

# Representation in times of crisis: Women's executive presence and gender-sensitive policy responses to crises

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*This paper shows how the gender composition of executive government impacts national responses to crises through the case study of the COVID-19 pandemic. Building on descriptive accounts of women's underrepresentation in COVID-19 decision-making I consider the causes and consequences of their (non)presence. Using data from the UN COVID-19 Global Gender Response Tracker, I find that (i) across 62 countries, women average 25% of members of government taskforces responding to the crisis and are siloed into advisory as opposed to decision-making positions. (ii) Women leaders shape who is present in policy-making, and policy outcomes. Women-led countries, although limited in number, have higher proportions of women on taskforces, especially decision-making ones. A country being woman-led has a large, although non-significant, positive effect on whether a policy response is gender-sensitive, whilst a higher proportion of women on all taskforces combined has a significant, yet small, positive effect.*

**Key Words:** COVID-19, Crises, executive leadership, gender, substantive representation

## 1. Introduction

The composition of executive government shapes outcomes and response to a crisis (Boin, McConnell, and Hart 2021), in the case of this paper, the inclusion of women in executive

office is found to have an impact on the gender-sensitive policy outcomes and the composition of decision-making bodies responding to crises. Against conventional wisdom - that masculine leadership styles and male leaders are desired in times of crisis (Falk and Kenski 2006; Holman, Merolla, and Zechmeister 2016; Lawless 2004) - a consistent media message during the Coronavirus pandemic has been that female leaders are outperforming their male counterparts in crisis response, with particular praise for their apparent compassionate approach (Johnson and Williams 2020). Early evidence suggests that, although the correlation between female leaders and lower coronavirus deaths is spurious (Piscopo 2020), women's presence in executive government may impact the gendering of crisis policy response. On balance, when women are present in decision-making, there are better outcomes for women, although this link is mediated by context and institutional factors especially at the executive government level (Childs and Lovenduski 2013; O'Brien and Reyes-Housholder 2020). Simultaneously, crises can affect the presence of women in decision-making: crises can be moments of opportunity where women can gain executive office, what is known as the 'glass cliff' phenomenon (Ryan and Haslam 2005), yet it is also theorised that male leadership will be preferred when in high threat conditions as voters prefer 'strong' leadership stereotypically associated with masculinity and men (Holman, Merolla, and Zechmeister 2016).

In this paper, I use the case study of the COVID-19 pandemic to further explore the relationship between women's presence in executive government and gender-sensitive policy responses in times of crisis. Using data from the COVID-19 Global Gender Response Tracker compiled by the UN Development Programme and UN Women, this paper examines women's representation in executive government and on task forces and gender-sensitive policy responses across 62 countries. It builds on the current descriptive accounts of women's presence in executive leadership and policy-making during COVID-19 which show that

women are under-represented in government responses and on COVID-19 task forces (van Daalen et al. 2020) to consider the causes and consequences of their (non)presence. Taking these descriptive results further, this paper examines the role of women's leadership in the composition of these task forces and asks 'do women shape crisis response?'

The results add evidence to our understanding of the complex link between women's presence in executive government and the substantive representation of women in policy outcomes. Consistent with the under-representation of women across democratic institutions, the paper confirms that women are under-represented in response to the COVID-19 crisis. Across the 62 countries in the analysis, on average only 25% of task force members are women. Women are also siloed into advisory as opposed to decision-making task forces suggesting they are more often placed in positions of limited power vis-à-vis their male peers. Women-led countries, although small in number, have notably higher representation of women on task forces. Regression analysis finds that having a woman leader compared to a man increases the average number of women on a country's COVID-19 task forces by 5.8 percentage points and this is driven by women leaders appointing more women to decision-making roles. Having a woman leader compared to a man increases the average number of women on decision-making task forces by 15.4 percentage points. The analysis then interrogates the effect of women's representation on these task forces and in executive leadership on whether policy responses to the crisis are gender-sensitive. It finds that the presence of women does matter. A country being woman led has a large, although non-significant, positive effect on whether a policy response is gender-sensitive, (having a woman leader increases the probability a policy is gender-sensitive by 11.2 percentage points). Whilst a higher proportion of women on all COVID-19 task forces combined has a significant, yet small, positive effect on the likelihood a COVID-19 measure is gender-sensitive.

Overall, women's presence in crisis decision-making can increase the likelihood of gender inequality being addressed in policy responses. The paper makes several contributions to current understandings of diversity, executive government, and crisis response. Firstly, by examining task forces a more complete picture is given of executive government in response to the crisis. These task forces have been identified as important actors in COVID-19 responses in both decision making and advice to executives and have been shown to lack diversity (van Daalen et al. 2020). This paper delves more into the causes and consequences of this (non)presence of women in executive policymaking providing further insight into who has given a voice in crisis response, and the possible impact of these voices. Secondly, the paper contributes to the literature on the link between women's representation at executive level and better policy outcomes for women, which is underexamined and contested in current work (O'Brien and Reyes-Housholder 2020). I also offer a cautionary note – there are good normative and empirical reasons for making women present in decision-making, but we should also question why men are failing to address gender issues at the same level when the gendered consequences of COVID-19 have been part of the national and international discourse (Harman 2021).

## **2. Literature Review**

Work on understanding varying response to crisis has shown how the role and composition of executive government affects policy response to crises. Institutional approaches have focused on how structural factors may shape or predict responses such as majoritarian or consensual systems, prime ministerial versus presidential and institutional veto points (e.g., Jae Moon et al. 2021; Parrado and Galli 2021); whilst work on crisis management has considered the

executive as political agents, part of a network of situated actors whose role has been more of a 'black box' but especially important in narrative and coordination of the crisis (Boswell et al. 2021; A. Stark 2011). Executive leadership then, shapes a country's response to a crisis, for instance in the construction of the narrative (A. Stark 2011) or in decision-making style (Boswell et al. 2021). We also know that executive government is a gendered institution and that crises are highly gendered events (Harman 2021; Jalalzai 2008; Sykes 2013). Simultaneously, political context matters and can impact the composition of government. For instance, crises can affect the presence of women in decision-making to begin with: crises can be moments of opportunity where women can gain executive office, what is known as the 'glass cliff' phenomenon (Ryan and Haslam 2005). Yet it is also theorised that male leadership will be preferred when in high threat conditions as voters prefer 'strong' leadership stereotypically associated with masculinity and men (Holman, Merolla, and Zechmeister 2016). It is logical also that issues of diversity may be side-lined during crises as the 'tyranny of the urgent' pushes out what are seen as less important issues (Harman 2021). To fully understand executive leadership in times of crisis the role of gender must be accounted for in both the composition of the executive and relative decision makers and the subsequent policy response.

