Give and take:

The impact of aid sanctions on women's rights

Abstract

What is the impact of aid sanctions on women's rights in the targeted state? While prior research has demonstrated that sanctions can negatively impact women's rights and health, we still do not have a clear understanding of the heterogenous effects of different sanction instruments. This paper argues that aid sanctions negatively impact women's rights through both direct and indirect means. Governments faced with aid cuts may be forced to direct funds away from social and health spending. Furthermore, in the civil sector, the termination of aid creates a more costly landscape for nongovernmental organizations that provide services to marginalized populations. Accordingly, this impact should be exacerbated in aid dependent countries. Women, a more vulnerable group in the population, are more likely to be impacted by these cuts than men. When sending states employ aid sanctions with the intent to curb human rights violations, however, this paper posits that these negative outcomes for women are mitigated. Using data on sanctions from 1989-2015, and indices on various dimensions of women's bodily rights, this paper tests how aid sanctions impact women's security, life expectancy, and maternal mortality. Overall, these results show that universal aid sanctions tend to be less harmful that other types of sanctions. Further, there is evidence to support a link between sanctions and health outcomes. In many cases, women's right to health (life expectancy and maternal mortality) is negatively impacted, indicating that aid sanctions, despite their frequent inclusion of exemptions for humanitarian aid, can still have detrimental effects on marginalized groups.

In 2019 the administration of President Donald Trump, amidst much outcry, slashed hundreds of millions of dollars in aid to three Northern Triangle countries of El Salvador, Guatemala, and Honduras (Wroughton and Zengerle 2019). The countries were accused of not doing enough to stem the flow of asylum seekers to the southern border of the United States. The sharp decrease in U.S. aid had wide-ranging effects. Prior to its termination, the aid supported security and police forces responsible for preventing drug trafficking, as well as Washington-backed humanitarian relief programs targeted towards the poorest residents in the three countries (McDonnell 2019). This set of sanctions were by no means the first time that the U.S. had used aid as an instrument of negative economic coercion. In fact, aid cuts have been utilized by every recent presidential administration as a tool of economic sanctions. President Joseph Biden stopped millions of dollars in aid from flowing to the Naypyidaw in the wake of the military coup in 2021 (Hansler 2021). In 2014, the government of Uganda signed the Anti-Homosexuality Act into law, leading then-President Barack Obama to impose travel restrictions on Ugandan officials, cancel a planned joint military exercise, and cut off aid for a community policing project and funding for health agencies (Baker 2014). As these examples demonstrate, aid termination is increasingly included in a sanctions package by sanction-sending governments.

Economic sanctions consist of a wide array of instruments and have been typically employed as an alternative to conflict. Although economic sanctions are traditionally associated with trade controls, ranging from limited import or export restrictions to wide-ranging embargoes, the humanitarian impact caused by such tools have encouraged policymakers to be more conscientious in sanction implementation (Weiss 1999). As policymakers have gained a better understanding of the harm that broad, undiscriminating embargoes could have on the civilian population in the sanctioned country, sanctions technology has evolved to become more targeted. Targeted sanctions, or sanctions that are imposed on the political elite of the target states, became increasingly popular (Drezner 2011). With technological advancements that allow for better targeting of individuals, entities, and organizations, sanctioning states can now choose between various types of tools, including aid sanctions, financial sanctions, travel bans, and arms embargoes. In a world interconnected by financial flows and aid, sanction-sending states embedded in capital networks have more sanctioning tools available. Some of these instruments can be as effective at achieving their goals as traditional sanctions. For example, a recent study finds that aid sanctions accelerate target capitulation (Jeong 2019).

Notwithstanding these advancements, we lack in-depth understanding of how the different kinds of sanction instruments affect the well-being of civilians in targeted states. Sanctions are highly complex and many of these sanction types occur simultaneously. Ignoring the independent effects of different sanction types may lead us to misunderstand the impact of sanctions. Despite this, the diversity of sanction instruments is infrequently accounted for in the sanctions literature, particularly with regards to on-the-ground consequences faced by the population in the target state. On average, economic sanctions have been found to negatively affect the population in the target country (Drury and Peksen 2014). But we do not understand if these impacts vary across different sets of conditions or populations. We argue that the consequences of economic sanctions cannot be truly understood without accounting for the heterogeneity in the implementation of economic sanctions. It is therefore imperative to disentangle the different sanction instruments used and to examine each in isolation. Due to their

prevalence and the direct effect they potentially have on the target state's marginalized population, this paper focuses on aid sanctions, or economic sanctions that include the termination of foreign aid, either committed or disbursed, to the target state. We measure the impact of aid termination on women's bodily rights, a term encompassing three outcomes related to women's *physical* well-being: Freedom from harm, life expectancy, and maternal mortality. This project has high relevance to policymakers seeking to ameliorate the effect of economic sanctions, particularly when sanction senders' objectives overlap with or necessitate the creation of a strong and stable civil society.

Aid Sanctions: A Unique Sanction Instrument

Aid sanctions and foreign aid are two sides of the same coin; both are forms of coercive economic statecraft, defined as the use of economic policy instruments to achieve foreign policy goals (Baldwin 2020). Countries employing economic statecraft can use "carrots and sticks" to induce compliance of target countries on non-economic issues through economic rewards or punishments. Foreign aid, while traditionally viewed as a "carrot", can also be used as a "stick" when the donor country withdraws or suspends committed aid from a recipient country to alter the non-economic behavior the target, for reasons ranging from fraudulent elections to weapons proliferation, to human rights abuses in the target country. Aid termination, also known as aid withdrawal or aid sanctions, is defined by scholars as a donor country's refusal to disburse aid that has already been committed to a recipient country (O'Brien-Udry 2020). Formally, the termination of foreign aid is when "the sender reduces or ends foreign aid or loans if the target state does not comply with the demands of the sender" (Weber and Schneider 2022). Although usually termination occurs due to reasons of corruption of human rights abuses, aid sanctions could be enacted to prompt behavioral change from the target orthogonal to issues relating to the disbursement and utilization of the foreign aid itself.

