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Article

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Journal of Government and Economics (JGE)

Provided in Cooperation with:

Elsevier

Suggested Citation: Christian, Atangana Zambo Charles; Emmanuel, Ongo Nkoa Bruno; Patrice, Etogo Nyaga Yves (2025) : Terrorism and gender inequalities in politics: An empirical analysis, Journal of Government and Economics (JGE), ISSN 2667-3193, Elsevier, Amsterdam, Vol. 19, pp. 1-16, <https://doi.org/10.1016/j.jge.2025.100157>

This Version is available at:

<https://hdl.handle.net/10419/340769>

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Terrorism and gender inequalities in politics: An empirical analysis

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ARTICLE INFO

Keywords:

Terrorism
Women's political representation
Democracy
International sanctions
Military spending.

ABSTRACT

The aim of this study is to analyze the effects of terrorism on gender inequality in politics for a panel of 180 countries over the period 2000–2020. Using generalized method of moments in a system, the results obtained reveal that terrorism reduces women's political representation, thereby increasing gender inequality in politics. This result remained robust after modifying the measure of women's political representation and terrorism. However, further analysis showed that, effect of international sanctions as moderators was limited in time, while military spending and autocracy amplify gender inequality in politics during periods of terrorism. Based on these findings, we propose that leaders of countries affected by terrorism promote democratic norms and that the international community prioritize sanctions that promote gender norms in target countries.

1. Introduction

Inclusion of gender equality in the United Nations Millennium Development Goals (MDGs) and, more recently, in Goal 5 of the Sustainable Development Goals (SDGs), reflects the international community's commitment to promoting gender equality and the empowerment of all women and girls by 2035 (Webster et al., 2019; Rink and Barros, 2021). This recognition underlines the importance of gender equality as a fundamental pillar of global sustainable development. To achieve this goal, it is imperative to address key gender inequalities, including legal and institutional discrimination, gender-based violence, limited access to economic resources, as well as the under-representation of women in decision-making positions. This last dimension, in particular women's political representation (WPR), is the main focus of this study.

A large body of research establishes a close link between increasing women's representation in legislative structures and the adoption of policies that are more inclusive and sensitive to women's specific needs (Fallon et al., 2012). As a historically marginalized group, women bring a unique perspective to major political issues such as gender violence, reproductive health and peace-building (Annan et al., 2021). Their participation in decision-making processes tends to foster a more collaborative, consensus-based style of governance, reducing the dynamics of confrontation and coercion. Strengthening the presence of women in politics therefore appears to be an essential lever for

promoting equality and improving the overall quality of governance.

Despite the progress made, women remain significantly underrepresented in politics. The international community, through organizations such as the United Nations, recommends that member nations ensure that at least 30 % of political decision-making positions are held by women (Sundström et al., 2017). However, globally, women still account for only about 20 % of members of national parliaments (Sharma, 2020). According to the latest report from the World Economic Forum (WEF, 2025), gender inequalities in politics are the least likely to be reduced. In 2024, while social inequalities (in education and health) and economic inequalities (labor market participation, wage gaps) have been reduced by 96 % and 60.5 % respectively, only 22.5 % of inequalities in politics have been reduced. This Fig. has not changed significantly over the last three years, rising from 22 % to 22.01 % and 22.1 % between 2021, 2022, and 2023. In Africa, it risen from 25 % in 2021 to 26 % in 2024 (Africa Barometer 2024). This disparity is particularly marked in countries affected by political instability, highlighting the need to examine the factors that may influence women's political representation and to identify the structural obstacles to this low level of representation (Poloni-Staudinger and Ortbals, 2013).

A dimension still little explored in the literature is the impact of periods of instability, such as terrorism, on gender inequalities in politics. While several studies suggest that societies with greater political equality are less exposed to conflict, the opposite effect - i.e. the impact of terrorism on women's political representation - remains

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<https://doi.org/10.1016/j.jge.2025.100157>

Received 6 May 2025; Received in revised form 15 August 2025; Accepted 30 September 2025

Available online 1 October 2025

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undocumented. Since the early 2000s, the rise of terrorism-related political violence has caused major socio-political upheavals, including an increase in forced displacement and an exacerbation of gender-based violence in affected regions (Asaf, 2017). These dynamics raise questions about how terrorism can reshape the gender balance in politics and influence women's ability to access decision-making spheres.

Empirical findings on this relationship are, however, contradictory. Some researchers argue that periods of conflict exacerbate gender inequalities in politics by reinforcing patriarchal structures and further marginalizing women (Meierrieks and Renner, 2023; Kim, 2024). Others argue, on the contrary, that these crises can create opportunities for women to become more involved in the political sphere and claim their rights (Laster and Erez, 2021; Tripp, 2023; Webster et al., 2019). Indeed, the disruption of traditional socio-political norms during periods of conflict can enable women to occupy previously inaccessible political and community roles.

The mitigated results of empirical studies suggest the existence of a debate that is so far inconclusive. Although this study is similar to that of Kim (2024), Meierrieks and Renner (2023) and Webster et al. (2019), it differs in several respects. Firstly, with the exception of Meierrieks and Renner, (2023) who focus specifically on the case of Islamist terrorism but neglect other forms of terrorism, Kim (2024) and Webster et al. (2019) focus solely on the consequences of armed conflict. What's more, only Kim (2024) takes women's political representation into account, the other authors having focused their interest on women's political empowerment. Although the latter refers to women's actual ability to influence political decisions and access positions of power in a meaningful way, it nevertheless depends on qualitative factors such as real influence on decisions, freedom of legislative initiative or the ability to impose a gender perspective, which are abstract and more difficult to measure (Goetz and Hassim, 2003).

Moreover, unlike armed conflict, which is organized violence between two or more armed groups (states, rebel groups, etc.) aimed at territorial or political control, terrorism is a set of premeditated acts of violence against civilians or institutions to achieve political, religious or ideological objectives (Crenshaw, 1981). Another innovation of this study is that it does not limit itself to establishing a simple link between terrorism and gender inequalities in politics. It also explores the external and internal institutional mechanisms (sanctions, democracy, militarization) that limit or amplify the effects of terrorism. This approach provides a new empirical and theoretical contribution that can help formulate more effective policies to promote gender equality in contexts of security instability, something that has not been taken into account in previous studies.

We analyze all these contributions across a panel of 180 countries over the period 2000-2020. Using generalized method of moments in a system, we find that terrorism increases gender inequality in politics by reducing the rate of women's representation in political office. This result remained robust after changing the measure of terrorism, women's political representation, and even after decomposing the sample by income level. However, a more in-depth analysis showed that these effects were short-lived, fading after five years, and that the moderating effect of international sanctions was limited in time, while military spending and autocracy amplify gender inequality in politics during periods of terrorism.

The rest of the article is structured as follows: the second section presents the state of the literature; the third section describes methodology; the fourth section presents results, discusses their economic implications and presents some robustness tests. The final section concludes article with some policy recommendations.

2. Literature review and hypothesis

Previous literature on the relationship between terrorism and WPR has not led to a consensus. Indeed, while some authors conclude that there is a negative effect (Meierrieks and Renner, 2023; Kim, 2024),

other authors come to the opposite conclusion (Laster and Erez, 2021; Tripp, 2023; Webster et al., 2019). We develop these different points of view in greater detail.

2.1. Traditional and modern arguments for more WPR in times of terrorism

In the first section, we discuss the traditional arguments in the literature based on internal factors that can promote WPR. This view derives from political opportunity theory, first formulated by Eisinger (1973) and later extended by Tilly (1978) and McAdam (1982), which theoretically demonstrates how periods of institutional fragility, such as those caused by conflict or war, can create opportunities for women to access to positions of power and decision-making. In the second section, we take the analysis a step further, highlighting new arguments.

2.1.1. Traditional arguments: the demographic imbalances created by terrorism encourage women's political mobilization

Demographic imbalances created in times of terrorism can, paradoxically, offer opportunities for women to improve their political representation by enabling them to access roles and positions that were traditionally reserved for men (Berry and Lake, 2021). Wars can transform a country's demographic landscape and create female-headed households (Bakken and Buhaug, 2021), as a large percentage of men often die in combat due to the traditional gender roles that drive them to join the army¹, for example.

In times of terrorism, many men may be killed, injured or displaced, leaving a leadership void in political and social structures. Women, traditionally excluded from these positions, may find themselves in a situation of necessity where their mobilization is required to fill these vacant roles. For example, in societies where men make up the majority of elected representatives or community leaders, their absence can create an institutional vacuum that can enable women to occupy positions not previously accessible to them. For example, to compensate for the loss of men in political institutions, quotas or electoral reforms can be introduced, ensuring a rapid increase in women's representation in parliaments, local or national governments.

In Rwanda, for example, the violence engendered by tribal warfare led to a shift in the sex ratio, resulting in an increase in the number of female-headed households. Men accounted for over 60 % of those killed, causing the sex ratio of men to women to fall (Berry & Lake, 2021). In addition, many found themselves in exile, prison, correctional facilities or military service. This demographic shift has created many voids, both in households and in governments, which has benefited women, offering them the opportunity to occupy political roles previously inaccessible to them. Basis of this argument, we formulate the following hypothesis:

H1: demographic imbalances in times of terrorism create opportunities for women's political mobilization.

2.1.2. Modern arguments: the role of democracy and international sanctions in promoting women's rights

i) Role of democracy

In countries with democratic regimes, conflict and terrorism can have ambivalent effects on women's political participation. Indeed, some democracies offer new opportunities for women to gain access to positions of power or influence public policy, as they provide legal and peaceful channels for expressing demands. This process limits the use of violence by giving citizens the opportunity to participate in decision-making processes and by responding to socio-economic frustrations (Piazza, 2007). It reduces the appeal of radical ideologies and the risk of resorting to terrorism (Li, 2005). Democracies develop more inclusive

¹ Ukraine-Russia conflict is a tangible example of this. Many Ukrainian men have enlisted in the army to support their army and defend their country.

institutions, where conflicts are managed peacefully, reducing the need for marginalized groups to use violence to make their voices heard. This dynamic also contributes to improving gender equality in politics by providing a favorable legal framework that promotes women's participation in decision-making bodies (Inglehart and Norris, 2003). The reduction in social tensions associated with the grievance-mitigating effect in turn increases the visibility of women's demands and facilitates the adoption of measures such as gender quotas. What's more, in a context where violent conflict is declining, women can become more involved in the political sphere without being marginalized by security priorities.

