations to lead to improved accord content, higher agreement implementation rates and peace that lasts longer. The relationship between peace agreements with women's signatures and peace durability holds after controlling for political and economic development, the numbers of women in parliament and gender quotas, among others. Bell (2015) further emphasizes the importance of participation by women, by underlining that peace agreements that merely talk holistically about women's rights are often the ones to suffer from implementation failures. This is because these agreements tend to be internationalized agreements that do not reflect actual agreement between the conflicting parties. In contrast, the Geneva Graduate Institute's Broadening Participation Process found that the involvement of women in the peace process led peace agreements to be almost always reached and more likely to be implemented. It has to be noted that the sample used by Krause et al. was constrained, since only 13 peace agreements over six peace processes involved female signatories.

Best, Shair-Rosenfield and Wood (2018) found similar results. The researchers examined the proportion of women in national legislatures from 1945 up until 2009 and the relationship with conflict termination. Increased representation of women within legislative bodies was found to increase the likelihood of war termination by negotiated settlement. Effects were stronger when gender diversity within legislatures was present in states that hold more authoritative legislatures. Bourne, Healy and Beer (2003) found female politicians to be more willing of conciliation after aggression of an opponent in case there was a peace treaty installed. For men, the results were found to be opposite, with violation of a peace treaty more often functioning as a justification of violence and revenge. An exception was found by research by Shea and Christian (2016), who found an increase of women legislators to increase the chance of a country engaging in humanitarian military intervention. Research by Eichenberg (2016) supports the finding that women are more likely to support humanitarian military intervention than men. Moreover, Eichenberg (2016) found women to be more supportive of peacekeeping operations than men, although gender effects were found to be small.

2.8 Intervening Factors.

The causes of armed conflict are widely contested among scholars, and a consistent theory enjoying support from the majority of scholars in the field has yet to be developed (Irenees, n.d.). There is always an element of triggering events, governmental error or just chance initiating the onset of war. After all, the outbreak of war is possible as long as there is a conflict between parties and weapons with which to fight are available (Smith, 2004). What makes war probable to occur is a more complex issue. One consensus stands strong: conflict is not the result of a single cause and cannot be explained by a single event. This section therefore sheds light on other factors related to armed conflict that are likely to account for part of the variance of armed conflict between and within states. According to Smith (2004), scholars roughly agree on two different factors related to the development of conflict. These are economic development and political systems, which are perceived as characteristics of a country's welfare, performance and place within the geopolitical sphere.

2.8.1 Economic Development. Within the conflict literature, economic variables have been repeatedly assessed as robust predictors of armed conflict (Collier & Hoeffler, 2004; Fearon & Laitin, 2003; Hegre & Sambanis, 2006). Brunnschweiler and Lujala (2017) tested the relationship between income levels and the occurrence of armed conflict and found that low income levels are positively related to the onset of armed conflict. In line with these findings, Rettberg (2020) stated that conflicts are more frequent in countries with low development. Countries most affected by armed conflict are among those with the highest insecurity issues, levels of victimization and worst economic perspectives. Countries with a dense history of armed conflict are moreover more prone to further conflict than other countries. This is due to the inflation of military budgets, pulling away from other crucial policy areas like health care and education, in turn creating poverty rates and crime to skyrocket. These countries are then left with unbalanced government budgets and institutional weakness, setting them up for further destabilization and armed intervention. Half of all civil wars come forward out of post-conflict relapse due to economical deterioration (Collier, 2004). Moreover, any conditions favourable for improved development tend to deteriorate for these countries, giving incentive for old conflicts to restart and new conflicts to spark (Rettberg, 2020). The interrelation between development and peace was called for in the 2030 Agenda for Sustainable Development, and the 16th Sustainable Development Goal called for the promotion of peaceful and inclusive societies (United Nations, 2015). However, inequalities in wealth and income do not by definition lead to conflict and rebellion (Willems,

2012). According to Willems, it is relevant to differentiate between different types of inequality, as illustrated below.

Economic Inequality between Countries. A strong link between the wealth of a country and its likelihood to engage in civil war has been determined by Collier and Sambanis, experts in the field of conflict studies (2004). The risk of being engaged in war is higher for poorer than for richer countries. Humprehs (2002) found that for a country with a GDP per capita of 250 US\$ dollars, the likelihood of conflict is 15% in the five years to come. For countries with a GDP per capita of 1250 US\$ dollars, this likelihood is reduced to 4%. An explanation for this is given by Holmqvist (2012), who argues that the recruitment of rebels in poorer countries is much cheaper than in richer countries, where states are likely to be more robust against rebellions. The wealth of countries is therefore found to be an important predictor of armed conflict.

Economic Inequality within Countries. Gurr (1970) argues that a gap between expected economic conditions and actual economic conditions can fuel conflict. His relative deprivation theory argues that large relative deprivation lead the poor to rebel against the rich and the rich to protect their assets by fighting the poor. However, evidence for this claim is negligible. Collier and Hoeffler (2004) found income inequality within countries to be insufficient in predicting conflict. Grievances are not a suitable predictor of conflict, since grievances alone do not enable the organization needed for armed conflict to occur.

2.8.2 Political Systems. The link between political systems and peace is at the forefront of conflict studies. The most prominent concept has been the liberal peace thesis: the idea that democratic governments are more peaceful than other political systems in terms of both internal and international politics (Paris, 2004). The UN has integrated the liberal peace thesis in the UN Agenda for Peace report, which states that it has the obligation to support any 'deficient' national structures of government and strengthen new democratic institutions by means of post-conflict peacebuilding (1992).

Public Opinion in Democratic Systems. Different types of explanations have been found for the liberal peace thesis (Hegre, 2014). The initiation of war is for example constrained within democratic systems that take the interests of organizations and citizens into account. Examination of the effects of public opinion on waging war supported the notion that democracies are inherently peaceful, and that this effect was facilitated by the value of morality among the general public. Bell and Quek (2017) further investigated the effect of

public opinion on peace and democracies. The opinion of the general public of China was examined in relation to the use of military forces against democracies. The research entailed a survey about the use of force against a fictive country that has either a democratic or autocratic system. The Chinese population was found to hold comparable views towards the use of (excessive) military force against democracies as citizens of the United States and the United Kingdom, despite living in a non-democratic system themselves. Moreover, Chinese citizens are significantly less supportive of military attacks towards democracies than autocracies. The authors underline that while populations in general are disinclined to use military force towards democracies, public opinion alone is not sufficient in itself to explain state behaviour in regard to democratic peace.

Face Value in Democratic Systems. Other explanations of the liberal peace thesis relate to the importance of possible political loss of face in case of military loss. The possible loss of face for democratic political leaders is more important than for autocratic political leaders (Hegre, 2014). Democratic political leaders are therefore more likely to only fight wars that can be won relatively easily and will mobilize more resources to do so, making them unattractive targets.

Goldsmith, Semenovich, Sowmya and Grgic (2015) identified the effect of political competition on militarized international conflict as the most important source of democratic peace. Polities that are highly competitive were found to be unlikely to initiate war against democracies. Leaders faced with high levels of political competition need a compelling normative argument for engaging in war, since being categorized as waging ‘unjust’ war sparks high levels of political vulnerability. Polities characterised by high competition are unlikely to target democracies as compared to autocracies since defending the initiation of such conflict as necessary, winnable and just is difficult to achieve. Taken together, the norm of not engaging in military conflict was therefore found to have stronger effects within the context of strong institutionalized political competition.

Militarized Disputes after Democratic Breakdown. Within the body of peace and democracy literature, criticism has been raised regarding the seemingly inviolable status of democratic practices. Tschantret (2020) argues that whereas democracies are less belligerent than autocracies, there is reason to suspect autocratic governments coming forward out of democratic breakdown to be more belligerent than other autocratic governments. The author argues that democratic breakdown paves the way for political leaders impatient with democratic practices to take charge. Excessive impatience and hostility towards these

democratic norms as compared to perspectives by other autocratic leaders might lead to increased rejection of democratic forms of conflict resolution and conciliation. After conducting the research, Tschantret (2020) found support for the notion that autocracies that were formed after or during democratic breakdown are more belligerent as compared to other autocracies. Autocracies that resulted after democratic breakdown are for example more likely to engage into conflict against democracies than other autocracies.

The Wisdom of Crowds. A fourth compelling argument for the liberal peace thesis was made by LeVeck and Narang (2017). The authors substantiated their research on advantages of group-decision making. Democratic institutions were expected to have more diverse collection of independently thinking and deciding individuals. As a consequence, fewer decision-making errors were expected to be made by more democratic regimes as opposed to more homogenous or autocratic states. The research was based on the so-called wisdom of crowds, which refers to the notion that in averaging individual guesses, errors are likely to be cancelled out and a form of collective wisdom is reached. In line, Aronson, Wilson and Akert (2013) argue that groups make better decisions than individuals when ideas are pooled and experts are being listened to. It was therefore expected that democracies are likely to have an advantage in conducting foreign policy in comparison to more autocratic regimes, that typically aggregate information from a smaller and more homogenous set of individuals (LeVeck & Narang, 2017). In line with expectations, LeVeck and Narang (2017) found bargaining for democratic institutions to be more successful than autocratic institutions. It was speculated that since democracies typically aggregate information and opinions from a more heterogenous set of individuals, the chances of some of these individuals matching and understanding opponent decision-makers increased. In turn, the responses and strategies of opponents can be better anticipated upon, increasing the chances of reaching mutual agreements. This research does substantiate why democracy is important to control for in further analysis.

2.9 Conclusion and Hypotheses.

This chapter was conducted in order to substantiate expectations regarding the following research question:

“What is the influence of women legislators in national parliaments on decision-making regarding conflict?”

The upcoming field of behavioural international relations was examined in order to answer what has been known so far that could help answering the research question. The literature review gave an overview of the academic literature and theories on sex differences in policy agendas, cognitive processes, leadership, armed conflict and peace negotiations. Moreover, two concepts have been defined as having an additional influence on military processes besides the sex of legislators: GDP per capita and the rate of democracy for a given country. Based on the retrieved information, the following hypotheses were derived:

Hypothesis One: *“An increase in the share of women in national parliaments is negatively related to the of share of military expenditure as part of GDP.”*

The literature review showed that women tend to strongly prioritize policy agendas such as social welfare, environmental regulations, maternity leave and health care besides, but not over, other policy arenas in comparison to men (Atchison & Down, 2019; Chen, 2010; Swiss, Fallon & Burgos, 2012). Yildirim (2018) found this to be true due to the fact that women have a lower threshold for perceiving societal issues as urgent, pressing the need to diffuse attention and finances over more policy areas. Moreover, it was found that women seek to attain political leadership by tacking on as many policy issues as feasible (Schmitt and Brant, 2019). As more women enter national parliaments, this pressure will lead to withdrawal of (relative) funding of military undertakings and the spread out finances over relatively underserved, typically ‘female’ policy issues.

Hypothesis Two: *“An increase in the share of women in national parliaments is negatively related to the number of armed conflicts a country engages in.”*

Women are both perceived and found to be more compromising and collaborative than men (Aronson, Wilson & Akert, 2013; Eagly, 2018; Heilman, 2012; Kuhn & Poole, 2000). Violation of this stereotype results in backlash, making agentic behaviour for women less effective (Williams & Tiedens, 2016). Moreover, the strongly imbedded perceptions of women as warm, soft and communal beings sparks a process of self-fulfilling prophecy, indirectly pushing women to behave as is expected by social norms (Aronson, Wilson & Akert, 2013). Involvement of women in peace processes leads to an increased chance of improved accord content, higher implementation rates and longer-lasting peace (Krause, Krause & Bränfors, 2018). Moreover, violation of a peace agreement by an opponent was more often met by willingness of conciliation by women than men (Bourne, Healy & Beer, 2003). It is therefore expected that after controlling for GDP per capita and democracy, an increased share of women in national parliaments results in a lower number of engagement in armed conflicts for a given country.