In terms of government composition, on balance, when women are present in decision-making, there are better outcomes for women (Childs and Lovenduski 2013; O'Brien and Reyes-Housholder 2020). There are good theoretical and empirical grounds to suppose that women's presence in government and executive bodies responding to the crisis may lead to more gender-sensitive policy outcomes. Feminist scholars have long linked women's descriptive representation ('who' representatives are) to the substantive representation (the actions of the representatives) of women's issues and interests; as Phillips (1998, 66) writes, "[t]here are particular needs, interests, and concerns that arise from women's experience, and these will be

inadequately addressed in a politics that is dominated by men”. In fact, we can theorise of crises as one of the four contexts in which Mansbridge contends that disadvantaged groups benefit from descriptive representation – “innovative thinking in contexts of uncrystallized, not fully articulated interests” (Mansbridge 1999, 628). In this context Mansbridge proposes descriptive representation will enhance substantive representation by improving deliberation. In times of crisis, it seems logical that we will see even greater instances of new issues emerging and taking shape on the political agenda which previously political parties may have not addressed.

Whilst there is mixed empirical evidence on this link, on balance, when women are present in decision-making bodies, the consequence is better outcomes for women (Annesley et al. 2014; Catalano 2009; Celis 2013; Taylor-Robinson and Heath 2003; Wängnerud 2009). Of particular relevance to COVID-19, higher numbers of women in office has been found to be correlated with the promotion of maternity and childcare leave policies (Kittilson 2008; Svaleryd 2009); policies promoting maternal employment (Weeks 2017); higher investment in public health infrastructure (Bhalotra and Clots-Figueras 2014; Clayton and Zetterberg 2018); and higher funding for social welfare (Holman 2014).

The link, however, is imperfect as ‘good’ representation may vary dependent on many factors, such as context, institutions, and the diversity of female representatives (Childs and Lovenduski 2013). Insights to date are primarily from legislative studies. By exploring the relationship between women in executive office and gender-sensitive policy responses to COVID-19 this paper furthers our understandings of the relationship between women’s descriptive and substantive representation at the executive level. The more limited body of empirical literature on whether women in executive office promote women’s issues has mixed results (O’Brien and Reyes-Housholder 2020). Explanations for this include the more

personality-led nature of executive government but more often the institutional and contextual barriers which may influence the link between descriptive and substantive representation. Women in executive office may have less room for manoeuvre in terms of promoting women-friendly issues. For instance, Sykes (2013) suggests that Anglo institutions encourage female Cabinet ministers to put aside feminine concerns and agree to the masculinised norms of governance. There is evidence that women's greater presence in cabinets is positively correlated with policies on paid employment during motherhood (Atchison 2015; Atchison and Down 2009) and greater attention to gender-equality issues such as reproduction and gender-based violence (Annesley et al. 2014). Yet, in comparison to female legislators, women chief executives appear to pursue women-friendly and gender equality legislation less and there is greater variation in their efforts to do so (O'Brien and Reyes-Housholder 2020; Sykes 2013).

## **2.2. COVID-19**

The Coronavirus pandemic offers a valuable case for examining questions of representation in times of crisis. It is a crisis that, despite variations in levels of intensity, is hitting all countries, allowing for large cross-national studies of executive governments' representation and response. Public health scholars have long pointed out the explicit gendered costs of health crises and how these effects may be compounded if gender inequalities are not considered in policy responses. As with previous major health crises, such as the Ebola and Zika epidemics, COVID-19 has aggravated a myriad of gendered inequalities (Davies and Bennett 2016; L. Stark et al. 2020). With school closures and 'stay at home' orders a ubiquitous tool against the spread of the virus, inequalities in the division of domestic labour and childcare have had negative impacts on women. Smith et al's (2021) study of China, Hong Kong, Canada and the UK found that women's unequal care burden, both in unpaid domestic labour and their over

representation in health and social care jobs, disproportionately and negatively impacted their financial and mental wellbeing during the pandemic. Women were more likely to have left or to consider leaving paid employment; for instance, UK mothers are more likely than fathers to have quit or lost their job since the beginning of the pandemic, and are spending less time on paid work and more on household responsibilities than fathers (Andrew et al. 2020). Instances of domestic violence have seen significant increases in lockdown (Williamson, Lombard, and Brooks-Hay 2020). Moreover, women make up larger numbers of health and social care workers on the front lines of the pandemic making them more vulnerable to infections (J. Smith et al. 2021).

A common response to the problem is to count women in – premised on the assumption that the presence of women in policy making around a crisis will ensure that gender is not overlooked in the response (Harman 2021). The first analysis of this paper considers whether women have been included in government responses. Secondly, as governments negotiate the impact of COVID-19 – the primary effects on health and the secondary long-term social, economic, security and health impacts – a gender lens can be, and has been, built into policy measures; what is termed taking a ‘gender-sensitive’ approach. The UN Development Programme defines a gender-sensitive approach to COVID-19 as one that “[seeks] to directly address the risks and challenges that women and girls face during the COVID-19 crisis” (Santos et al. 2021, 1). Aggregate data from the UN Women and UN Development Programme (UNDP)’s ‘Gender Tracker’ finds that across 2,500 COVID-19 policy response measures in 206 countries and territories significant gaps remain in how and if countries are addressing the gendered effect of the crisis. Whilst 135 countries or territories have adopted around 700 measures that target violence against women and girls during the pandemic, many have been small in scale or temporary. Furthermore, broader social protection and jobs responses have



been largely inadequate in tackling women's economic insecurity or issues of unpaid care with 82% of measures not addressing either (Staab, Tabbush, and Turquet 2020).

As with differing approaches across the globe to restrictions to curb infections we have seen variation in government responses to address the further social, economic, security and health effects of COVID-19 in the short and long-term and in the recognition of the gendered impacts of the pandemic within these responses (Staab, Tabbush, and Turquet 2020). A possible explanation for variation in whether government's policy responses to the pandemic are 'gender-sensitive' is women's descriptive representation, both at the executive level and on national COVID-19 task forces set up by national governments to manage or advise on the crisis. Theoretical and empirical literature contends that the greater descriptive representation of women leads to better policy outcomes for women (Hessami and da Fonseca 2020). Yet, it is interesting that in comparison to previous health emergencies the gendered inequalities of the pandemic have been prevalent in the public discourse (Harman 2021). In the context of understanding government responses it could be that this public discourse could weaken that link between descriptive and substantive representation. If the possible gendered effects of COVID-19 are part of the public discourse, then should we not be expecting male leaders to also act upon these concerns?