Although these arguments have been echoed, they are not unanimously accepted in the literature. For Hand and Saiya (2023), for example, periods of instability in democracies can lead to the implementation of restrictive security policies to the detriment of individual rights, which can, in turn, reduce women's place in political and social spheres. Stanton (2013) notes that democracies are more likely to encourage rebellion than autocracies due to the former group's greater sensitivity to human rights and civil liberties. As a result, marginalized groups may divert attention from inclusive policies in democracies, particularly those aimed at promoting gender equality towards national security and conflict management, thus relegating gender equality issues to the back burner. Webster et al. (2019) take their analysis a step further, revealing that while women may experience an increase in political participation in post-conflict democracies, their presence in positions of power is often ephemeral and subject to regression when institutions are re-established. In light of these arguments, we formulate the following hypothesis:

H2 : democracy has heterogeneous effects on WPR in times of terrorism.

ii) Role of international sanctions

In countries affected by terrorism, where political regimes are often authoritarian and patriarchal norms rigid, international sanctions can exert direct pressure on governments to adopt more inclusive reforms (Felbermayr et al., 2020). For example, targeted sanctions, such as restricting trade or freezing the assets of political leaders, can induce these regimes to make concessions to avoid diplomatic or economic isolation. This pressure may lead them to reform laws to allow women to play a greater role in politics, or to introduce gender quotas in political institutions in response to international expectations (Nguyen and Do, 2021). By imposing sanctions, international powers can open up space for feminist movements and women's rights organizations. These groups, which are often marginalized in contexts of war or terrorism, can use sanctions as leverage to draw international attention to gender inequalities and advocate for greater representation of women in political processes. In addition, targeted sanctions can help limit access to power for groups or individuals who perpetuate the marginalization of women.

H3: international sanctions moderate the effect of terrorism on WPR.

2.2. Terrorism and WPR: counter-arguments

i) Gender stereotypes in times of terrorism reduce political opportunities for women

Previous research has identified several factors that can exacerbate inequalities between men and women in the political arena. One of these is the existence of gender stereotypes based on beliefs and traits associated with both sexes. Indeed, according to this view, women excel more in the management of so-called community issues (education, civil rights and poverty), but less fleshed out when it comes to performing tasks traditionally associated with men (agent role), such as the military, national security, foreign policy, crime etc (Holman et al., 2016). For example, when a country is faced with a terrorist threat, its inhabitants may demand more security measures for their protection. As the issue of

national security moves up the political agenda, individuals associate traits with gender, leading them to prefer strong, competent, aggressive and hawkish leaders who can make appropriate decisions to deal with the problem (Kim and Kang, 2022). This point of view is developed in Mueller's (1970) theory of the assembly effect.

According to this theory, in times of crisis or threat, populations tend to rally around political leaders perceived as strong and capable of protecting the nation or society. This phenomenon is particularly visible in contexts of terrorism, where violence and instability exacerbate the search for security and stability (Lawless, 2004). In the face of threat, citizens are more likely to trust charismatic, authoritarian political leaders who embody strength and the ability to restore order, to the detriment of leaders perceived as more diplomatic or inclusive. This rallying dynamic reinforces the centralization of power and can marginalize the voices of women, who are often associated with more consensual, collaborative or non-aggressive forms of leadership (Bauer, 2015). In this way, the rallying effect can reduce women's political representation by consolidating power in the hands of masculine, militarized Fig.s, and reducing opportunities for women to actively participate in political processes in times of crisis. Accordingly, the following hypothesis is formulated:

H4: gender stereotypes amplify the effect of terrorism on WPR.

ii) Militarization: a way of reinforcing patriarchal norms

The militarization of societies in times of terrorism has profound consequences for gender norms and WPR. When countries are faced with terrorism, they tend to prioritize security and repression, which can reinforce patriarchal structures and accentuate gender stereotypes. Militarization can reinforce the idea that men are the natural protectors and leaders in times of crisis, while women are often perceived as vulnerable or unfit to take on leadership roles in contexts of war or violence (Elveren and Moghadam, 2022). This perception is fuelled by a war culture that values physical strength, aggression and military hierarchy, qualities traditionally associated with men, further marginalizing women in political spheres. Militarization: a means of reinforcing patriarchal norms.

In militarized societies, gender roles become more rigid. Women are often confined to caring or reconciliation roles, perceived as subordinate and more suited to their nature in wartime contexts, rather than to leadership roles. This is explained by role congruence, where the qualities associated with women are deemed incompatible with the demands of war and the management of terrorism (Eagly and Karau, 2002). In contrast, men are seen as the natural leaders in these contexts, as their ability to embody masculine values such as courage, strength and protection is more in tune with social expectations of leadership in times of crisis (Webster et al., 2019).

H5: the militarization of societies in times of terrorism further reduces WPR.

3. Methodology

We structure this section around three main points: presentation of the study's variables and data sources, the study's empirical model and, finally, the estimation technique.

3.1. Variables and data

3.1.1. Dependent variable

Gender inequality in politics is measured using Women's Political Participation (WPR) index from the Varieties of Democracy (V-dem) database. This measure encompasses both the descriptive representation of women in the legislature and the gendered distribution of political power. The index ranges from 0 (low representation) to 1 (high representation). Other authors such as Poloni-Staudinger and Ortals (2013),

Kim (2024), Webster et al. (2019) and Bakken and Buhaug, (2021) have also used such a measure in their studies. For robustness analyses, we use the percentage of seats held by women in the lower houses (or parliament) and the percentage of female ministers.

3.1.2. Independent variable

Unlike other authors who have used armed conflict in their work (Kim, 2024; Webster et al., 2019), our measure of terrorism (*Attak*) corresponds to the recurrence of terrorist attacks per country and per year, independently of the number of deaths and injuries. This measure informs us about the frequency of attacks and demonstrates a willingness on the part of the armed group to degrade the security context and weaken the country's economic activity. The variable is based on the Global Terrorism Data (GTD) database. This database is favored in studies of terrorist activity (Berkebile, 2015; Carson and Turner, 2022). The data come from a wide variety of sources (government reports, newspapers, news agencies, etc.). Actors are assumed to be rational, and their actions are justified by the pursuit of a political, economic, religious or social objective, through fear, coercion or intimidation (LaFree and Dugan, 2007). Data available up to 2020.

3.1.3. Control variables

Several variables from the literature were used. These are:

Women's participation in the labor market (*Women.labor*) this variable measures, as a percentage of men, the fraction of women over the age of 15 who participate in the labor market. It is generally accepted that women's participation in the labor market can contribute to their political representation by offering them opportunities for personal development, networking and awareness of social issues. The variable is taken from the World Bank database and was also used by Hughes (2009) in his work.

Economic growth (*GDP*) is measured using gross domestic product per capita. Economic growth can boost women's political representation by improving access to education and professional opportunities. A higher standard of living enables women to acquire the skills and resources they need to get involved in politics. In addition, a prosperous economy can encourage the adoption of public policies promoting gender equality, such as representation quotas. Joshi and Olsson (2021) also used this measure in their study. However, economic growth can also reinforce structural inequalities and limit women's access to politics. When the benefits of growth are captured by a male elite, this can consolidate traditional power networks and exclude women from positions of responsibility. In some societies, economic prosperity can accentuate conservative gender roles, confining women to the domestic sphere. To take account of the possible non-linear relationship between economic growth and women's political representation, we introduce a GDP squared value (*GDP2*).

Globalization (*Globalization*) is a composite indicator designed to measure a country's degree of political, economic and social globalization. It ranges from 0 to 100, with lower values indicating lower levels of globalization. Awoa et al (2022) also used this measure in their study.

We also control for the size of the female population (*Female.pop*) measured by the share of the female population in the total population. The data come from World Bank database. The size of the female population can reinforce solidarity between women and encourage collective mobilization to demand better political representation. The more women there are, the more political pressure they can exert to advance their interests (Awoa et al., 2022).

We also control for religion (*Muslim.rel*) as a measure of culture. We choose Islam as the basis for comparing the effects of religion on gender inequality in politics. It is widely accepted in the literature that discrimination against women is widespread in many Muslim-majority countries, as well as in countries where Islam is the source of legislation (Awoa et al., 2022). To determine whether Islam is the dominant religion in a given country, we draw on data from La Porta et al. (1999) and define a categorical variable that takes the value 1 if the percentage

of people whose religion is Islam is dominant over other religions, and zero otherwise.

To measure changes in institutional structure, we use a measure of gender quotas (*Qotas*). It is generally accepted in the literature that countries with gender quota systems have higher levels of women in politics. Quota systems are grouped around 3 types: (1) reserved seats that set aside seats for women, (2) national legislative quotas that oblige all parties to present women as candidates, and (3) party quotas adopted by one or more political parties within a country. These three variables are combined into a single categorical variable indicating the presence or absence of a quota (Hughes and Tripp, 2015). The data are taken from the International Institute for Democracy and Electoral Assistance (IDEA) database.

3.2. Empirical model

In this study, we draw on the empirical model Meierrieks and Renner (2023), who investigated the effect of Islamic terrorism on women's political empowerment for a total of 168 countries over the period 1970-2016. The authors came to the conclusion that, Islamic terrorism reduces women's political empowerment in their sample. We modify the empirical model proposed by the authors and analyze the effect of terrorism on women's political representation in a larger sample of 180 countries. The study period runs from 2000 to 2020. This time interval takes into account the availability of terrorism data for a large number of countries (mainly developing countries), while the end date is due to the last year of data covered by the GTD. The empirical model proposed in this study is presented as follows:

$$WPR_{it} = \beta_0 + \beta_1 WPR_{it-1} + \beta_2 Attak_{it} + \sum_{j=3}^n \beta_j X_{it} + \varepsilon_{it} \quad (1)$$

Where WPR, WPR_{it-1} and $Attak_{it}$ represent respectively the political representation of women, its lagged value and the number of terrorist attacks in country i at period t ; X_{it} is the matrix of control variables. ε_{it} is the error term and $\beta_0, \beta_1, \dots, \beta_j$ the parameters of the variables to be estimated. Taking into account the various study variables selected, the final model can be presented as follows:

$$\begin{aligned} WPR_{it} = & \beta_0 + \beta_1 WPR_{it-1} + \beta_2 \ln(Attak)_{it} + \beta_3 \ln(Women.labor)_{it} \\ & + \beta_4 \ln(GDP)_{it} + \beta_5 \ln(GDP2)_{it} + \beta_6 \ln(Globalisation)_{it} \\ & + \beta_7 \ln(Female.pop)_{it} + \beta_8 Muslim.rel_i + \beta_9 Qotas_i + \mu_i + \gamma_t + \varepsilon_{it} \end{aligned} \quad (2)$$

μ_i and γ_t country and time fixed effects, respectively.