3. Method

Chapter 3 tests whether the share of women in national parliaments can predict the share of military expenditure as part of GDP, and engagement in armed conflict for a given country. In order to make sound inferences, the main analyses are controlled for two variables: GDP per capita and democracy. The chapter will first describe the research design in a more elaborate manner, followed by the operationalization of the variables, data preparation, planning of data analysis, reliability and validity.

3.1 Research Design

This research makes use of a quantitative cross-sectional research design. In order to measure any causal relations between independent and dependent variables, an experimental research design is usually preferred (Neuman, 2009). However, an experimental research design is unsuitable for this research, since the variables examined do not lend themselves for manipulation. A time-series design measures a given research unit at multiple points in time, and generally lends itself for longitudinal research of patterns of change over time or the effects of interventions, given the variables vary over time (Salkind, 2010). Since scores on the independent variable ‘proportion of seats held by women in national parliaments’ are usually determined and locked for a given time by election cycles, and these cycles do not run parallel for all countries, the use of a time-series design does not suit the research best. Comparing scores dependent on varying election cycles and processes causes inferences of the outcomes to be possibly unsound. The best fit for this research is a cross-sectional design. A cross-sectional research design measures different variables at a given point in time (Gravetter & Wallnau, 2013). The use of a cross-sectional design allows for and is characterized by a large N-sample, which contributes to the external validity of the research (Gravetter & Wallnau, 2013). Moreover, this design allows for the inclusion of control variables.

The independent variable of this research is the percentage of women in the national legislature for a given country, and the control variables are GDP per capita and the establishment of democracy, as explained in the theoretical framework. The dependent variables will be the number of armed conflicts per year and the military spending as share of gross domestic product (GDP). These variables are defined in the following section. The

population of this research includes all countries, and the sample of countries is dependent on the availability of data. For a country to be added into the research, it needs to have data available for all variables.

3.2 Operationalization

In this section, the variables that will be analysed are conceptualized and operationalized.

The Proportion of Seats Held by Women in National Parliaments. The main independent variable is the proportion of seats held by women in national parliaments. The World Bank (2020) defines this variable as "... the percentage of parliamentary seats in a single or lower chamber held by women." The data for this indicator will be detracted from the World Bank Development Indicators Databank.

GDP per Capita. In order to account for the effects of differences in economic wealth on the engagement in armed conflict, GDP per capita will be controlled for in the analysis. The World Bank defines this measure as: "... gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. (World Bank, 2020). GDP per capita is measured in current US dollars. All data for this measure will be derived from the World Bank Development Indicators Databank.

Democracy. The Center for Systemic Peace states that democracy consists out of three elements: "the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. Second is the existence of institutionalized constraints on the exercise of power by the executive. Third is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation (CSP, 2020, p.13)." The data for this control variable is gathered by Center for Systemic Peace. This organization supports science and quantitative analysis in areas related to violence in human relations and societal-systemic development processes (CSP, 2020).

The dataset from Center for Systemic Peace used for this research is called the Polity5 Project, political regime characteristics and transitions, 1800-2018 (CSP, 2020). This dataset includes all independent countries with a population of over 500,000 in 2018, at a total of 167 countries. From this dataset, the variable polity is used, which is coded as POLITY. The index is composed out of scores on competitiveness of political participation, openness of executive recruitment, competitiveness of executive recruitment and constraints on the chief executive.

These underlying measures and the respective weights are further explained in the codebook of the dataset (CSP, 2020). The Polity Index operates at an 21-point scale from minus ten (strongly autocratic) to plus ten (strongly democratic).

Military Expenditure as Share of Gross Domestic Product. The first dependent variable is military expenditure as share of gross domestic product (GDP). Data used for assessing this measure is derived from the Development Indicators Databank of the World Bank, which defines the measure as “all current and capital expenditures on the armed forces, including peacekeeping forces; defence ministries and other government agencies engaged in defence projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities (World Bank, 2020, p.?).” Expenditures for civil defence and ongoing expenditures for previous military undertakings as benefits for veterans, conversion, demobilization and weapons destructions are excluded from this measure.

Number of Armed Conflicts. The second dependent variable is the number of armed conflicts per year wherein the government of the respective country is involved. The Uppsala Conflict Data Program (UCDP) defines conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year (UCDP, 2018, p.1). Further operationalization of the concepts mentioned within this definition can be found in Annex A. The data for this measure is gathered by the Uppsala Conflict Data Program (UCDP), Uppsala University and the Centre for the Study of Civil War at the International Peace Research Institute in Oslo (PRIO). The first version of the UCDP/PRIO Armed Conflict Dataset was published in 2002. This research makes use of the most recently updated version, which is the UCDP/PRIO Armed Conflict Dataset version 19.1 (UCDP, n.d.). This most recent dataset entails cases of armed conflict between 1946 and 2018, with a total of 2,384 cases of armed conflict worldwide during this period.

3.3 Data Preparation

Data on all variables will be gathered and analysed by use of *SPSS statistics version 25* for all entities (countries). The year to which the data references will be 2014 for all variables except the variable of number of armed conflicts. Since the number of battle-related deaths is declining according to PRIO (2019), and the number of armed conflict is defined by the UNDP as the number of armed conflicts that resulted in at least 25 battle-related deaths, this variable might have relatively high variation in scores over the years for each entity.

Therefore, in order to gain a more accurate insight of the effect of the share of women in parliament on the number of armed conflicts typically assigned to a given country, the latter variable will be comprised out of the sum of armed conflicts in the years 2015 up and including 2018.

First, data on the percentage of women in parliament, GDP per capita (current US dollars) and share of military expenditure as part of GDP are gathered from the World Bank Development Indicators Data Bank for the year 2014. This data is structured so that each case represents the scores on these variables for a respective country. Cases with missing values on these variables are deleted, since the dataset needs to be complete in order to make sound inferences. For these remaining cases, scores for polity are gathered from the Polity5 Project, political regime characteristics and transitions, 1800-2018 when available for the year 2014 (CSP, 2020). Any cases with missing values on this variable are again deleted as a whole from the dataset. Finally, for each case the sum of the number of armed conflicts between 2015 up and including 2018 are taken from the UCDP/PRIO Armed Conflict Dataset and added to the dataset. This resulted in no further exclusion of cases. The final number of entities is $N = 139$. Annex B gives an overview of all deleted and included cases. The percentage of women in parliament, GDP per capita, percentage of military expenditure as part of GDP and the number of armed conflicts are set on a scale measurement level, while data on the polity variable is set on ordinal measurement level (running from minus ten to plus ten).

3.4 Data Analysis

Since the causal relationship between dependent variables and three independent variables is examined, a multiple regression analysis will be conducted for each dependent variable (Allen, Bennet & Heritage, 2014). The variables in the dataset will be tested to see whether the assumptions of a multiple regression are met: normality, absence of outliers,

multicollinearity and normality, linearity and homoscedasticity of residuals. Allen, Bennet & Heritage (2014) also underline the need of a sufficient N (cases) : k (predictors) ratio, whereby N should be ideally at least $50 + 8k$ for a full regression model. For this research, this translates to a minimal N of $50 + (8*3) = 74$, which is lower than the total of $N = 139$ cases included in this research. This assumption is therefore met. If all assumptions are met, a multiple regression will be run for each dependent variable and the results will be reported. Any violations of assumptions, even after transformation of the data, will lead to invalidation of significance tests, confidence intervals and the extent in which the model can be generalized (Field, 2013). Dependent on the type of violation, it can therefore be decided to run an additional analysis in order to overcome particular measurement issues.

Reliability and Validity

Both the reliability and the validity of the research are accounted for in the research design to ensure the robustness of the outcomes. Reliability is achieved when the research method used is consistent and dependable (Neuman, 2014). Since all data used has been made public by its respective sources and the process of analysis is carefully reported, repeating the research can be easily done for everyone interested in replicating the results for the same cases and years, or different cases and years that lie in interest. The reliability of the research is therefore guaranteed as long as this data remains to be published openly. Moreover, all datasets and syntax coming forward from the analyses will be saved and made available by the researcher when asked for, so that each individual step within the process of analysis can be easily replicated.

Validity suggests truthfulness and the extent to which the concepts of interest matches the methods used to measure them (Neuman, 2014). The internal validity of the research is highly supported by an intensive literature review and theoretical framework, precise operationalization of the variables examined and its reliance on globally respected sources of data as the World Bank, Center for Systemic Peace and the Uppsala Conflict Data Program to ensure professional measurement. External validity is accounted for by the use of a large N of 139.

4. Results

This chapter holds the results of this research. First, the main descriptive information of the variables is presented. The variables are then tested for meeting the assumptions of a standard multiple regression. The preliminary results, transformations of the variables and their consequences in regard to meeting the assumptions are reported. For each dependent variable, a standard multiple regression is run and the outcomes are reported. The assumption of normally distributed residuals was violated for the outcome variable number of armed conflicts. To check whether this violation affected the outcomes for this variable, a binary logit regression with engagement in armed conflict as dependent variable is run. The results where then also reported in this chapter.

4.1 Descriptive Analysis.

The dataset is composed as described under the subchapter data preparation of the method section. The dataset used consists out of $N = 139$ cases, whereby each case represents a country. Annex B gives an overview of both the cases included into the research, as cases excluded due to missing data on one or more variables. Descriptive characteristics of the raw data is summarized in Table 1.

Table 1

Descriptive information of the raw data for all variables.

	<i>Mean</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>
Percentage of Women in Parliaments	22.16	20.00	1.20	63.80
GDP per Capita	13366.18	6600.07	274.86	118823.65
Democracy	4.89	7	-10	10
Share of Military Expenditure as Part of GDP	1.89	1.45	.00	10.68
Number of Armed Conflicts	4.84	3	0	31

Note. Since democracy and number of armed conflicts are variables with only integer scores, presentation is without decimals.

4.2 General Assumptions.

After setting up the dataset and generating the main descriptives, the data was checked for the assumptions needed to be met in order to perform a standard multiple regression.

Normality and outliers. Several methods were used in testing the assumption of normality for the data. Boxplots were created in order to get a preliminary insight in the shape of the bell curve and an indication of the presence of outliers. The assumption was then tested for by use of a Shapiro-Wilk test, which assesses whether the distribution of the scores is different from a normal distribution (Field, 2013). The Shapiro-Wilk test and boxplots indicated the violation of the assumption of normality for all variables (Table 2). For the raw data, boxplots indicated several outliers for all variables, with three extreme outliers on the high end on the variable of GDP per capita (Luxembourg, Norway and Switzerland). According to Frost (2020), outliers may only be removed when they result from data measurement errors or sampling problems. There is no indication that this is the case for these measurements. Moreover, the measurements reflect the target population (e.g. all countries, including the upper wealthy countries), research question and research methodology. Removing outliers merely on the base of its extreme values distorts results in terms of variability for the given study area. It is therefore decided to not delete any outliers.

Table 2

Test of Normality before transformations for all variables.

