

More Harm than Good? The Effects of Sanctions on Different Aspects of Women's Rights

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ABSTRACT

While the linkage between economic growth and women's rights in low- and middle-income countries has been explored, less emphasis has been placed on how women's rights are affected by economic statecraft. Prior studies examining the impact of sanctions on women's rights have focused on economic, political, and social rights codified as laws. We argue that relying on legal rights alone under-predicts and, in some cases, over-predicts the negative outcomes women face as this narrow definition ignores the *de facto* effects in favor of those that are *de jure*. What is the impact of economic sanctions on various aspects of women's rights in the targeted country? Using new data on sanctions from 1960-2019 and new indices on various dimensions of women's rights, our paper expands the current knowledge of the unintended negative consequences of sanctions by examining women's societal and health rights. Namely their right to security, inclusion, and health in addition to legal rights. We find that consistent with prior studies, women's legal rights decline with the presence of sanctions, as do women's rights to security, and health. While women's right to inclusion, or the extent to which they are visible in society, decreases 5 years after sanctions have been enacted, these effects are not seen immediately, and political inclusion actually increases. We disaggregate the inclusion index further to tease out how economic factors drive these results. These findings have policy implications for countries interested in promoting sustainable development goals (SDGs), such as SDG 3: Healthy Lives and Well-being and SDG 5: Gender Equality, while also pursuing their own economic statecraft policies. As we move toward 2030, it is important to understand how to employ economic statecraft without derailing the SDGs.

INTRODUCTION

Economic sanctions are a form of economic statecraft, which is defined as a type of policy instrument used to influence the behavior of another international actor (Baldwin 2020).

While generally a less harmful method for countries to settle disputes compared to military force, sanctions still can adversely affect the civilian population in the targeted state. Much

research has been done on the negative consequences of economic sanctions, from increasing inequality to shortened life expectancies for the citizens of the targeted countries (e.g., Drury and Peksen, 2014; Jeong, 2020; Gutmann et al., 2021). Emerging research suggests that sanction instruments have differential impacts on vulnerable groups.

We know from the conflict, development economics, and public health literatures that women are particularly impacted by external shocks, such as conflicts, natural disasters, and economic shocks. For example, women are more likely than men to die from living in a conflict zone (Plümper and Neumayer, 2006), natural disasters are correlated with a decrease in women's economic and political rights (Detraz and Peksen 2017), and multiple studies have documented the gendered impacts of the COVID-19 pandemic, such as an increase in gender-based violence (Cousins, 2020). Additionally, there are a few recent studies in the field of international political economy indicating that economic sanctions have a negative impact on women's legal rights (Drury and Peksen 2014, Guttman et al., 2020). However, we still do not know how sanctions affect other dimensions of women's rights, which we have termed women's societal rights and health rights. These societal rights include their right to inclusion in society, right to security (also termed freedom from harm), and right to health. The aim of this exploratory analysis is to expand the scope of prior research on economic sanctions and women's rights to understand how economic sanctions impacts various dimensions of women's societal and health rights (legal, inclusion, freedom from harm, and health).

Examining the impacts of economic sanctions on vulnerable populations is important, particularly as countries increasingly use sanctions as their preferred foreign policy tool. Economic sanctions are essentially negative economic shocks for the target state, and as such

we would expect to see detrimental effects from sanctions policies. At the same time, it is imperative to recognize that women's rights are not unidimensional and are composed of different facets. Without examining the varying aspects of women's rights, it is difficult to implement targeted policies.

ECONOMIC SANCTIONS AND WOMEN'S RIGHTS

External Shocks and Women's Rights

There is a rich body of literature confirming that women's rights are uniquely affected by both natural and human-induced disasters and that looking at overall population effects is inadequate when understanding the impact of these events (Plümper and Neumayer, 2006; Ghobarah, Huth, and Russett, 2003; Urdal and Che, 2015; Detraz and Peksen, 2017; Collins et al., 2020; Hunter et al, 2021). In this paper we add to scholarship that seeks to identify the effects of a specific type of economic shock, economic sanctions, on women's rights.

Economic sanctions and women's rights: What we know

In their seminal study on this topic, Drury and Peksen examine the impact of economic sanctions on women's labor force participation, as well as women's economic rights, political rights, and social rights for the years 1971-2005 (2014). They posit that the economic hardship caused by sanctions can reduce the level of respect for economic, social, and political rights. As they explain in their theory linking economic sanctions with adverse outcomes for women on these measures, when women lose jobs in an economic downturn precipitated by sanctions, they lose economic independence and social autonomy. Furthermore, their social and political status can be impacted by the social frustration and disorder brought about by the economic sanctions. For example, a weakened target state will be less likely to enforce women's rights.

They test these hypotheses using data on women's rights from the Cingranelli-Richards Human Rights Database (2010), and their results indicate that economic sanctions correspond with a statistically significant *decrease* in women's economic rights, social rights, and political rights in targeted countries.

Drury and Peksen's finding on economic rights were contradicted by a more recent study. In a 2020 paper, Gutmann et al. investigate how economic sanctions could impact the target state's human rights institutions. Using the same Cingranelli-Richards Human Rights Database, Gutmann et al disaggregate human rights into four facets: economic, political, civil, and basic human rights, arguing for the need to look at how sanctions could have differing effects on the multiple components that make up the umbrella term "human rights." Their analysis revealed that sanctions are in fact associated with *improvements* in women's economic rights. Clearly more research is needed to understand these discrepancies, which could be partly attributed to how scholars disaggregate the umbrella term "women's rights" and what specific aspects of women's rights are under examination as well as what types of sanctions are employed.

In a paper published in 2021, Gutmann et al. shift their outcome variable of interest from human rights to health rights, by examining the effects of economic sanctions on life expectancy in target states and the differing impacts of economic sanctions on men and women. They argued the negative effects of sanctions could be particularly detrimental to women's health because of a) added-worker effect (higher female participation in labor market in more hazardous occupations) and b) less access to health resources. The authors found that sanctions employed by both the UN and US decrease life expectancy, and that UN sanctions

decrease life expectancy more than US sanctions. In both cases, women tend to bear the brunt of the decrease in life expectancy. Each of these studies highlights the negative impact sanctions have on women. Table 1 summarizes the main scholarship to date on economic sanctions and women's rights.

Table 1: Economic Sanctions and Women's Rights: Prior Scholarship		
Indicator (Source)	Women's Rights Indicator, Defined	Findings
POLITICAL (Cingranelli and Richards, CIRI Human Rights Data Project 2010)	Existence of laws enshrining internationally recognized rights such as right to vote, hold political office, join political parties, petition government officials. Effectiveness in enforcing said laws.	Small effect, <i>decrease</i> in political rights in poorest countries (Drury and Peksen 2014).
ECONOMIC (Cingranelli and Richards, CIRI Human Rights Data Project 2010)	Existence of laws enshrining internationally recognized rights such as equal pay for equal work, employment without consent of male relative, equality in hiring and promotion practices, non-discrimination by employers. Effectiveness in enforcing said laws.	<i>Increase</i> in economic rights when sanctioned by US (Gutmann et al, 2020) as women enter labor market. <i>Decrease</i> in labor force participation rate (compared with men). (Drury and Peksen 2014) <i>Decrease</i> in economic rights: In poor target states (countries with GDP per capita lower than \$3,000), increase in predicted probability of women's economic rights violations (compared with those of men). (Drury and Peksen 2014)
SOCIAL (Cingranelli and Richards, CIRI Human Rights Data Project 2010)	Existence of laws enshrining internationally recognized rights for women such as equal inheritance, travel, obtain passport, equal marriage, divorce initiation, participation in community activities and education. Enforcement of such laws	<i>Decrease</i> in social rights. In poor target states (countries with GDP per capita lower than \$3,000), increase in predicted probability of women's social rights violations (compared with those of men) (Drury and Peksen 2014)

HEALTH (US Census Data)	Life expectancy Gender gap in life expectancy	UN sanctions and US sanctions <i>reduce</i> life expectancy for both men and women. However, women are more affected by sanctions (women's life expectancy <i>decreases</i> more than that of men). (Gutmann et al 2021).
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This early work has been crucial to establishing the differential impacts of economic sanctions on distinct populations. However, we argue that prior scholarship has ignored a key factor that would greatly expand our understanding of the impact of sanctions on women's rights. The previously used definition of women's rights is too narrow, leading to issues with construct validity of the dependent variables. For example, the conflation of economic *laws* with economic *outcomes* has produced confusion and conflicting findings with regards to women's economic *rights*. We address this gap by expanding the scope of women's rights beyond legal rights to include multiple societal and health rights. In doing so, our findings provide a richer understanding of the impact of economic sanctions on women's rights.