3.3. Estimation

To estimate Eq. (2), we use the Generalized Method of Moments in System (GMM-S). There are several reasons for choosing GMM-S as the estimation method in this study. Most empirical research is confronted with a major problem when using panel data, namely the problem of endogeneity. Endogeneity arises from the existence of reverse causality between certain variables in the study. Indeed, assuming that the capacity for terrorism reduces women's political representation, it is equally plausible that this representation also reduces terrorist incidents, as women are known to exercise a more inclusive and participatory model of governance. In addition, we may face a problem of omitted variable bias. Indeed, omitted variable bias can arise if unobserved factors are likely to influence the relationship. In this work, we solve this problem by using several control variables documented in the literature on the subject. This also enables us to solve the problems of heterogeneity and autoregression (Blundell and Bond, 1998).

GMM estimator is also well suited to the structure of our sample. As Roodman (2009) points out, this method is more effective when the cross-sectional dimension is larger than the temporal dimension. In our

study, the sample comprises 180 countries for the study period 2000-2020, which justifies the application of this approach. In addition, GMM provides unbiased, convergent and efficient estimators, especially when a lagged dependent variable is included among the explanatory variables. Compared with conventional methods, such as ordinary least squares (OLS) or fixed-effects models, GMM offers better correction of short- and long-term errors.

In this study, we opt for the two-stage GMM estimator, proposed by [Arellano and Bover \(1995\)](#) and [Blundell and Bond \(1998\)](#), to improve the accuracy of our estimates. Unlike the difference GMM, which can be affected by weak instruments and small sample size bias, GMM-S allows us to simultaneously estimate the Eq. in first difference and in level. However, this method has the disadvantage of generating an excessive number of instruments, which can compromise the validity of tests such as Hansen's. For this reason, [Roodman \(2009\)](#) suggests that the number of instruments should be smaller than the cross-sectional dimension of the panel, which corresponds to Hansen's J over-identification test. The second test of instrument validity is Hansen's difference-in-Hansen test (or Hansen's C test). These tests are completed by [Arellano and Bond's \(1991\)](#) residual autocorrelation test. In this way, the instrumental approach is validated if the null hypothesis of residual autocorrelation is rejected at first order, but not at second order, and if Hansen's J and C tests are not rejected.

Although endogeneity has been established theoretically and we propose GMM-S to resolve it, there is no empirical evidence that terrorism and WPR are indeed endogenous. In order to fill this gap, we test the endogeneity of the various variables in the model using the Nakamura Nakamura test, which involves three steps (see [Kpodar \(2007\)](#)). The first involves regressing the endogenous variable on the model's exogenous variables and its instruments. Predict the residual value of the instrumented variable in the second. In the third step, the residuals from the first step are recovered and included in the initial model. Thus, endogeneity is present when the coefficients of the residuals are statistically significant in the second step. To perform this test, we used the one-period lagged terrorism variable as the instrument for measuring terrorism. The results of the endogeneity test carried out are presented in [Table 3A](#) in appendix, which shows that the residual of the terrorism measure is statistically significant in the second stage, so we reject the hypothesis of exogeneity of the instrument. In other words, there is an endogeneity relationship between terrorism and WPR.

4. Results and analysis

This section will be structured around two main points. The first presents the main results of the study. The second will discuss robustness.

4.1. Main results

Before beginning the analysis of the results themselves, it is worth presenting the summary statistics for the various study variables. [Table 1](#) shows the results of the descriptive statistics. The mean value for terrorist attacks is 30.58, meaning that the countries in the sample record an average of 30 terrorist attacks per year. However, the minimum and maximum values reveal that some countries are relatively spared, with a minimum value of 0 attacks, while others record over 3,000 terrorist attacks per year. As for the measure of gender inequality in politics, [Table 1](#) reveals that it varies between 0 and 1, while [Table 2](#) shows the correlations between the variables. With the exception of terrorist attacks, religion and gender quotas, all the other variables in the study are positively correlated with women's political representation.

Basic results are presented in [Table 3](#). [Table B](#) in the appendix presents the basic results obtained from the OLS. It shows that terrorism reduces gender inequalities in politics by increasing the rate of women's political representation. As suggested above, these results may suffer

from possible endogeneity problems, which is why we present the basic results obtained from GMM in system in [Table 3](#). The analysis begins with a bivariate model in which the measure of women's political representation is regressed on the terrorism variable (model 1). Then, in models 2 to 7, we successively introduce the various control variables. These are, respectively, women's economic empowerment (model 2), economic growth and its squared value (model 3), globalization (model 4), percentage of female population (model 5) and Muslim religion (model 7). Finally, the last model includes all the above variables plus the gender quota measure.

In terms of preliminary tests, the Fisher test is conclusive for all seven estimates, since its probability is below the 1 % threshold. This means that all the explanatory variables in the model are associated with the dependent variable. The Sargan and Hansen over-identification tests are also conclusive. Consequently, we cannot reject the null hypothesis that the instruments are not exogenous. Finally, the second-order autocorrelation test AR (2) is also satisfactory, since its p-value is above the 10 % threshold. Consequently, the null hypothesis of no second-order autocorrelation is accepted. The results of our estimations are therefore robust, especially as the standard deviations have also been corrected for heteroscedasticity. Overall, only the results in column 7 will be discussed, since no major changes were observed for these variables in the previous columns.

With regard to terrorism, a 1 % increase in the number of terrorist attacks reduces women's political representation by 0.002 units². This result can be explained by several mechanisms linked to the effects of terrorism on the political, social and economic environment, which create additional obstacles to women's participation in politics. The first explanation is linked to the climate of insecurity and increased violence. The increase in the number of terrorist attacks has created a climate of fear and instability that is particularly discouraging for women from taking up public office. Women, often perceived as more vulnerable in contexts of violence, may be less inclined to participate in political processes for fear of their personal safety and that of their families. This insecurity may also restrict their mobility, limiting their ability to campaign or attend political meetings, particularly in areas affected by attacks.

Prioritization of security issues to the detriment of social issues is the second explanatory mechanism for this result. In the context of terrorism, governments and political parties give greater priority to national security and defense issues (traditionally male-dominated fields), and relegate gender equality issues and the promotion of women's rights to the background. Indeed, so-called national security issues often lead to a reduction in public resources and funding for initiatives to promote women's political participation. Women candidates, who already face structural obstacles (such as lack of campaign funding or political networks), suffer even more when resources are redirected to security measures. What's more, as women are under-represented in military or security institutions, they can be sidelined from decision-making processes and strategic positions, reducing their political representation.

Final mechanism is the reinforcement of patriarchal norms and the stigmatization and targeting of female politicians. Periods of crisis and violence, such as those caused by terrorism, can lead to a return to traditional gender norms. Social expectations can lead women to retreat into the domestic sphere, while men take on the roles of protection and decision-making. This traditional withdrawal limits women's opportunities to participate actively in political life and reduces their chances of gaining access to decision-making positions. Also, in certain contexts, terrorist groups may directly target women involved in politics, seeing

² To reduce scaling problems, most model variables have been linearized, except categorical variables and the index of women's political representation. Consequently, results are analyzed according to the level (for the dependent variable) - log (for the control variables) principle.

Table 1
Descriptive statistics.

Variable	Observations	Mean	Standard deviation	Minimum	Maximum
WPR	3780	0.7345	0.2897	0	1
Attak	3780	30.5833	158.3106	0	3371
Women_labor	3654	50.1997	15.446	5.091	87.123
GDP	3717	13039.3	18282.56	255.1003	112417.9
GDP2	3717	5.04e+08	1.29e+09	65076.15	1.26e+10
Globalisation	3780	57.5923	17.8	0	90.93
Female_pop	3780	50.05	2.9272	23.3942	54.8935
Muslim_rel	3633	0.2602	0.44	0	1
Qotas	2415	0.713	0.4524	0	1

Source : authors.

Table 2
Correlation matrix.

	a	b	c	d	e	f	g	h	i
a=WPR	1.0000								
b=Attak	-0.0282	1.0000							
c=Women_labor	0.2563	-0.2813	1.0000						
d=GDP	0.3091	-0.0792	0.0922	1.0000					
e=GDP2	0.2254	-0.0579	0.1011	0.9208	1.0000				
f=Globalisation	0.4887	-0.0859	-0.0774	0.6825	0.4745	1.0000			
g= Female_pop	0.2567	-0.0516	0.1452	-0.1455	-0.1147	0.0549	1.0000		
h= Muslim_rel	-0.4415	0.1926	-0.4436	-0.2189	-0.1453	-0.3388	-0.2791	1.0000	
i=Qotas	-0.1465	-0.0204	-0.1102	-0.3035	-0.2030	-0.3204	-0.1260	0.1540	1.0000

Source : authors.

Table 3
Effects of terrorism on women's political representation.