The logic of economic sanctions dictates that their success is based on the ability of the sanction-sending state to exert economic harm on the target. By severing economic ties, the sanctioning state hopes to hurt relevant stakeholders in the targeted country, be they elites or the mass population, who would then in turn theoretically pressure their political leaders into changing their behavior and capitulating to the demands of the sanctioner. This is a two-step process, with potential complications at each stage. The ultimate contents of economic sanctions, including the scope (what products are included, which industries are exempt, etc.) and their severity, are the outcome of bargaining processes, both inside the sanction-sending state and, if the sanctions were enacted through a coalition or an international organization, with external partners. Thus, the economic effect that sanctions may have could vary. Moreover, how sanctions themselves would interact with the conditions of the target state also contains a high degree of uncertainty. The target's existing trade relations, infrastructure, sanction-proofing preparations are just some of the factors that could impact how it experiences sanctions.

Compared with other types of sanction tools such as trade and finance, foreign aid sanctions have a few advantages for the sanctioning state. First, the flow of foreign aid is directly under the jurisdiction of the sanctioning state. The government of the sanctioning state could not only control whether aid is given, but it could control how much aid is given. Further, the sanctioner does not need to expand resources on monitoring and punishing sanction evasion.

Second, and relatedly, there is less uncertainty surrounding the effects that aid sanctions may have on the target. This means that aid sanctions can directly impact the lives of certain populations in the target state. While the effectiveness of foreign aid in general is debated, a number of studies exist that demonstrate the positive impact of aid on health. For example, active aid projects decrease infant mortality (Kotsadam et al. 2018), aid reduces HIV and child mortality (Yogo and Mallaye 2015), the prevalence of malaria (Marty et al. 2017), diarrhea (De and Becker 2015) and overall disease burden (Odokonyero et al. 2015). Aid allocated to reproductive health and maternal health is associated with decreases in maternal mortality (Banchani and Swiss 2019)**.** The interconnection between aid and the lived experiences of the target state civilians makes it imperative to examine how and in what ways aid sanctions differ from their counterparts.

Aid withdrawal itself contains a range of tools, though it usually either excludes humanitarian aid, medicine/medical products, etc. or includes specific waivers to continue providing humanitarian aid, medicine/medical products, etc.; for example, with the recent ascent of the Taliban into full government control of Afghanistan, the US issued a license to continue humanitarian assistance even as US sanctions continued against the Taliban (Psaledakis 2021). Thus, aid sanctions are not always associated with a decrease in the net flow of aid to the target state. The EU and US commonly redirect funds from the government in target states to projects that would "directly benefit civilians," such as when the US redirected $42 million in aid in 2021 from the post-coup Myanmar government to civil society and private sector projects. Partial aid sanctions exist where donor states punish recipients by cutting aid to economic sectors while continuing aid to the civil society writ large (Nielsen 2013). Prior research documents the negative consequences of economic sanctions for civilians, from increasing inequality to shortened life expectancies (Gutmann, Neuenkirch, and Neumeier 2021, for example). With these embedded exceptions for humanitarian purposes, it is reasonable to assume that aid sanctions should theoretically be less harmful overall, especially when compared to other types of sanction instruments.

Despite efforts to minimize risk, we argue that there may still be some adverse effects, particularly to marginalized populations. Prior work on aid sanctions does suggest that affluent groups bear the greatest share of costs associated with aid termination (Jeong 2020). Since the poor are not the primary targets of aid sanctions, Jeong argues that they should not suffer adverse humanitarian consequences of aid termination. He goes so far as to suggest that aid termination is one way to coerce target governments and avoid harm to target citizens. We agree with Jeong's assertion that the extent of humanitarian suffering may differ across sanction instruments and future studies should analyze this effect. If his assumption about affluent groups bearing the costs of aid termination is true, we would expect to see no change in humanitarian outcomes for women in the years when aid sanctions are applied. But if aid termination has some negative humanitarian impacts, which Jeong did not test for, we would expect those to be revealed in marginalized populations, if not in the general population. Furthermore, the quality of life for marginalized populations could diminish much more than their privileged counterparts. While the affluent groups in the target state may incur larger absolute economic loss, their wealth acts as a buffer, allowing them to weather the consequences of the economic shock. In this paper we isolate and estimate the impact of aid sanctions on women's bodily security and health, as

women are more likely to suffer from economic sanctions than their male counterparts (Drury and Peksen 2014).

Disruptions due to Aid Sanctions

Aid sanctions could impact bodily security and health of the vulnerable population in the target state either directly or indirectly. Aid sanctions that cut off government budgetary support is particularly prevalent (Jeong 2019). The direct impact of such aid cuts decreases capacity in government programs. Aid related to security, including community policing programs, military training and equipment, etc. are among the first programs cut by the sender state. This is partly correlated with the motivations of the sanctions. When the sanctioned state is repressive or committing human rights abuses, the sanctioning state often targets resources that could be used to support a repressive security apparatus. When this occurs, the target may also have less ability to provide security to its citizens.

