

## Online Appendix

Tidblad-Lundholm, Kajsa. “When are women deployed? Operational uncertainty and deployment of female personnel to UN peacekeeping.” *International Peacekeeping*. DOI: <https://doi.org/10.1080/13533312.2020.1760717>.

### ***Section A: Included troop contributing countries***

Albania	Dominican Republic	Lithuania	Russian Federation
Algeria	Ecuador	Luxembourg	Rwanda
Argentina	Egypt	Macedonia	Senegal
Armenia	El Salvador	Madagascar	Serbia
Australia	Estonia	Malawi	Sierra Leone
Austria	Ethiopia	Malaysia	Singapore
Bangladesh	Fiji	Mali	Slovakia
Belarus	Finland	Mauritania	Slovenia
Belgium	France	Mexico	South Africa
Benin	Gabon	Moldova	Spain
Bhutan	Gambia	Mongolia	Sri Lanka
Bolivia	Georgia	Montenegro	Sweden
Bosnia and Herzegovina	Germany	Morocco	Switzerland
Brazil	Ghana	Mozambique	Tajikistan
Bulgaria	Greece	Myanmar	Tanzania
Burkina Faso	Guatemala	Namibia	Thailand
Burundi	Guinea	Nepal	Timor-Leste
Cambodia	Guinea-Bissau	Netherlands	Togo
Cameroon	Honduras	New Zealand	Tunisia
Canada	Hungary	Niger	Turkey
Chad	India	Nigeria	Uganda
Chile	Indonesia	Norway	Ukraine
China	Iran	Pakistan	United Kingdom
Congo	Ireland	Papua New Guinea	United States of America
Cote d'Ivoire	Italy	Paraguay	Uruguay
Croatia	Japan	Peru	Vanuatu
Cyprus	Jordan	Philippines	Vietnam
Czech Republic	Kazakhstan	Poland	Yemen
DR Congo	Kenya	Portugal	Zambia
Denmark	Kyrgyzstan	Qatar	Zimbabwe
Djibouti	Lesotho	Republic of Korea	
	Liberia	Romania	

**Section B: Included missions**

<b>Acronym</b>	<b>Mission name</b>
BNUB	United Nations Office in Burundi
MINURCAT	United Nations Mission in the Central African Republic and Chad
MINURSO	United Nations Mission for the Referendum in Western Sahara
MINUSCA	United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
MINUSTAH	United Nations Stabilization Mission in Haiti
MONUSCO (MONUC)	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo
UNAMA	United Nations Assistance Mission in Afghanistan
UNAMI	United Nations Assistance Mission for Iraq
UNAMID	African Union/United Nations Hybrid operation in Darfur
UNDOF	United Nations Disengagement Observer Force
UNFICYP	United Nations Peacekeeping Force in Cyprus
UNIFIL	United Nations Interim Force in Lebanon
UNISFA	United Nations Interim Security Force for Abyei
UNMIK	United Nations Interim Administration Mission in Kosovo
UNMIL	United Nations Mission in Liberia
UNMIN	United Nations Mission in Nepal
UNMIS	United Nations Mission in the Sudan
UNMISS	United Nations Mission in the Republic of South Sudan
UNMIT	United Nations Integrated Mission in Timor-Leste
UNMOGIP	United Nations Military Observer Group in India and Pakistan
UNOCI	United Nations Operation in Côte d'Ivoire
UNSMIS	United Nations Supervision Mission in Syria
UNTSO	United Nations Truce Supervision Organization

## ***Section C: Coding of variables***

### *Coding of the dependent variable*

The dependent variable has been operationalized as the average proportion of female military personnel in a contribution deployed by a troop contributing country to a mission in a given year. The main source is the International Peace Institute (IPI) Peacekeeping Database. IPI provides monthly information on how many personnel TCCs deploy to UN peacekeeping. To transform the monthly IPI data to yearly observations I have calculated the average proportion of female military personnel deployed by a certain TCC to a certain mission. The number of women and the number of total military personnel deployed by a TCC to a mission can vary over a year as personnel are sent in rotations. Therefore, I have calculated the proportion of women in TCC's contribution based on the TCC's average number of deployed personnel in a given year.

For example, for the observation representing Sweden's contribution to MINUSMA in 2015 I have summed the number of female military personnel deployed by Sweden to MINUSMA per month during 2015 and divided the sum by the number of months Sweden actively deployed military personnel to MINUSMA in 2015. This numerator has been divided by the total number of military personnel deployed by Sweden to MINUSMA during 2015, divided by the number of months Sweden actively deployed military personnel to MINUSMA in 2015. For more information, see the do-file.

### *Coding of battle related deaths*

The main source of information on battle related deaths is the UCDP Georeferenced Event Dataset (v 18.1). For most cases, the battle related GED-events have been aggregated by year and country code of the mission's host country (see exceptions below). The variable *battle related deaths (moving yearly average of past 5 years /1000)* was created by calculating:

$$\frac{BRD_{t-1} + BRD_{t-2} + BRD_{t-3} + BRD_{t-4} + BRD_{t-5}}{5} / 1000$$

As mentioned in the research design section, some countries and missions have required special attention due to lack of data or missions operating over country borders. These cases include:

#### Syria:

Syria is not included in UCDP GED version 18.1. The number of battle related deaths has therefore been drawn from “UCDP Syria Country Profile”.