	Shapiro Wilk		
	Statistic	df	Sig.
Percentage of Women in Parliaments	.971	139	.005
GDP per Capita	.711	139	.000
Democracy	.818	139	.000
Military Expenditure as Percent of GDP	.744	139	.000
Number of Armed Conflicts	.806	139	.000

In order to push the data towards a normal distribution, transformations have been conducted for each independent variable that was strongly skewed (Field, 2013). In order to properly transform the data, a constant positive needs to be added to variables with negative scores or scores of zero. For democracy, a positive constant of 11 was added, as the minimum value for

this measure is -10. Choosing the right transformation is a process of trial and error (Field, 2013). To assess whether a given transformation was more favourable than other transformations or no transformation, the effect of transformation was repeatedly checked for by examining the distribution of data for each variable. The final choice of transformation for each variable was decided by the skewness it generated, whereby a value closer towards zero indicates more normally distributed data and was therefore preferred.

Table 3 gives an overview of the skewness and Kurtosis of the raw data, the applied transformation, and the skewness and Kurtosis of the transformed data. As a rule of thumb, skewness between -.5 and .5 indicates fairly symmetrical data (Jain, 2018). Data with a skewness between -1 and -.5 or .5 and 1 indicates moderate skew, and it is still considered suitable for a multiple regression analysis. Variables with a skewness below -1 or above 1 were transformed. The transformation of these variables led the distribution of these variables to be symmetrical (Jain, 2018). For a normal distribution, SPSS statistics version 25 gives a value of zero for the Kurtosis statistic (IBM, 2020). Kurtosis is closer to zero for all but democracy after transformation. This indicates that the extreme values of the distributions better align to normal distribution characteristics for the transformed variables (Jain, 2018; McNeese, 2018). Table 4 gives an overview of the Shapiro Wilk tests for the transformed data. Both the following checks for assumptions and the multiple regression analyses are run for the transformed variables of GDP per capita and democracy, as the remaining non-transformed variables.

Table 3

Overview of skewness and Kurtosis before and after transformation of the variables.

	Raw data		Transformation	Transformed data	
	Skewness*	Kurtosis**		Skewness*	Kurtosis**
% Women in Parliaments	.66	.49	-	-	-
GDP per Capita	2.21	5.67	Natural Log	-.06	-.961
Democracy	-1.09	-.09	Power 5	.04	-1.50

Note. $N = 139$. * SE = .21 ** SE = .41

Table 4

Test of Normality after transformations.

	Shapiro Wilk		
	Statistic	df	Sig.
GDP per Capita	.973	139	$p = .01$
Democracy	.871	139	$p = .00$

Multicollinearity. A multiple regression analysis is perceived to be unstable and hard to interpret when correlations between predictor variables are high ($r \geq .85$) (Allen, Bennet & Heritage, 2014). Multicollinearity is detected by use of Tolerance or VIF statistics (Field, 2013). As portrayed in table 5, the assumption of absence of multicollinearity has been met for all independent variables (Tolerance > .01, VIF < 5).

Table 5

Collinearity statistics for the predictive variables after transformations.

	Tolerance	VIF
Percentage of Women in Parliaments	.96	1.05
GDP per Capita	.73	1.37
Democracy	.71	1.41

Multivariate outliers. When the Maximum Mahalonobis distance is larger than the critical chi-square value for $df = k$ at $\alpha = .001$, one or more multivariate outliers are detected (Field, 2013). Multivariate outliers refer to cases with relatively unusual combinations of scores on a minimum of two predictor variables. For $df = 3$, the critical chi-square value = 16.27 at $\alpha = .001$. Since the Maximum Mahalonobis distance = 18.70 for this research, one or more multivariate outliers are detected. The assumption of absence of multivariate outliers has therefore been violated. Inspection of the data points at a single multivariate outlier, which is the case of Rwanda. Cook's distance for this case is .003, which is below the threshold of 1 (Field, 2013). The influence of the case on the model as a whole is therefore minimal. It has therefore been decided not to delete the case from the dataset.

4.3 Standard Multiple Regression for Share of Military Expenditure as Part of GDP

A standard multiple regression was run with share of military expenditure as part of GDP as dependent variable, and percentage of women in parliament, GDP per capita and democracy as independent variables. The variables of GDP per capita and democracy were transformed before running the analysis, as shown in Table 2.4.

Normality, linearity and homoscedasticity of residuals. For correct interpretation of a multiple regression analysis, a normal distribution and linear relationship between the differences on the observed and predicted variables (the residuals) on the outcome variable is assumed (Allen, Bennet & Heritage, 2013). Moreover, the variance of the residuals should be homogenous for all predicted values. Scatterplots have been examined in order to check for the assumption of normality, linearity and homoscedasticity of residuals. The normality probability plot of standardised residuals indicates that the assumption of normality of residuals has been met. Moreover, the scatterplot of standardised predicted values indicated that the assumptions of normality, linearity and homoscedasticity of the residuals have been met.

Standard multiple regression. In combination, the three predictor variables significantly accounted for 33.5% of variability in the share of military expenditure as part of GDP, $R^2 = .34$, adjusted $R^2 = .32$, $F(3, 135) = 22.62$, $p < .000$. Table 6 portrays the outcomes for each predictor in the regression model. Squared semi-partial correlations (sr^2) reflect the proportion of variance in the outcome variable uniquely explained by the predictor. The share of women in parliament did not significantly account for variability. GDP per capita and democracy did significantly accounted for the variability in the share of military expenditure as part of GDP. A positive relationship between GDP per capita and share of military expenditure was found. Democracy negatively relates to the share of military expenditure. The first hypothesis is not confirmed.

Table 6

Unstandardized (B) and standardized (β) regression coefficients and squared semi-partial correlations for each predictor in the model predicting share of military expenditure as part of GDP.

	B [95% CI]	β	sr^2	Sig.
Percentage of Women in Parliaments	-.02 [-.04, .00]	-.12	.01	$p = .088$
GDP per Capita	.47 [.30, .64]	.44	.14	$p < .001$
Democracy	-6.395E-7 [.00, .00]	-.63	.28	$p < .001$

Note. $N = 139$. CI = confidence interval

4.4 Standard Multiple Regression for Number of Armed Conflict

A standard multiple regression was run with number of armed conflicts as dependent variable, and percentage of women in parliament, GDP per capita and democracy as independent variables. The variables of GDP per capita and democracy were transformed before running the analysis, as shown in Table 2.4.

Normality, linearity and homoscedasticity of residuals. Scatterplots have been examined in order to check for the assumption of normality, linearity and homoscedasticity of residuals. Both the normality probability plot of standardised residuals and the scatterplot of standardised predicted values indicated that the assumption of normally distributed residuals *has been violated*. Substantial deviations are cause for concern for the interpretation of the results (Allen, Bennet & Heritage, 2014). The assumptions of linearity and homoscedasticity of the residuals have been met.

Standard multiple regression. In combination, the three predictor variables non-significantly accounted for 4% of variability in the share of military expenditure as part of GDP, $R^2 = .04$, adjusted $R^2 = .02$, $F(3, 135) = 1.96$, $p = .123$. Table 7 portrays the outcomes for each predictor in the regression model. Squared semi-partial correlations (sr^2) reflect the proportion of variance in the outcome variable uniquely explained by the predictor. Only GDP per capita significantly accounted for variation in the number of armed conflicts ($p = .048$). The second hypothesis cannot be confirmed.

Table 7

Unstandardized (B) and standardized (β) regression coefficients and squared semi-partial correlations for each predictor in the model predicting the number of armed conflicts.

	<i>B</i> [95% CI]	β	<i>sr</i> ²	Sig.
Percentage of Women in Parliaments	-.02 [-.11, .07]	-.04	.00	<i>p</i> = .65
GDP per Capita	-.78 [-1.55, -.01]	-.20	.02	<i>p</i> = .05
Democracy	-9.049E-9 [.00, .00]	< .00	.00	<i>p</i> = .98

Note. *N* = 139. CI = confidence interval

Violation of assumptions. Since the assumption of normally distributed residuals has been violated, it was decided to run an additional logit regression with the number of armed conflicts as binary outcome variable. A logit regression does not rely on the assumption of normally distributed residuals. Moreover, with a logit regression the hypotheses can still be tested, since the probability of correctly predicting whether a country engages in conflict or not based on one or more predictors can be examined (Allen, Bennet & Heritage, 2014).

4.5 Binary Logistic Regression for Engagement in Armed Conflicts

In order to conduct the binary logistic regression, the dependent variable number of armed conflicts was recoded. A value of zero indicated no engagement in armed conflicts in the years of 2015 up and including 2018, and the value of 1 indicated engagement in armed conflicts in the years of 2015 up and including 2018.

A binary logistic regression does not require the assumption of normality for independent variables and transformation may complicate interpretation (Schreiber-Gregory, 2018). However, a positive constant of 11 needed to be added to the raw data for the variable of democracy so that this variable held no negative scores or scores of zero. This is needed in order to generate the natural logarithm for checking assumptions and run the binary logistic regression. Moreover, since the assumption of multicollinearity is checked for by use of Pearson correlations, it was chosen to use the transformed data for GDP per capita and democracy as portrayed in Table 3.

The assumptions of cases to variables ratio, minimum expected frequencies, absence of outliers, absence of multicollinearity, logit linearity and independence of errors were tested

before interpreting the outcomes of the binary logistic regression (Allen, Bennet & Heritage, 2014).

Cases to variables ratio. For testing the overall fit of any regression model, a sample size of a 100 cases is generally sufficient for up until six predictors (Field, 2013). Since this research has a $N = 139$ and $k = 3$, the assumption for cases to variables ratio has been met.

Minimum expected frequencies. In order for this assumption to be met, each possible pairing of discrete variables put into the regression needs to have a minimum expected cell frequency (Allen, Bennet & Heritage, 2014). Since only the variable engagement in armed conflicts is discrete, the assumption of minimum expected frequencies causes no concern for the analysis.

Outliers. No outliers are found to have standardized residuals outside the cut off of \pm two (Allen, Bennet & Heritage, 2014). Moreover, Cook's distance is < 1 for all variables. The assumption of absence of outliers has therefore been met.

Multicollinearity. Absence of multicollinearity was checked for by performing Pearson correlations. As seen in Table 2.8, no significant Pearson correlation of $r > .80$ has been detected between independent variables. Multicollinearity is therefore not an issue for the analysis (Allen, Bennet & Heritage, 2014). The assumption of absence of multicollinearity has been met.

Table 8

Correlations between the independent variables.

	% Women in Parliament	GDP per Capita	Democracy
% Women in Parliament	1	-	-
GDP per Capita	.130	1	-
Democracy	.210*	.517**	1

* Pearson correlation is significant at $p = .05$ (two-tailed), $N = 139$.

** Pearson correlation is significant at $p = .01$ (two-tailed), $N = 139$.

Logit linearity. This assumption tests the linearity between each continuous predictive variable and the transformed logit of the dependent variable (Allen, Bennet & Heritage, 2014). Since the interactive terms are not significant ($p > .05$), the linearity of logit is not problematic for the research. The assumption has been met.

Independence of errors. According to Field (2013), violation of independence of errors leads to overdispersion: the observed variance is larger than what was expected from the logistic regression model. Overdispersion is a serious cause for concern when the ratio of the chi-square goodness-of-fit statistic to the respective degrees of freedom is larger than two. This ratio is called the dispersion parameter. For this research, the dispersion parameter is 3.353:3, equalling a dispersion parameter of approximately 1.12:1. Dispersion is therefore not an issue for running and interpreting the binary logistic regression, and the assumption of independence of errors has been met.

Binary Logistic Regression. The omnibus model for the logistic regression analysis was not statistically significant, $\chi^2 (df = 3, N = 139) = 3.25, p = .340$, Cox and Snell $R^2 = .02$, Nagelkerke $R^2 = .03$. Had the model been significant, the predictions of engagement in conflict would be 56.1% accurate. The Hosmer and Lemeshow test indicates that the model significantly departs from a good-fitting model $\chi^2 (df = 8, N = 139) = 7.26, p < .01$. The model's predictors and corresponding coefficients are presented in Table 9. As can be derived from the table, none of the individual predictors significantly influenced the probability of a country's engagement in conflict. The second hypothesis has been cannot be confirmed.