Variables	(1) WPR	(2)	(3)	(4)	(5)	(6)	(7)
L.WPR	0.9600*** (0.0118)	0.9685*** (0.0123)	0.9639*** (0.0099)	0.8762*** (0.0219)	0.8775*** (0.0187)	0.9309*** (0.0091)	0.9408*** (0.0076)
Attak	-0.0020*** (0.0007)	-0.0033*** (0.0009)	-0.0035*** (0.0011)	-0.0039*** (0.0009)	-0.0046*** (0.0011)	-0.0030*** (0.0007)	-0.0020** (0.0008)
Women_labor		0.0233*** (0.0050)	0.0060*** (0.0023)	0.0553*** (0.0119)	0.0549*** (0.0124)	0.0238*** (0.0065)	0.0138** (0.0064)
GDP			-0.0142** (0.0057)	-0.0529*** (0.0162)	-0.0617*** (0.0171)	-0.0234** (0.0110)	-0.0114** (0.0050)
GDP2			0.0008** (0.0003)	0.0024*** (0.0008)	0.0029*** (0.0009)	0.0010* (0.0006)	0.0003** (0.0002)
Globalisation				0.0911*** (0.0238)	0.0978*** (0.0230)	0.0367*** (0.0102)	0.0361** (0.0170)
Female_pop					-0.0336* (0.0200)	-0.0786*** (0.0271)	-0.1023* (0.0535)
Muslim_rel						-0.0136** (0.0056)	-0.0065** (0.0032)
Qotas							0.0017** (0.0007)
Constant	0.0403*** (0.0107)	-0.0555*** (0.0147)	0.0788*** (0.0284)	-0.2059*** (0.0566)	-0.0597 (0.0923)	0.2558*** (0.0871)	0.3359** (0.1536)
Observations	3600	3480	3425	3396	3396	3298	2107
Country	180	174	173	171	171	166	106
AR1	0.0009	1.09e-05	1.17e-05	0.0000	0.0000	0.0000	6.04e-08
AR2	0.223	0.478	0.454	0.943	0.942	0.933	0.786
Instruments	42	20	37	22	28	32	39
Sargan	0.292	0.285	0.768	0.410	0.659	0.869	1.000
Hansen	0.284	0.356	0.453	0.672	0.831	0.390	0.862

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively. Source : authors.

their participation as a threat to extremist ideologies or the traditional norms generally associated with them. This targeted violence accentuates women's withdrawal from the political scene through self-censorship or social pressure, contributing to a decline in their representation. Similar analyses have also been put forward by [Meierrieks and Renner \(2023\)](#) for the latter case.

Overall, we find results contrary to those of [Webster et al. \(2019\)](#), [Hughes and Tripp \(2015\)](#) who all revealed that terrorism creates windows of opportunity by destabilizing the established socio-political order (notably patriarchal norms and gender stereotypes), enabling women to claim more rights and greater inclusion in political decision-making positions.

For the control variables, we find that a 1 % increase in women's participation in the labor market improves women's political representation by 0.0138 units. This result can be explained by the fact that women's economic empowerment, as measured by their participation in the labor market, strengthens their financial independence and self-confidence, two essential elements for accessing political office. A greater presence of women in the economy also enables them to develop organizational skills and a social network useful for political engagement, which in turn promotes greater visibility for women in the public arena, breaking down gender stereotypes. Moreover, economically empowered women have sufficient resources to finance their own campaigns and overcome structural barriers to political participation. Our results are similar to those of [Hughes \(2009\)](#).

Economic growth reduces WPR. Indeed, a 1 % increase in the variable GDP reduces WPR by 0.011 units. However, its squared term produces the opposite effect, i.e. a 1 % increase in the squared GDP variable increases WPR by 0.0003 units. What we have here is a non-linear U-shaped effect between economic growth and WPR. In the early stages of economic growth, an increase in GDP per capita can reinforce gender inequalities in politics. Indeed, the initial benefits of growth are often appropriated by elites and can consolidate existing patriarchal structures, limiting women's access to positions of power. What's more, in developing societies, priority is often given to economic investment rather than the promotion of gender equality. However, beyond a certain threshold of growth, the dynamic changes. Prolonged economic growth is generally associated with higher levels of education, social modernization and a shift in attitudes in favor of gender equality principles. It can also enable the implementation of inclusive public policies (quotas, empowerment programs) favoring women's participation. Our findings are broadly similar to those of [Fallon et al. \(2012\)](#).

We also find that a 1 % increase in the globalization index improves female representation by 0.036 units. This result is similar to that of [Meierrieks and Renner \(2023\)](#). The positive effect of globalization on women's political representation can be explained by several factors. These include the spread of progressive ideas and values such as gender equality, which encourages countries to adopt legislative reforms and inclusive policies. Cultural exchanges that give women access to various types of resources (education, training, cooperation, etc.) likely to improve their leadership skills. In addition, pressure from international organizations often prompts governments to update their women's rights legislation to meet international standards.

Size of the female population does not improve women's political participation. Indeed, although significant at the 10 % threshold only, an increase of 1 % in the variable `Population_fem` reduces WPR by 0.102

units. This result does not support the conclusion of [Awoa et al. \(2022\)](#). This result may seem counter-intuitive, but it highlights the fact that the size of the female population alone is not enough to improve women's political representation. A larger female population may reflect a greater share of women from disadvantaged backgrounds, with limited access to education, economic resources and political networks, which are prerequisites for greater political participation. This result suggests that a simple quantitative increase in the number of women does not mechanically lead to an improvement in their political representation without institutional and legal measures to remove barriers to their political involvement.

As a further result, we find that Muslim countries have low levels of WPR. In other words, countries where the Muslim religion is dominant have WPR levels that are on average 0.006 units lower than countries where other religions are dominant. This result is similar to that of [Awoa et al. \(2022\)](#). Muslim-majority countries often have lower levels of political representation for women due to social and cultural norms that privilege traditional and patriarchal roles for women. In some of these countries, conservative interpretations of Islam may limit women's rights to participate fully in political life, by imposing legal or social restrictions. In addition, political and legal structures are often dominated by male elites, which can hinder reforms in favor of gender

Table 4

Terrorism and women's political representation in developed and developing countries.

Variables	(1) Developed countries WPR	(2) Developing countries
L.WPR	0.9544*** (0.0147)	0.9364*** (0.0257)
Attak	-0.0048*** (0.0015)	-0.0080*** (0.0024)
Women_labor	0.0211*** (0.0058)	-0.0170*** (0.0057)
GDP	-0.0662* (0.0363)	-0.1812** (0.0749)
GDP2	0.0031* (0.0018)	0.0107** (0.0047)
Globalisation	0.0459** (0.0223)	0.1008*** (0.0294)
Female_pop	-0.3116*** (0.0775)	-1.2125** (0.5270)
Muslim_rel	-0.1550*** (0.0351)	0.0093 (0.0086)
Qotas	0.0086*** (0.0023)	-0.0321** (0.0154)
Constant	1.3340*** (0.3685)	5.2576** (2.2525)
Observations	680	1427
Country	34	72
AR1	0.0725	2.06e-07
AR2	0.152	0.676
Instruments	19	18
Sargan	0.989	0.998
Hansen	0.906	0.980

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively. Source : authors.

equality.

Finally, we find that countries with proportional representation policies have average levels of female political representation of 0.001 units compared to those without. Gender quotas act as positive measures aimed at overcoming structural and cultural obstacles to women's participation in politics. Through this policy, states guarantee greater female participation in parliaments and other political institutions, even in the absence of significant changes in social attitudes or cultural norms. Quotas thus bridge the gender gap, giving women direct access to political processes, which in turn promotes greater equality in political decision-making. Our results are similar to those of Hughes and Tripp (2015).

4.1.1. Extension of results by income level and subregions

Three main analyses will be carried out. The first consists of decomposing the sample into developed and developing countries. The second involves conducting a subregional analysis. Finally, the third involves deferring the terrorism variable over time in order to assess its short- and medium-term effects.

4.1.1.1. Terrorism and WPR in developed and developing countries. The results obtained above may be biased, as they are estimated on a sample comprising a heterogeneous panel of countries with different income levels. To correct this limitation, we subdivide the sample into developed and developing countries, according to the World Bank classification. Unlike developing countries, developed countries are distinguished by the quality of their institutions, the solidity of their economic structure and more egalitarian social and cultural norms. As a result, these countries are better equipped to mitigate the effects of terrorism and promote greater representation of women in political institutions. The results obtained from this approach are presented in Table 4. It shows that countries' income levels do not influence the effect of terrorism on gender inequalities in politics. Indeed, we find that a 1 % increase in the number of terrorist attacks reduces women's WPR by 0.004 in developed countries and by 0.008 in developing countries. The effect is slightly greater in the latter group.

Although the result is always the same for terrorism, some major changes are to be noted with regard to the control variables. Indeed, we find that women's participation in the labor market contributes positively to WPR in developed countries, whereas the opposite effect is observed in developing countries. Similarly, gender quotas are more likely to increase WPR in developed countries than in developing countries. In developed countries, women's participation in the labor market improves WPR because these societies have strong institutions and legal frameworks that promote gender equality. Policies in these countries often value diversity and encourage the inclusion of women in decision-making spheres. In developing countries, on the other hand, the negative effect may be due to structural and cultural factors. Although women can participate in the labor market, they often hold precarious or informal jobs, with few prospects of social or political advancement. In addition, rigid patriarchal norms and disproportionate domestic burdens limit their involvement and progression in the political sphere, despite their presence in the economy.

In developed countries, gender quotas are generally better applied thanks to more transparent and efficient institutions. They are often accompanied by complementary measures (training, funding, monitoring) that facilitate women's access to decision-making positions. Developed countries are also more inclined to accept women as political leaders, reinforcing the positive impact of quotas on women's political representation. In developing countries, on the other hand, the effect of quotas is often limited by a lack of political will and incomplete or symbolic application. They may be used to meet international obligations without bringing about real structural change. In addition, political elites may circumvent these measures by placing women with little autonomy or influenced by male Fig.s, thus reducing their real impact on

WPR.

4.1.1.2. Terrorism and WPR in subregions³. In this robustness, we preferred Freedom House's classification⁴ to that of the World Bank for more than one reason. With only five sub-regions, Freedom House's classification reduces sample fragmentation compared to the World Bank's seven divisions. This facilitates statistical comparisons and improves the readability of the results, while avoiding overly small groups where statistical significance could be compromised. Furthermore, Freedom House classifies countries not only by geographical area, but also by political and institutional proximity. The results obtained are presented in Table C in the appendices. As the effect of terrorism on the WPR corresponds here to the total effect, we obtain heterogeneous results in the different sub-regions⁵.

Indeed, we observe that the effect of terrorism on WPR is positive in Americas and Europe subregions, while the effect is negative in Asia-Pacific, MENA, and SSA. American and European countries generally have stronger institutions and better governance, which may enable them to better manage terrorism-related crises. This can also promote political and economic responses that mitigate the negative effects of terrorism. In contrast, in environments characterized by weak governance, restrictive gender norms, and terrorist threats with a strong ideological component (MENA, SSA, Asia-Pacific), violence tends to reduce the political space available to women, thereby accentuating their marginalization.