### *3. Hypotheses*

Given the consistent under-representation of women in politics, in both executive and legislative bodies (Paxton, Hughes, and Barnes 2020) it is not surprising that women have similarly been shown to underrepresented in the bodies set up to tackle the COVID-19 crisis. Case studies of single countries have shown women to be under-represented in government

responses to COVID-19 (J. C. Smith 2020) as well as in global responses, for instance women only make up 20% of the World Health Organization's own Emergency Committee on COVID-19 (Women in Global Health n.d.). And UNDP has publicised how women are under-represented on COVID-19 task forces. In the descriptive analysis of the countries included in this analysis it logically follows that results will be similar – women will be underrepresented and concentrated in advisory roles (van Daalen et al. 2020), therefore simple hypotheses are still made about the descriptive analysis (H1 and H2). The analysis takes these descriptive accounts further by conducting exploratory analysis on the predictors of the composition of these task forces and the consequences of women's presence across executive government including in these COVID-19 task forces on policy outcomes.

Institutional contexts matter for the representation of women (Lowndes 2020). There is no reason to think this would be different for COVID-19 task forces. It is likely that women's numbers will vary depending on the type of task force. The UNDP categorises task forces as decision-making or advisory. Any taskforce with government members is categorised as a decision-making one. Typically, these task forces are made up of ministers, public health official or other high-level government representatives. Expert-advisory task forces are those which consist of experts outside of government such as academics, medical doctors or other public health officials.

It is expected that, as shown in previous descriptive accounts, women's representation will be higher on advisory rather than decision-making task forces in the sample of countries (van Daalen et al. 2020). There are several reasons for this hypothesis which relate to the supply and demand factors that influence women's presence in political bodies (Norris and Lovenduski 1995). Firstly, on the demand side more often gatekeepers allow for women to gain power

when it is diluted in some way, such as women are more likely to govern in Parliamentary as opposed to Presidential systems and, in dual executive systems, are often relegated to the weaker position (Jalalzai 2008, 2013). Similarly, women are siloed within Cabinets into what are seen as less powerful and more feminine Cabinet positions (Annesley, Gains, and Franceschet 2019). We may expect to see similar patterns when appointing women to COVID-19 task forces – women will be appointed more to less powerful advisory bodies as opposed to decision-making task forces.

Secondly, in terms of supply women remain underrepresented in formal electoral politics which is the more likely supply pool for decision-making bodies which draw on both elected and non-elected government officials. Advisory bodies are made up of more diverse range of officials from different sectors such as medicine, public health, and academia. Thus, the supply pool will be wider for these bodies and gatekeepers more able to appoint women.

*H1: Women will be under-represented on Covid-19 Task Forces*

*H2: Women will form a higher proportion of the membership of expert-advisory COVID-19 task forces compared to decision-making task forces*

There are good theoretical and empirical bases to suppose that there will be a positive link between the descriptive presence of women in executive leadership and on COVID-19 task forces and the likelihood policy responses to the crisis are gender-sensitive. Whilst the link between the two may be imperfect and dependent on intervening factors such as context, institutions, and the diversity of female representatives (Childs and Lovenduski 2013). There is evidence to suggest that women's greater presence in executive governance is positively

correlated with gender sensitive policies such as those on paid employment during motherhood (Atchison 2015; Atchison and Down 2009), reproduction rights, and gender-based violence (Annesley et al. 2014). The COVID-19 task forces may be a further site for women's descriptive and substantive representation, for both decision-making and advisory bodies. A diversity of representation is not just important for elected officials when it comes to public officials but is both normatively and empirically important for all bodies involved in public policy (Childs and Celis 2020). A lack of representation of women at various stages and inputs of the policy process has likely policy outcomes for public policy (Johnston 2019)

*H3a: Greater representation of women in executive government (leadership and Cabinet) will have a positive effect on the likelihood a policy response is gender-sensitive*

*H3b: Greater numbers of women on COVID-19 task forces will have a positive effect on the likelihood a policy response is gender-sensitive*

## **4. Methodology**

### **4.1 Data**

To empirically test the representation of women in times of crisis and the impact of this representation on policy responses, I rely on data from the March 2021 COVID-19 Global Gender Response Tracker, developed by the UN Development Programme (UNDP) and UN Women. The tracker is a live database, meaning the March 2021 version covers policy for the first year of the pandemic. This captures initial government responses as they worked to tackle

the crisis and mitigate any impact on the economy. The tracker contains two databases. A policy database collates all policy measures implemented worldwide by governments in response to the Coronavirus pandemic. The general measures currently included in the tracker fall under four categories: (i) social protection, (ii) labour markets, (iii) violence against women, and (iv) fiscal and economic policies. The tracker is based on publicly available information, including official government documents, media coverage, and existing policy repositories. Data is also provided by UNDP and UN Women country offices. Data collection focuses on measures taken by governments at the national or federal level. The second database monitors the number of women members of COVID-19 task forces. This data is compiled by the Gender Inequality Research Lab (GIRL) at the University of Pittsburgh in conjunction with the UNDP and UN Volunteers. The data is based on desk research of country ministerial websites, news media sources, UNDP/UN Women Country Offices, and academic or third-party agency reports.

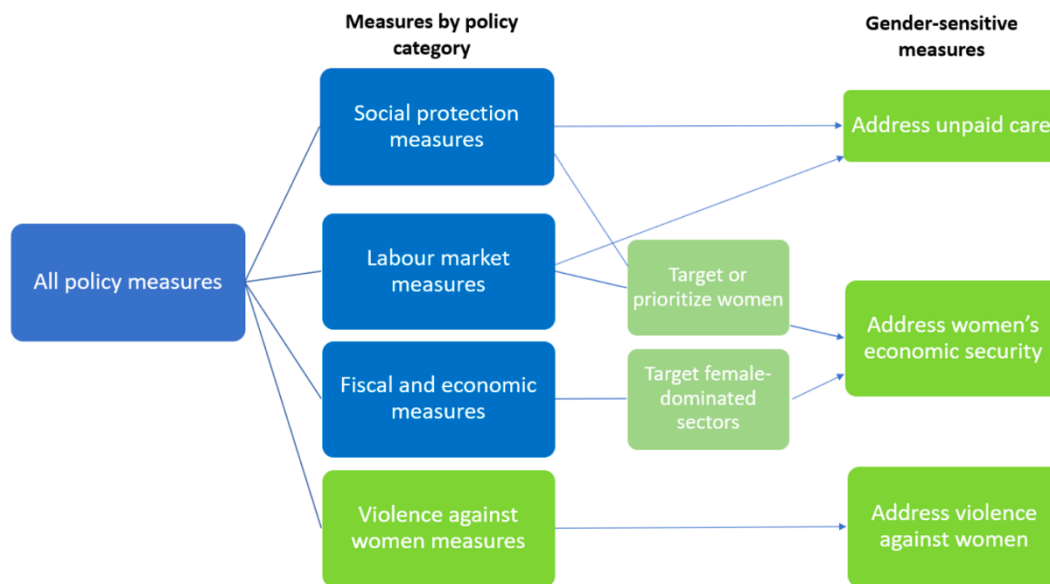
Additional datasets were used to identify further country-level variables for use in the models. These included the March 2021 REIGN database (Bell, Besaw, and Matthew 2021); OECD March 2020 V-Dem database (Coppedge et al. 2020); World Bank and UN data banks; Council on Foreign Relations' Women Power Index, Global Leader Ideology dataset (Herre 2021) and the UNDP Human Development Report Office's Gender Inequality Index.