Table 9

Predictor coefficients for the model predicting engagement in armed conflicts (N = 139).

	<i>Exp(B) [95% CI]</i>	<i>b</i>	<i>SE (b)</i>	<i>Sig.</i>
Constant		.99		
% Women in Parliament	1.00 [.97, 1.04]	< .00	.02	.85
GDP per Capita	.96 [.73, 1.26]	-.04	.14	.78
Democracy	1.00 [1.00, 1.00]	< .00	< .00	.16

Note. *CI* = confidence interval.

5. Discussion of Findings

Both hypotheses were tested and the results reported in the former chapter. In order to keep a clear overview, the interpretation of results is divided over this and the following chapter. In this chapter, a closer look at the findings is taken for each hypothesis. The results are directly compared to the hypotheses, and any expected or unexpected findings are elaborated upon in both a theoretical and methodological manner when relevant. The chapter ends with a conclusion for the separate findings. The following chapter will directly address the implications for the main research question, the stronger and weaker points of this research, and implications for further research.

5.1 Share of Military Expenditure as Part of GDP

The effect of the share of women in national parliaments on the share of military expenditure as part of GDP was first hypothesized upon and tested for. The literature review gave indication that women are more likely to perceive a given societal issue as needed to be urgently addressed (Yildirim, 2018). Therefore, women are found to push forward broader overall policy agendas than men. Moreover, women more often advocate for policy agendas like health care, child care and environmental regulations than men (Atchison & Down, 2019; Chen, 2010; Swiss, Fallon & Burgos, 2012). This was expected to come at the cost of prioritization of military expenditure. As aforementioned, increased GDP per capita and democracy rates were also expected to have a negative relation with the share of military expenditure as part of GDP. This led to the following hypothesis to be tested:

Hypothesis One: *“An increase in the share of women in national parliaments is negatively related to the share of military expenditure as part of GDP.”*

Main Outcomes. After controlling for assumptions, transforming the variables accordingly, and controlling for the covariables, a standard multiple regression showed no significant relation between the share of women in national parliaments and share of military expenditure as part of GDP. This was contrary to expectations.

Methodological Explanations. In order to explain why no relation was found between the share of female legislators and share of military expenditure as part of GDP after

controlling for the covariables, another critical look at the literature review and methods used was given. Several things came forward. Foremost, one article formerly reviewed stated an increase of female legislators to lead to an increase in humanitarian military intervention (Shea & Christian, 2016). The authors argue that within the gender and conflict literature, differences in causes for engaging in military intervention are commonly and unjustifiably ignored. While academic literature on the subject generally points towards a negative relation between share of female legislators and military spending, Shea and Christian (2016) found the opposite to be true when military intervention regarded humanitarian concerns.

Humanitarian interventions are more often than not focused on saving lives, predominantly those of women and children. This adds to the notion that women generally tend to more often actively advocate for children's issues than men (Little, Dunn & Deen, 2001). In the current research, the measure for military expenditure concerned both budget allocation for humanitarian interventions as well as other military activities (World Bank, 2020). While formulating the hypothesis, humanitarian and therefore the more 'soft' side of military spending was overlooked. Positive relations between female legislators and humanitarian interventions on the one side and negative relations between female legislators and other military spending on the other side might have ruled out any effects in the standard multiple regression.

Theoretical Explanations. An interesting nuance has been found for women in leadership positions and military spending preferences. Shea and Christian (2016) conclude with the remark that women in higher position of office might feel more pressure to live up to agentic stereotypes. In line with this finding, Koch and Fulton (2011) argue that communal characteristics of women are more strongly challenged in positions higher up the political ladder. Whereas Koch and Fulton find support for decreased military spending as a result of generally increased female political participation, relations flipped for an increase in women in the higher executive branches. This effect is appointed to (over)compensation of women to counter stereotypes of being 'weak.' This reasoning is supported by Schramm and Stark (2020), who argue that women in high political positions tend to perform stereotypically masculine behaviour to prove they have characteristics associated with good leadership to elite policymakers. The policy areas associated with the military and security are also most associated with stereotypical masculine behaviour. However, the effect of women in executive functions of increased military spending disappeared when representation of women in underlying leadership position was high (Koch & Fulton, 2011). In the current research, the share of women in national parliaments refers to women with seats in the single

or lower chamber (World Bank, 2020). Perhaps the countries high in share of women in parliament are also the countries high in female political representation altogether. This would have ruled out any effects within the analysis. Comparable relations have been found by Powell and Mukazhanova-Powell (2018). After controlling for women's overall status within society, no statistical difference was found between states led by women or men on military affairs and initiation of conflict. The main conclusion of their research was that the relation between women and more peaceful states has more to do with increased female empowerment than share in top political positions, for which further support was found. Melander (2005) argues that more gender equal societies have lower levels of intrastate armed conflict. Additionally, Caprioli (2005) examined the relations between gender equality on the chances of intrastate conflict. Domestic gender equality was expected to reduce the likelihood of intrastate conflict, and this also came forward from the research. In the discussion of the research by Caprioli (2005), it was emphasized that variables measuring inequality as opposed to diversity accounted for the risk of armed conflict. This further presses the need to differentiate gender equality from the share of women in high legislative functions.

Whereas for now implications for the current research can only be speculated upon, any effect for female legislators on military spending might have been singled out by high female representation in subordinate positions and effects of overall gender equality.

Outcomes for GDP per Capita. The multiple regression revealed a significant positive relations for GDP per capita and the share of military expenditure as part of GDP, controlled for the share of women in national parliaments and democracy rates. It was predicted that an increase in GDP per capita leads to a decrease of the share of military spending as part of GDP (Holmqvist, 2012; Humprehys, 2002)

Explanations for GDP per Capita Findings. It was hypothesized that the relative share of military expenditure would decrease as a result of increased GDP per capita, since military recruitment comes at a higher cost in richer countries and rebellions are less frequent. In contrast, a positive relationship has been found. Further reading indicates some explanations. The prioritization of military expenditure might be more strongly driven by other factors than absolute costs and direct needs within the state territory. The Charles Koch Institute (2019) examined the largest military in the world: that of the United States. US military spending takes up 21% of the total federal budget, and over half of the annual discretionary budget. Simultaneously, the US has large budget deficits and is in over \$20 trillion in debt. Despite high costs, US military spending keeps skyrocketing due to its

strategy of primacy. Its aim is to spread democracy, maintain allies and oppose competitors on a global scale. The push for this strategy overrules spending in other public domains and exponentially increases military spending as compared to increases in GDP per capita, especially under the current Trump administration. Additionally, Zielinski, Fordham and Schilde (2017) argue that military expenditure was seven to eight times more impacted by economic decline than by economic growth. A downfall in GDP per capita by for example global recession is likely to cut military state budgets. Concluded from the research by Zielinski (2017), strong effects were found for even minor downfalls in GDP. Simultaneously, the return to pre-recession levels of military expenditure after GDP levels recover is a slow process.

Outcomes for Democracy. Like expected, democracy was found to have a negative relationship with the share of military expenditure as part of GDP, after controlling for share of women in national parliaments and GDP per capita.

Explanations for Democracy Findings. Democracy turned out to be an important predictor of the relative share of military spending. This relationship was expected to be found since more democratic states are less likely to engage in war with another (Paris, 2004). This finding has been supported by Hegre (2014), who argued that democratic states have a higher need to justify acts and therefore the costs of military spending to the public as compared to autocratic regimes. Politicians and other legislators in democratic systems are at more risk of losing face and therefore not being re-elected as opposed to autocratic leaders. In line with this reasoning, democratic leaders will generally only initiate war or military operations with high chances of being successful and will mobilize relatively more resources for these instances. This makes them unattractive targets. In contrast, Bove and Brauner (2016) examined military spending in autocratic regimes. Strongly autocratic and military regimes were found to have higher levels of relative military spending, due to a higher need of oppressing resistance towards the state. Both the findings by Hegre (2014) and Bove and Brauner (2016) are supported by the current research, since this research used the polity index ranging from -10 for strongly autocratic regimes to +10 for strongly democratic regimes, and found that higher scores on this index related to lower levels of share of military expenditure as part of GDP.

5.2 Number of Armed Conflicts

The effect of the share of women in national parliaments on the number of armed conflicts a country engaged in was secondly hypothesized upon and tested for. The literature review gave indication that an increase of female legislators is negatively related to the number of armed conflicts for a given country. Involvement of women in peace processes has been found to result in more peace agreements that last substantially longer (Bourne, Healy & Beer, 2003; Krause, Krause & Bränfors, 2018). Moreover, social norms of how ‘women’ should and are expected to behave pushes for compromise, collaboration, and reconciliation (Aronson, Wilson & Akert, 2013; Eagly, 2018; Heilman, 2012; Kuhn & Poole, 2000). Lastly, women tend to push more for policy agendas of health care and child rights than the protection of national security (Bendix & Jeong, 2019). This led to the understated hypothesis.

Hypothesis Two: *“An increase in the share of women in national parliaments is negatively related to the number of armed conflicts a country engages in.”*

Main Outcomes. A standard multiple regression found the share of women in national parliaments not to be predictive of number of armed conflicts, after controlling for GDP per capita and democracy. Since one of the assumptions needed to be met in order to make sound inferences of a standard multiple regression was violated, an additional analysis was run. A binary logistic regression with engagement in armed conflict as dependent variable indicated further support that the share of female legislators is non-predictive for engagement in armed conflict as defined in this research.

Methodological Explanations. The measure for the number of armed conflicts for a given country was derived from the Uppsala Conflict Data Program (UCDP), which defines conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year (UCDP, 2018, p.1).” Within the literature, the counting of the number of battle-related deaths by UDCP has been criticized. Krause (2016) argues that the methodology used by UDCP underestimates the indirect consequences of conflict, of which some are lethal. This argument is illustrated by Krause (2016) by giving the example of Iraq. The Iraq Body Count (IBC) documents reported between 144,384 and 166,085 civilian deaths as a result of armed conflict for the years 2003 up and including 2015. UCDP data however ‘only’ reported 53,361 lethal casualties for this

time period. Moreover, since the UCDP now upholds a threshold of at least 25 battle-related deaths, including indirect lethal casualties in counting armed conflicts is likely to affect 'score' for a certain amount of countries. This needs to be taken into consideration for follow-up research.

Theoretical Explanations. The aforementioned differences in counted casualties stem from the negligence of indirect deaths as result of for example famine, displacement and lack of health care caused by armed conflict by the UCDP (Krause, 2016). For this current research, it cannot be said with certainty that including indirect casualties of armed violence would result in changed outcomes for any relations between the share of women in parliament and number of armed conflicts. However, it is assumed that possible indirect deaths of armed conflict are seriously considered in making the decision of engaging in armed conflict. Indirect victims of conflict more often concern women and children, who are more often victim of sexual violence and lack of health care (ICRC, 2015). These issues are more often addressed by women than men, so it is interesting to examine whether gender shifts in parliament affect the amount of conflict with substantial indirect victims as opposed to conflict with majorly direct battle-related victims. Lastly, half of at least all civil wars were found to be due to post-conflict relapse in the first decade (Collier, 2004). While the current research focuses on armed conflict in a broader sense, this strong relation may strongly undermine other factors in predictive value.