EXPANDING THE SCOPE: WOMEN'S RIGHTS

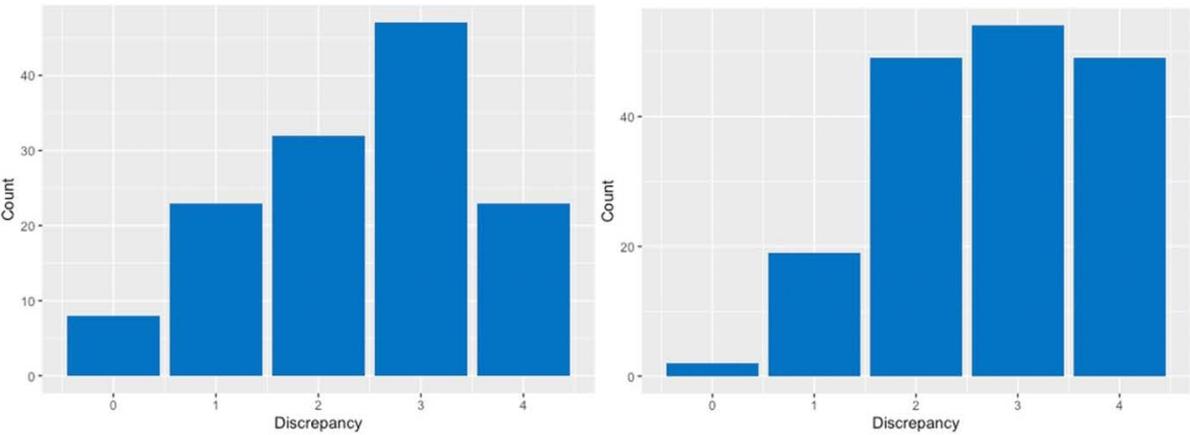
Economic Sanctions and Women's Rights: Societal Rights and Health Rights

According to the Cingranelli-Richards Human Rights Database Codebook, the indices for economic, political, and social rights capture the extensiveness of the *laws* in that country enshrining women's rights on that dimension and the effectiveness of the government in enforcing those laws. While a demonstrated decline in women's legal rights corresponding with economic sanctions is alarming in and of itself, relying on that measure alone may under-predict or over-predict the extent of the negative outcomes faced by women, as it ignores the *de facto* impacts in favor of those that are *de jure*. Laws enshrining equal rights and

enforcement of those laws can co-exist with gross gender inequities. For example, in the US, the gender wage gap of 82 cents earned by women for every 1 dollar earned by men persists, despite the existence of laws, such as the Equal Pay Act of 1963, banning discriminatory employment practices (US Bureau of Labor Statistics 2021).

Data from 164 countries for the years 2007 and 2015 demonstrate that there is indeed widespread discrepancy between the laws that exist enshrining the rights of women and the enforcement of those laws. Figure 1 shows that for both years, fewer than ten countries score a 0, indicating that there is no discrepancy between written laws that are consonant with CEDAW (Convention on the Elimination of all Forms of Discrimination Against Women, the international treaty adopted in 1979 by the UN security council) and enforcement of those laws. Instead, most of the countries (nearly 50 countries in 2007, and nearly 60 countries in 2015) fall in category 3, where laws are somewhat consonant with CEDAW, and only occasionally enforced.

Figure 1: Discrepancy between National Law and Practice Concerning Women



0=Laws are a) consonant with CEDAW and b) enforced (high government priority)
 1=Laws are a) consonant with CEDAW and b) mostly enforced (government proactively challenges harmful norms)
 2=Laws are a) consonant with CEDAW and b) somewhat enforced (government may or may not challenge harmful norms)
 3= Laws are a) somewhat consonant with CEDAW and b) occasionally enforced (low government priority)
 4= Laws are a) generally not consonant with CEDAW b) not enforced by government
 Source: WomanStats Multivariate Scale #2

Prior studies documenting a decline in legal rights represent an important first step in understanding one way in which economic sanctions can impact women, but this emphasis on the legal rights of women in the target countries does not provide a comprehensive picture of how the status of women changes with the implementation of sanction instruments. We posit that in addition to women's legal rights, there are additional dimensions that should be considered. We categorize these rights into two groups: societal rights and health rights, each of which includes multiple measures. Under societal rights we examine legal rights, security (defined as freedom from harm), and women's inclusion in society. Our conceptualization of health rights is captured through life expectancy at birth, maternal mortality, and adolescent fertility. The disaggregation of women's rights not only serves to better reflect women's everyday realities, but also highlights the multi-dimensionality of the concept "women's rights."

As outlined in Table 1, above, prior studies documented the overall decrease in women's legal rights after economic sanctions were imposed (the exception is Guttman et al. noticed a slight increase in some legal economic rights when target states were sanctioned by the US). However, to more comprehensively examine how the different aspects of women's rights could be affected, we use an alternate, newer index for women's rights, the Hill-Karim scale (*forthcoming*), which better captures the facets of women's rights that are unrelated to the status women enjoy legally. Their *legal rights index* incorporates multiple legal indicators of women's economic, social, and political rights (see Table 2). Like the Cingranelli-Richards Human Rights Database, this concept measures the existence of policies and laws that are available to women in the target country. Sanctions negatively impact the economy. Consequently, they could lead to negative outcomes, particularly a decrease in rights and

respect for women, as the target state grapples with reduced economic resources. Although there is discrepancy between the legal status of women and women's everyday realities, we still believe it is important to include women's legal rights in the analysis. This is because women's rights that are accorded to them legally reflect, at least on some level, the stature they enjoy in society and the rights they are entitled to according to the law.

Consistent with previous work by Drury and Peksen that used the TIES database (Morgan et al. 2014) and Guttman et al. that uses the EUSANCT database (Weber and Schneider 2020), we anticipate analyses using newly available data (Global Sanctions Data Base and the forthcoming updated Hill-Karim indices) will also reveal that economic sanctions negatively impact women's legal rights, since weakened target states are unable to enforce women's legal rights.

H1: The presence of sanctions in a given year will correspond with a DECREASE in women's legal rights in the following year.

To move beyond the realm of legal rights and to better understand the on-the-ground impacts of economic sanctions, we investigate the right to be included in society. The Hill-Karim *inclusion index* measures the extent to which women are represented in public places. It considers indicators such as female participation in government, female graduates in various industries, female landowners, and female labor force participation. Women's inclusion differs from women's rights in that it measures the visibility of women in the public sphere; the extent to which women are included in various aspects of society, not the legal structures in place dictating their ability to participate in society. For example, many countries allow women's suffrage, yet political participation as measured by women holding legislative or executive

government positions is still significantly lower than 50%, and not representative of the percentage of women in the population. Conversely, in Rwanda, where the constitution mandates a 30% quota for female parliament members, women account for 62% of the parliament seats, far more than 50% of the general population, and over twice the amount that is legally required by the constitution (International IDEA 2021). Depending on the context, inclusion can either exceed the legal expectation, or it can underperform.

In the case of economic sanctions, we anticipate that women's inclusion will remain unchanged. The inclusion index is composed of three parts (political inclusion, economic inclusion, and educational inclusion), each of which may be impacted by economic sanctions in conflicting ways. For example, political inclusion may increase if target countries place women in cabinet positions or other visible government offices as a way to signal to the sending countries that they have made improvements in their governing bodies. Educational inclusion may decrease as families face economic pressure and take their daughters out of school to work and contribute income to the household, or if educational resources become scarce as money is redirected away from the system to other areas. Economic inclusion may increase based on prior studies demonstrating that the economic shock to the household forces women into the workforce (Gutmann et al 2020, 2021). In economics, this is known as the "added worker effect." Scholars argue that if a woman's partner loses their job or her household income decreases due to economic hardship, she will seek employment (Sabarwal et al., 2011; Smith et al., 2002), though in potentially more hazardous or less secure jobs. Economists note that the added worker effect is evident in times of economic hardship like the 2001 Argentine economic crisis where women whose spouses experienced a decline in income were more likely

to enter the labor market (Martinoty 2015) or the 2008 global economic crisis when women in Turkey, particularly those in financially constrained relationships, were more likely to participate in the labor force in response to their husband's unemployment (Ayhan 2018).

H2: The presence of sanctions in a given year will correspond with NO CHANGE in women's inclusion in the following year.