Source: Uppsala Conflict Data Program. “UCDP Syria Country Profile”, UCDP Conflict Encyclopedia, Uppsala University, 2018, <http://ucdp.uu.se/#country/652> (accessed May 25, 2019).

#### UNMOGIP:

The UN mission United Nations Military Observer Group in India and Pakistan (UNMOGIP) is mandated to supervise the ceasefire between India and Pakistan in the State of Jammu and Kashmir. To get battle related deaths in "target area" for UNMOGIP I have used the number of battle related deaths from the dyad Government of India - Government of Pakistan from the “UCDP Government of India- Government of Pakistan Profile”.

Source: Uppsala Conflict Data Program. “UCDP Government of India- Government of Pakistan Profile”, UCDP Conflict Encyclopedia, Uppsala University, 2018, <http://ucdp.uu.se/#statebased/422> (accessed May 25, 2019).

#### UNDOF:

The UN mission United Nations Disengagement Observer Force (UNDOF) is mandated to maintain and supervise the ceasefire between Israeli and Syrian forces in the Golan. As the mission has not been mandated to handle the intra-state conflict in Syria it is not sound to include all battle related deaths generated in that conflict as possible threats to UNDOF personnel. In fact, UNDOF personnel was removed from the Syrian side of the boarder as hostilities in the area increased. I have therefore used the battle related GED-events in Israel as a proxy for battle related deaths for UNDOF.

#### UNTSO:

The United Nations Truce Supervision Organization (UNTSO) operates in the Middle East and is mandated to “monitor ceasefires, supervise armistice agreements, prevent isolated incidents from escalating and assist other UN peacekeeping operations in the region to fulfill their respective mandates” (UNTSO, 2017). Because this mission operates over boarders and can be moved with short notice it is difficult to code it as operating in one specific area. For convenience, I have coded all battle related deaths GED-events taking place in Egypt as a proxy for conflict intensity facing UNTSO peacekeepers. This decision was mainly based on practical reasoning but also

to avoid including the battle related deaths from Syria. Although far from perfect, it should be a reasonable approximation.

Source: UNTSO. "Helping to bring stability in the Middle East". United Nations Truce Supervision Organization (UNTSO). United Nations, Peacekeeping missions, UNTSO, 2017, <http://www.un.org/en/peacekeeping/missions/untso/> (accessed May 16, 2017).

### *Coding of SVAC in mission area*

UNMOGIP:

In line with coding of battle related deaths in the area of operation, I have used information on prevalence of SVAC in the Government of India - Government of Pakistan dyad as a proxy.

UNDOF:

In line with coding of battle related deaths in the area of operation, I have used information on prevalence of SVAC in Israel as a proxy.

UNTSO:

In line with coding of battle related deaths in the area of operation, I have used information on prevalence of SVAC in Egypt as a proxy.

### *Coding of GDP/pc in mission area*

UNMOGIP:

I have used the information on GDP per capita for India as a proxy.

UNDOF:

In line with coding of battle related deaths in the area of operation, I have used information on GDP per capita in Israel as a proxy.

UNTSO:

In line with coding of battle related deaths in the area of operation, I have used information on GDP per capita in Egypt as a proxy.

### *Coding of TCC GDP/pc*

When information was downloaded from WDI, there were missing values on the GDP per capita of the TCC Djibouti in the years 2009, 2011, 2012, 2013, 2014, 2015. The value given for 2010 has been used for all years.