Findings for GDP per Capita. The multiple regression analysis found a negative relationship between GDP per capita and the number of armed conflicts for a given country. Violation of an assumption however undermined sound interpretation of the results. A binary logistic regression found GDP per capita to be unrelated to the number of armed conflicts for a given country. This was contrary to the hypothesis: it was expected that GDP per capita would negatively relate to the number of armed conflict for a given country.

Explanation for GDP per Capita Findings. UNICEF stated that why while economic development makes conflict less likely to occur, conflict has been on a rise at times of global economic growth (2003). The first explanation is that other factors that do increase the chance of conflict have been on a rise, such as population sizes. The rise of factors that stimulate conflict may outweigh any effects of increased wealth. It has also been found by Bercovitch, Kremenyuk and Zartman (2009) that while an increase of GDP per capita reduces the risk of conflict at own territory, engagement in conflict in general is not affected by GDP. This was found to be especially true for countries engaging in overseas military intervention.

Since 1945, France, the USA and Great Britain are among the top ten countries most frequently at war. This helps to explain why no relation between GDP per capita and number of armed conflict has been found in the current research, since any conflict whereby a state was involved was included within the analysis.

Findings for Democracy. Democracy was found to have no significant relation with the number of armed conflict for a given country. This was contrary to expectations, since it was expected that stronger democracies are involved in less armed conflicts.

Explanations for Democracy Findings. Bercovitch et al. (2009) argue that generally speaking, democracy is related to less engagement in armed conflict. It is however emphasized that democratic practices spread globally and exponentially. Democratic practices are increasingly internalized by more societies and have become integrated in public policy standards. Since democracy is internationally perceived as not only effective but legitimate, the integration of certain democratic practices has reached more autocratic regimes as well. This is especially true for approaches of conflict resolution, whereby international relations are at stake. The authors argue that effects of democracy on engagement in armed conflict therefore might have saturated. This research by Bercovitch et al. (2009) helps to explain why in the current research, no relation between democracy and engagement in armed conflict was found.

6. Conclusion

In this final chapter, all that is learned is accumulated in order to give an elaborate but nuanced answer to the main research question. This research, as any research, has both its strong suits and its methodological and theoretical limitations. These will be discussed in this chapter. Finally, implications for future research and policies are given.

6.1 Female Legislators and Decision-Making regarding Conflict

This research aimed to answer the following research question:

“What is the influence of women legislators in national parliaments on decision-making regarding conflict?”

In order to properly answer the research question, several sub-questions guided the research. First, a literature review answered what has been known about gender differences in policy agendas, cognitive processes, leadership, conflict and other factors that interfere with decision-making in conflict. Women were found to advocate for broader policy agendas than men that include more issues related to health care and children (Atchison & Down, 2019; Chen, 2010; Little, Dunn & Deen, 2001; Swiss, Fallon & Burgos, 2012). This was explained by Yildirim (2018), who found women to have a lower threshold of urgency for societal issues, which in turn broadened the issues women tend to address. Women were also found to be more collaborative leaders, stimulated by social norms and self-fulfilling prophecies (Aronson, Wilson & Akert, 2013; Eagly, 2018; Heilman, 2012; Randsley et al., 2018; Shepherd, 2018; Okimoto & Brescoll, 2010). For peace processes, involvement by women was found to increase willingness of conciliation and the chances of long-lasting peace agreements (Bourne, Healy & Beer, 2003; Krause, Krause & Bränfors, 2018).

The second sub-question focused on the definition and the operationalization of the concepts examined. For the independent variable, two control variables and two separate outcome variables, definitions and operationalization were derived from the World Bank, the Center for Systemic Peace and the Uppsala Conflict Data Program. These were then reported within the method section of this research.

The last sub-question is of empirical nature considered the internal and external validity of the research. This was accounted for in setting up the research design of the research. Reliability and validity is elaborated upon under the subchapter considered with the

strengths and weaknesses of this research. After completion of the literature review and the method section, analyses gave insight in regard to the main research question.

Contrary to expectations, no significant relationship was found between the share of women in parliament and overall share of military expenditure as part of GDP. Reviewing the literature gives an indication that the share of women in parliament might be positively related to spending for humanitarian military intervention, and negatively related to other types of military intervention (Shea & Christian, 2016). What does affect the share of military expenditure as part of GDP, is GDP per capita and the extent to which a country is assessed to be democratic. Secondly, no significant relation between the share of women in national parliaments and the number of armed conflicts for a given country was found. Armed conflict hereby refers to conflict that directly inflicts at least 25 battle-related deaths. This might be due to a combination of methodological and theoretical factors. The UCDP measure of armed conflict used neglects indirect deaths of armed conflict such as famine, displacement and lack of health care (Krause, 2016). The relative stronger prioritization of these issues by women relative to men is what led to the expectation that an increase in female legislators results in a decrease of armed conflicts. GDP per capita and democracy were also found to be unrelated to the number of armed conflicts for a given country in the following years.

6.2 Support for the Research

Since this research makes use of variables that are both operationalized and measured by highly respected institutions that are categorized among the top of their respective fields, both reliability and validity of this research is argued to be strong. Moreover, all data used is openly published. Together with the thorough description of the process of data analyses, research findings can be easily replicated by others to examine and draw own inferences. Lastly, replication is further facilitated by saving all SYNTAX created by SPSS statistics used for all analyses. These can be provided by the author.

The current research aimed to analyse, combine and harmonize findings from several scientific disciplines like social psychology, public management and international relations. While the importance of including cognition in explaining phenomena at the macro-level is increasingly recognized, little attention has been given so far to information processing and decision-making outside the boundaries of psychological research (Yildirim, 2018). Large societal issues and phenomena cannot be comprehensively studied from a single perspective (Proctor & Vu, 2019). While combining different scientific disciplines can be a complex undertaking, it enables more thorough explanation of theories and observations. For the

current research and following the field of behavioural international relations, pulling resources from different scientific disciplines proved to be fruitful in generating hypotheses and explaining both expected and non-expected findings.

6.3 Limitations of the Research

While shortcomings are always aimed to be avoided, this research has several important limitations that need to be considered. First, examining causes of conflict is a complex undertaking due to many possibly factors all influencing the chances at conflict. For analyses with a large N, it is difficult to control for factors that are context or country specific. Although this research controlled for two of the main interfering factors, not all variance was explained for by the variables analysed. This means that there are several, maybe numerous, factors that predict the onset of conflict. However, this does not mean that conflict is not suitable for analysis (National Research Council, 2000). It means that further research is needed in order to increase predictive ability of the occurrence of armed conflict and corresponding military processes.

Initially, this research was prepared for a quantitative cross-sectional time-series research design by use of panel data. This design has the advantage that it lends itself for longitudinal research of patterns of change over time, additionally to what can be found by cross-sectional research. The performance of sound panel-data analysis turned out not to be executable for the author, since this would require learning how to work with STATA from scratch starting in a later stadium of the research. This was beyond the scope of feasibility for conducting this research. While cross-sectional research is a suitable measure for answering the research question, cross-sectional time-series design may have given more insights in any effects of the variables and their relations over time.

6.4 Further Implications for Research

The current research has several implications for further scientific research. Contrary from what was expected based on earlier published literature, no relations between women in parliaments and shares of military expenditure or number of armed conflicts has been found. This calls for further investigating these relations, as well as a careful look at the nuances between this and former research.

As aforementioned, the current research found no effects for the share of women in national parliaments on the share of military expenditure as part of GDP. Whereas the current research was based upon general findings within the literature, further

investigation reveals possibly additionally interfering factors. Closer examination of the literature and inspection of the operationalization of the variables led to the impression that differentiation in type of military expenditure is an important factor in assessing any effects of gender on military spending. Although examining and comparing defence budgets across countries does not go without difficulties, follow-up research needs to differentiate between humanitarian military intervention and other types of military intervention. It may be predicted that increased female participation leads to increased spending on humanitarian military intervention, and a decrease in overall military spending as part of GDP. Moreover, follow-up research needs to account for the individual effects of the leadership position studied on outcomes for military expenditure. More specifically, any effects of gender differences in high executive positions should be controlled for by female political participation rates, since a small body of research indicates moderation of effects. Lastly, gender equality is likely to have an outcome on effects based on the gender and conflict literature. This is the third confounding factor that needs to be both tested and controlled for in any further research.

From the current research, it can only be concluded that the share of women in national parliament is not related to the number of armed conflicts with at least 25 deaths directly related to battle. Both methodological and theoretical explanations point at possible issues of negligence of indirect casualties by the UCDP in counting armed conflict. No inferences can be made on the effect of number of armed conflicts involving indirect lethal casualties, which often involve additional issues of health care and sexual violence, typically more strongly advocated for by women than men. This helps to explain why the findings of the current research are different from what was expected. For follow-up research, it is important to check whether the amount of expected indirect casualties of armed conflict mediates the relation between the share of women in parliaments and the number of armed conflict a country engages in.

Positive relations were found for GDP per capita and share of military expenditure. It would be interesting to examine further underlying causes for this finding, since it runs counterintuitively compared to most earlier findings. The current research does add up to two findings within the literature. Firstly, it has been argued that military strategies are more determinant for the share of military expenditure as part of GDP than the need of solely national security. Moreover, light downfall in GDP was found to be related to large downfalls in the share of military expenditure. Since the current research indicates support for these

findings, further research as has been done so far in regard to these relations is highly encouraged.

With three possible predictors of respectively military expenditure and armed conflict analysed, not all variance for the dependent variables was accounted for. Further research into different confounding variables is likely to increase explanatory leverage for decision-making regarding conflict situations.

As aforementioned, the concepts analysed lend themselves for panel data analysis. Since the shift in gender balance in parliaments is a steady but slow global process, it is interesting to examine effects of this occurrence on a global level over time. This is especially true since any shift in gender balance in political systems is predominantly dependent on electoral processes, which are inherently time-bound. The same can be said for democracy rates. It is therefore recommend to use a cross-sectional time-series design for any follow-up research. However, comparing variable dependent on electoral processes that do not run parallel across countries might come with some difficulties in interpreting the data.

This research is roughly among the first to combine behavioural processes and macro-level developments in order to provide explanatory leverage for societal phenomena. The combination of scientific fields turned out to be especially useful in explaining what has or has not been found contrary to former expectations and findings within the academic literature. Interdisciplinary research is relatively new, even more so the rise of behavioural international relations. Insights from behavioural sciences and especially psychology can add a new layer to the dominance of rationality now installed in the core of international relations. While integration of scientific angles will not be without hardship or go without clashes, its insights for science in general are expected to deliver high returns. As stated, research following up the current research needs to address the effect of the level of the legislative position, differentiation in types of military expenditure and operationalization of armed conflict. Further investigation of the relations between these concepts from an interdisciplinary viewpoint is expected to be fruitful in delivering explanatory leverage for processes of conflict.

6.5 Further Implications for Policy

Contrary to general findings, no relations were found for the effect of female legislators on decision-making regarding conflict in this research. Elaboration of the findings from a behavioural international relations perspective gives explanatory leverage for the outcomes.

Several findings from both the field of behavioural sciences and international relations that are not thoroughly examined yet best explain the outcomes of this research. For example, Sjoberg, Kadera and Thies, (2018) point at the importance of differentiation between sex (a physical trait of femaleness and maleness) and gender (a social construct of feminine and masculine behavioural expectations related to the perception of biological femaleness and maleness) in examining political leadership in international relations. The explanatory part of the research can give insight in failed processes of policy implementation and policy outcomes, by combining insights of varying scientific fields and bringing nuance to what has been generally published so far.