Women's security/freedom from harm stems from the concept of human security, which emphasizes the right "to live in freedom and dignity, free from poverty and despair...freedom from fear and freedom from want, with an equal opportunity to enjoy all the rights and fully develop their human potential" (UN Human Security Handbook 2016, 6). Thus, women's security as a concept captures women's freedom from various harms such as hunger, disease, violence, and repression, as well as freedom to participate in society, make household decisions, and access reproductive health and rights. Women's security/freedom from harm differs from women's legal rights in that the existence of legal rights on paper does not guarantee a woman's ability to access those rights and thrive on a day-to-day basis. Domestic violence may be an illegal, yet persistent problem indicating the simultaneous presence of women's legal rights and absence of women's security. Economic sanctions in general can threaten to disrupt women's security/freedom from harm through a number of mechanisms such as job loss, contraceptive stockouts, and food insecurity. These consequences could come either directly, as difficulty to accessing food, medical resources, etc. increases, or indirectly through growing economic hardship. We anticipate that in the presence of economic sanctions, women's security will decrease as her exposure to harm will increase.

H3: The presence of sanctions in a given year will correspond with a DECREASE in women's security in the following year.

Although Drury and Peksen's study on the impact of economic sanctions on women's rights did not include an investigation of health rights, we believe that access to health is an important part of women's rights and reflect the quality of life for women. A recent article uses life expectancy and the male-female life expectancy gap in target countries to examine this relationship (Gutmann et al 2021). We similarly rely on life expectancy data for females and males to test our hypotheses. Life expectancy for women can decrease with the implementation of certain types of sanctions as contraceptives and medicines may become harder to obtain. The public health literature documents that more unwanted pregnancies result in unsafe abortions and/or more women forced to carry high-risk pregnancies to term. Both situations jeopardize the woman's health, and in some cases lead to death. For both men and women, less money from primary job loss often translates to fewer food resources, resulting in malnutrition, and fewer trips to the doctor. Those who can travel to health clinics may still face barriers to accessing care if hospitals and clinics are overrun with patients due to increases in disease or other threats to public health, which are documented outcomes of severe economic sanctions (Kim 2019; Peksen 2011; Allen and Lektzian 2013). Although life expectancy is one of the many factors included in Hill-Karim's index for women's security/freedom from harm, we examine life expectancy in isolation for two reasons. First, it allows us to make direct comparison to previous studies that investigate the impact of economic sanctions on female life expectancy. Secondly, life expectancy at birth is one of the best indicators that proxies overall health that is also disaggregated by sex. We hypothesize

that life expectancy at birth will decrease for both women and men, with women experiencing a steeper decrease than men.

H4: The presence of sanctions in a given year will correspond with a DECREASE in the life expectancy in the following year. Furthermore, this decrease will be greater for women than for men.

We expand the category of health rights to also include maternal mortality and adolescent fertility, two indicators that demonstrate a society's commitment to health resources for women. Within developing countries, the number one cause of disability and death of women of childbearing age is complications stemming from pregnancy and childbirth. While womanhood is not synonymous with motherhood, MMR is a good proxy for women's right to health as prior studies have shown that MMR is correlated with access to health infrastructure for women, as indicated by its positive relationship with infant mortality, and negative relationship with prenatal care and birth attended by skilled health personnel (Alvarez et al 2009; Betrán et al 2005). Similarly, the adolescent fertility rate (births per 1,000 women ages 15-19) is a good proxy for girls' access to contraceptives, education, and health infrastructure (including prevention and treatment of sexually transmitted infections), all of which may be impacted by the imposition of economic sanctions. The inability for women and girls to access health infrastructure, contraceptives, or education can come from several sources during an economic sanction. Directly, economic hardship and the lack of financial means could raise the barrier in accessing all three of the resources. Indirectly, though, sanctions may also cause the closure of clinics and schools, as aid funding dries up or when target governments redirect budget to national security and other concerns. We expect that

both maternal mortality and adolescent fertility will increase after the imposition of economic sanctions.

H5: The presence of sanctions in a given year will correspond with an INCREASE in the maternal mortality ratio and in the adolescent fertility rate in the following year.

Table 2 details these indicators, their definitions, and our accompanying hypotheses for the impact of economic sanctions on various aspects of women’s rights.

Table 2: Economic Sanctions and Women’s Rights: Expanding the scope		
Indicator (Source)	Women’s Rights Indicator, Defined	Hypotheses
LEGAL RIGHTS (Daniel Hill and Sabrina Karim)	The existence of policies and laws available to women in the target country. Total of 65 indicators, including all political, economic, and social rights covered in the Cingranelli and Richards database.	H1: The presence of sanctions in a given year will correspond with a DECREASE in women’s legal rights in the following year.
INCLUSION (Daniel Hill and Sabrina Karim)	The extent to which women are visible in public spaces. 35 indicators, including graduation rate, landowner ratio, firms with female ownership, female political leaders.	H2: The presence of sanctions in a given year will correspond with NO CHANGE in women’s inclusion in the following year.
SECURITY/ FREEDOM FROM HARM (Daniel Hill and Sabrina Karim)	Safety from harms like hunger, disease, violence, and repression; and freedom to participate in society, make household decisions, and access reproductive health and rights. 45 indicators, including life expectancy ratio, fertility rate, contraceptive prevalence, household decision making, marital rape scale, murder scale.	H3: The presence of sanctions in a given year will correspond with a DECREASE in women’s security in the following year.
HEALTH (World Bank Indicators)	Life expectancy at birth The number of years a newborn would live if the mortality patterns in existence at the time of birth prevailed throughout the infant’s life.	H4: The presence of sanctions in a given year will correspond with a DECREASE in the life expectancy in the following year. Furthermore, this

	<p>Maternal mortality ratio (maternal deaths per 100,000 live births)</p> <p>Adolescent fertility rate (number of births per 1,000 women ages 15-19)</p> <p>These reproductive health indicators cover important aspects of health rights such as access to health clinics, access to medical professionals, access to pre- and post-natal care.</p>	<p>decrease will be greater for women than for men.</p> <p>H5: The presence of sanctions in a given year will correspond with an INCREASE in the maternal mortality ratio and in the adolescent fertility rate in the following year.</p>
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DATA AND METHODS: EXPANDING THE SCOPE OF WOMEN’S RIGHTS

Newly available data on both economic sanctions and women’s rights allow us to address this relationship in a more fine-grained way. To empirically test these hypotheses, all our data have been manipulated into country-year format. Unless otherwise stated, the data in our models cover the period from 1960 to 2019 and include all countries covered by World Bank data.

Independent variable of interest

Our unit of analysis is country-year, and our independent variable of interest is *sanction*, a binary variable from the Global Sanctions Data Base, indicating for each year whether economic sanctions were present (n=4,358) or not (n=11,482) (Felbermayr et al 2020).

Dependent variables of interest

Our dependent variables of interest measuring women’s rights are drawn from two different sources: one focusing on societal rights and another focusing on health rights (each of the health rights variables we use—life expectancy, maternal mortality, and adolescent fertility—are detailed in a subsequent section). To measure societal rights, we rely on an

unpublished set of scales, based on a latent variable approach, which are used here with authors' permission (Karim and Hill, forthcoming). Each of the three Hill-Karim scales are meant to capture a different facet of women's rights. The first is women's *inclusion*, which measures the participation of women in the workforce, education, and other public settings. *Political inclusion* is a subset of this scale, and it examines women's political involvement. The second index, *combined harm*, captures how economically and physically secure and how independent women are in their daily lives. *Indirect harm* is a subset of combined harm that focuses on the non-physical threats women face, while *direct harm* focuses on physical threats. Third, *women's legal rights*, measures formal rights women enjoy (Karim and Hill, forthcoming). In our analyses, we lagged all dependent variables for one year and then again for five years (see Appendix for results after 5 years), as the effects of sanctions may not be immediately apparent the year that they are imposed.

In addition to our dependent variables and independent variables of interest, we also control for the following factors that could affect women's rights in any given year.

The variable *conflict* is a dummy that indicates whether the country was the site of armed conflict in any given year. Conflict could not only negatively impact women's right to security/freedom from harm and women's legal rights but could also increase maternal mortality as fighting is destructive to the health infrastructure or prevents women from reaching hospitals or clinics. The data is extracted from UCDP/PRIO (Croicu et al 2012).

We use *GDP per capita* (logged) to capture the development and wealth of the country targeted by sanctions (World Bank 2021). Wealthier countries are often better able to respond to and alleviate sanction shocks and tend to be associated with better rights and health

outcomes for women. As a side note, we do not control for health expenditure in our models because health expenditure is highly correlated with GDP and the health expenditure data are unavailable prior to the year 2000.

Because more democratic states are associated with better rights outcomes for women, we control for regime type by using the *Polity V* score for each country. Similarly, the more integrated into the world economy a country is, generally the more its female citizens enjoy rights (broadly defined). Thus, to capture *trade openness*, we use the ratio of a country's total imports and exports over its total GDP in any given year.