## **4.2 Measurements**

### *Gender-sensitive Policy*

The COVID-19 Global Gender Response Tracker policy database defines gender-sensitive policy measures as, “those that seek to directly address the risks and challenges that women and girls face during the COVID-19 crisis” (Santos et al. 2021, 1). It categorises policy responses into three types of gender-sensitivity – measures that address (i) violence against women and girls, (ii) unpaid care work; or (iii) economic insecurity. The detailed classification of these policies is included in Appendix 1. The measures included vary in their scope and size and are coded as gender-sensitive if they actively address female inequality – this may be directly targeting or prioritising women or indirectly through targeting female-dominated industries. For example, in Australia’s social protection policy response to COVID-19 a provision was included providing an extra 130.4 million AUD for Paid Parental Leave to support families whose employment has been impacted by COVID-19. This would be categorised as a gender-sensitive policy on economic insecurity which directly targets or prioritises women. Figure 1 outlines the structure of the policy measures in the tracker. Policies that directly harm women will not be captured but simply coded as not gender sensitive.

**Figure 1. Structure of the policy measures in the COVID-19 Global Gender Response Tracker Policy Response Database**

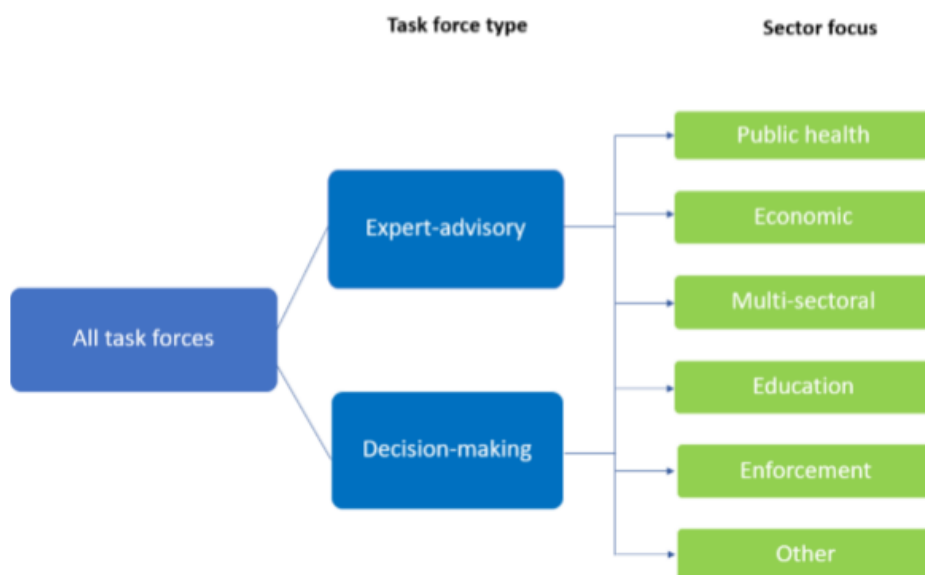


It should be noted that there are some limitations to the measures. Most notably, when considering the number of individual measures, the measures included in the tracker vary in scope, scale and duration. Some measures may be relatively small-scale whereas others may be large. For example, the policy measure included may be a large new budgetary announcement, such as Bangladesh implementing an emergency cash programme for poor urban workers of around 350 million US Dollars, or a smaller extension of previous policies to respond better to COVID-19 such as Austria extending online support and service hours of domestic violence support services. For this reason, analysis is kept to the individual policy level rather than creating an aggregate measure of the level of gender sensitivity of a country's response e.g., percentage of a country's policies which are gender-sensitive. Secondly, data is only available at the national level meaning regional policies which may often be sites of crisis response are not included, limiting analysis to only national level. Thirdly, it is a 'living database' with measures regularly added, updated, and validated. The data used in this paper is the database as of March 2021 therefore captures the first year of response to the crisis. As with all policy trackers there may be gaps in the data due to unavailable data. Despite these

limitations, it is the best source to provide insight into the relationship between women’s descriptive representation and gendered responses to the Coronavirus pandemic.

### *COVID-19 Task Forces*

**Figure 2. Structure of COVID-19 Task Forces**



The second database in the COVID-19 Global Gender Response Tracker contains data on the number of women on COVID-19 task forces. A COVID-19 Task Force is defined as “any executive branch institution (ad hoc or permanent) that was created by the national government in response to the COVID-19 pandemic” (Santos et al. 2021, 6). These are mainly new institutions, any bodies that were created before December 2019 and are still involved in the pandemic response are excluded expect when a COVID-19-specific sub-committee was



identified<sup>1</sup>. Task forces are categorised into expert-advisory and decision-making (Figure 2). Decision-making task forces are categorised as those that include government representatives, typically these are composed of ministers, public health officials or other high-level government representatives. Expert-advisory task forces include typically academics, medical doctors, or public health experts from outside of government agencies. Most common was to have a decision-making task force, only 12 countries had only an expert or advisory task force and no decision-making body. Overall decision-making task forces were more common than expert or advisory (52 countries had decision-making task forces and 26 had expert or advisory).

### *Women's Political and Social Equality*

Data on the sex of the Head of Government for countries was collated from the REIGN database. Data was correct as of March 2021. The Head of Government is defined as the leader who tends to be primarily responsible for domestic policymaking (Herre 2021). Five of the 62 countries included in the final sample have women heads of government. The percentage of women in Cabinet (as of 1<sup>st</sup> January 2021) was included as an additional measure of women's executive presence. The percentage of women in Parliament (as of 1<sup>st</sup> January 2021) is also included as a control measure for women's political equality and representation. Analysis is kept to the executive level as this paper is concerned with understanding the role of women at this level as the composition of executive government has been shown to shape outcomes and responses to crisis (Boin, McConnell, and Hart 2021).

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<sup>1</sup> Task Forces are limited to national level, subnational, regional, or international responses are excluded.