Indirectly, aid sanctions could potentially cause the deterioration of the social safety net. While aid sanctions may provide exceptions for certain activities, particularly those connected to humanitarian projects and democratization, the introduction of such sanctions puts strain on the target state government. Depending on where aid cuts occur, the target state may choose to reshuffle its budget by redirecting funds from one sector to another. Given that security-related aid is often the first type cut by the sanctioning state, and that target states usually prioritize international security over civil society policing programs or other projects that may help with women's experienced bodily security, it is expected that the target would shift resources away from social welfare, public health, or related priorities towards security. This has occurred in other sectors of government priorities, specifically disaster preparedness (McLean and Whang 2021) and is one possible way in which governments may respond to aid termination.

Finally, aid sanctions increase transaction costs for NGOs attempting to minimize disruption to their aid flows (Allen and Lektzian 2013). NGOs on the ground struggle to provide the same level of services due to these increased costs. A 2017 Washington Post article highlighted challenges sanctions posed for aid operations in North Korea, such as bureaucratic constraints, and direct cuts to foreign assistance imposed by the US and the UK on Pyongyang (Fifield 2017). Even in the most well-designed sanction regimes, friction exists.

We posit that both the direct and indirect effects are mediated in turn by sanction motivation. Unpacking what drives a sanctioning state to impose aid sanctions on the target, we divide sanctions into two categories: human rights-related and non-human rights-related objectives. We argue that when the issue under sanction is human rights related, the sanctioning state is more likely to be conscientious of the ways in which aid sanctions are carried out. If the purpose of such sanctions is to stop human rights abuses, not inflict more harm on the target state or to inflict economic hardship on the population, traditional sanction logic may not apply. On the other hand, if the sanctions were motivated by other, non-human rights-related reasons, particularly security, the goal of the sanctioning state is to have the target quickly capitulate and thus the sender less likely to consider or prioritize the harm done by the sanctions on an already vulnerable population.

Aid Sanctions and Women's Bodily Rights

There is a rich body of literature confirming that women's rights are uniquely affected by external shocks incurred through natural and human-induced disasters. Research shows that women are more likely than men to die from natural disasters (Detraz and Peksen 2017) and in conflict zones (Plümper and Neumayer 2006). Furthermore, women experience negative outcomes to their sexual and reproductive health, both during times of armed conflict (Ghobarah, Huth, and Russett 2003) (Urdal and Che 2015) and throughout the COVID-19 pandemic (Hall et al. 2020) (Hunter, Hubner, and Kuczura 2021). Sanctions-specific research indicates that in target countries, women experience a greater decrease in life expectancy (Gutmann, Neuenkirch, and Neumeier 2021) and a greater increase in HIV infection rates than men (Kim 2019) while also experiencing lower literacy rates and labor force participation rates (Perry 2022) and a decrease in social rights, economic rights, and political rights (Drury and Peksen 2014). We contribute to this broader literature by demonstrating the correlation between a type of economic shock, aid sanctions, and women's outcomes and theorizing how as a marginalized population, women would be uniquely affected. This comes from the belief that examining the average effects of sanctions on the general population, or on even one aspect of women's rights, is insufficient for understanding how aid sanctions could affect the lives of women in the targeted country.

While broad sanctions and other types of shocks negatively impact women's outcomes, we indirectly test if the "safeguards" built into aid sanctions mitigate the harmful effects on women's bodily rights, which we define as to include their rights to physical security and to access healthcare. We focus on women's bodily rights for two reasons. First, previous work on the subject has primarily looked at how economic sanctions could affect women's social rights, including their legal rights or rights to participate in society. However, discrepancies often exist between the legal rights women are entitled to and their lived experiences. Exploring women's rights to physical security and access to health better reflect their everyday experiences. Moreover, bodily rights are fundamental rights. Furthermore, we argue that bodily rights could be comparatively severely impacted by aid sanctions. On the one hand, aid sanctions that either exclude humanitarian aid or redirect government aid to projects aimed at improving society could maintain or improve women's rights to bodily security in the target country. For nearly two decades there has been a concerted effort to fund projects that support gender equality and women's empowerment. As early as 2009, OECD reported that overall, 31% of sector-allocated bilateral aid supported gender equality projects (OECD 2012). In particular, over 50% of aid to the health and education sectors combined targeted gender equality (OECD 2012). Thus, despite the presence of aid sanctions, women's lives with regards to societal and health rights could be unchanged or even improved if aid is redirected into health or education projects. On the other hand, as members of a vulnerable population that is more susceptible to external shocks, women in countries experiencing aid withdrawal may suffer negative outcomes as they do when general sanctions are applied, albeit indirectly through the friction generated by the aid distribution process or through a general deterioration of social conditions under aid sanctions. In the next three subsections, we examine each of the bodily rights in turn, and discuss the mechanisms through which they could be affected by aid sanctions.

Women's security, or freedom from physical and indirect harm, could be threatened by aid termination if target governments, facing budget cuts, are unable to wield enough power to uphold existing rights or protections for their citizens. Liou, Murdie and Peksen identify reduced target government capacity as the mechanism between sanctions and increased human rights abuses in the target population (Liou, Murdie, and Peksen 2021). According to their work, this occurs through two channels: diminished fiscal capacity and increased corruption. They find that governments with reduced capacity are unable to screen and oversee their security agents, which leads to an increase in human rights abuses. This could have implications for women's bodily security. Since aid sanctions target government budgets, we would expect to see an increase in harm to women as these budget cuts would reduce government capacity to protect women. However, when aid sanctions are motivated by human rights violations, we posit the sanction sending states will be more attentive to the human rights consequences of their sanction packages and will include more effective ways to mitigate risk to the population. This leads us to the following set of hypotheses.

H1a. The year after sanctions are present, harm to women will increase in countries that experience aid sanctions, compared to countries that do not experience any sanctions whatsoever.