4.1.1.3. Deferred effects of terrorism on the WPR. The main objective of this test is to assess the temporal dynamics of terrorism on women's political representativeness. In other words, it seeks to identify whether the repercussions of terrorism are immediate or delayed, and to assess whether the nature of the effect changes over time. The results (Table D in the appendices) reveal contrasting dynamics in the impact of terrorism on women's political representativeness. When the terrorism variable is delayed by two years, the estimated effect remains negative and statistically significant, reflecting an immediate and persistent short-term impact. This result can be explained by the fact that terrorist episodes tend, in the early years, to destabilize political institutions, shift government priorities toward security, and increase the exclusion of marginalized groups, including women, from decision-making

³ Several reasons justify this approach. First, the effect observed from the overall sample may mask regional disparities. By conducting a subregional analysis, we test whether the results are stable (robust) or whether they are mainly driven by one or two specific areas. Second, gender norms vary across regions. In some societies, women have historically played a more active role in public life, while in others, sociocultural constraints limit their participation. Third, women's representation depends heavily on the institutional framework and political will. Countries in some subregions have adopted quota laws or have a more inclusive political tradition (e.g., Southern Africa), while others have more unstable governance. Analysis by subregion thus makes it possible to distinguish whether the effect of terrorism is amplified or attenuated depending on the subregional institutional framework. Finally, we believe that terrorism does not manifest itself with the same intensity or in the same form in all subregions. Testing the robustness of the results by subregion allows us to verify whether the relationship observed at the global level also holds in environments where the nature, frequency, and targets of terrorism differ.

⁴ The five subregions according to Freedom House's classification are: America, Asia Pacific, Europa, Middle East and North Africa (MENA), and Sub-Saharan Africa (SSA).

⁵ In order to get around the structural constraint of the GMM-S (i.e., $N > T$) for certain subregions, we opted for a strategy of interaction between the terrorism variable and the dummy regional variables (five in total) corresponding to the Freedom House classification. Next, the total effect is calculated. It corresponds to the effect of terrorism on the political representation of women in each subregion. Finally, a linear combination test is performed to determine whether the total effect is statistically significant or not.

Table 5
Terrorism and other measures of WPR.

Variables	(1) Women ministers	(2) Women in parliament
L.Women ministers	1.1606*** (0.0332)	
L.Women in parliament		0.8898*** (0.0292)
Attak	-0.0330*** (0.0087)	-0.0227*** (0.0053)
Women_labor	-0.0782** (0.0379)	0.2015*** (0.0669)
GDP	-0.6190*** (0.1930)	0.3906** (0.1574)
GDP2	0.0408*** (0.0123)	-0.0219** (0.0086)
Globalisation	-0.0621 (0.0522)	0.2176*** (0.0677)
Female_pop	1.2199** (0.5012)	1.4972*** (0.4858)
Muslim_rel	-0.0199 (0.0252)	0.3599*** (0.0933)
Qotas	0.5538*** (0.1006)	0.0658** (0.0307)
Constant	-2.7607* (1.6559)	-8.9360*** (2.5968)
Observations	2107	1992
Country	106	106
AR1	3.20e-07	5.50e-06
AR2	0.105	0.405
Instruments	20	25
Sargan	1.000	0.796
Hansen	0.944	0.980

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source : authors.

processes. After five years, however, the effect becomes positive and statistically significant. This result suggests that some governments may implement policies to promote inclusion and strengthen women's representation in politics, particularly due to internal or external pressure from the international community.

4.2. Robustness and role of moderating factors

In order to confirm the results previously obtained, we carry out two robustness tests, changing the measure of women's political representation and terrorism respectively. In the rest of the analysis, we will test the units of view of the literature developed in the second section. The analysis will test the moderating role of international sanctions, democracy and military spending as factors that can attenuate or accentuate the effects of terrorism on WPR⁶.

4.2.1. Other measures of women's political representation and terrorism

Table 5 shows the results obtained when two alternative measures of WPR are used: the number of women ministers (column 1) and the number of women in parliament (column 2). Data on women ministers come from the World Bank's Gender Statistics database and include women in ministerial positions with portfolio, including prime ministers and heads of government, but excluding vice-presidents and heads of government agencies. As for the number of women in parliament, the data come from the World Bank's WDI database and correspond to the percentage of seats held by women in a single or lower house. The results obtained after estimating the two variables are identical and similar to

⁶ Other mechanisms highlighted are demographic imbalance and gender stereotyping. While no data are available for the former, data on stereotypes are only available for a relatively small number of countries. Consequently, we do not test these mechanisms in this study.

Table 6
Other measures of terrorism and women's political representation.

Variables	(1) Victims WPR	(2) Attak_gov	(3) National	(4) International
L.WPR	0.9261*** (0.0182)	0.9318*** (0.0168)	0.9430*** (0.0085)	0.9454*** (0.0094)
	-0.0018*** (0.0004)	-0.0026*** (0.0008)	-0.0015** (0.0006)	0.0104*** (0.0036)
Women_labor	0.0165** (0.0065)	0.0123*** (0.0033)	0.0119*** (0.0034)	-0.0086 (0.0062)
GDP	-0.0166*** (0.0051)	-0.0107*** (0.0031)	-0.0083* (0.0050)	-0.0263** (0.0120)
GDP2	0.0006** (0.0003)	0.0004** (0.0002)	0.0002 (0.0002)	0.0011* (0.0007)
Globalisation	0.0321*** (0.0067)	0.0228** (0.0088)	0.0302*** (0.0083)	0.0245*** (0.0080)
Female_pop	-0.0376*** (0.0101)	-0.0423*** (0.0103)	-0.0807*** (0.0252)	-0.0467 (0.0746)
Muslim_rel	-0.0092* (0.0053)	-0.0112* (0.0061)	-0.0060** (0.0029)	-0.0179*** (0.0064)
Qotas	0.0011 (0.0015)	0.0008 (0.0021)	0.0015* (0.0009)	0.0179*** (0.0062)
Constant	0.1209* (0.0652)	0.1565*** (0.0434)	0.2621** (0.0999)	0.2977 (0.2903)
Observations	2107	2107	2107	2107
Country	106	106	106	106
AR1	6.76e-08	7.17e-08	6.25e-08	4.41e-08
AR2	0.903	0.764	0.801	0.768
Instruments	33	34	37	26
Sargan	0.734	1.000	1.000	0.964
Hansen	0.546	0.876	0.629	0.872

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source : authors.

those in Table 3. The estimates show that the impact of terrorism on these two indicators is negative and statistically significant, confirming the trends already observed in Table 3. Specifically, an increase in terrorist attacks leads to a 3.30 % decrease in the number of women ministers, and a 2.27 % decrease in the number of women parliamentarians.

The second robustness test we applied involved changing the measure of terrorism. The first alternative measure of terrorism used was Victims, which refers to the number of people injured and killed during a terrorist attack. An increase in the number of victims of terrorist attacks can aggravate the climate of insecurity and reinforce gender stereotypes that women are less able to manage security crises. This could limit their access to positions of power. However, if public opinion perceives women as peacemakers or moderating Fig.s, this could also encourage their rise in politics to promote more inclusive and peaceful policies.

Next, we decompose the main measure of terrorism into attacks targeting the general government (Attak_gov), national attacks (National) and international attacks (International). Attacks on general government are the sum of attacks on administrative staff and government buildings, police and military. This type of attack can have a dual effect. On the one hand, they can directly weaken the institutions that encourage reform. If the latter include gender equality measures (such as the adoption of quotas), this can improve women's political representation. On the other hand, increased political instability can reinforce the dominance of male elites, limiting women's access to decision-making positions. As Gaibullov & Sandler (2008, 2011) and Enders et al. (2011) point out, international terrorist attacks cause greater economic disruption than domestic attacks, due to the additional expenditure they impose on governments (border protection, increased

internal security, international military cooperation, etc.). The use of these two alternative measures of terrorism may or may not also aggravate gender inequalities in politics (Table 6).

The first finding is that all terrorism measures are statistically significant. However, with the exception of international terrorist attacks, which are positively related to WPR, all other measures produce the opposite effect. The number of victims reduces WPR by 0.001 units, attacks against the government by 0.002 units, and domestic attacks by 0.001 units. The squared term for attacks, meanwhile, reveals the absence of non-linearity between terrorism and WPR in the countries in the sample. We find that international attacks increase WPR by 0.01 units. This coefficient is higher than any of the previous measures. Unlike domestic terrorism and other measures, terrorist attacks on an international scale often mobilize the attention of the international community, which actively promotes women's rights and gender equality as key elements of political stability. States under pressure are often forced to adopt certain reforms to meet international expectations in order to benefit from foreign aid, for example, or any other form of assistance.

4.2.2. Terrorism and women's political representation: the role of moderating factors

The first section highlights international sanctions, while the second discusses the effects of terrorism on democracies and autocracies.

4.2.2.1. Role of international sanctions. In this sub-point, we go beyond the traditional arguments in the literature which have revealed that terrorist acts often disrupt established power structures, which can pave the way for political and social reforms that offer women an opportunity to strengthen their political influence. A limitation of this argument is that it does not take into account the international community's response to assist countries affected by terrorism. In response to this concern, we set out to assess the role played by international sanctions in the relationship between terrorism and women's political representation. To do this, we used four sanctions measures grouped into two categories: economic sanctions, which include trade sanctions (Trade_S) and financial sanctions (Finance_S) on the one hand, and political sanctions, which include arms sanctions (Weapons_S) and military sanctions (Military_S) on the other. These different sanctions can be imposed either by international organizations (UN) or by individual countries or groups of countries (e.g. the USA or the EU). The data comes

Table 7
Terrorism and WPR: role of international sanctions and militarization.