Aside from economic measures, governance is also an important contributor to women's rights. A government with greater capacity to govern would be better able to secure rights for women, or to better withstand the negative economic shock of sanctions. To proxy for government function, we use the *Absolute Political Extraction* measure from the Relative Political Capacity dataset (Fisunoglu et al 2011).

Lastly, to capture to the scope and severity of sanctions, we control for the *number of sanctioners* that have placed sanctions on the target state in any given year. Multilateral sanctions tend to induce worse outcomes for the target state because multilateral sanctions restrict the target's ability to find alternate markets for its products and services. Theoretically the larger the sanctioning coalition, the more extreme these negative outcomes should be.

Table 3 lists the descriptive statistics of each of our variables.

Table 3: Descriptive statistics of dependent variables.

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Legal Rights	4,536	0.249	0.851	-2.610	-0.283	0.917	1.851
Inclusion	3,591	0.114	0.707	-3.231	-0.131	0.535	2.024
Pol. Inclusion	5,157	0.105	0.593	-1.141	-0.275	0.344	3.265
Combined Harm	4,860	-0.254	0.881	-1.385	-0.991	0.387	2.902
Indirect Harm	4,860	-0.253	0.880	-1.374	-0.982	0.397	2.901
Direct Harm	1,950	0.110	1.123	-2.744	-0.971	0.716	2.596
Life Exp. (F)	6,615	69.925	10.074	27.571	62.883	77.515	86.900
Life Exp. (M)	6,615	65.051	9.185	24.834	59.154	72.003	84.100
Maternal Mort.	3,465	225.818	302.823	2.000	21.000	340.000	2,480.000
Adolescent Fertility	14,520	76.59	52.459	0.283	32.467	112.644	232.484

Estimation Strategy

For this first investigation, which is intended to be an exploratory analysis providing a broad look at how economic sanctions (in aggregate) impact an expanded scope of the dependent variables encapsulating women’s rights, we rely on linear models (OLS) with country-year fixed effects. The unit of analysis is the country-year and robust standard errors are clustered by country. First, in line with prior studies we estimated the impact of sanctions, on each of our women’s rights outcomes. To understand the relationship between the presence of aggregate sanctions in a given year on women’s rights in the following year, we used our independent variable of interest and control variables to estimate the following model for each aspect of women’s rights, where c=country and t=time and $\mu_{c,y}$ =country-year fixed effects to account for country-specific time invariant unobservables. See table 4 for results.

$$rights_{c,t+1} = \beta_0 + \beta_1 sanctions_t + \beta_2 GDP_{c,t} + \beta_3 conflict_{c,t} + \beta_4 tradeopenness_{c,t} + \beta_5 polity_{c,t} + \beta_6 capacity_{c,t} + \beta_7 sanctioners_{c,t} + \mu_{c,y} + \varepsilon_c$$

RESULTS: EXPANDING THE SCOPE OF WOMEN’S SOCIETAL RIGHTS

Table 4 shows the impact of the presence of sanctions for any given year on women’s societal rights one year following the implementation of sanctions. The results for most of these models align with our hypotheses. As anticipated, legal rights are negatively impacted by the presence of sanctions. This confirms what prior studies have found using alternative data on sanctions, namely the TIES dataset and the EUSANCT dataset. While direct harm decreases, combined harm as well as indirect harm to women increase (representing a decrease in overall women’s security). The slight decrease in direct harm may be a result of target countries implementing measures to improve women’s security in response to imposed sanctions. Five years after sanctions are enacted, these effects are relatively consistent, signifying the lasting impact economic sanctions have on women’s societal rights (see Appendix). One year post sanctions, we obtained a null result for overall inclusion in society; it is the one indicator that is not statistically significant, but women’s political inclusion increases. However, to account for the long-term change that sanctions may bring, we run the analysis with a five-year lag for the dependent variables, and we find that five years after sanctions are enacted, women’s overall inclusion decreases, and political inclusion remains positive (see Table 5).¹ We theorize about this unanticipated result signifying a lasting response to increased political inclusion in the discussion section.

¹ The full results for the five-year lag dependent variables can be found in the Appendix

TABLE 4: SOCIETAL RIGHTS (1-YEAR LAG)

	<i>Dependent variable:</i>					
	Legal Rights	Inclusion	Political Inclusion	Combined Harm	Indirect Harm	Direct Harm
	(1)	(2)	(3)	(4)	(5)	(6)
Sanctions	-0.063*** (0.010)	0.023 (0.019)	0.039*** (0.013)	0.099*** (0.012)	0.109*** (0.012)	-0.022*** (0.007)
Conflicts	-0.064*** (0.016)	0.003 (0.031)	-0.095*** (0.021)	0.052*** (0.019)	0.058*** (0.019)	-0.048*** (0.009)
GDP (log)	0.045*** (0.010)	-0.078*** (0.020)	-0.018 (0.013)	0.025** (0.012)	0.021* (0.012)	0.055*** (0.012)
Trade Openness	0.0002 (0.0002)	-0.001*** (0.0004)	0.001*** (0.0003)	0.001*** (0.0002)	0.002*** (0.0002)	0.0001 (0.0001)
Polity	0.034*** (0.001)	0.008*** (0.002)	-0.013*** (0.001)	-0.014*** (0.001)	-0.014*** (0.001)	-0.001 (0.001)
APE	0.436*** (0.050)	0.581*** (0.099)	0.182*** (0.067)	-0.726*** (0.061)	-0.758*** (0.062)	0.091** (0.044)
No. of Sanctioners	-0.001*** (0.0001)	0.0004 (0.0003)	-0.002*** (0.0002)	-0.001*** (0.0002)	-0.001*** (0.0002)	0.00005 (0.0001)
Observations	6,565	5,647	6,428	6,570	6,570	1,468
R ²	0.207	0.018	0.040	0.067	0.072	0.054
Adjusted R ²	0.180	-0.016	0.007	0.035	0.040	-0.067
F Statistic	236.483*** (df = 7; 6347)	13.970*** (df = 7; 5457)	37.354*** (df = 7; 6210)	65.497*** (df = 7; 6351)	70.315*** (df = 7; 6351)	10.661*** (df = 7; 1300)

Note:

* p < 0.10 ** p < 0.05 *** p < 0.01

TABLE 5: INCLUSION RESULTS (5-YEAR LAG)

	<i>Dependent variable:</i>	
	Inclusion (1)	Political Inclusion (2)
Sanctions	-0.041** (0.019)	0.033*** (0.012)
Conflict	0.036 (0.030)	-0.095*** (0.020)
GDP (log)	-0.032 (0.020)	0.003 (0.013)
Trade Openness	-0.002*** (0.0004)	0.001*** (0.0003)
Polity	0.005** (0.002)	-0.014*** (0.001)
APE	0.249** (0.103)	0.059 (0.067)
No. of Sanctioners	0.001*** (0.0003)	-0.002*** (0.0002)
Observations	5,161	5,988
R ²	0.012	0.048
Adjusted R ²	-0.024	0.013
F Statistic	8.866*** (df = 7; 4975)	41.713*** (df = 7; 5773)
<i>Note:</i>	* p < 0.05, ** p < 0.01, *** p < 0.001	

The inclusion scale is comprised of indices along three spectra of inclusion: political, educational, and economic. To understand more about what is driving these long-term changes in inclusion, which is contrary to our expectations, we disaggregated the index and tested additional economic indicators². We assumed, based on prior studies, that women's economic inclusion would increase after economic sanctions, as women are forced to enter the labor force to supplement their household income, albeit in less secure jobs. With data from the World Bank Development Indicators and the International Labour Organization we ran the same model with

four distinct economic dependent variables, each disaggregated by sex.

Both *labor force participation rate* (employed/seeking work divided by working age population), which has been used by prior studies, and *wage workers* (employed in public or private sector and compensated in wages) represent empowering economic indicators. A large female labor force participation rate and increase in wage workers would suggest an increase in economic inclusion as women are employed or are able to seek jobs. We also investigated the

² The available educational inclusion indicators disaggregated by sex suffered from missing data problems, as well as availability issues, and so we were unable to run analyses on the educational dimension of inclusion.

impact of economic sanctions on negative economic indicators, namely *unemployment* (actively seeking employment, but unable to obtain it). Increases in this indicator would suggest a decrease in women’s economic inclusion in society. Finally, we examine *vulnerable employment* (without formal work arrangements, at home or in the workplace). Due to the way labor force participation is coded and the Hill-Karim indices are constructed, an increase of women in vulnerable employment may be reflected positively in both. However, this is by no means an empowering economic indicator, since vulnerable employment reflects worse working conditions for women, less job security, and less ability to access healthcare and other benefits that may come from holding a contractual job. Table 6 displays the descriptive statistics for these additional dependent variables.