H1b. The year after sanctions are present, harm to women will increase in countries that experience aid sanctions, compared to countries that do not experience any aid sanctions.

H1c. The year after sanctions are present, harm to women will decrease in countries that experience aid sanctions motivated by human rights violations.

Life Expectancy

Shocks generated by sanctions have been shown to have detrimental effects on life expectancy of women (Garfield 1997) (Gutmann, Neuenkirch, and Neumeier 2021). This occurs for multiple reasons. With budget cuts, government health spending may be diverted to other areas. Lower public spending on health is associated with increased child mortality and deaths due to cholera as the public sanitation system collapses and increases the spread of infectious diseases (Gutmann, Neuenkirch, and Neumeier 2021). Sanctions can cause other disruptions to the health services system as necessary goods such as food and medicine may become more scarce as the costs associated with trading goods increases (Garfield 1999). Even when humanitarian goods are exempted from sanctions packages, studies have found that these exemptions are implemented in an imperfect manner and are often ineffective (Garfield 1999). This could make it more difficult for NGOs operating in the health space to obtain what they need as well. Since aid sanctions can directly impact government budgets and impact the operations of NGOs either indirectly through disruptions to health services or directly through potential cuts to project aid, we expect that life expectancy for women would decrease. However, when aid sanctions are motivated by human rights violations, we posit the sanction sending states will be more attentive to the human rights consequences of their sanction packages and will include more effective ways to mitigate risk to the population.

H2a. The year after sanctions are present, women's life expectancy will decrease in countries that experience aid sanctions, compared to countries that do not experience any sanctions whatsoever. This decrease will be greater for women than it is for men.

H2b. The year after sanctions are present, women's life expectancy will decrease in countries that experience aid sanctions, compared to countries that do not experience any aid sanctions. This decrease will be greater for women than it is for men.

H2c. The year after sanctions are present, women's life expectancy will increase in countries that experience aid sanctions motivated by human rights violations, compared to countries that do not experience any aid sanctions. This increase will be greater for women than it is for men.

Maternal Mortality

Maternal mortality, a key health indicator for women, could be negatively impacted by sanctions in the same ways that sanctions impact life expectancy. Like other health indicators, maternal mortality has been shown to increase during shocks, such as financial crises (Blanton, Blanton, and Peksen 2019). The maternal mortality indicator demonstrates a society's commitment to health resources for women. While womanhood is not synonymous with motherhood, maternal mortality is a good proxy for women's right to health as prior studies have shown that maternal mortality 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). We expect changes in maternal mortality to respond to aid termination in the same ways as female life expectancy.

H3a. The year after sanctions are present, maternal mortality will increase in countries that experience aid sanctions, compared to countries that do not experience any sanctions whatsoever.

H3b. The year after sanctions are present, maternal mortality will increase in countries that experience aid sanctions, compared to countries that do not experience any aid sanctions.

H3c. The year after sanctions are present, maternal mortality will decrease in countries that experience aid sanctions motivated by human rights violations, compared to countries that do not experience any aid sanctions.

Aid Sanctions: A Frequently Employed Instrument

The prevalence of aid sanctions provides both an opportunity and an imperative to examine this sanction instrument. Most sanction episodes include aid as a sanction instrument, whether alone or used jointly with other tools of negative coercion. Target countries are often subject to multiple, or layered sanctions simultaneously and it is difficult to isolate the effect of a singular sanction instrument. Since one-third of our dataset includes sanction cases where aid

termination was utilized *independent* of any other type of sanctioning instrument, we can isolate those cases to provide a better understanding of how outcomes of vulnerable populations are correlated with aid withdrawal. Figure 7 shows the number of sanction episodes per year, divided by type: 1. sanctions that do *not* include aid termination (in red), 2. sanctions that include aid termination *along with* other forms of sanction instruments (in green), and 3. sanctions that *only* include aid termination (blue).
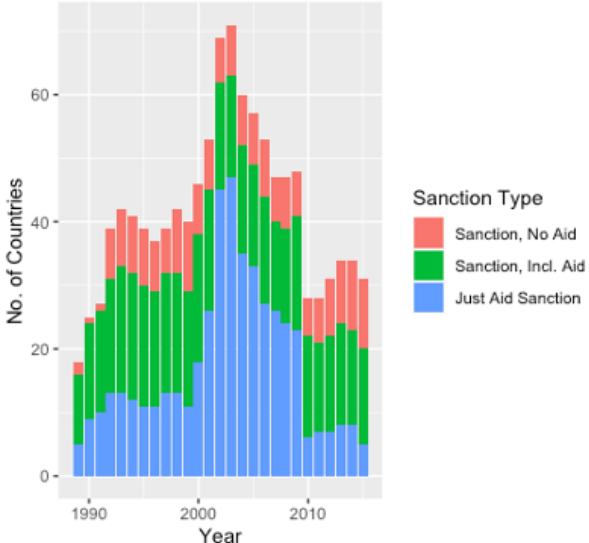
Figure 1. Frequency of Sanction Episodes Imposed on Countries per year, by Type

To further illustrate the predominance of aid sanctions, Figure 8 shows all combinations of sanction types that were imposed by the EU, UN, and US during the years 1989-2015. Sanction Type 8 is aid termination, which appears on its own over 650 times. Sanction Type 8 is also frequently used in conjunction with other sanction types, as indicated on the y axis.