In addition, the baseline policy landscape for gender equality varies between countries. For instance, some countries may have few COVID-19 related gender-sensitive measures but have established gender-sensitive policies that may address the inequalities of the pandemic. To account for countries' pre-existing gender equality policy the UNDP Human Development Report Office's Gender Inequality Index (GII) is used, as recommended by the authors of the COVID-19 Global Gender Response Tracker database. The GII ranges from 0 to 1 with higher values meaning greater inequality between men and women.

### *Country Level Indicators*

Additional data was collated on country level socio-economic indicators. It has been suggested the correlation between female leaders and lower COVID-19 death rates is confounded by women being in power in wealthy democracies with high state capacity. Similar measures to those used in Piscopo's (2020) study to control for state capacity and wealth. Firstly, from the 2020 OECD V-Dem indicators measures of transparent laws with predictable enforcement and impartial public administrations were taken. These are measured via expert ratings on a 4-pt scale where 4=most transparent or most impartial). The type of political system was also included (presidential or parliamentary) given that system types can impact crisis policy responses (Jae Moon et al. 2021; Parrado and Galli 2021) and can impact levels of women's representation (Jalalzai 2013; O'Brien and Reyes-Housholder 2020). Secondly, using UN data bank and the World Bank data 2019 GDP per capita at current US dollars was included for each country and health expenditure as % of GDP in 2018. Thirdly, leader ideology was included from Herre (2021) Global Leader Ideology dataset, ideology was classified as 'leftist', 'centrist' or 'rightist'.

## 5. Results and Analysis

For comparability, analysis was undertaken on only democratic countries (as defined in the REIGN database) and for countries which have had no change in government since the beginning of the pandemic since the policy database includes policies from across the pandemic. Overall, 62 countries are retained for analysis out of the 206 countries and nations in the database, a full list of countries and the descriptives for all countries is found in Appendix 2.

### 5.2. Women’s Representation on COVID-19 Task Forces

**Table 1. Women’s Descriptive Representation on COVID-19 Task Forces**

Average % of Women on Covid Taskforces

	<b>Mean</b>	<b>SD</b>
"All taskforces"	24.93	18.52
"Decision-Making Taskforces"	21.81	16.64
"Expert"	36.30	19.83

N Countries = 62

Basic descriptive statistics in Table 1 show the average percentage of women on COVID-19 task forces overall and by type of task force – either decision-making or expert-advisory. The ‘ideal’ result would be gender parity, i.e. 50% women, on all task forces. The results of this descriptive comparison provide initial support for Hypothesis 1 as, overall, women are under-represented on national COVID-19 task forces, making up on average a quarter of the membership of these task forces.

In line with the second hypothesis, women’s representation was lower on decision-making task forces in comparison to expert-advisory ones, with a difference of 14.5 percentage points which amounts to an average of three fewer women on decision-making task forces compared to those classed as expert-advisory.

**Figure 3. Descriptive Representation of Women on COVID-19 Task Forces by Sex of Leader**

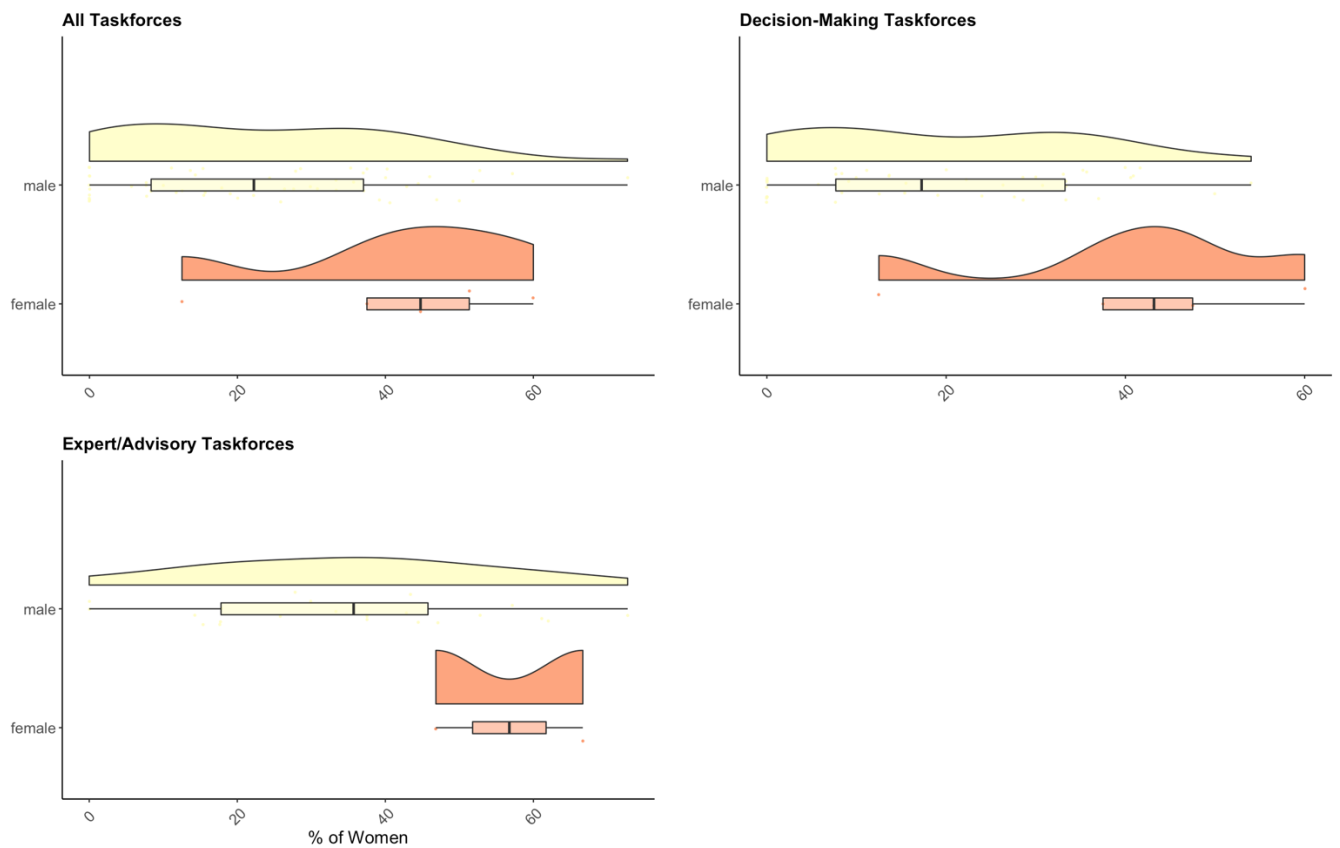


Figure 3 shows the average percentage of women on COVID-19 task forces for women-led and male-led countries. These results should be interpreted cautiously given the low N for women-led countries (n=5) given that few women occupy executive office to begin with