Table 6: Descriptive statistics of dependent variables (economic indicators).

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Labor Force Participation (F)	7047	40.09	9.24	7.89	37.42	46.25	56.01
Labor Force Participation (M)	7050	74.29	8.12	42.13	68.83	80.04	96.28
Vulnerable Employment (F)	6815	44.81	31.90	0.02	12.40	77.89	99.27
Vulnerable Employment (M)	6815	40.15	26.24	0.15	16.33	63.81	92.86
Unemployment (F)	6815	8.99	7.01	0.08	4.16	12.09	47.59
Unemployment (M)	6815	7.26	5.18	0.05	3.85	9.33	36.96
Wage Worker (F)	6815	53.52	31.47	0.62	21.07	85.00	99.93
Wage Worker (M)	6815	55.84	25.06	1.07	33.83	78.28	99.61

Results in Table 7 demonstrate that five years after economic sanctions are enacted, women suffer economic losses that are not as pronounced one year after economic sanctions are imposed (see Table 8).

TABLE 7 ECONOMIC INCLUSION INDICATORS (5-YEAR LAG)

	<i>Dependent variable:</i>							
	Labor Force Participation Female	Labor Force Participation Male	Vulnerable Employment Female	Vulnerable Employment Male	Unemployment Female	Unemployment Male	Wage Worker Female	Wage Worker Male
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanctions	-0.186*** (0.070)	-0.312*** (0.109)	0.536*** (0.180)	0.641*** (0.166)	0.004 (0.141)	0.204 (0.125)	-0.600*** (0.180)	-0.561*** (0.166)
Conflict	-0.096 (0.092)	-0.139 (0.143)	-0.196 (0.234)	0.388* (0.216)	0.173 (0.183)	0.271* (0.163)	0.311 (0.234)	-0.364* (0.216)
GDP (log)	-0.805*** (0.091)	-0.657*** (0.141)	-1.339*** (0.233)	-2.219*** (0.215)	-1.363*** (0.182)	-1.211*** (0.162)	1.144*** (0.232)	1.988*** (0.214)
Trade Openness	0.001 (0.001)	0.006*** (0.002)	-0.016*** (0.004)	-0.020*** (0.003)	0.001 (0.003)	-0.0002 (0.002)	0.013*** (0.004)	0.017*** (0.003)
Polity	-0.050*** (0.009)	-0.065*** (0.014)	-0.118*** (0.024)	-0.120*** (0.022)	0.085*** (0.018)	0.027 (0.016)	0.141*** (0.024)	0.132*** (0.022)
APE	-0.667 (0.409)	0.676 (0.636)	-4.266*** (1.038)	-8.401*** (0.958)	2.599*** (0.811)	2.170*** (0.724)	4.863*** (1.037)	9.673*** (0.957)
No. of Sanctioners	-0.001 (0.001)	0.003** (0.001)	0.003 (0.002)	0.006*** (0.002)	0.004*** (0.002)	0.001 (0.001)	-0.001 (0.002)	-0.004** (0.002)
Observations	3,385	3,385	3,272	3,272	3,272	3,272	3,272	3,272
R ²	0.039	0.021	0.033	0.087	0.031	0.023	0.034	0.086
Adjusted R ²	-0.016	-0.035	-0.023	0.033	-0.026	-0.035	-0.023	0.032
F Statistic	18.672*** (df = 7; 3200)	9.813*** (df = 7; 3200)	15.282*** (df = 7; 3089)	41.855*** (df = 7; 3089)	14.000*** (df = 7; 3089)	10.281*** (df = 7; 3089)	15.471*** (df = 7; 3089)	41.385*** (df = 7; 3089)

Note:

*p**p***p<0.01

Yet even one year after the enactment of sanctions (see Table 8), women in vulnerable employment increases significantly, more so than men, and the proportion of waged and salaried female workers decreases significantly, even as their male counterparts did not seem equally affected.

TABLE 8: ECONOMIC INCLUSION INDICATORS (1-YEAR LAG)

	<i>Dependent variable:</i>							
	Labor Force Participation Female (1)	Labor Force Participation Male (2)	Vulnerable Employment Female (3)	Vulnerable Employment Male (4)	Unemployment Female (5)	Unemployment Male (6)	Wage Worker Female (7)	Wage Worker Male (8)
Sanctions	-0.019 (0.065)	-0.277*** (0.102)	0.485*** (0.171)	0.261* (0.158)	-0.136 (0.123)	-0.006 (0.109)	-0.551*** (0.171)	-0.228 (0.160)
Conflict	-0.144 (0.094)	0.097 (0.148)	0.083 (0.247)	0.814*** (0.229)	0.261 (0.178)	0.462*** (0.158)	0.055 (0.248)	-0.785*** (0.231)
GDP (log)	-1.003*** (0.088)	-0.567*** (0.138)	-1.781*** (0.232)	-2.834*** (0.215)	-1.427*** (0.167)	-1.192*** (0.148)	1.591*** (0.232)	2.510*** (0.217)
Trade Openness	-0.0002 (0.001)	0.006*** (0.002)	-0.018*** (0.003)	-0.022*** (0.003)	0.0004 (0.002)	0.001 (0.002)	0.015*** (0.003)	0.019*** (0.003)
Polity	-0.058*** (0.009)	-0.070*** (0.014)	-0.114*** (0.024)	-0.121*** (0.022)	0.099*** (0.017)	0.025 (0.015)	0.133*** (0.024)	0.128*** (0.023)
APE	-1.096*** (0.395)	-0.036 (0.619)	-5.110*** (1.036)	-9.374*** (0.962)	2.713*** (0.746)	2.561*** (0.660)	5.730*** (1.038)	10.550*** (0.968)
No. of Sanctioners	-0.003*** (0.001)	-0.0003 (0.001)	-0.005*** (0.002)	-0.003* (0.002)	0.003* (0.001)	-0.0001 (0.001)	0.007*** (0.002)	0.004** (0.002)
Observations	3,971	3,971	3,858	3,858	3,858	3,858	3,858	3,858
R ²	0.049	0.016	0.037	0.091	0.034	0.026	0.038	0.087
Adjusted R ²	0.002	-0.033	-0.011	0.045	-0.015	-0.023	-0.011	0.040
F Statistic	27.881*** (df = 7; 3782)	8.771*** (df = 7; 3782)	20.393*** (df = 7; 3671)	52.722*** (df = 7; 3671)	18.435*** (df = 7; 3671)	13.992*** (df = 7; 3671)	20.677*** (df = 7; 3671)	49.821*** (df = 7; 3671)

Note:

*p**p***p<0.01

After five years, both empowering economic inclusion indicators showed an even larger decrease (labor force participation and wage workers), while vulnerable employment increases. The effects that appear after a five-year lag may reflect the structural changes to the economy that economic sanctions bring. The increased magnitude of sanctions five years on could explain the significant drop in the inclusion variable when it is lagged to five years. These economic inclusion losses are seemingly not offset by political inclusion or educational inclusion (though we are unable to test for the latter and strongly suspect that it signs negatively), as overall inclusion is negative five years after economic sanctions are enacted.

DATA, METHODS, AND RESULTS: EXPANDING THE SCOPE OF WOMEN'S HEALTH RIGHTS

To quantify women's right to health, we use the same model specified above, but replace the societal rights indicators with health indicators. We use a total of three World Bank

Development Indicators for these dependent variables. Consistent with earlier studies, we examine *female life expectancy at birth*. Although our focus is on female life expectancy, we include *male life expectancy* as a contrast to demonstrate the differential impact economic sanctions may have on the health rights of women compared with those of men. In deviating from prior studies, we take a more holistic approach to health and expand our analyses to include two additional indicators that highlight women's right to health in each country. These include *maternal mortality ratio* and *adolescent fertility rate*.

Maternal mortality is defined as the number of female deaths related to pregnancy or its mismanagement that occurs during pregnancy, childbirth, or within 42 days of pregnancy termination. The maternal mortality ratio (MMR) is the number of maternal deaths per 100,000 live births annually. Adolescent fertility rate is defined as the number of births per 1,000 women ages 15-19. Since complications from pregnancy and childbirth are a primary cause of death in women of childbearing years in low- and middle-income countries, these reproductive health indicators can be used as broader health indicators in developing contexts. For this paper, we use these indicators as proxies for women's ability to access health care.