A negative relation was found between democracy and shares of military expenditure as part of GDP. Together with complementary articles, this finding supports the liberal peace theory and gives incentives to invest in democratization processes on a global scale. Democratization is already one of the main pointers of foreign aid, and this research supports further investment and international collaboration in order to make way for more democratic societies. While democracy is generally perceived as the highest rank of type of government, implementation in post-conflict societies has proven to be difficult (Zakaria, 1997; Paris, 2004). Nonetheless, this research adds further support for its substantial effect on decline of militarization.

References

- Allen, P., Bennett, K., & Heritage, B. (2014). *SPSS Statistics Version 22* (3rd ed.). Melbourne, Australia: Cengage Learning.
- Allen, P., Bennett, K., & Heritage, B. (2014). *SPSS Statistics Version 22* (3rd ed.). Melbourne, Australia: Cengage Learning.
- Amen, D., Trujillo, M., Keator, D., Taylor, D., Willeumier, K., Meysami, S., & Raji, C. (2017). Gender-based cerebral perfusion differences in 46,034 functional neuroimaging scans. *Journal of Alzheimer's Disease*, *60*(2), 605–614. <https://doi.org/10.3233/jad-170432>
- Aronson, E., Wilson, T. D., & Akert, R. (2013). *Social Psychology, Global Edition* (9th ed.). Harlow, United Kingdom: Pearson Education Limited.
- Atchison, A., & Down, I. (2019). The effects of women officeholders on environmental policy. *Review of Policy Research*, *36*(6), 805–834. <https://doi.org/10.1111/ropr.12346>
- Atkinson, M., & Windett, J. (2018). Gender stereotypes and the policy priorities of women in congress. *Political Behavior*, *41*(3), 769–789. <https://doi.org/10.1007/s11109-018-9471-7>
- Baltrunaite, A., Bello, P., Casarico, A., & Profeta, P. (2014). Gender quotas and the quality of politicians. *Journal of Public Economics*, *118*, 62–74. <https://doi.org/10.1016/j.jpubeco.2014.06.008>
- Baron-Cohen, S. (2010). Empathizing, systemizing, and the extreme male brain theory of autism. *Progress in Brain Research*, 167–175. <https://doi.org/10.1016/b978-0-444-53630-3.00011-7>
- Battaglio, R., Jr., Belardinelli, P., Bellé, N., & Cantarelli, P. (2018). Behavioral Public Administration ad fontes: A Synthesis of Research on Bounded Rationality, Cognitive Biases, and Nudging in Public Organizations. *Public Administration Review*, *79*(3), 304–320. <https://doi.org/10.1111/puar.12994>
- BBC. (2019, December 16). Obama: Women are better leaders than men. Retrieved 7 March 2020, from <https://www.bbc.com/news/world-asia-50805822>
- Bell, C. (2015) Text and Context: Evaluating Peace Agreements for their “Gender Perspective”. Political Settlements Reports, Political Settlements Research Programme. Available at https://www.research.ed.ac.uk/portal/files/23462551/Text_and_Context_11_October_2015.pdf

- Bell, M., & Quek, K. (2018). Authoritarian Public Opinion and the Democratic Peace. Retrieved from <https://core.ac.uk/download/pdf/208016865.pdf>
- Bellégo, C., & Pape, L. (2019). Dealing with the Log of Zero in Regression Models. *SSRN Electronic Journal*, 2019, 1–20. <https://doi.org/10.2139/ssrn.3444996>
- Bellégo, C., & Pape, L. (2019). Dealing with the Log of Zero in Regression Models. *SSRN Electronic Journal*, 2019, 1–20. <https://doi.org/10.2139/ssrn.3444996>
- Bendix, W., & Jeong, G. (2019). Gender and foreign policy: Are female members of congress more dovish than their male colleagues? *Political Research Quarterly*, 73(1), 126–140. <https://doi.org/10.1177/1065912919879764>
- Bercovitch, J., Kremenyuk, V. A., & Zartman, I. W. (2009). *The SAGE Handbook of Conflict Resolution*. Thousand Oaks, Canada: SAGE Publications.
- Besley, T., Folke, O., Persson, T., & Rickne, J. (2017). Gender quotas and the crisis of the mediocre man: Theory and evidence from Sweden. *American Economic Review*, 107(8), 2204–2242. <https://doi.org/10.1257/aer.20160080>
- Best, R., Shair-Rosenfield, S., & Wood, R. (2018). Legislative gender diversity and the resolution of civil conflict. *Political Research Quarterly*, 72(1), 215–228. <https://doi.org/10.1177/1065912918785459>
- Bittner, J. (2019, February 2). Germany wants more women in politics but quotas are a bad idea. Retrieved from <https://www.nytimes.com/2019/02/01/opinion/germany-wants-more-women-in-politics-but-quotas-are-a-bad-idea.html>
- Bourne, L., Jr., Healy, A., & Beer, F. (2003). Military conflict and terrorism: General psychology informs international relations. *Review of General Psychology*, 7(2), 189–202. <https://doi.org/10.1037/1089-2680.7.2.189>
- Bove, V., & Brauner, J. (2014). The demand for military expenditure in authoritarian regimes. *Defence and Peace Economics*, 27(5), 609–625. <https://doi.org/10.1080/10242694.2014.925325>
- Brown, A. (2017). *Of six minds on the matter: A psychology-based typology of hawkish and dovish decision makers*. Retrieved from https://kuscholarworks.ku.edu/bitstream/handle/1808/25999/Brown_ku_0099D_15455_DATA_1.pdf?sequence=1&isAllowed=y
- Cappella Zielinski, R., Fordham, B., & Schilde, K. (2017). What goes up, must come down? The asymmetric effects of economic growth and international threat on military spending. *Journal of Peace Research*, 54(6), 791–805. <https://doi.org/10.1177/0022343317715301>

- Caprioli, M. (2000). Gendered conflict. *Journal of Peace Research*, 37(1), 51–68.
<https://doi.org/10.1177/0022343300037001003>
- Caprioli, M. (2005). Primed for Violence: The Role of Gender Inequality in Predicting Internal Conflict. *International Studies Quarterly*, 49(2), 161–178.
<https://doi.org/10.1111/j.0020-8833.2005.00340.x>
- Catalano Weeks, A., & Baldez, L. (2014). Quotas and qualifications: the impact of gender quota laws on the qualifications of legislators in the Italian parliament. *European Political Science Review*, 7(1), 119–144. <https://doi.org/10.1017/s1755773914000095>
- Charles Koch Institute. (2019, November 20). The Military Spending Debate. Retrieved from <https://www.charleskochinstitute.org/issue-areas/foreign-policy/the-military-spending-debate/>
- Chen, L. J. (2010). Do gender quotas influence women’s representation and policies? *The European Journal of Comparative Economics*, 7(1), 13-60.
- Chong, D., & Druckman, J. (2007). Framing theory. *Annual Review of Political Science*, 10(1), 103–126. <https://doi.org/10.1146/annurev.polisci.10.072805.103054>
- Christov-Moore, L., Simpson, E., Coudé, G., Grigaityte, K., Iacoboni, M., & Ferrari, P. (2014). Empathy: Gender effects in brain and behavior. *Neuroscience & Biobehavioral Reviews*, 46, 604–627. <https://doi.org/10.1016/j.neubiorev.2014.09.001>
- Clayton, A., & Zetterberg, P. (2018). Quota shocks: Electoral gender quotas and government spending priorities worldwide. *The Journal of Politics*, 80(3), 916–932.
<https://doi.org/10.1086/697251>
- Collier, P. (2004). *Development and Conflict* . Retrieved from <https://www.un.org/esa/documents/Development.and.Conflict2.pdf>
- Collier, P. Hoeffler, A. Rohner, D. (2008) *Beyond Greed and Grievance: Feasibility of Civil War*. Department of Economics, University of Oxford.
- Conciliation Resources. (2018, June 1). Conciliation Resources. Retrieved from <http://www.c-r.org/>
- Cross, W. P., & Blais, A. (2012). *Politics at the centre: The selection and removal of party leaders in the Anglo parliamentary democracies* (1ste ed.). Oxford University Press.
- CSP. (2020). *POLITY5: Political regime characteristics and transitions, 1800-2018*. Retrieved from <http://www.systemicpeace.org/inscr/p5manualv2018.pdf>
- CSP. (n.d.). Mission. Retrieved 23 April 2020, from <https://www.systemicpeace.org/mission.html>

- Cupać, J. (2019, January 7). It's Time for Behavioral and Emotional International Relations. Retrieved from <https://ordersbeyondborders.blog.wzb.eu/2018/09/18/its-time-for-behavioral-and-emotional-international-relations/>
- Dildar, S., & Amjad, N. (2017). Gender differences in conflict resolution styles (CRS) in different roles: A systematic review. *Pakistan Journal of Social and Clinical Psychology, 15*(2), 37-41.
- Dykiert, D., Gale, C., & Deary, I. (2009). Are apparent sex differences in mean IQ scores created in part by sample restriction and increased male variance? *Intelligence, 37*(1), 42–47. <https://doi.org/10.1016/j.intell.2008.06.002>
- Eagly, A. (2018). Some leaders come from nowhere: Their success is uneven. *Journal of Social Issues, 74*(1), 184–196. <https://doi.org/10.1111/josi.12263>
- Edmonds, W. A., & Kennedy, T. D. (2016). *An applied guide to research designs* (2nd ed.). Thousand Oaks, Canada: SAGE Publications.
- Eichenberg, R. (2016). Gender difference in American public opinion on the use of military force, 1982–2013. *International Studies Quarterly, 60*(1), 138–148. <https://doi.org/10.1093/isq/sqv019>
- Eichenberg, R. C., & Read, B. M. (2016). Gender difference in attitudes towards global issues. In *Handbook on Gender in World Politics*. Edward Elgar Publishing
- European Institute for Gender Equality. (n.d.). Women and Armed Conflict. Retrieved 8 April 2020, from https://eige.europa.eu/gender-statistics/dgs/browse/bpfa/bpfa_e
- European Parliament. (2017, December 15). Building EU capacity on conflict prevention and mediation. Retrieved from https://www.europarl.europa.eu/doceo/document/TA-8-2019-0158_EN.html
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th ed.). Thousand Oaks, Canada: SAGE Publications.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th ed.). Thousand Oaks, Canada: SAGE Publications.
- Frost, J. (2020). Guidelines for Removing and Handling Outliers in Data. Retrieved from <https://statisticsbyjim.com/basics/remove-outliers/>
- Frost, J. (2020). Guidelines for Removing and Handling Outliers in Data. Retrieved from <https://statisticsbyjim.com/basics/remove-outliers/>
- Geissel, B., & Hust, E. (2005). Democratic mobilisation through quotas: Experiences in India and Germany. *Commonwealth & Comparative Politics, 43*(2), 222–244. <https://doi.org/10.1080/14662040500151101>