Figure 2. Frequency of Sanction Type Used, by Sender (1989-2015)

Figure 9 is similar to Figure 8, but it narrows the sample exclusively to sanction episodes that include some form of aid termination. This encompasses episodes that solely featured aid termination as well as episodes that combined aid termination with other sanction instruments. Figure 9 displays the frequency of aid sanctions employed by the US, EU, and UN for the years 1989-2015 and highlights the US's dominant role in utilizing aid termination as a sanction instrument.
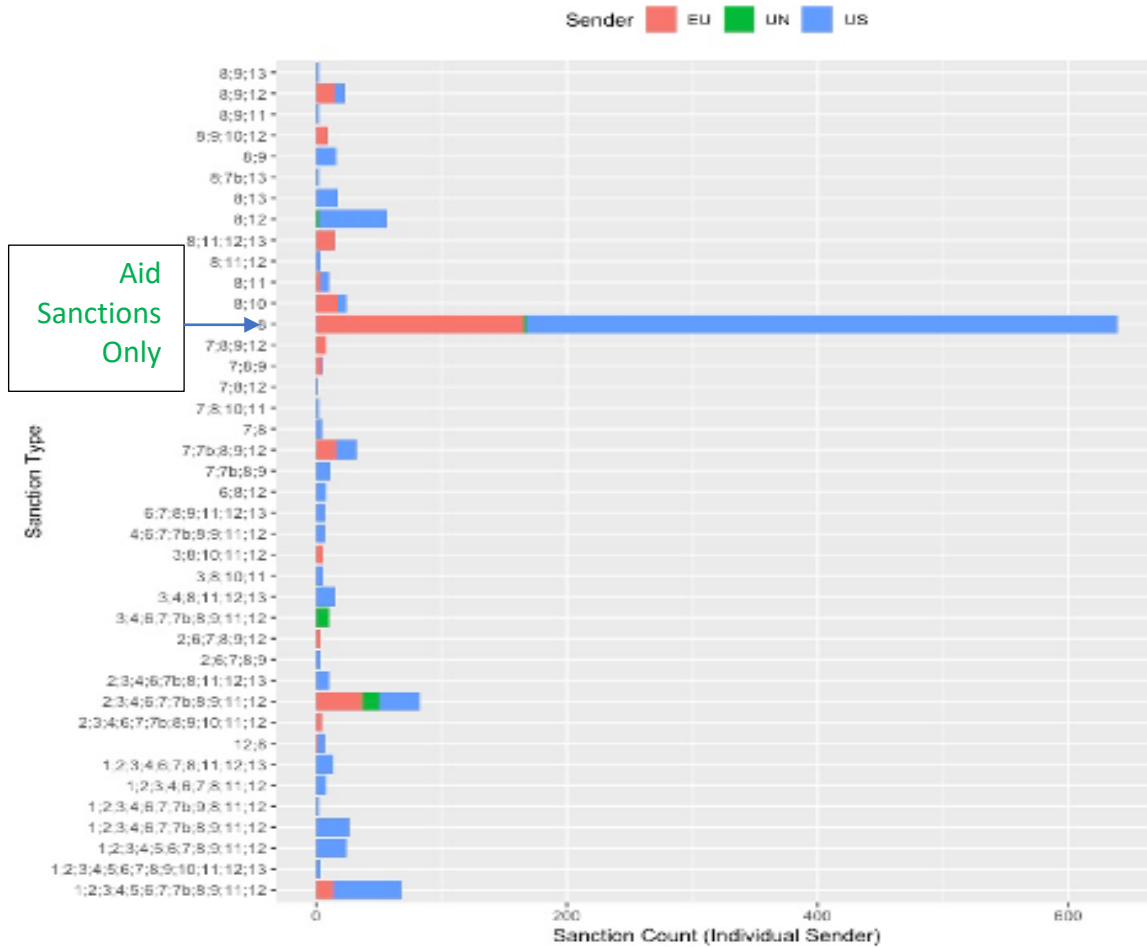
Figure 3 Frequency of Aid Sanctions, by Sender (1989-2015)

Aid sanctions are often implemented to improve human rights. In figures 10 and 11, the x axis shows the fourteen categories of sender motivation, or issues, included in the EUSANCT Dataset (Weber and Schneider 2022). For this analysis, we focus on Type 8: Improve Human Rights. According to the codebook, a sanction episode falls under this issue area if the sanction is threatened or imposed to coerce the target to end repressive laws, policies, or actions or to compel the target state to respect individual rights (Weber and Schneider 2022). In Figure 10, the y axis denotes the three different types of imposed sanctions utilized in our analysis: *non-aid* sanctions (Type 2; light grey), aid sanctions *plus* other sanctions (Type 3; medium grey) and *only* aid sanctions (Type 4; dark grey). As is evident in the area highlighted by the blue rectangle, most of the sanctions imposed for human rights reasons include aid sanctions (either exclusively, or in concert with other sanction types).

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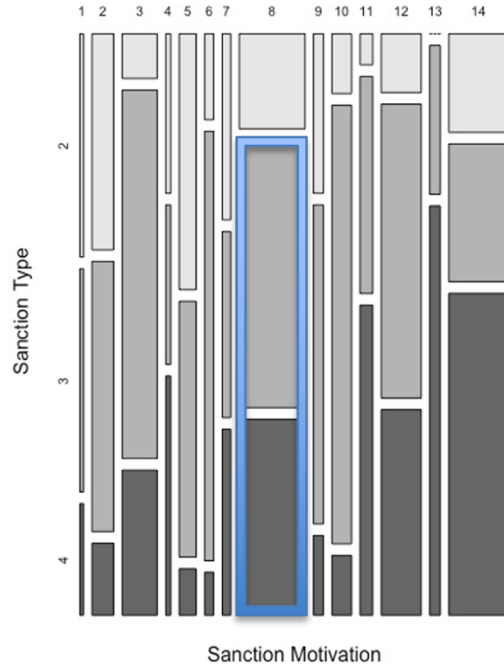
Figure 4. Crosstab: Sanction Type and Sanction Motivation