*Women's participation in domestic military forces*

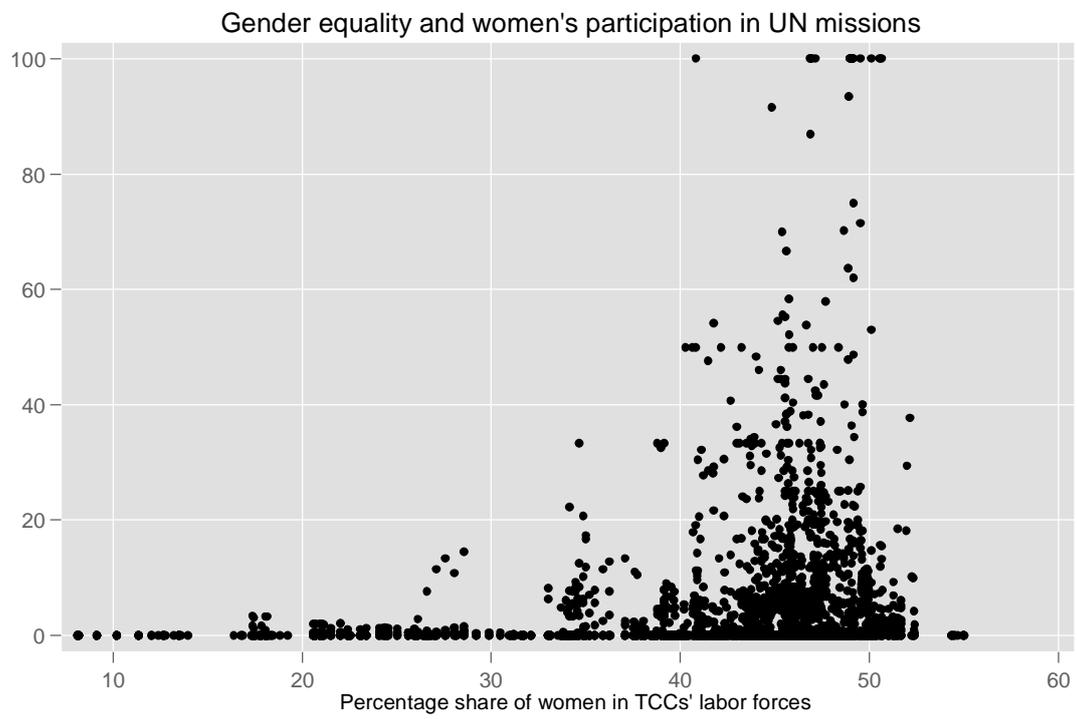
<u>Troop contributing country</u>	<u>Women in domestic military forces, approximation (%)</u>
Bangladesh	0.02
Belgium	8.11
Benin	9.64
Bosnia and Herzegovina	2.81
Burkina Faso	0.71
Canada	12.89
Chad	1.5
China	2.84
Cote d Ivoire	0.24
Czech Republic	12.71
Denmark	5.48
Ethiopia	3.57
France	11.31
Germany	7.15
Ghana	9.78
Greece	11.44
Hungary	18.97
India	6.082
Italy	2.28
Namibia	8.67
Nepal	0.58
Netherlands	8.98
Niger	0.57
Nigeria	3.13
Norway	7.85
Poland	1.59
Portugal	12.39
Romania	4.76
Senegal	10.81
Sierra Leone	1.89
Slovakia	6.53
Slovenia	14.61
South Africa	16.24
Spain	11.41
Sweden	11
Tanzania	9.64
Togo	1.54
Tunisia	9.78
Turkey	3.04
Uganda	1.44
United Kingdom	9.43
United States of America	14.48

**Section D: Additional figures and tables**

Table 4: Exploring the substantial effect of duration, mixed effects regression excluding the logit link

	(1) Female mil. personnel ratio
Duration (years)	0.00305*** (0.000587)
Duration (years)*2	-0.0000424*** (0.00000809)
BRD (mov.avg 5y)/1000	-0.0116*** (0.00193)
PK fatalities (previous 2y)/1000	0.237* (0.123)
GDP/pc mission area (log)	-0.00633*** (0.00231)
SVAC (previous 2y, dummy)	0.00995* (0.00552)
Chapter VII	0.00963 (0.00784)
Mission size/1000	-0.00121** (0.000552)
TCC women in labour force	0.00232*** (0.000716)
TCC GDP/pc (log)	-0.00510 (0.00393)
TCC contribution size/1000	-0.0172*** (0.00427)
Year dummies	Yes
Constant	0.00997 (0.0493)
Observations	3475
Standard errors in parentheses * $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.01$ , grouped by TCC, 125 groups. The statistical results were generated in Stata.	

Figure 6: Women in TCCs' labour forces and the proportion of female military personnel in contributions (all contributions included in the dataset)



### *Section E: Exploring where TCCs deploy*

To explore if there are any systematic differences in where more and less gender equal TCCs deploy peacekeepers, the sample has been split based on the share of women in TCC labour force. The sample has been split using the mean value 41.94%.

<b>Variable</b>	<b>“More gender equal TCC” TCC women in labour force &gt; 41.94312</b>	<b>“Less gender equal TCC” TCC women in labour force &lt; 41.94312</b>
Female military personnel (%)	5.5 (n=2323, Std. Dev 13.9)	1.43 (n=1152, Std. Dev. 5.8)
Female military troops (%)	5.29 (n=1268, Std. Dev 11.86)	1.5 (n=697, Std. Dev 5.84)
Female military experts (%)	6.11 (n=1759, Std. Dev 16.49)	1.02 (n=859, Std. Dev 5.64)
New mission	0.059 (n=2323, Std. Dev 0.23)	0.058 (n=1152, Std. Dev 0.23)
Duration (years)	15.31 (n=2323, Std. Dev 18.04)	13.57 (n=1152, Std. Dev 15.35)
BRD (mov.avg 5y)/1000	0.72 (n=2323, Std. Dev 1.22)	0.56 (n=1152, Std. Dev 0.88)
PK fatalities (previous 2y)/1000	0.018 (n=2323, Std. Dev 0.02)	0.019 (n=1152, Std. Dev 0.02)
SVAC (previous 2y, dummy)	0.6 (n=2323, Std. Dev 0.49)	0.56 (n=1152, Std. Dev 0.5)
Chapter VII	0.67 (n=2323, Std. Dev 0.47)	0.68 (n=1152, Std. Dev 0.47)
GDP/pc mission area (log)	7.3 (n=2323, Std. Dev 1.08)	7.29 (n=1152, Std. Dev 1.08)