- Goldgeier, J. M., & Tetlock, P. E. (2001). Psychology and international relations theory. *Annual Review of Political Science*, 4(1), 67–92.
<https://doi.org/10.1146/annurev.polisci.4.1.67>
- Goldsmith, B., Semenovich, D., Sowmya, A., & Grgic, G. (2017). Political Competition and the Initiation of International Conflict. *World Politics*, 69(3), 493–531.
<https://doi.org/10.1017/s0043887116000307>
- Gravetter, F., & Wallnau, L. (2013). *Statistics for the Behavioral Sciences* (9th ed.). Wadsworth, United States: Cengage Learning.
- Gurr, T. (1970) Why Men Rebel. Princeton: Princeton University Press.
- Hafner-Burton, E., Haggard, S., Lake, D., & Victor, D. (2017). The Behavioral Revolution and International Relations. *International Organization*, 71(S1), S1–S31.
<https://doi.org/10.1017/s0020818316000400>
- Halpern, D. F. (2013). *Sex differences in cognitive abilities*. Abingdon, United Kingdom: Taylor & Francis.
- Hegre, H. (2014). Democracy and armed conflict. *Journal of Peace Research*, 51(2), 159–172. <https://doi.org/10.1177/0022343313512852>
- Heilman, M.E. (2012). Gender stereotypes and workplace bias. *Research in Organizational Behavior*, 32, 113–135.
- Hermann, M., Preston, T., Korany, B., & Shaw, T. (2001). Who Leads Matters: The Effects of Powerful Individuals. *International Studies Review*, 3(2), 83–131.
<https://doi.org/10.1111/1521-9488.00235>
- Hicks, D., Hicks, J., & Maldonado, B. (2016). Women as policy makers and donors: Female legislators and foreign aid. *European Journal of Political Economy*, 41, 46–60.
<https://doi.org/10.1016/j.ejpoleco.2015.10.007>
- Holmqvist, G. (2012) Inequality and Identity: Causes of War? Discussion Paper 72, Nordiska Afrika institutet, Uppsala, p. 11.
- Humphreys, M. (2002) Economics and Violent Conflict. Harvard CPI Portal on Economics and Conflict, Framework Paper, p. 2.
- IBM Knowledge Center. (2020). *Descriptive options*. https://www.ibm.com/support/knowledgecenter/SSLVMB_24.0.0/spss/base/idh_desc_opts.html.
- IDEA. (2020). *Gender Quotas*. <https://www.idea.int/data-tools/data/gender-quotas/quotas>.
<https://www.idea.int/data-tools/data/gender-quotas/quotas>

- International Peace Institute. (2013). *Women in conflict mediation: Why it matters*. Retrieved from https://www.ipinst.org/wp-content/uploads/publications/ipi_e_pub_women_in_conflict_med.pdf
- Irenees. (n.d.). Causes of armed conflict. Retrieved 23 April 2020, from http://www.irenees.net/bdf_fiche-analyse-642_en.html
- Jain, D. (2018). Skew and Kurtosis: 2 Important statistics terms you need to know in data science. Retrieved from <https://codeburst.io/2-important-statistics-terms-you-need-to-know-in-data-science-skewness-and-kurtosis-388fef94eeaa+>
- Jalalzai, F. (2016). *Shattered, cracked, or firmly intact?: Women and the executive glass ceiling worldwide*. Oxford University Press.
- Jeong, S., & Harrison, D. (2017). Glass breaking, strategy making, and value creating: Meta-analytic outcomes of women as CEOs and TMT members. *Academy of Management Journal*, 60(4), 1219–1252. <https://doi.org/10.5465/amj.2014.0716>
- Kertzer, J., & Tingley, D. (2018). Political Psychology in International Relations: Beyond the Paradigms. *Annual Review of Political Science*, 21(1), 319–339. <https://doi.org/10.1146/annurev-polisci-041916-020042>
- Kittilson, M. C. (2011). Women, parties and platforms in post-industrial democracies. *Party Politics*, 17(1), 66–92. <https://doi.org/10.1177/1354068809361012>
- Klein, R. S. (2011). The role of women in mediation and conflict resolution: lessons for UN Security Council Resolution 1325. *Wash. & Lee J. Civil Rts. & Soc. Just.*, 18, 277
- Koch, M., & Fulton, S. (2011). In the defence of women: Gender, office holding, and national security policy in established democracies. *The Journal of Politics*, 73(1), 1–16. <https://doi.org/10.1017/s0022381610000824>
- Krause, J., Krause, W., & Bränfors, P. (2018). Women’s participation in peace negotiations and the durability of peace. *International Interactions*, 44(6), 985–1016. <https://doi.org/10.1080/03050629.2018.1492386>
- Krause, K. (2016). From armed conflict to political violence: Mapping & explaining conflict trends. *Daedalus*, 145(4), 113–126. https://doi.org/10.1162/daed_a_00416
- Kuhn, T., & Poole, M. (2000). Do conflict management styles affect group decision making? Evidence from a longitudinal field study. *Human Communication Research*, 26(4), 558–590. <https://doi.org/10.1111/j.1468-2958.2000.tb00769.x>
- Lawless, J. (2015). Female Candidates and Legislators. *Annual Review of Political Science*, 18(1), 349–366. <https://doi.org/10.1146/annurev-polisci-020614-094613>

- Little, T., Dunn, D., & Deen, R. (2001). A view from the top. *Women & Politics*, 22(4), 29–50. https://doi.org/10.1300/j014v22n04_02
- Maoz, I. (2009). C. *International Negotiation*, 14, 519–536.
- McNeese, B. (2020, April 25). Are the Skewness and Kurtosis Useful Statistics? Retrieved from <https://www.spcforexcel.com/knowledge/basic-statistics/are-skewness-and-kurtosis-useful-statistics>
- McNeese, B. (2020, April 25). Are the Skewness and Kurtosis Useful Statistics? Retrieved from <https://www.spcforexcel.com/knowledge/basic-statistics/are-skewness-and-kurtosis-useful-statistics>
- Melander, E. (2005). Gender Equality and Intrastate Armed Conflict. *International Studies Quarterly*, 49(4), 695–714. <https://doi.org/10.1111/j.1468-2478.2005.00384.x>
- Mintz, A. (2007). Behavioral IR as a Subfield of International Relations. *International Studies Review*, 9(1), 157. <https://doi.org/10.1111/j.1468-2486.2007.00669.x>
- Murat Yildirim, T. (2018). Gender and agenda diversity: Cognitive differences in representatives' information processing. *Policy Studies Journal*, 48(2), 327–341. <https://doi.org/10.1111/psj.12295>
- National Research Council. (2000). *International conflict resolution after the Cold War*. Washington, United States: The National Academic Press. <https://doi.org/10.17226/9897>
- Neuman, L. W. (2009). *Understanding Research*. Harlow, United Kingdom: Pearson Education.
- Neuman, W. (2014). *Understanding Research*. Harlow, United Kingdom: Pearson Education.
- Nhengu, D. (2019). How does feminism engender the global peace and security agenda? *PEOPLE: International Journal of Social Sciences*, 5(2), 170–192. <https://doi.org/10.20319/pijss.2019.52.170192>
- Njoku, C. (2018, June 5). The secret to ending a war? More women in peace negotiations. Retrieved from <https://www.weforum.org/agenda/2018/06/women-in-peace-negotiations-end-wars/>
- Nownes, A., & Freeman, P. (2019). Gender-Based Differences in Information Use and Processing among State Legislators. *Journal of Women, Politics & Policy*, 40(4), 473–497. <https://doi.org/10.1080/1554477x.2019.1614866>
- O'Brien, D. Z., & Rickne, J. (2016). Gender quotas and women's political leadership. *American Political Science Review*, 110(1), 112–126. <https://doi.org/10.1017/s0003055415000611>

- O'Reilly, M., Súilleabháin, A., & Paffenholz, T. (2015). *Reimagining Peace-making: Women's Roles in Peace Processes*. Retrieved from <https://www.ipinst.org/wp-content/uploads/2015/06/IPI-E-pub-Reimagining-Peacemaking.pdf>
- Okimoto, T., & Brescoll, V. (2010). The price of power: Power seeking and backlash against female politicians. *Personality and Social Psychology Bulletin*, *36*(7), 923–936. <https://doi.org/10.1177/0146167210371949>
- Paris, R. (2004) *At War's End: Building Peace After Civil Conflict*. Cambridge: Cambridge University Press. [chapters 1 & 2]
- Paris, Roland and Timothy Sisk, 2007, *Managing Contradictions. The Inherent Dilemmas of Post-War Statebuilding*, International Peace Academy, November 2007.
- Park, S. (2017). Gendered representation and critical mass: Women's legislative representation and social spending in 22 OECD countries. *Sociological Perspectives*, *60*(6), 1097–1114. <https://doi.org/10.1177/0731121417710458>
- Post, A., & Sen, P. (2019). Why can't a woman be more like a man? Female leaders in crisis bargaining. *International Interactions*, *46*(1), 1–27. <https://doi.org/10.1080/03050629.2019.1683008>
- Powell, J., & Mukazhanova-Powell, K. (2018). Demonstrating Credentials? Female Executives, Women's Status, and the Use of Force. *Journal of Women, Politics & Policy*, *40*(2), 241–262. <https://doi.org/10.1080/1554477x.2019.1535107>
- PRIO. (2018). *Trends in armed conflict, 1946–2017* (05). Retrieved from <https://reliefweb.int/sites/reliefweb.int/files/resources/Dupuy%20Rustad-%20Trends%20in%20Armed%20Conflict%201946%E2%80%932017%20Conflict%20Trends%205-2018.pdf>
- PRIO. (2019, March). *Trends in Armed Conflict, 1946–2018*. Retrieved from <https://reliefweb.int/sites/reliefweb.int/files/resources/Strand%20Rustad%20Urdal%20Nyg%20A5rd%20Trends%20in%20Armed%20Conflict%201946%E2%80%932018%20Conflict%20Trends%203-2019.pdf>
- PRIO. (2019, March). *Trends in Armed Conflict, 1946–2018*. Retrieved from <https://reliefweb.int/sites/reliefweb.int/files/resources/Strand%20Rustad%20Urdal%20Nyg%20A5rd%20Trends%20in%20Armed%20Conflict%201946%E2%80%932018%20Conflict%20Trends%203-2019.pdf>
- Proctor, R., & Vu, K. (2019). How psychologists help solve real-world problems in multidisciplinary research teams: Introduction to the special issue. *American Psychologist*, *74*(3), 271–277. <https://doi.org/10.1037/amp0000458>

- Randsley de Moura, G., Leicht, C., Leite, A., Crisp, R., & Gocłowska, M. (2018). Leadership diversity: Effects of counter stereotypical thinking on the support for women leaders under uncertainty. *Journal of Social Issues, 74*(1), 165–183.
<https://doi.org/10.1111/josi.12262>
- Rettberg, A. (2020). The legacies of armed conflict on lasting peace and development in Latin America. Retrieved from <https://www.un.org/en/chronicle/article/legacies-armed-conflict-lasting-peace-and-development-latin-america>
- Roche, E. (2016). Superforecasting: The Art and Science of Prediction. By Philip Eyrikson Tetlock and Dan Gardner. New York, N.Y.: Crown Publishers, 2015. *Journal of Strategic Security, 9*(1), 144–145. <https://doi.org/10.5038/1944-0472.9.1.1519>
- Salkind, N. J. (2010). *Encyclopedia of Research Design*. Thousand Oaks, Canada: SAGE Publications.
- Savic, I., Garcia-Falgueras, A., & Swaab, D. (2010). Sexual differentiation of the human brain in relation to gender identity and sexual orientation. *Progress in Brain Research, 41–62*. <https://doi.org/10.1016/b978-0-444-53630-3.00004-x>
- Schmitt, C., & Brant, H. (2019). Gender, Ambition, and Legislative Behavior in the United States House. *Journal of Women, Politics & Policy, 40*(2), 286–308.
<https://doi.org/10.1080/1554477x.2019.1570757>
- Schreiber-Gregory, D. (2018). *Logistic and Linear Regression Assumptions: Violation Recognition and Control* (130). Retrieved from https://www.lexjansen.com/wuss/2018/130_Final_Paper_PDF.pdf
- Schramm, M., & Stark, A. (2020). Peacemakers or iron ladies? A cross-national study of gender and international conflict. *Security Studies, 29*(3), 515–548.
<https://doi.org/10.1080/09636412.2020.1763450>
- Shea, P., & Christian, C. (2016). The impact of women legislators on humanitarian military interventions. *Journal of Conflict Resolution, 61*(10), 2043–2073.
<https://doi.org/10.1177/0022002716631105>
- Shea, P., & Christian, C. (2016). The impact of women legislators on humanitarian military interventions. *Journal of Conflict Resolution, 61*(10), 2043–2073.
<https://doi.org/10.1177/0022002716631105>
- Shepherd, C. (2015). The role of women in international conflict resolution. *Journal of Public Law and Policy, 36*(2), 53–67. Retrieved from <https://digitalcommons.hamline.edu/jplp/vol36/iss2/1/>