Variables	(1) WPR	(2)	(3)	(4)	(5)
L.WPR	0.8168*** (0.0584)	0.9013*** (0.0269)	0.9571*** (0.0117)	0.9856*** (0.0364)	0.9880*** (0.0319)
Attak	-0.0051** (0.0020)	-0.0096** (0.0038)	-0.0036*** (0.0012)	-0.0373** (0.0178)	0.0117*** (0.0035)
Trade_S	-0.6058*** (0.1871)				
Attak*Trade_S	0.0930*** (0.0319)				
Financial_S		-0.0889** (0.0406)			
Attak*Financial_S		0.0241*** (0.0091)			
Weapons_S			-0.0452*** (0.0132)		
Attak* Weapons_S			0.0152** (0.0071)		
Military_S				-0.5011* (0.2796)	
Attak*Military_S				0.1587* (0.0857)	
Milexp					0.0167** (0.0064)
Attak*Milexp					-0.0149*** (0.0051)
Baseline control variables	Yes				
Net effects	0.0001 (0.0014)	-0.0065* (0.0035)	-0.0024** (0.0012)	0.0290 (0.0196)	-0.0173** (0.0083)
Constant	0.4445 (0.4257)	1.6372*** (0.1791)	0.9955** (0.4421)	0.3052 (0.9316)	0.0724 (0.5213)
Observations	2,001	2,001	2,001	2,001	1,902
Country	106	106	106	106	100
AR1	0.0104	5.29e-08	1.19e-07	0.000816	5.65e-07
AR2	0.844	0.721	0.726	0.274	0.105
Instruments	29	43	44	23	26
Sargan	0.999	0.939	0.657	0.947	0.822
Hansen	0.994	0.684	0.511	0.989	0.798

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source : authors.

from the Global Sanction Database developed by Felbermayr et al. (2020); Kirikakha et al. (2021); Syropoulos et al. (2024).

Trade sanctions are restrictive measures imposed by one or more countries on another to influence its policies or behavior. They can take the form of embargoes, restrictions on imports and exports, or tariff barriers. Governments impose these sanctions on companies, limiting trade in certain goods, technologies or services. Financial sanctions are restrictive measures aimed at limiting or blocking financial transactions with a specific country, individuals or entities in order to exert economic and political pressure. They can include freezing assets, restricting the transfer of funds or prohibiting access to financial markets.

Arms sanctions are restrictive measures imposed to limit or prohibit the export, import, sale or transfer of arms and military materiel to a country, group or individuals, in order to prevent conflict or sanction behavior deemed a threat to international peace. They can take the form of complete arms embargoes, restrictions on certain types of military equipment, bans on training or technical assistance, and controls on dual-use technologies (civilian and military). Finally, military sanctions are restrictive measures limiting or prohibiting military cooperation with a targeted country or group. They can include bans on arms sales, suspension of military cooperation agreements, cessation of technical or logistical assistance, and restrictions on exchanges of strategic information or military training.

Next, to test the militarization hypothesis, we also considered the role of military expenditure in the relationship between terrorism and women's WPR. Data for this variable come from the World Bank's (WDI, 2024) database. Military expenditure is defined as the current and capital expenditure of the armed forces, including peacekeeping forces, ministries of defense and other government agencies engaged in defense projects, paramilitary forces, if considered trained and equipped for military operations, and military space activities (WDI, 2024). Model (2) is modified and augmented by international sanctions measures and military spending. It is presented as follows:

$$\begin{aligned} WPR_{it} = & \beta_0 + \beta_1 WPR_{t-1} + \beta_2 \ln(Attak)_{it-1} + \beta_3 \ln(Women_labor)_{it-1} \\ & + \beta_4 \ln(GDP)_{it-1} + \beta_5 \ln(GDP2)_{it-1} + \beta_6 \ln(Globalisation)_{it-1} \\ & + \beta_7 \ln(Female_pop)_{it-1} + \beta_8 Muslim_rel_i + \beta_9 Qotas_{it} \\ & + \beta_{10} [\ln(Attak) * Sanction]_{it} + \beta_{11} [\ln(Attak) * \ln(Milexp)]_{it} + \gamma_t \\ & + \varepsilon_{it} \end{aligned} \quad (3)$$

With β_0 the constant term; β_i ($i=1...11$) the parameters of the variables to be estimated; $Sanction_{it}$, the matrix of the various international sanctions selected; γ_t , and ε_{it} represent the year fixed effects and the error term respectively. Eq. 4 translates the marginal effects of sanctions and military expenditure obtained from Eq. 3. For each variable, there are two extreme cases. If $\beta_{10} + \beta_{11} < 0$, this means that sanctions and military spending exacerbate the effect of terrorism on women's political representation. On the other hand, if $\beta_{10} + \beta_{11} > 0$, we get the opposite effect, i.e. the moderate the effect of terrorism on women's political representation.

$$\frac{\delta WPR_{it}}{\delta Attak_{it}} = \beta_1 + \beta_{10} Sanction_{it} + \beta_{11} Milexp_{it} \quad (4)$$

The new results are presented in Table 7. Columns 1 to 4 present the results of the interaction between terrorism and international sanctions, while the interaction with military expenditure is presented in the fifth column. The first column shows the results for trade sanctions, the second for financial sanctions, the third for arms sanctions and the fourth for military sanctions. Firstly, all forms of sanctions are negatively related to WPR. However, the effect changes when they interact with the terrorism variable. Indeed, during a period of terrorism, trade sanctions increase WPR by 0.08 units. It is also the form of sanction with the greatest impact. This increase is 0.028 units for financial sanctions, 0.022 units for arms sanctions and 0.04 units for military sanctions.

Fig. 1 shows the marginal effects resulting from these interactions.

Minor sanctions generally have no significant effect on the domestic policy of the sanctioned country, as shown in Fig. 1. This can be explained by the priority given to security issues at the expense of inclusion, or by the desire of authoritarian or patriarchal regimes to take advantage of the crisis to strengthen their control and marginalize women in decision-making processes. However, as the intensity of sanctions increases, the negative effect of terrorism on women's representation appears to diminish. Stricter sanctions exert increased pressure on governments. In response to these constraints, authorities may expand women's access to political spheres by implementing specific measures, such as gender quotas or other inclusive policies, to respond to international expectations and improve their image.

However, while marginal effects show that stricter sanctions reducing the impact of terrorism on women's political representativeness, the net effect reveals that only financial sanctions and weapon sanctions are statistically significant. Furthermore, their effect is limited in time, which means that, although sanctions help to reduce the extent of the harmful effects of terrorism, their application is not sufficient to reverse the relationship; consequently, terrorism continues to have a negative impact in the long term⁷. In other words, financial sanctions and arms sanctions have a partial moderating effect, but are not sufficient to completely neutralize the long-term consequences of terrorism.

This result can be explained by the fact that these forms of sanction do not directly target the social and institutional norms that structure gender inequalities in politics. Indeed, the freezing of financial assets and arms embargoes are primarily aimed at weakening the operational and financial capacities of terrorist actors, as well as constraining the regimes or organisations that support them. However, these instruments of international policy do not alter the socio-cultural structures, institutional barriers or implicit discrimination that limit women's participation in decision-making bodies. Consequently, although they may partially reduce the intensity of violence, they do not address the root causes of gender inequality in politics.

The interaction between terrorism and military spending reduces women's political representation by 0.015 units, confirming the view in the literature that countries that increase their level of militarization tend to have higher patriarchal norms, which limits women's access to decision-making positions. This result is also confirmed by Fig. 2, which presents the results of the marginal effects resulting from this interaction and the net effect, which remains negative and statistically significant. As we can see, when the level of military spending is below 1, the impact of terrorism is relatively low, since the level of political representation is above zero. However, as a country's militarization intensifies, the level of women's representation becomes negative. A country's militarization can reduce women's political representation because it reinforces patriarchal norms associating power and security with male roles. In a highly militarized context, decision-making positions are often held by men, limiting women's access to political spheres, especially as budgetary and political priorities focus on defense rather than inclusive reforms promoting gender equality (Table 8).

4.2.2.2. Role of democracies and autocracies. In line with our estimates, we test the influence of democracy (respectively autocracy) in the relationship between terrorism and women's political representation. The data on democracy come from the Polity 5 database. It is an index with values ranging from -10 to 10. Autocratic countries are those with index values between -10 and -1, while democratic countries are those with index values between 0 and 10. The study sample is redefined on the basis of this division of countries, and the results obtained after

⁷ The net effect means that even at an average level of financial sanctions and weapons sanctions, the effect of terrorism on political representation remains negative.

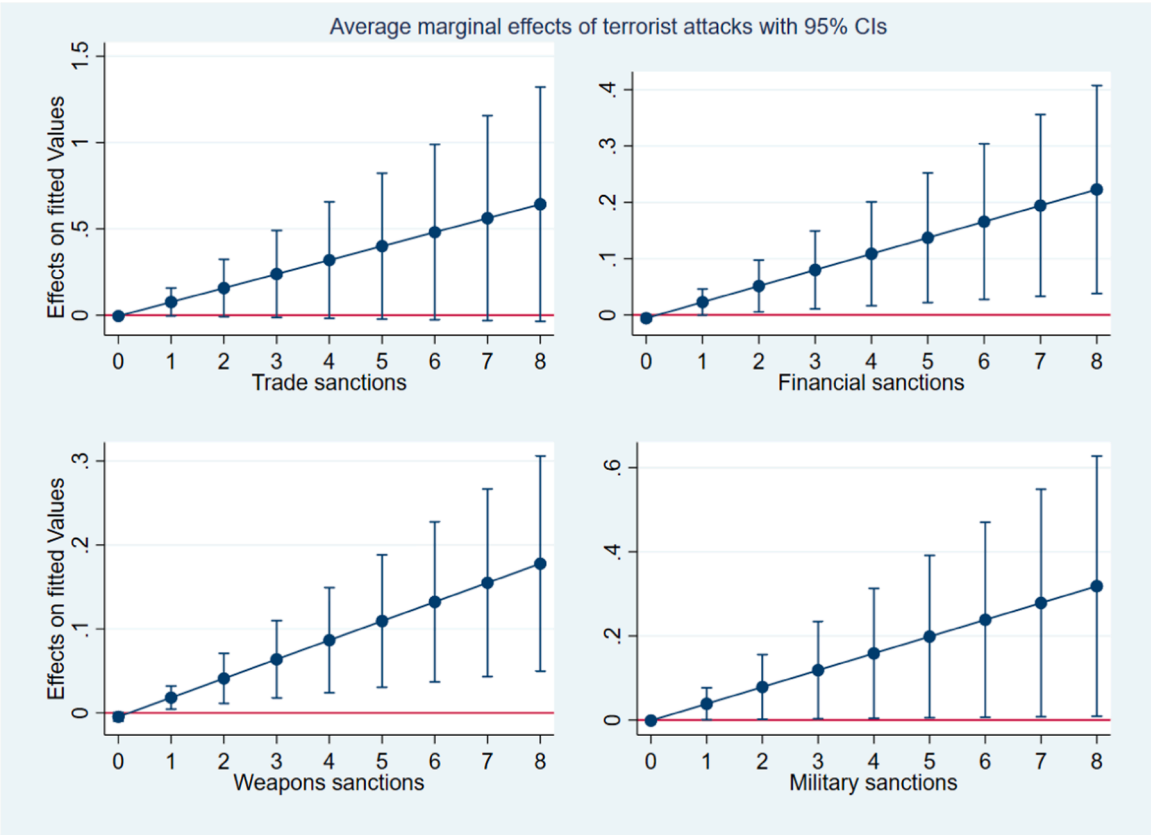


Fig. 1. Marginal effects of international sanctions.
Source : authors.