Figure 11 shows how often different sanction instruments are employed for each issue area. Aid sanctions (Type 8 on the y axis) is the most common instrument used to improve human rights (Type 8 on the x axis), as illustrated by the red rectangle.
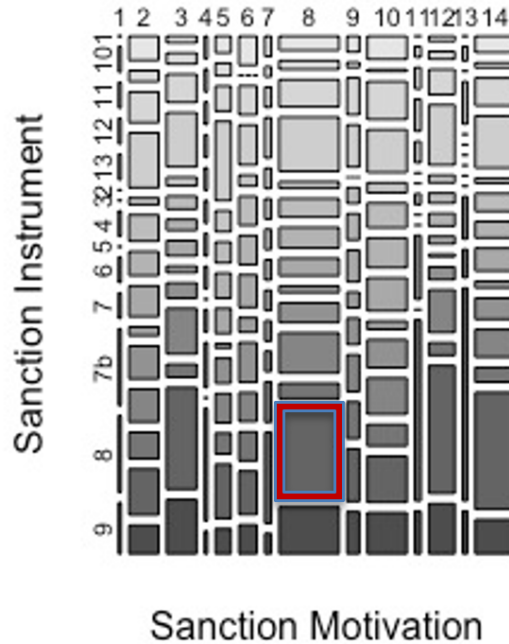
Figure 5 Crosstab: Sanction Instrument and Sanction Motivation

Research Design

We test our hypotheses using linear models (OLS) with country-year fixed effects. Our assumption is that any correlation between sanctions and women's outcomes would not be immediately detectable, so we empirically analyze whether the presence of economic sanctions instruments affects the target state's women's rights one year later. Since it is not obvious what the optimal counterfactual would be, we include multiple models that allow for several comparisons.

Model 1: Full Sample: The first set of models conducts a time-series analysis with lagged independent variables. The unit of analysis is the country-year. For the first set of models, the base category is countries that do not experience any form of sanctions during that year.

$$harm_{c,t} = \beta_0 + \beta_1 NonAid_{c,t-1} + \beta_2 WithAid_{c,t-1} + \beta_3 OnlyAid_{c,t-1}$$

$$+ \beta_4 AidDependence_{c,t-1} + \beta_5 NonAid_{c,t-1}xAidDependence_{c,t-1}$$

$$+ \beta_6 WithAid_{c,t-1}xAidDependence_{c,t-1}$$

$$+ \beta_7 OnlyAid_{c,t-1}xAidDependence_{c,t-1} + \beta_8 power_{c,t-1} + \beta_9 conflict_{c,t-1}$$

$$+ \beta_{10} VDem_{c,t-1} + \beta_{11} GDP_{c,t-1} + \beta_{12} MilExp_{c,t-1} + \beta_{13} harm_{c,t-1} + \mu_{c,y} + \varepsilon$$

$$LExp_{c,t} = \beta_0 + \beta_1 NonAid_{c,t-1} + \beta_2 WithAid_{c,t-1} + \beta_3 OnlyAid_{c,t-1}$$

$$+ \beta_4 AidDependence_{c,t-1} + \beta_5 NonAid_{t-1}xAidDependence_{c,t-1}$$

$$+ \beta_6 WithAid_{c,t-1}xAidDependence_{c,t-1}$$

$$+ \beta_7 OnlyAid_{c,t-1}xAidDependence_{c,t-1} + \beta_8 power_{c,t-1} + \beta_9 conflict_{c,t-1}$$

$$+ \beta_{10} VDem_{c,t-1} + \beta_{11} GDP_{c,t-1} + \beta_{12} HlthExp_{c,t-1} + \beta_{13} LExp_{c,t-1} + \mu_{c,y} + \varepsilon$$

$$MMR_{c,t} = \beta_0 + \beta_1 NonAid_{c,t-1} + \beta_2 WithAid_{c,t-1} + \beta_3 OnlyAid_{c,t-1}$$

$$+ \beta_4 AidDependence_{c,t-1} + \beta_5 NonAid_{t-1}xAidDependence_{c,t-1}$$

$$+ \beta_6 WithAid_{c,t-1}xAidDependence_{c,t-1}$$

$$+ \beta_7 OnlyAid_{c,t-1}xAidDependence_{c,t-1} + \beta_8 power_{c,t-1} + \beta_9 conflict_{c,t-1}$$

$$+ \beta_{10} VDem_{c,t-1} + \beta_{11} GDP_{c,t-1} + \beta_{12} HlthExp_{c,t-1} + \beta_{13} GenPar_{c,t-1}$$

$$+ \beta_{14} MMR_{c,t-1} + \mu_{c,y} + \varepsilon$$

Outcome Variables

The dependent variables of interest measuring women's rights are drawn from two different sources. The first is one of four scales based on a latent variable approach (Karim and

Hill 2018). An updated version of the indices, which will be published in 2024, are used here with authors' permission (Karim and Hill 2024). Our project focuses on *combined harm*, which captures the direct, physical harm women face (rape, gender-based violence, intimate partner violence) and indirect harm women incur from structural violence and other conditions that negatively and disproportionately affect women's wellbeing (indicators include measures associated with reproductive choices and autonomy in household decision making). To quantify women's right to health, we use data from the World Bank Development Indicators: *life expectancy at birth* (total life expectancy is calculated along with its components, female and male, to indicate the differential impact aid withdrawal may have on the health rights of women compared with men*)* and *maternal mortality ratio.* 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. All independent variables are lagged for one year as the effects of aid withdrawal may not be immediately apparent in the year that aid was terminated.