- Shonk, K. (2020, January 14). Challenges facing women negotiators. Retrieved from <https://www.pon.harvard.edu/daily/leadership-skills-daily/women-and-negotiation-leveling-the-playing-field/>
- Singer, T., Seymour, B., O'Doherty, J., Stephan, K., Dolan, R., & Frith, C. (2006). Empathic neural responses are modulated by the perceived fairness of others. *Nature*, *439*(7075), 466–469. <https://doi.org/10.1038/nature04271>
- Sjoberg, L., Kadera, K., & Thies, C. G. (2016). Reevaluating gender and IR scholarship. *Journal of Conflict Resolution*, *62*(4), 848–870. <https://doi.org/10.1177/0022002716669207>
- Smith, D. (2004). Trends and Causes of Armed Conflict. *Trends and Causes of Armed Conflict*, 111–127. https://doi.org/10.1007/978-3-663-05642-3_6
- Somvichian-Clausen, A. (2020, April 20). Countries led by women have fared better against coronavirus. Why? Retrieved from <https://thehill.com/changing-america/respect/equality/493434-countries-led-by-women-have-fared-better-against>
- Swiss, L., Fallon, K. M., & Burgos, G. (2012). Does critical mass matter? Women's political representation and child health in developing countries. *Social Forces*, *91*(2), 531–558. <https://doi.org/10.1093/sf/sos169>
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks-Cole.
- Tomz, M., Weeks, J., & Yarhi-Milo, K. (2018). *Public Opinion and Decisions about Military Force in Democracies* (1027). Retrieved from <https://kingcenter.stanford.edu/sites/default/files/publications/WP1027.pdf>
- Tomz, M., & Weeks, J. (2013). Public Opinion and the Democratic Peace. *American Political Science Review*, *107*(4), 849–865. <https://doi.org/10.1017/s0003055413000488>
- Tschantret, J. (2020). Democratic Breakdown and the Hidden Perils of the Democratic Peace. *European Journal of International Relations*, 135406612091652. <https://doi.org/10.1177/1354066120916525>
- UCDP. (2020). *UCDP Dataset Download Center* [Dataset]. Retrieved from <https://ucdp.uu.se/downloads/>
- UN Women. (2015). Women's participation and a better understanding of the political. Retrieved from <https://wps.unwomen.org/participation/>

- UN Women. (2020-a). World Conferences on Women. Retrieved 7 March 2020, from <https://www.unwomen.org/en/how-we-work/intergovernmental-support/world-conferences-on-women>
- UN Women. (n.d.-b). Parliaments and local governance: Women's leadership and political participation. Retrieved 7 March 2020, from <https://www.unwomen.org/en/what-we-do/leadership-and-political-participation/parliaments-and-local-governance>
- UNICEF. (2003). *Economics and violent conflict*. Retrieved from https://www.unicef.org/socialpolicy/files/Economics_and_Violent_Conflict.pdf
- United Nations Security Council. (2000). *Resolution 1325* (S/RES/1325). Retrieved from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N00/720/18/PDF/N0072018.pdf?OpenElement>
- United Nations. (1992). *An agenda for Peace. Preventive diplomacy, peace-making and peace-keeping* (A/47/277-S/24111). Retrieved from https://www.un.org/ruleoflaw/files/A_47_277.pdf
- United Nations. (2015). Sustainable Development Goals. Retrieved from <https://sustainabledevelopment.un.org/?menu=1300>
- United Nations. (2017). *Guidance on gender and inclusive mediation strategies*. Retrieved from <https://peacemaker.un.org/sites/peacemaker.un.org/files/1.%20English%20-GIMS.pdf>
- United Nations. (n.d.). Sustainable Development Goals. Retrieved 9 March 2020, from <https://sustainabledevelopment.un.org/sdgs>
- Willems, R. (2012, November 21). When do inequalities cause conflict? Focus on citizenship and property rights. Retrieved from <https://www.thebrokeronline.eu/when-do-inequalities-cause-conflict/>
- Williams, M. J., & Tiedens, L. Z. (2016). The subtle suspension of backlash: A meta-analysis of penalties for women's implicit and explicit dominance behavior. *Psychological Bulletin*, 142, 165–197. <https://doi-org.eur.idm.oclc.org/10.1037/bul0000039>
- Wittenberg-Cox, A. (2020, April 22). What do countries with the best coronavirus responses have in common? Women leaders. Retrieved from <https://www.forbes.com/sites/avivahwittenbergcox/2020/04/13/what-do-countries-with-the-best-coronavirus-reponses-have-in-common-women-leaders/#13aa4b2a3dec>
- World Bank. (n.d.). DataBank. Retrieved 26 February 2020, from <https://databank.worldbank.org/home>

Yildirim, T., Kocapınar, G., & Ecevit, Y. (2019). Status Incongruity and Backlash against Female Legislators: How Legislative Speechmaking Benefits Men, but Harms Women. *Political Research Quarterly*, 1–29.

<https://doi.org/10.1177/1065912919861443>

Zakaria, Fareed, 1997, ‘The Rise of Illiberal Democracy’, In *Foreign Affairs*, November 1997, 22-43.

Annex A: Definition of Armed Conflict

The Uppsala Conflict Data Program (UCDP) defines conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year (UCDP, 2018, p.1). This definition of conflict is further defined in several sub-definitions.

1. Use of armed force: “use of arms, resulting in deaths (UCDP, 2018, p1).”
 - a. Arms: “any material means, e.g. manufactured weapons but also sticks, stones, fire, water etc (UCDP, 2018, p.1).”
2. 25 deaths: “A minimum of 25 battle-related deaths per year and per dyad (UCDP, 2018, p.2).”
3. Party: “A government of a state or any opposition organization or alliance of organizations (UCDP, 2018, p.2).” The UCDP distinguishes between primary parties, those that have incompatibilities in their positions and of which at least one party is the government of the state, and secondary parties. Secondary parties are parties that support a primary party by means of entering a conflict with troops. Since this research focuses on national legislatures, only conflicts that involve governments of states are taken into account within the analysis. As such, only the conflicts that involve primary parties are relevant for this research.
 - a. Government: “The party controlling the capital of a state (UCDP, 2018, p.2).
 - b. Opposition organization: “Any non-governmental group of people having announced a name for their group and using armed force to influence the outcome of the stated incompatibility (UCDP, 2018, p.2).”
 - c. Dyad: “A dyad consists of two conflicting primary parties. At least one of the primary parties must be the government of a state (UCDP, 2018, p.2).” An interstate conflict occurs if both primary parties are governments of a state. Intrastate conflict occurs if an opposition organization is at least one of the non-governmental primary parties.
4. State: “A state is an internationally recognised sovereign government controlling a specific territory or an internationally unrecognised government controlling a specified territory whose sovereignty is not disputed by another internationally recognized sovereign government previously controlling the same territory (UCDP, 2018, p.2).”

5. Incompatibility concerning government or territory: As stated by the given parties, the incompatibilities between them must be concerned with government and/or territory (UCDP, 2018).
- a. Incompatibility: “The stated general incompatible positions (UCDP, 2018, p.2)”
 - b. Incompatibility concerning government: “Incompatibility concerning type of political system, the replacement of the central government, or the change of its composition (UCDP, 2018, p.2).”
 - c. Incompatibility concerning territory: “Incompatibility concerning the states of a territory, e.g. the change of the state in control of a certain territory (interstate conflict), secession or autonomy (internal conflict) (UCDP, 2018, p.2).”

Annex B: Lists of Countries Included in and Excluded from the Analyses

List of countries included within the analyses ($N = 139$):

Afghanistan	Denmark	Kuwait	Portugal
Albania	Dominican Republic	Kyrgyz Republic	Romania
Algeria	Ecuador	Latvia	Russian Federation
Angola	El Salvador	Lebanon	Rwanda
Argentina	Equatorial Guinea	Lesotho	Saudi Arabia
Armenia	Estonia	Liberia	Senegal
Australia	Ethiopia	Lithuania	Serbia
Austria	Fiji	Luxembourg	Sierra Leone
Azerbaijan	Finland	Madagascar	Singapore
Bahrain	France	Malawi	Slovak Republic
Bangladesh	Gabon	Malaysia	Slovenia
Belarus	Gambia, The	Mali	South Africa
Belgium	Georgia	Mauritania	Spain
Benin	Germany	Mauritius	Sri Lanka
Bolivia	Ghana	Mexico	Sweden
Botswana	Greece	Moldova	Switzerland
Brazil	Guatemala	Mongolia	Tajikistan
Bulgaria	Guinea	Montenegro	Tanzania
Burkina Faso	Guinea-Bissau	Morocco	Thailand
Burundi	Guyana	Myanmar	Timor-Leste
Cabo Verde	Honduras	Nepal	Togo
Cambodia	Hungary	Netherlands	Trinidad and Tobago
Cameroon	India	New Zealand	Tunisia
Canada	Indonesia	Nicaragua	Turkey
Chad	Iran, Islamic Rep.	Niger	Uganda
Chile	Iraq	Nigeria	Ukraine
China	Ireland	Norway	United Arab Emirates
Colombia	Israel	Oman	United Kingdom
Congo, Dem. Rep.	Italy	Pakistan	United States
Congo, Rep.	Jamaica	Panama	Uruguay
Costa Rica	Japan	Papua New Guinea	Venezuela, RB
Croatia	Jordan	Paraguay	Vietnam
Cuba	Kazakhstan	Peru	Zambia
Cyprus	Kenya	Philippines	Zimbabwe
Czech Republic	Korea, Rep.	Poland	

List of countries excluded within the analyses due to missing data:

American Samoa	Eritrea	Malawi	Solomon Islands
Andorra	Eswatini	Malaysia	Somalia
Antigua and Barbuda	Faroe Islands	Maldives	South Sudan
Aruba	French Polynesia	Malta	St. Kitts and Nevis
Bahamas, The	Gibraltar	Marshall Islands	St. Lucia
Barbados	Greenland	Micronesia, Fed. Sts.	St. Martin (French part)
Belize	Grenada	Monaco	St. Vincent and the Grenadines
Bermuda	Guam	Mozambique	Sudan
Bhuta	Haiti	Namibia	Suriname
Bosnia and Herzegovina	Hong Kong SAR, China	Nauru	Sweden
British Virgin Islands	Iceland	New Caledonia	Syrian Arab Republic
Brunei Darussalam	Isle of Man	North Macedonia	Tonga
Cayman Islands	Kiribati	Northern Mariana Islands	Turkmenistan
Central African Republic	Korea, Dem. People's Rep.	Palau	Turks and Caicos Islands
Channel Islands	Korea, Rep.	Puerto Rico	Tuvalu
Comoros	Kosovo	Qatar	Uzbekistan
Cote d'Ivoire	Lao PDR	Samoa	Vanuatu
Curacao	Libya	San Marino	Virgin Islands (U.S.)
Djibouti	Liechtenstein	Sao Tome and Principe	West Bank and Gaza
Dominica	Macao SAR, China	Seychelles	Yemen, Rep.
Egypt, Arab Rep.	Madagascar	Sint Maarten (Dutch part)	