Each of these indicators has followed a consistent trend in low- and middle-income countries throughout the last few decades, with MMR and adolescent fertility rates steadily declining each year, and life expectancy for both women and men consistently increasing (see Appendix). Therefore, a deviation from these trends would be unexpected and indicative of a change in the female population's right to health.

Table 9 shows the impact of economic sanctions on life expectancy, maternal mortality, and adolescent fertility rate one year following the imposition of sanctions. The results for each

of these four models align with our hypotheses: health outcomes for women are worse across the board. While life expectancy at birth decreases for both females and males (with a greater decrease among the female population), MMR and adolescent fertility increase. For the majority of indicators, these results hold 5 years after sanctions are enacted (only MMR is no longer statistically significant. See Appendix).

TABLE 9 HEALTH RIGHTS (1-YEAR LAG)

	<i>Dependent variable:</i>			
	Life Expectancy at Birth Female	Life Expectancy at Birth Male	Maternal Mortality Ratio	Adolescent Fertility Rate
	(1)	(2)	(3)	(4)
Sanctions	-0.366*** (0.089)	-0.174** (0.085)	10.291** (4.268)	1.128** (0.482)
Conflicts	-0.115 (0.147)	-0.388*** (0.141)	46.403*** (5.798)	1.550* (0.798)
GDP (log)	0.651*** (0.090)	0.621*** (0.087)	-11.271* (5.845)	4.298*** (0.490)
Trade Openness	0.004** (0.002)	0.009*** (0.002)	0.056 (0.080)	0.127*** (0.010)
Polity	0.137*** (0.009)	0.099*** (0.008)	-2.797*** (0.680)	0.107** (0.048)
APE	19.275*** (0.466)	17.869*** (0.446)	-387.098*** (27.082)	-23.840*** (2.524)
No. of Sanctioners	0.001 (0.001)	0.003** (0.001)	0.139*** (0.044)	-0.020*** (0.006)
Observations	6,598	6,598	2,643	6,598
R ²	0.249	0.229	0.135	0.057
Adjusted R ²	0.224	0.202	0.073	0.025
F Statistic	302.763*** (df = 7; 6378)	270.368*** (df = 7; 6378)	54.928*** (df = 7; 2465)	55.567*** (df = 7; 6378)

Note:

* p < 0.05
** p < 0.01
*** p < 0.001

DISCUSSION

Although we did not anticipate an increase in political inclusion following the enactment of economic sanctions, this result is consistent with the post-conflict literature. Many scholars find that women's political rights can increase in the aftermath of conflict, as conflict provides an opportunity to redefine gender norms and women find new ways to participate in society.

For example, following the Rwandan genocide women seized opportunities for political mobilization, augmenting their political rights (Berry 2015). Recent large-N studies have found a correlation between various aspects of conflict and an increase in political rights, such as conflict duration (the longer the conflict, the greater the probability for an increase in political rights, as documented by Gurses, Arias, and Morton 2020) and conflict termination (a successfully negotiated and implemented comprehensive peace agreement increases women's political rights, as documented by Joshi and Olsson 2021). It is possible that economic sanctions, like conflict, provide a venue for women to redefine society and their place within it, especially politically.

CONCLUSION

There is more to the women's rights and economic sanctions story than has previously been understood. We argue that there exist multiple dimensions of women's rights beyond legal rights. Our paper introduces an examination of other societal rights (women's security/freedom from harm, and inclusion in society), along with multiple health rights (maternal mortality and adolescent fertility) in addition to legal rights and life expectancy, which have been the focus of previous studies. This initial estimation of the data confirms our assertion that expanding the scope of women's rights allows us a more nuanced understanding of the impact of sanctions.

While legal rights, freedom from harm, and health rights all decrease after sanctions are imposed, political inclusion increases. This increase in political inclusion is countered with a decrease in economic inclusion. Although prior studies found that women entered the labor force when sanctions were imposed, our work reveals that they do so in less desirable jobs as

evidenced by an increase in vulnerable employment. Thus, in the long run, overall women's inclusion in society decreases after the implementation of economic sanctions.

Examining the impacts of economic sanctions on vulnerable target populations is critical, particularly as countries eschew conflict in favor of sanctions, which purportedly inflict less harm on civilians. Our results show that apart from political inclusion, women's rights are overwhelmingly harmed by economic sanctions. This finding has policy implications for countries interested in promoting sustainable development goals (SDGs), such as SDG 3: Healthy Lives and Well-being and SDG 5: Gender Equality, while also pursuing their own economic statecraft policies. By imposing economic sanctions, sending countries contribute to conditions that worsen health outcomes and exacerbate gender equality in target countries. As we move toward 2030, it is imperative to understand how to employ economic statecraft without derailing the SDGs. Future research should identify what measures can be taken in conjunction with economic sanctions to shore up support for vulnerable populations, such as women.

REFERENCES

- Allen, S. H., & Lektzian, D. J. (2013). Economic sanctions: A blunt instrument?. *Journal of Peace Research*, 50(1), 121-135.
- Alvarez, J. L., Gil, R., Hernández, V., & Gil, A. (2009). Factors associated with maternal mortality in Sub-Saharan Africa: an ecological study. *BMC public health*, 9(1), 1-8.
- Ayhan, S. H. (2018). Married women's added worker effect during the 2008 economic crisis—The case of Turkey. *Review of Economics of the Household*, 16(3), 767-790.
- Baldwin, D. A. (2020). *Economic Statecraft: New Edition*. Princeton University Press.
- Betrán, A. P., Wojdyla, D., Posner, S. F., & Gülmezoglu, A. M. (2005). National estimates for maternal mortality: an analysis based on the WHO systematic review of maternal mortality and morbidity. *BMC Public Health*, 5(1), 1-12.
- Berry, M. E. (2015). From violence to mobilization: Women, war, and threat in Rwanda. *Mobilization: An International Quarterly*, 20(2), 135-156.
- Caprioli, M., Hudson, V. M., McDermott, R., Ballif-Spanvill, B., Emmett, C. F., & Stearmer, S. M. (2009). The Womanstats Project database: Advancing an empirical research agenda. *Journal of Peace Research*, 46(6), 839-851.
- Cingranelli, D. L., & Richards, D. L. (2010). The Cingranelli and Richards (CIRI) human rights data project. *Hum. Rts. Q.*, 32, 401.
- Collins, Caitlyn, Liana Christin Landivar, Leah Ruppanner, and William J. Scarborough. "COVID-19 and the gender gap in work hours." *Gender, Work & Organization* (2020).
- Cousins, Sophie. "COVID-19 has "devastating" effect on women and girls." *The Lancet* 396.10247 (2020): 301-302.
- Croicu, Mihai & Sundberg (2012) UCDP GED Conflict Polygons Dataset. Department of Peace and Conflict Research, Uppsala University
- Detraz, N., & Peksen, D. (2017). In the aftermath of Earth, Wind, and Fire: Natural disasters and respect for women's rights. *Human Rights Review*, 18(2), 151-170.
- Drury, A. C., & Peksen, D. (2014). Women and economic statecraft: The negative impact international economic sanctions visit on women. *European Journal of International Relations*, 20(2), 463-490.

Felbermayr, G. A. Kirilakha, C. Syropoulos, E. Yalcin, and Y.V. Yotov (2020). The global sanctions data base." *European Economic Review*, October.

Fisunoglu, A. Kang, K. Arbetman-Rabinowitz, M. Kugler, J. (2011) "Relative Political Capacity Dataset (Version 2.4) August 2020.

Ghobarah, H. A., Huth, P., & Russett, B. (2003). Civil wars kill and maim people—long after the shooting stops. *American Political Science Review*, 97(2), 189-202.

Gurses, M., Arias, A., & Morton, J. (2020). Women and War: Women's Rights in Post-Civil War Society. *Civil Wars*, 22(2-3), 224-242.

Gutmann, J., Neuenkirch, M., & Neumeier, F. (2020). Precision-guided or blunt? The effects of US economic sanctions on human rights. *Public Choice*, 185(1), 161-182.

Gutmann, J., Neuenkirch, M., & Neumeier, F. (2021). Sanctioned to death? The impact of economic sanctions on life expectancy and its gender Gap. *The Journal of Development Studies*, 57(1), 139-162.

Hunter, K., Hubner, S., & Kuczura, E. (2021). "If you don't help me, I'm going to take my life": the devastating impact of the US's global gag rule and the COVID-19 pandemic on women's sexual and reproductive health in Kenya. *International Feminist Journal of Politics*, 1-8.

International IDEA. Gender Quotas Database. International Institute for Democracy and Electoral Assistance. Accessed September 22, 2021. www.idea.int/data-tools/data/gender-quotas/country-view/255/35

Jeong, J. M. (2020). Economic sanctions and income inequality: impacts of trade restrictions and foreign aid suspension on target countries. *Conflict Management and Peace Science*, 37(6), 674-693.