Table 1. Summary Statistics for Outcome Variables

Outcome Variables	Observations (country-year)	Mean	Standard Deviation	Min	Max
Harm	4,701	-0.273	0.865	-1.385	2.901
Life Expectancy (Total)	4,797	67.479	9.865	26.172	85.417
Life Expectancy (Female)	4,797	69.979	10.344	27.571	86.990
Life Expectancy (Male)	4,797	65.075	9.539	24.834	84.100
Maternal Mortality	2,891	210.959	301.790	2	2480

Independent Variables of Interest

For sanctions data, we utilized the EUSANCT Dataset (Weber and Schneider 2022), which includes both sanction threats and imposed sanctions by the EU, US, and UN. International relations research on sanctions has historically relied heavily on the Threat and Imposition of Economic Sanctions (TIES) Dataset (Morgan, Bapat, and Krustev 2009) and more recently on the Global Sanctions Data Base (Felbermayr et al. 2020), but we argue that EUSANCT provides better data with which to answer our specific research question.[1] While EUSANCT narrows the scope of the sender (EU, UN, and US account for 55% of cases in TIES), it allows us to examine trends through 2015 and focus on the impact of aid sanctions employed by the liberal sanctioning states and entities who are also the largest providers of foreign aid. For example, 26 of the 31 members of the Organisation for Economic Cooperation and Development's Development Assistance Committee (OECD's DAC) are included in EUSANCT. The data set includes 324 sanction cases that were imposed during 1989 to 2015. Our unit of analysis is country-year, and our sample incorporates all country-years with and without sanctions. We analyze sanction cases that were imposed, as opposed to threatened.[2] In Model 1, the main independent variables of interest are four mutually exclusive binary variables, describing four types of sanctions. This allows us to differentiate between countries that were exposed to four mutually exclusive categories of sanction types: aid sanctions, non-aid sanctions, a combination of the two, or none at all. Table 17 shows these four independent variables and the number of sanction episodes (in country-year format) associated with each sanction type.

Table 2. Independent Variables of Interest

Type of Sanction	Definition	Observations (country-year)
No sanctions	No sanctions of any kind were imposed on the target country. This is the reference category.	3951

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[1] The Global Sanctions Data Base does not provide adequate granularity to examine aid sanctions disentangled from other sanction types. Although TIES has this capability, TIES only includes observations up to the year 2005. Understanding the more recent trend to utilize aid withdrawal requires a dataset that extends beyond the early years of the new millennium.

[2] Although the literature has long differentiated between the threat and the imposition stages of sanction episodes (Morgan, Bapat, and Krustev 2009), we posit that the effects of aid sanctions on women's rights is not salient in the threat stage. The mechanisms we outlined hypothesize the negative impacts on women should only materialize after sanctions are imposed.

Sanctions (no aid)	Non-aid sanctions; no aid sanctions were imposed on the target country, however other types of sanctions were imposed.	207
Sanctions (with aid)[3]	Aid sanctions plus other sanctions; a combination of aid sanctions and other sanction types were imposed on the target country.	453
Sanctions (exclusively aid)	Only aid sanctions; the only types of sanctions imposed on the target country were aid sanctions.	266

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[3] Sanctions sometimes exist in clusters depending on factors such as the issue under dispute, the characteristics of the target, and the preferences of the sender state. Acknowledging that the existence of one type of sanction may be linked to the presence of another and that layered sanctions are common, we include this category, which tends to represent the most severe suite of sanctions.

Control variables

Given that there is heterogeneity across target countries in the amount of foreign aid received, the impact of aid withdrawal would be commensurate with the extent to which the target country is dependent on aid. All models include the control variable, *aid dependence*, which is the amount of foreign aid received by the recipient country as a portion of its gross national income (GNI). The models also include interaction terms, one for each sanction type (*SanctionType*AidDependence),* to control for the added effect that aid sanctions would have on rights, given the level of aid dependence in the target country.

These models also control for the following factors that could affect both the country's likelihood to be the target of aid sanctions and the level of rights enjoyed by women in that country. The variable *conflict* is a dummy that indicates whether the country was the site of armed conflict, as recognized by the Uppsala Conflict Data Program (Croicu and Sundberg 2015). The presence of armed conflict could simultaneously affect the likelihood of a country receiving sanctions (Lektzian and Regan 2016) while also impacting women's rights. Armed conflict increases physical harm and can lead to an in increase maternal mortality as well as decrease life expectancy as fighting is destructive to the health infrastructure or prevents women from reaching hospitals, clinics, or skilled medical personnel (Ghobarah, Huth, and Russett 2003) (Urdal and Che 2015).

Because democratic states are associated with better rights outcomes for women (Wang et al. 2017) and are also less likely to be the target of sanctions (Lektzian and Souva 2003), we control for regime type by using the *VDem* score for each country. Since sanctions can both be imposed for human rights violations and impact human rights (Peksen 2009), our model also controls for the rights of the previous year to account for the effects that rights will have on future years. We use extractive power as a proxy for governance capabilities, since states with low governance capacity are correlated with states that are sanctioned (for example these states experience difficulty stamping out internal conflict and are fertile ground for illegal activities like trafficking and corruption), while states with higher governance capacity would be better able to cope with the effects of economic sanctions. We use data (the variable *absolute political extraction*) from the Relative Political Capacity dataset (Fisunoglu et al. 2020). We use *growth in GDP* to capture the development and wealth of the country targeted by sanctions (World Bank 2014). Wealthier countries are often better able to respond to and alleviate sanction shocks and they are also associated with better rights and health outcomes for women.