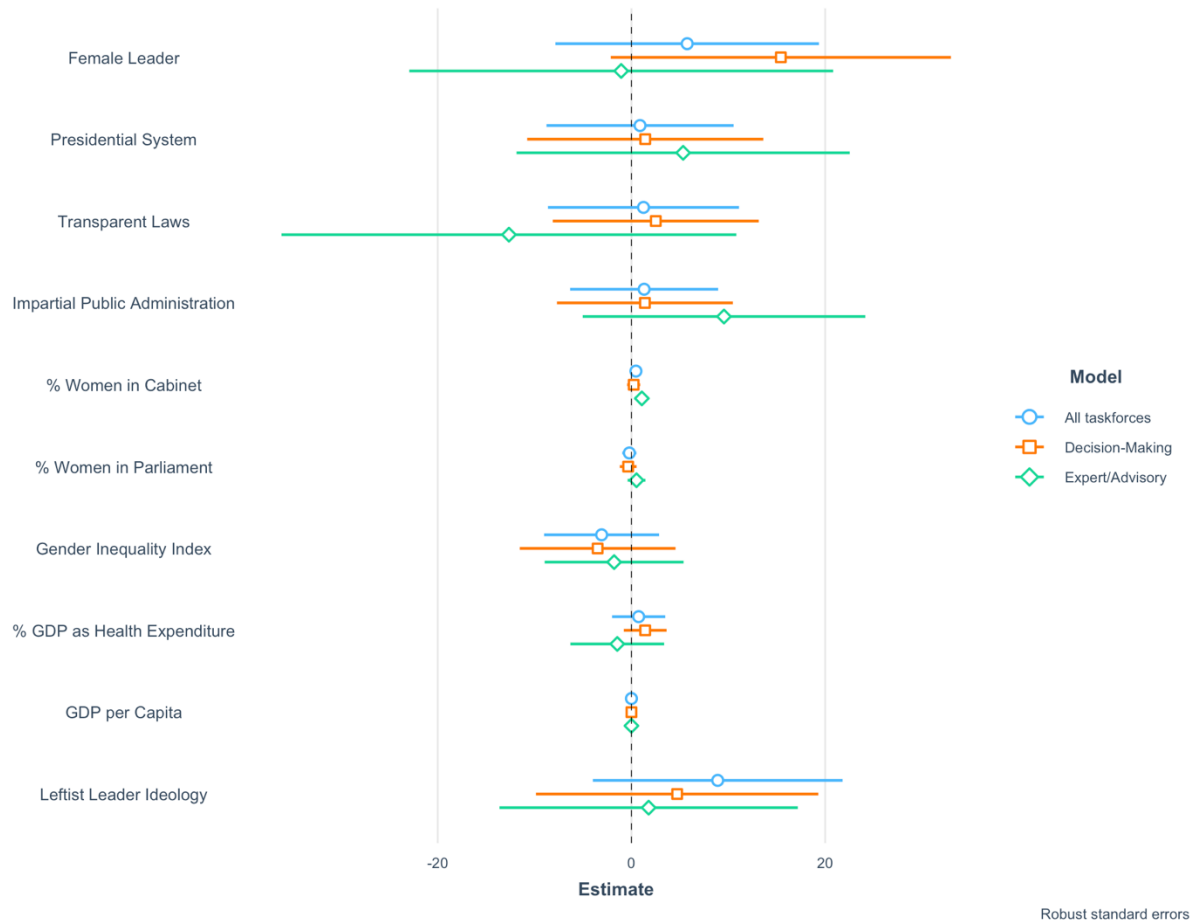
combined with the criteria applied above of no government change in the time frame studied. From this limited number there is some suggestion that female leaders appoint more women to COVID-19 task forces. The percentage of women is more dispersed for task forces in countries with a male chief executive whereas for countries with women leaders the means are clustered at the upper end of the scale. Although the highest average number of women across task forces was 72.7% in male led countries, the lowest was 0% and over two-thirds of these countries had an average of over 60% men across all task forces. For women-led countries the highest average proportion of women was 60% in Iceland and the lowest 12.5% in Bangladesh but over half (3 of the 5) countries had an average of over 40% women.

Of course, as with the relationship between women-led countries and low COVID-19 deaths, this could be a spurious correlation, not least because countries with a woman head of government are likely to have better representation of women in politics overall. Therefore, a second OLS regression was conducted with the dependent variable of the average percentage of women on a country's COVID-19 task forces overall as well as running separate models for types of taskforce (decision-making or expert/advisory) whilst controlling for a vector of country-level covariates. Independent variables include measures of female representation at the executive and legislative level, the Gender Inequality Index<sup>2</sup> as a baseline measure of a country's level of gender equality, as well as socio-economic country level control variables. Results from the model are presented in Figure 4 (full model in Appendix 3). Multicollinearity between the predictor variables was checked in a correlation matrix (Appendix 4), all values were below 0.74 and so were not deemed to be of great concern (Allison 1998).

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<sup>2</sup> GII was recoded to run from 0 to 10 in all regression models for ease of interpretation in comparison to other variables in the models

**Figure 4. OLS Regression Model: Dependent Variable Average Percentage of Women on Country’s COVID-19 Task Forces**



The results show that even when controlling for these other factors, a country having a woman leader remains a positive predictor of the proportion of women on COVID-19 task forces overall. Whilst the model estimates an effect for female leaders that does not comply with conventional levels of statistical significance ( $p < 0.05$ ), the point-estimate itself is both sizable and in the theorised direction. Having a woman leader compared to a male leader increases the average number of women on a country’s COVID-19 task forces by 5.8 percentage points. A lack of significance here may be a function of the lower N among female-led nations limiting

our ability to robustly identify coefficients that are indistinguishable from zero. Where this overall effect seems to be coming from is women leaders appointing more women on decision-making task forces. When broken down to different task forces having a woman leader has large effect on women's presence on decision-making task forces, but not expert or advisory. Having a woman leader compared to a male leader increases the average number of women on a country's COVID-19 decision-making task forces by 15.4 percentage points. This national level data provides initial support for a relationship between women's presence at executive levels of office and the appointment of women to decision-making COVID-19 task forces.

Figure 4 also shows the proportion of women in Cabinet or in Parliament does not have a notable effect on the composition of task forces. An initial analysis therefore suggests that demand rather than supply side explanations are better placed to explain the higher presence of women on advisory task forces. If supply side factors were stronger then we may expect when there are more women in government or parliament (i.e. higher supply) then women's presence on decision-making task forces would be higher. Further analysis is recommended to explore these explanations more fully.