Joshi, M., & Olsson, L. (2021). War termination and women's political rights. *Social Science Research*, 94, 102523.

Karim, S., & Hill, D. (2018, May). The study of gender and women in cross-national political science research: Rethinking concepts and measurement. In *Working paper presented at the Annual Convention of the International Studies Association*.

Kim, Y. (2019). Economic sanctions and HIV/AIDS in women. *Journal of public health policy*, 40(3), 351-366.

Martiny, L. (2015). Intra-household coping mechanisms in hard times: the added worker effect in the 2001 Argentine Economic Crisis. Available at SSRN 2581547.

Morgan, T. C., Bapat, N., & Kobayashi, Y. (2014). Threat and imposition of economic sanctions 1945–2005: Updating the TIES dataset. *Conflict Management and Peace Science*, 31(5), 541-558.

Peksen, D. (2011). Economic sanctions and human security: the public health effect of economic sanctions. *Foreign Policy Analysis*, 7(3), 237-251.

Plümper, T., & Neumayer, E. (2006). The unequal burden of war: The effect of armed conflict on the gender gap in life expectancy. *International organization*, 60(3), 723-754.

Sabarwal, S., Sinha, N., & Buvinic, M. (2011). How do women weather economic shocks? What we know.

Smith, J. P., Thomas, D., Frankenberg, E., Beegle, K., & Teruel, G. (2002). Wages, employment and economic shocks: Evidence from Indonesia. *Journal of Population Economics*, 15(1), 161-193.

United Nations Human Security Unit. 2016. UN Human Security Handbook. New York, NY.

United States Bureau of Labor Statistics. 2021. Highlights of women's earnings in 2020. BLS Reports. Number 1094. September.

Urdal, H., & Che, C. P. (2015). War and gender inequalities in health. In *Gender, Peace and Security* (pp. 136-157). Routledge.

Weber, P. M., & Schneider, G. (2020). Post-Cold War Sanctioning by the EU, the UN, and the US: Introducing the EUSANCT Dataset. *Conflict Management and Peace Science*.

World Development Indicators, The World Bank. Accessed March 12, 2021

APPENDIX

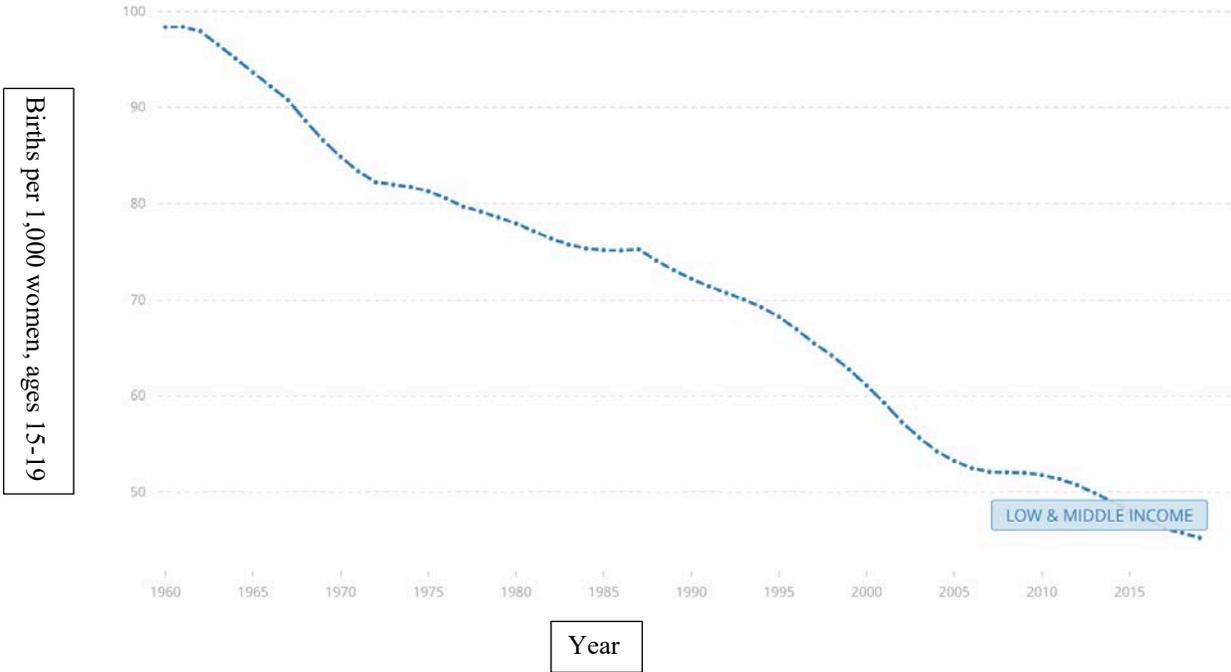
SOCIETAL RIGHTS (5-YEAR LAG)

	<i>Dependent variable:</i>					
	Legal Rights	Inclusion	Political Inclusion	Combined Harm	Indirect Harm	Direct Harm
	(1)	(2)	(3)	(4)	(5)	(6)
Sanctions	-0.045*** (0.009)	-0.041** (0.019)	0.033*** (0.012)	0.130*** (0.011)	0.137*** (0.011)	0.006 (0.008)
Conflict	-0.055*** (0.015)	0.036 (0.030)	-0.095*** (0.020)	0.021 (0.017)	0.023 (0.017)	-0.043*** (0.009)
GDP (log)	0.028*** (0.009)	-0.032 (0.020)	0.003 (0.013)	-0.009 (0.011)	-0.012 (0.011)	0.058*** (0.013)
Trade Openness	0.0003* (0.0002)	-0.002*** (0.0004)	0.001*** (0.0003)	0.0003 (0.0002)	0.0004* (0.0002)	0.0001 (0.0001)
Polity	0.034*** (0.001)	0.005** (0.002)	-0.014*** (0.001)	-0.010*** (0.001)	-0.010*** (0.001)	-0.0001 (0.001)
APE	0.357*** (0.050)	0.249** (0.103)	0.059 (0.067)	-0.561*** (0.057)	-0.568*** (0.057)	0.081* (0.046)
No. of Sanctioners	-0.001*** (0.0001)	0.001*** (0.0003)	-0.002*** (0.0002)	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)
Observations	5,985	5,161	5,988	5,988	5,988	1,317
R ²	0.234	0.012	0.048	0.063	0.065	0.048
Adjusted R ²	0.206	-0.024	0.013	0.028	0.031	-0.090
F Statistic	252.385*** (df = 7; 5771)	8.866*** (df = 7; 4975)	41.713*** (df = 7; 5773)	55.525*** (df = 7; 5773)	57.728*** (df = 7; 5773)	8.231*** (df = 7; 1150)

Note:

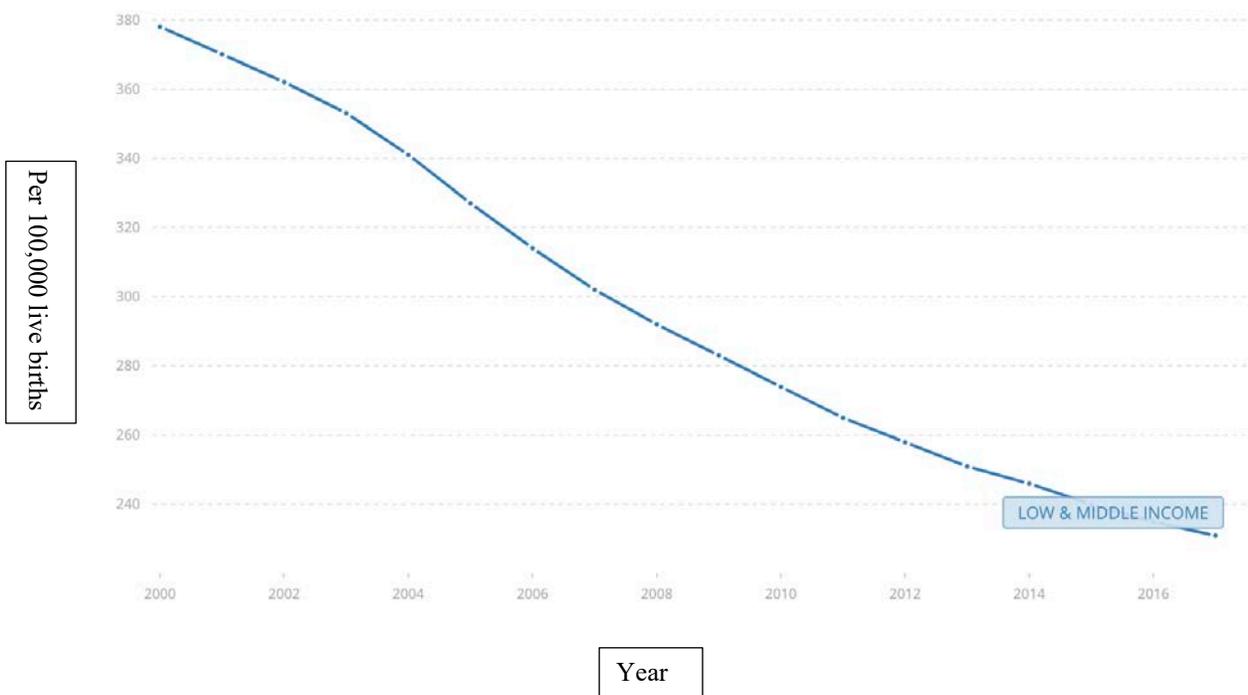
*** p < 0.01

Adolescent Fertility Rate, Low- & Middle-Income Countries (1960-2019)