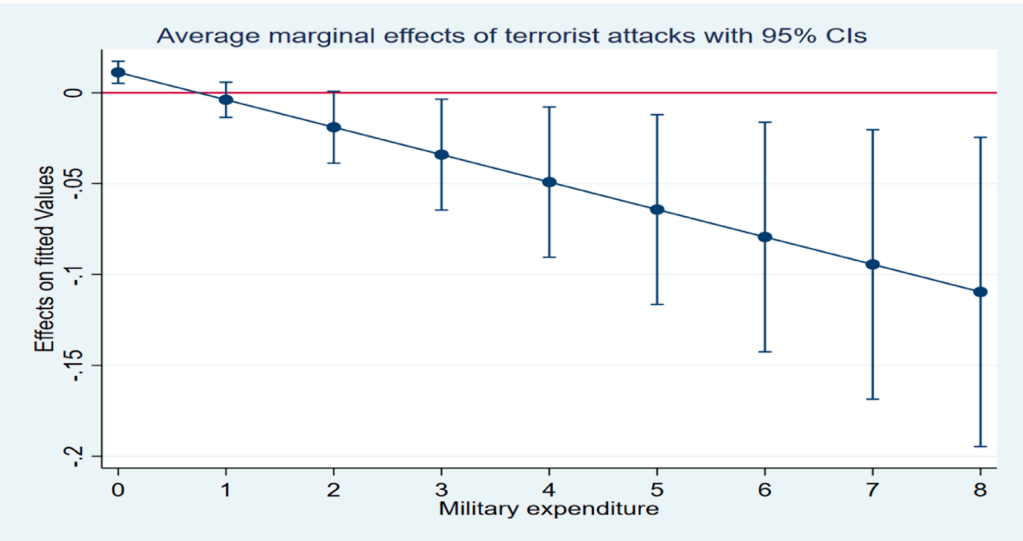


Fig. 2. Marginal effects of militarization.
Source : authors.

Table 8

Terrorism and women's representation in democracies and autocracies.

Variables	(1) Autocracy WPR	(2) Democracy
L.WPR	0.9938*** (0.0683)	0.9559*** (0.0133)
Attak	-0.0076*** (0.0014)	0.0007*** (0.0002)
Women_labor	-0.1224*** (0.0228)	-0.0424*** (0.0069)
GDP	0.1281** (0.0615)	-0.0525*** (0.0106)
GDP2	-0.0104** (0.0043)	0.0028*** (0.0006)
Globalisation	0.0250 (0.0203)	0.0070 (0.0144)
Female_pop	2.2575*** (0.5327)	0.1278** (0.0498)
Muslim_rel	-0.0995*** (0.0219)	-0.0303*** (0.0098)
Qotas	0.0255 (0.0645)	-0.0047 (0.0047)
Constant	-8.7864*** (1.9663)	-0.0744 (0.2368)
Observations	433	1313
Country	35	82
AR1	0.006	5.22e-06
AR2	0.872	0.152
Instruments	15	25
Sargan	0.993	0.803
Hansen	0.983	0.817

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively. Source : authors

estimation are presented in ⁸Table 8. From the latter, we observe that terrorism reduces WPR in autocracies, while the effect is positive in democracies. In other words, an increase in the number of terrorist attacks reduces WPR by 0.76 units in autocracies, while increasing it by 0.07 units in democracies.

This result can be explained by the fact that democracies, due to their more open institutions and the pressure of public opinion, are more likely to respond to terrorism by adopting inclusive policies to enhance political legitimacy, notably in favor of women. In contrast, autocracies, often characterized by rigid power control and higher patriarchal norms, use security crises to reinforce authoritarianism and restrict women's access to decision-making positions.

Appendix

Table A, Table B, Table C, Table D

Table A

Nakamura Nakamura endogeneity test results.

Variables	(1) Attak	(2) WPR
Attak		0.0133*** (0.0022)
L.Attak	0.8989*** (0.0092)	
R_Attak		-0.0113** (0.0047)
Women_labor	-0.1737*** (0.0589)	0.0940*** (0.0146)
GDP	-0.2321*	-0.2731***

(continued on next page)

5. Conclusion

The aim objective of this study was to analyse the effects of terrorism on women's political representation in a sample of 180 countries over the period 2000-2020. The theoretical literature has shown that there are two distinct views on the issue. On the one hand, there are studies that find that terrorism increases gender inequalities in politics, and on the other hand, those that find the opposite effect. We tested these arguments using generalized method of moments in a system, and the results revealed that terrorism increases gender inequalities in politics by reducing the rate of representation of women in political institutions. This result remained robust after a series of robustness tests including the use of alternative measures of terrorism and women's political representativeness, the decomposition of the sample by income level. Other results, however, revealed that these effects were limited in time (especially in the short term), that they differ according to the sub-regions and, above all, that the promotion of democratic norms is more likely to mitigate the effects of terrorism on women's political representation than international sanctions, which have a limited deterrent power in time. On the basis of these results, we encourage political leaders to promote the consolidation of democratic institutions and political transparency in order to foster the inclusion of women in decision-making bodies in the context of terrorism. This could include adopting laws on gender equality and improving women's access to political positions through gender quota policies, for example. These provisions can limit exposure to sanctions, which are mostly restrictive to economic development and the well-being of populations; Establish a balanced budget that limits the funds allocated to defence in favour of more resources in education, health and the reduction of gender inequalities.

CRedit authorship contribution statement

Atangana Zambo Charles Christian: Writing – original draft, Methodology, Data curation, Conceptualization. **Ongo Nkoa Bruno Emmanuel:** Validation, Supervision. **Etogo Nyaga Yves Patrice:** Validation, Supervision.

Declaration of competing interest

no conflict exists for all authors.

⁸ Meierrieks (2025) used a similar approach.

Table A (continued)

Variables	(1) Attak	(2) WPR
	(0.1391)	(0.0277)
GDP2	0.0110 (0.0079)	0.0141*** (0.0015)
Globalisation	0.1786* (0.1043)	0.4461*** (0.0298)
Female_pop	-0.0948 (0.2341)	0.5003*** (0.0776)
Muslim_rel	0.0320 (0.0532)	-0.0837*** (0.0111)
Qotas	-0.0788** (0.0357)	0.0335*** (0.0067)
Constant	1.6588 (1.1199)	-2.0619*** (0.3296)
Observations	2108	2108
R square	0.8259	0.4349

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Notes: l.Attak=instrument of terrorism; R_Attak=residual of first step.

Source: authors.

Table B

Terrorism and WPR: results obtained from OLS.

Variables	(1) WPR	(2)	(3)	(4)	(5)	(6)	(7)
Attak	0.0116*** (0.0025)	0.0206*** (0.0022)	0.0226*** (0.0021)	0.0112*** (0.0021)	0.0102*** (0.0020)	0.0092*** (0.0020)	0.0121*** (0.0020)
Women_labor		0.1602*** (0.0112)	0.1782*** (0.0122)	0.1554*** (0.0117)	0.1342*** (0.0113)	0.0874*** (0.0128)	0.0973*** (0.0143)
GDP			-0.0055 (0.0376)	-0.2329*** (0.0312)	-0.2703*** (0.0308)	-0.2859*** (0.0310)	-0.2403*** (0.0283)
GDP2			0.0014 (0.0022)	0.0085*** (0.0018)	0.0116*** (0.0017)	0.0122*** (0.0017)	0.0123*** (0.0015)
Globalisation				0.7044*** (0.0290)	0.6429*** (0.0308)	0.6397*** (0.0316)	0.4387*** (0.0291)
Female_pop					0.7565*** (0.0545)	0.5744*** (0.0548)	0.4743*** (0.0788)
Muslim_rel						-0.1008*** (0.0113)	-0.0806*** (0.0109)
Qotas							0.0327*** (0.0068)
Constant	0.7157*** (0.0101)	0.1221*** (0.0439)	0.0000 (0.1775)	-1.3459*** (0.1478)	-3.8875*** (0.2151)	-2.8690*** (0.2332)	-2.0811*** (0.3336)
Observations	3,600	3,480	3,425	3,396	3,396	3,298	2,107
R-square	0.1345	0.1014	0.1276	0.3301	0.3742	0.4059	0.4345

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source: authors.

Table C

Terrorism and WPR in subregions.

Variables	(1) America WPR	(2) Asia_Pacific	(3) Europa	(4) MENA	(5) SSA
L.WPR	0.9471*** (0.0148)	0.9445*** (0.0385)	0.9723*** (0.0263)	1.0764*** (0.1145)	0.9578*** (0.0270)
Attak	-0.0047*** (0.0014)	0.0031 (0.0042)	0.0015 (0.0026)	-0.0076 (0.0075)	0.0099 (0.0069)
America	0.0169*** (0.0031)				
Attak*America	0.0384** (0.0182)				
Asia_Pacific		0.0128* (0.0066)			
Attak*Asia_Pacific		-0.0194*** (0.0056)			
Europa			0.0008 (0.0051)		
Attak*Europa			0.0107* (0.0062)		

(continued on next page)

Table C (continued)

Variables	(1) America WPR	(2) Asia_Pacific	(3) Europa	(4) MENA	(5) SSA
MENA				0.2781 (0.6783)	
Attak*MENA				-0.1025* (0.0614)	
SSA					-0.0145*** (0.0053)
Attak*SSA					-0.0315** (0.0145)
Total effect	0.0338* (0.0179)	-0.0162*** (0.0041)	0.0123** (0.0052)	-0.0216** (0.0093)	-0.0216** (0.0093)
Baseline control variables	Yes				
Constant	0.6357 (0.4520)	0.4901 (0.8340)	-2.0338*** (0.4817)	18.7752 (12.1615)	0.4179 (0.5081)
Observations	2,107	2,107	2,107	2,107	2,107
Country	106	106	106	106	106
AR1	3.23e-08	1.13e-07	5.55e-08	4.30e-06	4.58e-08
AR2	0.639	0.850	0.748	0.274	0.675
Instruments	28	21	24	21	18
Sargan	0.880	0.732	0.818	0.984	0.935
Hansen	0.917	0.415	0.555	0.973	0.927

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source: authors.