## **5.2 Descriptive Representation and Gender-Sensitive Policies**

The second analysis in this paper tests the effect of the descriptive representation of women in executive office on the gender sensitivity of a government's policy response to COVID-19. A policy measure in the database could be defined as 'gender-sensitive' in three ways – either it addresses (i) violence against women and girls, (ii) unpaid care work; or (iii) economic insecurity. For each policy measure in the dataset a categorical variable was created coded as 1 if the policy was defined as gender-sensitive in one of these three ways and 0 if it was not.

Table 3 shows the frequency of gender-sensitive policy measures overall. In total, 45% of policy measures in the dataset included were coded as gender-sensitive.

**Table 3. Gender-sensitive Categorisation of Policy Measures**

Policy Measures by Gender Sensitivity		
"Categorisation"	N	Percent
Gender Sensitive	775	45.03
No Gender Sensitivity	946	54.97
All	1721	100.00

An OLS regression analysis on the binary dependent variable of whether a policy was gender-sensitive or not. Although the outcome variable here is binary OLS regression was used as it has been shown to give reliable coefficients for binary outcomes and effect sizes are easier to interpret (Gomila 2021). For comparison logit models are included in Appendix 5 and are not found to show any substantial differences in effect sizes or significance levels. As discussed in the methodology section, analysis was conducted at the policy rather than country level. To account for the multiple policies per country standard errors are clustered by country. The models are presented in Table 4. In the baseline model, there are no significant effects of any of the independent variables, and all effects appear to be small. Once again, factors such as the gender inequality index and political system are then included in the full model (Figure 5)<sup>3</sup>.

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<sup>3</sup> Analysis of gender-sensitivity by policy type is provided in Appendix 7 (excluding Violence against Women). Analysis suggests that economic and fiscal policy is significantly less likely to be gender sensitive.



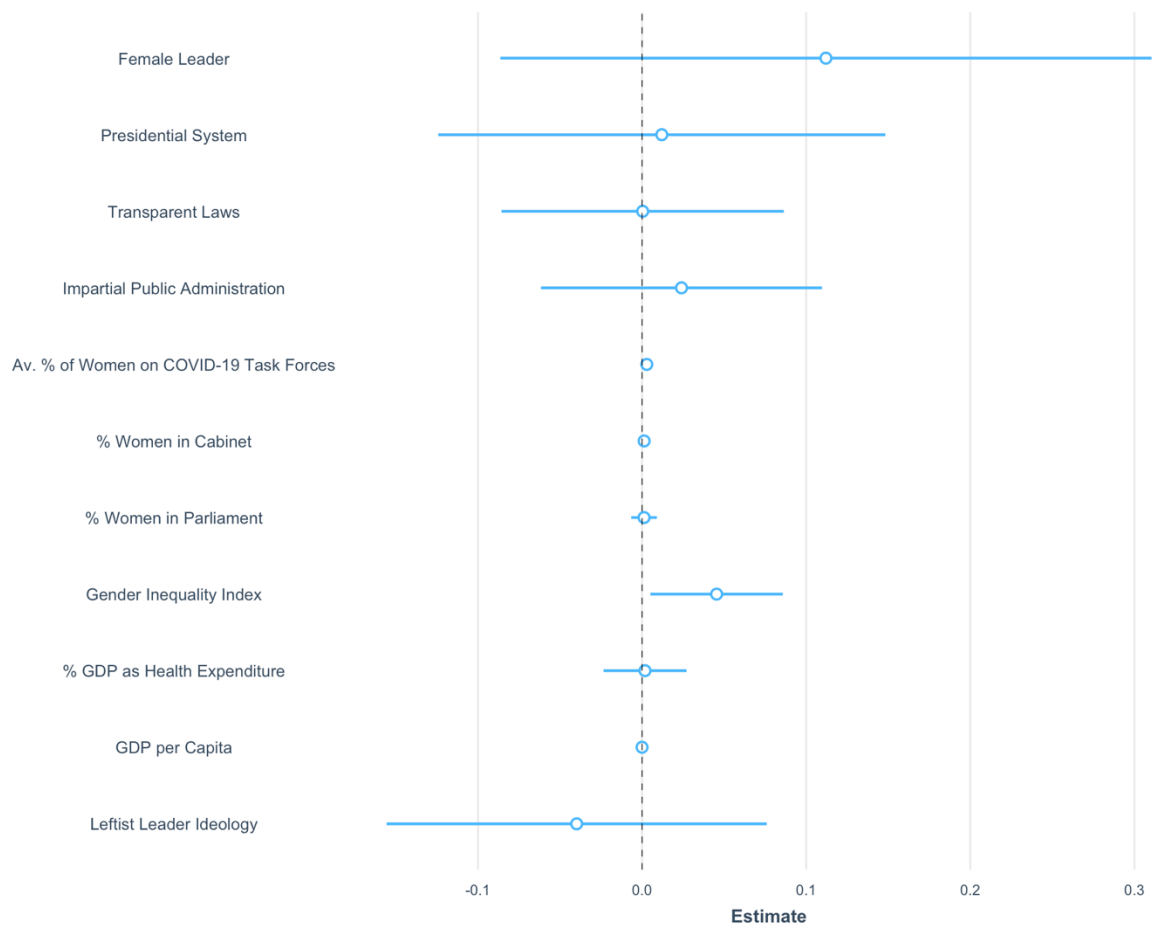
**Table 4. OLS Regression Model: Gender-Sensitive Policy Outcomes**

	Model 1	Model 2
(Intercept)	0.393***	0.119
	(0.047)	(0.180)
Female Leader	0.095	0.112
	(0.099)	(0.101)
Av. % of Women on COVID-19 Task Forces	0.001	0.003*
	(0.001)	(0.001)
% Women in Cabinet	0.001	0.001
	(0.001)	(0.001)
Presidential System		0.012
		(0.069)
Transparent Laws		0.000
		(0.044)
Impartial Public Administration		0.024
		(0.044)
% Women in Parliament		0.001
		(0.004)
Gender Inequality Index		0.045*
		(0.021)
% GDP as Health Expenditure		0.002
		(0.013)
GDP per Capita		0.000
		(0.000)
left		-0.040
		(0.059)

	Model 1	Model 2
Num.Obs.	1182	1094
AIC	1708.3	1589.9
BIC	1733.6	1654.8
Log.Lik.	-849.134	-781.938

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Figure 5. OLS Regression Model**