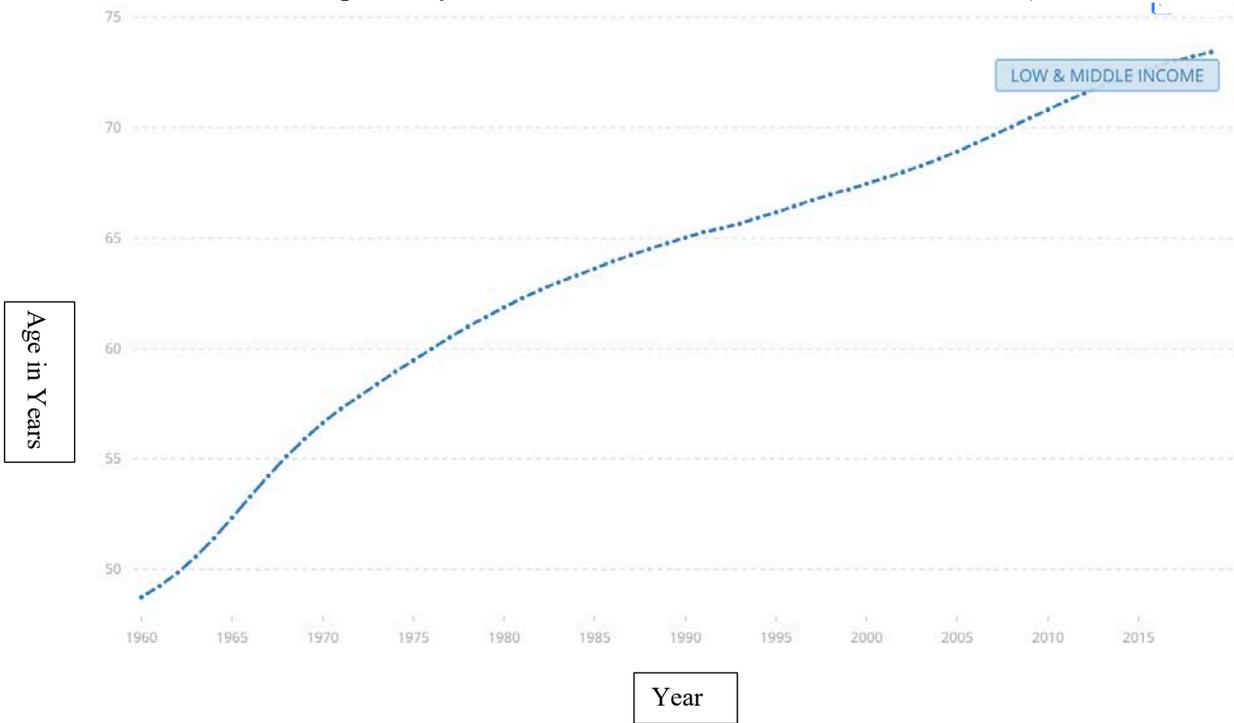
Source: World Bank Development Indicators (UN Population Division, World Population Prospects)

Maternal Mortality Ratio, Low- & Middle-Income Countries (2000-2017)



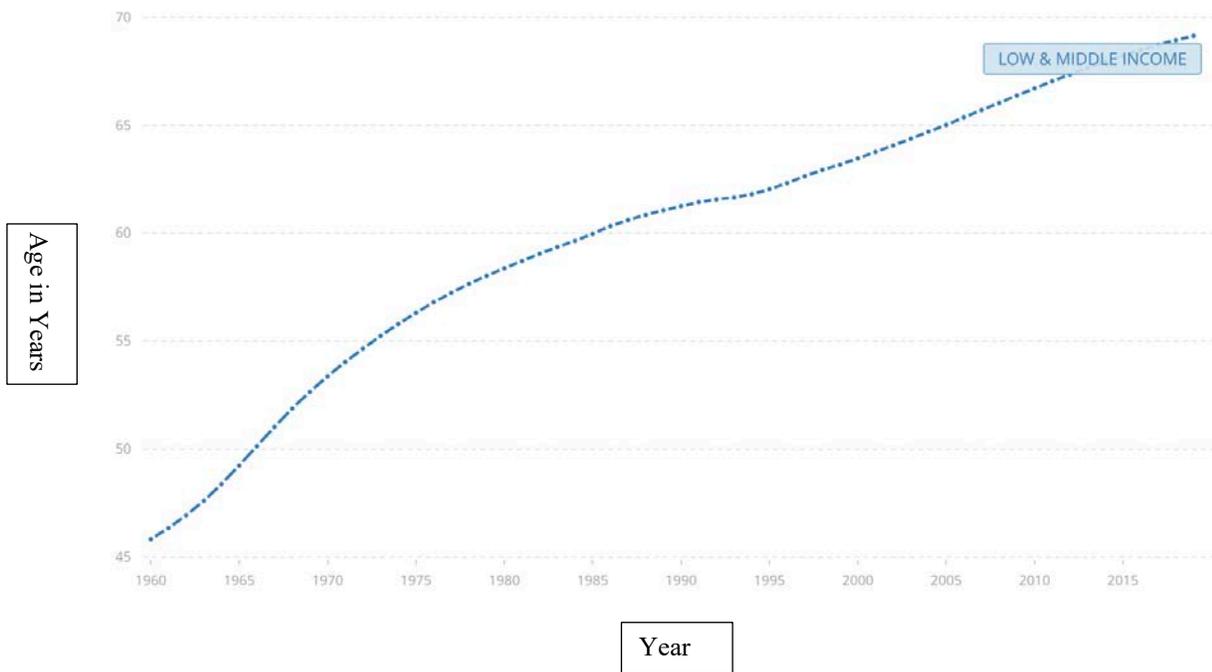
Source: WB Development Indicators (WHO, UNICEF, UNFPA, WB Group, & UN Population Division)

Female Life Expectancy at Birth, Low- & Middle-Income Countries (1960-2019)



Source: World Bank Development Indicators

Male Life Expectancy at Birth, Low- & Middle-Income Countries (1960-2019)



Source: World Bank Development Indicators

HEALTH RIGHTS (5-YEAR LAG)

	<i>Dependent variable:</i>			
	Life Expectancy at Birth Female	Life Expectancy at Birth Male	Maternal Mortality Ratio	Adolescent Fertility Rate
	(1)	(2)	(3)	(4)
Sanctions	-0.597*** (0.093)	-0.414*** (0.089)	-5.287 (4.883)	2.266*** (0.502)
Conflict	0.070 (0.148)	-0.232 (0.143)	44.986*** (6.123)	1.429* (0.803)
GDP (log)	0.544*** (0.094)	0.513*** (0.090)	-3.027 (6.708)	3.697*** (0.507)
Trade Open.	0.006*** (0.002)	0.009*** (0.002)	0.161* (0.095)	0.123*** (0.010)
Polity	0.130*** (0.009)	0.094*** (0.009)	-2.934*** (0.800)	0.173*** (0.049)
APE	19.448*** (0.496)	18.139*** (0.479)	-371.227*** (32.783)	-21.756*** (2.689)
No. of Sanctioners	-0.005*** (0.001)	-0.004*** (0.001)	0.058 (0.050)	-0.027*** (0.007)
Observations	6,016	6,016	2,057	6,016
R ²	0.254	0.231	0.111	0.053
Adjusted R ²	0.227	0.203	0.029	0.018
F Statistic	282.418*** (df = 7; 5800)	249.160*** (df = 7; 5800)	33.562*** (df = 7; 1883)	46.164*** (df = 7; 5800)

Note:

* p < 0.1
** p < 0.05
*** p < 0.01