Table D

Delayed effects of terrorism on women's political representativeness: a short- and medium-term analysis.

Variables	(1) WPR	(2)
L.WPR	0.9381*** (0.0194)	0.9715*** (0.0076)
L2.Attak	-0.0023*** (0.0007)	
L5.Attak		0.0013*** (0.0002)
Baseline control variables	Yes	
Constant	-0.7112*** (0.2698)	0.9212*** (0.2146)
Observations	2,002	1,687
Country	106	106
AR1	1.44e-07	1.51e-06
AR2	0.683	0.432
Instruments	23	26
Sargan	0.899	0.987
Hansen	0.505	0.919

Standard errors in parentheses. ***, **, *, significant at levels of 1 %, 5 % and 10 % respectively.

Source: authors

Countries

Afghanistan, Albania, Algeria, Andorra, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo Dem, Congo Rep, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czechia, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Eswatini, Ethiopia, Fiji, Finland, France, French Polynesia, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Islamic Rep, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan ; Kenya Korea Rep, Kosovo, Kuwait, Kyrgyz Republic, Lao PDR, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macao SAR, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Caledonia, New Zealand, Nicaraguan Niger, Nigeria, North Macedonia, Norway, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russian Federation, Rwanda, San Marino, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovak Republic, Slovenia, Solomon Islands, Somalia, South Africa, South Sudan, Spain, Sri Lanka, St Lucia, Sudan, Suriname, Sweden, Switzerland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkiye, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Vanuatu, Viet Nam, West Bank and Gaza, Yemen, Zambia, Zimbabwe.

Bibliography

- Africa Barometer, 2024. Women's Political Participation. <https://doi.org/10.31752/idea.2024.46>.
- Annan, J., Donald, A., Goldstein, M., Martinez, P.G., Koolwal, G., 2021. Taking power: women's empowerment and household well-being in Sub-Saharan Africa. *World Dev.* 140, 105292.
- Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment Eq.s. *Rev. Econ. Stud.* 58 (2), 277–297.
- Arellano, M., Bover, O., 1995. Another look at the instrumental variable estimation of error-components models. *J. Econom.* 68 (1), 29–51.
- Asaf, Y., 2017. Syrian women and the refugee crisis: surviving the conflict, building peace, and taking new gender roles. *Soc. Sci.* 6 (3), 110.
- Awoa, P.A., Ondo, H.A., Tabi, H.N., 2022. Women's political empowerment and natural resource curse in developing countries. *Resour. Policy.* 75, 102442.
- Bakken, I.V., Buhaug, H., 2021. Civil war and female empowerment. *J. Confl. Resolut.* 65 (5), 982–1009.
- Bauer, N.M., 2015. Emotional, sensitive, and unfit for office? Gender stereotype activation and support female candidates. *Polit. Psychol.* 36 (6), 691–708.
- Berkebile, R.E., 2015. What is domestic terrorism? a method for classifying events from the global terrorism database. *Terror. Polit. Viol.* 29 (1), 1–26.
- Berry, M.E., Lake, M., 2021. Women's rights after war: On gender interventions and enduring hierarchies. *Annu. Rev. Law Soc. Sci.* 17, 459–481.
- Blundell, R., Bond, S., 1998. Initial conditions and moment restrictions in dynamic panel data models. *J. Econom.* 87 (1), 115–143.
- Carson, J.V., Turner, N.D., 2022. The role of ideology in terrorist attack intentions and outcomes. *Terror. Polit. Viol.* 1–23, 0(0).
- Crenshaw, M., 1981. The causes of terrorism. *Comp. Polit.* 13 (4), 379–399.
- Eagly, A.H., Karau, S.J., 2002. Role congruity theory of prejudice toward female leaders. *Psychol. Rev.* 109 (3), 573.
- Eisinger, P.K., 1973. The conditions of protest behavior in American cities. *Am. Polit. Sci. Rev.* 67 (1), 11–28.
- Elveren, A.Y., Moghadam, V.M., 2022. Militarization and gender inequality: Exploring the impact. *J. Women. Polit. Policy.* 43 (4), 427–445.
- Enders, W., Sandler, T., Gaibullov, K., 2011. Domestic versus transnational terrorism: Data, decomposition, and dynamics. *J. Peace Res.* 48 (3), 319–337.
- Fallon, K.M., Swiss, L., Viterna, J., 2012. Resolving the democracy paradox: Democratization and women's legislative representation in developing nations, 1975 to 2009. *Am. Sociol. Rev.* 77 (3), 380–408.
- Felbermayr, G., Kirilakha, A., Syropoulos, C., Yalcin, E., Yotov, Y.V., 2020. The global sanctions data base. *Eur. Econ. Rev.* 129, 103561.
- Gaibullov, K., Sandler, T., 2008. Growth consequences of terrorism in Western Europe. *Kyklos.* 61 (3), 411–424.
- Gaibullov, K., Sandler, T., 2011. The adverse effect of transnational and domestic terrorism on growth in Africa. *J. Peace Res.* 48 (3) forthcoming.
- Goetz, A.M., Hassim, S., 2003. No shortcuts to power: African women in politics and policy making, 3. Zed Books.
- Hand, A.W., Saiya, N., 2023. Democracy's ambivalent effect on terrorism. *J. Confl. Resolut.* 67 (7–8), 1618–1643.
- Holman, M.R., Merolla, J.L., Zechmeister, E.J., 2016. Terrorist threat, male stereotypes, and candidate evaluations. *Polit. Res. Q.* 69 (1), 134–147.
- Hughes, M.M., Tripp, A.M., 2015. Civil war and trajectories of change in women's political representation in Africa, 1985–2010. *Soc. Forces* 93 (4), 1513–1540.
- Hughes, M.M., 2009. Armed conflict, international linkages, and women's parliamentary representation in developing nations. *Soc. Probl.* 56 (1), 174–204.
- Inglehart, R., Norris, P., 2003. *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- Joshi, M., Olsson, L., 2021. War termination and women's political rights. *Soc. Sci. Res.* 94, 102523.
- Kim, N.K., Kang, A.J., 2022. External threat environments and individual bias against female leaders. *Political. Sci. Res. Methods* 10 (1), 1–17.
- Kim, N.K., 2024. Does war improve women's political representation? *Res. Polit.* 1–9.
- Kirilakha, A., Felbermayr, G.J., Syropoulos, C., Yalcin, E., Yotov, Y.V., 2021. The Global Sanctions Data Base (GSDB): an update that includes the years of the Trump presidency. *Research handbook on economic sanctions*. Edward Elgar Publishing, pp. 62–106.
- Kpodar, K., 2007. *Manuel d'initiation à Stata (Version 8)*. Computer Programs, EconWPA, CERDI-CNRS.
- LaFree, G., Dugan, L., 2007. Introducing the global terrorism database. *Terror. Polit. Viol.* 19, 181–204.
- La Porta, R., Lopez-de Silanes, F., Shleifer, A., Vishny, R., 1999. The quality of government. *J. Law, Econ., Organiz.* 15 (1), 222–279.
- Laster, K., Erez, E., 2021. *Gender and Terrorism. Theories of Terrorism*. Routledge, pp. 119–150.
- Lawless, J.L., 2004. Women, war, and winning elections: Gender stereotyping in the post-September 11th era. *Polit. Res. Q.* 57 (3), 479–490.
- Li, Q., 2005. Does democracy promote or reduce transnational terrorist incidents? *J. Confl. Resolut.* 49 (2), 278–297.
- McAdam, D., 1982. *Political Process and the Development of Black Insurgency, 1930–1970*. University of Chicago Press, Chicago.
- Meierrieks, D., Renner, L., 2023. Islamist terrorism and the status of women. *Eur. J. Polit. Econ.* 78, 102364.
- Meierrieks, D., 2025. The effect of terrorism on economic inequality in democracies and non-democracies. *Eur. J. Polit. Econ.* 86, 102640.
- Mueller, J.E., 1970. Presidential popularity from Truman to Johnson. *Am. Polit. Sci. Rev.* 64 (1), 18–34.
- Nguyen, T.T., Do, M.H., 2021. Impact of economic sanctions and counter-sanctions on the Russian Federation's trade. *Econ. Anal. Policy.* 71, 267–278.
- Piazza, J.A., 2007. Draining the swamp: Democracy promotion, state failure, and terrorism in 19 Middle Eastern countries. *Stud. Confl. Terror.* 30 (6), 521–539.
- Poloni-Staudinger, L., Ortals, C.D., 2013. *Terrorism and Women Political Elites. Terrorism and Violent Conflict: Women's Agency, Leadership, and Responses*, pp. 69–88.
- Rink, U., Barros, L., 2021. Spending or saving? Female empowerment and financial decisions in a matrilineal society. *World Dev.* 141, 105342.
- Roodman, D., 2009. How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata J.* 9 (1), 86–136.
- Sharma, E., 2020. Women and politics: A case study of political empowerment of Indian women. *Int. J. Sociol. Soc. Policy* 40 (7/8), 607–626.
- Stanton, J.A., 2013. Terrorism in the Context of Civil War. *J. Polit.* 75 (4), 1009–1022.
- Sundström, A., Paxton, P., Wang, Y.T., Lindberg, S.I., 2017. Women's political empowerment: A new global index, 1900–2012. *World Dev.* 94, 321–335.
- Syropoulos, C., Felbermayr, G., Kirilakha, A., Yalcin, E., Yotov, Y.V., 2024. The global sanctions data base-Release 3: COVID-19, Russia, and multilateral sanctions. *Rev. Int. Econ.* 32 (1), 12–48.
- Tilly, C., 1978. *From Mobilization to Revolution*. Addison-Wesley, Reading, MA, p. 349.
- Tripp, A.M., 2023. War, Revolution, and the Expansion of Women's Political Representation. *Polit. Gender* 19 (3), 922–927.
- Webster, K., Chen, C., Beardsley, K., 2019. Conflict, peace, and the evolution of women's empowerment. *Int. Organ.* 73 (2), 255–289.
- World Economic Forum, 2025. *Global Gender Gap Report 2025*. World Economic Forum, 1 Gender Gap Report 2025 |.