There is some support for Hypothesis 3a (Greater representation of women in executive government will have a positive effect in the likelihood a policy response is gender-sensitive)

and some very limited support for 3b (Greater numbers of women on COVID-19 taskforces will have a positive effect on the likelihood a policy is gender-sensitive). Although a leader being female did not have a statistically significant effect on the likelihood a policy was gender-sensitive, the coefficient is positively signed, and the effect is sizable. Having a female leader increases the probability a policy is gender-sensitive by 11.2 percentage points. The percentage of women in Cabinet did not have a significant effect, and any effect was small – for example if the percentage of women in Cabinet increased by 10 percentage points, the likelihood a policy was gender-sensitive only increased by one percentage point. The effect of the composition of the task forces is more complex. There is some suggestion that when there is a higher average number of women across all taskforces policies are more likely to be gender sensitive. The percentage of women on all COVID-19 task forces had a statistically significant and positive effect on the likelihood a policy response was gender-sensitive in this full model. However, the effect is small. For example, if the percentage of women on task forces increased by 10 percentage points the likelihood a policy was gender-sensitive increases by 3 percentage points. In Appendix 6 models are included for the two types of task forces – decision-making and expert/advisory. When broken down into the different task forces the effect of the average percentage of women is non-significant and remains small. However, this may be due to smaller sample sizes when restricting models to only one type of task force.

Given women's executive leadership has a positive effect on the number of women on task forces, women's executive leadership may have a secondary effect also on a country's policy response through women's representation on these COVID-19 task forces. A country's Gender Inequality Index had a significant and positive effect, i.e. the higher the gender inequality the more likely a policy was gender-sensitive. Whilst this seems counterintuitive, it makes sense:

those countries which are more gender equal are more likely to have pre-existing policies to ensure its pandemic responses are gender-sensitive.

## **6. Discussion and Conclusion**

In this paper the case of the COVID-19 pandemic was used to explore women's representation in executive government in times of crises. The analysis of 62 countries response in the first year of the Coronavirus pandemic builds on current descriptive accounts of women's representation in COVID-19 decision-making to consider the causes and consequences of women's (non-)presence. In doing so it contributes to our understanding on the importance of the composition of executive government in times of crisis both in shaping the voices present in policy making and the resultant policy outcomes.

Firstly, the paper reconfirms women continue to be under-represented in executive leadership in times of crisis. Women constituted an average of 25% of members in national COVID-19 task forces set up by governments in response to the pandemic and were siloed into expert-advisory task forces rather than those designated as decision-making suggesting they are more often appointed to positions of more limited power. This mirrors patterns seen often in women's representation in formal electoral politics (Jalalzai 2013). Whilst a diversity of voices in advisory and expert policy making bodies is normatively important (Childs and Celis 2020; Johnston 2019), taking these descriptive accounts further to consider the consequence of women's (under)representation on task forces has more mixed results. Whilst it is clear that executive leadership matters in shaping the response to crisis in both the composition of these policy bodies and policy outcomes. The impact of the composition of the task forces was harder

to discern. Although there was a significant overall effect of having more women on all task forces the effect was very small and became insignificant when we separate this into the two different task forces. It may be that these task forces have limited impact and what we are seeing is that executive power and policy preference remains dominant in determining policy outcomes. Or it may be that the limited numbers of women on decision-making task forces means their effects were harder to determine. Work is already exploring the core executive networks that responded to COVID-19 including their composition and impact (Boswell et al. 2021), and as academic work (Cairney 2021) as well as wider political inquiries examine the role of experts such as those on task forces and their relationships with government attention should be paid to the role of gender in these interactions and the possible impacts for the descriptive and substantive representation of women.

In exploratory analysis of the causes of this under-representation it is found that women's leadership at the highest level had a notable, positive impact on women's representation on COVID-19 taskforces (although these countries are small in number) and in particular women leaders appointed higher proportion of women to decision-making task forces. Having a woman leader compared to a man increased the average percentage of women on decision-making COVID-19 task forces by 15.4 percentage points. This goes somewhat against previous literature that suggests women leaders are no more likely than their male counterparts to appoint women to high prestige posts as a consequence of the opportunities and constraints facing men and women leaders (O'Brien et al. 2015). It is contested whether crises are a moment of opportunity or constraint for women's representation (Lawless 2004; Ryan and Haslam 2005; Simas 2020), this initial analysis suggests they may be a moment of opportunity for *women* leaders to diversify who is present in decision-making. Similarly, we may see this as a moment of opportunity for women to 'act for' women. The paper contributes to the limited

body of empirical literature on whether women in executive office promote women's issues, with previous studies more focused on the legislative level of representation. It is suggested that women in executive office have less room for manoeuvre in terms of promoting women-friendly issues (O'Brien and Reyes-Housholder 2020). Yet, women executives appear to be acting for women more than their male counterparts during a crisis. The initial evidence in this paper found that a country being women-led in itself had a large and positive effect on the likelihood a policy was gender-sensitive. Further analysis may take this idea further and test across time with further crises in comparison to 'normal' governing times to fully understand whether we can understand these as moments of opportunity or constraint for women's representation.

One of the lessons we may conclude from this paper's findings is that having women present in times of crisis can ensure a greater likelihood the response to the crisis will account for gender inequalities. Yet, a word of warning should be attached to this conclusion. We should be cautious of a slippage to seeing women as the solution to a crisis and therefore only measuring or ensuring their presence rather than addressing the gendered outcomes of the crisis (Harman 2021). Questions should also be asked about the potential failure of male leadership here. Unlike previous health crises the gendered implications of COVID-19 were part of the public discourse (Harman 2021), yet male leaders were still less likely to include gender-sensitive responses and to appoint women to decision-making COVID-19 task forces.

Finally, this under-representation of women on COVID-19 task forces is a normative concern, as Saward (2010) has argued representation matters, and happens, beyond just elected bodies. Further work may examine the effect of this lack of women's representation on the perceived legitimacy of the government's and task force's advice and policy outcomes. Evidence suggests

citizens find decisions made by all male panels to be less procedurally legitimate (Clayton, O'Brien, and Piscopo 2019). Symbolically, women are also not 'seeing' themselves represented in these bodies, both in terms of who is considered an 'expert' and those in decision-making roles. Although there is no measure in this paper of how public facing or visible these bodies are, a consistent story of the pandemic has been the visibility of previously unseen scientific advisors, for example at government press briefings (J. C. Smith 2020). As with women's presence in political institutions the lack of women in these bodies could affect women citizens' political knowledge and engagement (Campbell and Wolbrecht 2006, 2006; Dassonneville and McAllister 2018). Beyond any possible policy consequences explored in this paper, women's (in)visibility raises concerns about the democratic legitimacy of government's policy responses.

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Ethics and Integrity:

- i. The data that support the findings of this study are openly available in UN COVID-19 Global Gender Response Tracker at <https://data.undp.org/gendertracker/>.
- ii. No funding was used in the production of this work.
- iii. The author(s) have no conflict of interest to declare.

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