We also include a control variable specific to each outcome. When harm is the dependent variable, we control for *military expenditure as a percentage of GDP* to proxy a government's capacity to protect its citizens (World Bank 2014). For the health outcome models (life expectancy and maternal mortality), we include *public health expenditure as a percentage of GDP* since the amount of money a country devotes to health expenditures impacts the health of its citizens (World Bank 2014). Finally, for the maternal mortality model we use the *gender parity index (GPI),* which is an indicator of women's value to society (World Bank 2014).

Model 2: Realized Sanctions Sample: The second set of models are similar to the first, but the sample only includes those countries that were under sanctions. The base category is countries that were subject to any form of sanctions *except* for aid sanctions.

$$harm_{c,t} = \beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1}$$

$$+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1}$$

$$+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1}$$

$$+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1}$$

$$+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1}$$

$$+ \beta_{15} MilExp_{c,t-1} + \beta_{16} harm_{c,t-1} + \mu_{c,y} + \varepsilon$$

$$LExp_{c,t} = \beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1}$$

$$+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1}$$

$$+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1}$$

$$+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1}$$

$$+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1}$$

$$+ \beta_{15} HlthExp_{c,t-1} + \beta_{16} LExp_{c,t-1} + \mu_{c,y} + \varepsilon$$

$$MMR_{c,t} = \beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1}$$

$$+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1}$$

$$+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1}$$

$$+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1}$$

$$+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1}$$

$$+ \beta_{15} HlthExp_{c,t-1} + \beta_{16} GenPar_{c,t-1} + \beta_{17} MMR_{c,t-1} + \mu_{c,y} + \varepsilon$$

Independent Variables

While the dependent variables remain the same, in Model 2 we exclude countries that are not exposed to any sanction instruments at all and only analyze realized sanctions (countries that experienced some form of sanctions). Non-aid sanctions is the baseline category, which is compared with two independent variables of interest, aid sanctions plus other sanctions, and only aid sanctions. In excluding the no sanctions category, we could include sanction-specific control

variables (described below) that would allow us to better understand how the different types of sanctions relate to and differ from each other. To account for severity of sanctions (scope and time), we include two interaction terms, *multilateral*streak* and *universal*streak*, to understand how women are impacted in countries that experience coordinated sanction efforts from two or more entities over multiple years.[4] We believe that is important to include Model 2 in our analysis, as both the size of the sanctioning coalition and the duration of economic sanctions have been shown to be correlated with their impact on the target state (Gutmann, Neuenkirch, and Neumeier 2021; Peksen 2009, etc.).

Model 3: Realized Sanctions Sample: Human Rights Motivation: The third set of models test our hypotheses about aid motivation. They include the same variables as the second set of models, but we split the sample into two complementary categories of sender motivation: sanctions that were issued for human rights reasons and those that were issued for non-human rights reasons.

$$
\begin{aligned}
harm_{c,t} = \ &\beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1} \\
&+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1} \\
&+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1} \\
&+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1} \\
&+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1} \\
&+ \beta_{15} MilExp_{c,t-1} + \beta_{16} harm_{c,t-1} + \mu_{c,y} + \varepsilon
\end{aligned}
$$

$$
\begin{aligned}
LExp_{c,t} = \ &\beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1} \\
&+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1} \\
&+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1} \\
&+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1} \\
&+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1} \\
&+ \beta_{15} HlthExp_{c,t-1} + \beta_{16} LExp_{c,t-1} + \mu_{c,y} + \varepsilon
\end{aligned}
$$

---

[4] The severity of sanctions that multilateral regimes impose on the target varies. The coalitional nature of multilateral sanctions may make them less effective (Kaempfer and Lowenberg 1999) (Drezner 2000). However, accounting for the scope of sanctions serves as a good proxy generally to the costs that are inflicted on the target state, particularly when examining a limited set of sanction instruments. Logically, multilateral sanctions make it more difficult for targeted states to find alternative donors for foreign aid, particularly in a short time frame. Empirically, Gutmann et al. found that UN sanctions (i.e., universal sanctions) have more serious effects on women's life expectancy compared to unilateral or, under certain cases, multilateral sanctions (Gutmann, Neuenkirch, and Neumeier 2021).

$$MMR_{c,t} = \beta_0 + \beta_1 WithAid_{c,t-1} + \beta_2 OnlyAid_{c,t-1} + \beta_3 AidDependence_{c,t-1}$$

$$+ \beta_4 WithAid_{c,t-1} x AidDependence_{c,t-1}$$

$$+ \beta_5 OnlyAid_{c,t-1} x AidDependence_{c,t-1} + \beta_6 multi_{c,t-1} + \beta_7 univ_{c,t-1}$$

$$+ \beta_8 streak_{c,t-1} + \beta_9 Multi_{c,t-1} x Streak_{c,t-1} + \beta_{10} Univ_{c,t-1} x Streak_{c,t-1}$$

$$+ \beta_{11} power_{c,t-1} + \beta_{12} conflict_{c,t-1} + \beta_{13} VDem_{c,t-1} + \beta_{14} GDP_{c,t-1}$$

$$+ \beta_{15} HlthExp_{c,t-1} + \beta_{16} GenPar_{c,t-1} + \beta_{17} MMR_{c,t-1} + \mu_{c,y} + \varepsilon$$

Results

Women's Security (Freedom from Harm)

Table 3. Results for Dependent Variable: Combined Harm

	Model 1: Full Sample (base: states with no sanctions)	Model 2: Realized Sanctions (base: sanctioned states without any aid sanctions)	Model 3: Realized Sanctions (base: sanctions states without any aid sanctions) Human Rights	Non-Human Rights
Non-Aid	0.042 (0.031)			
With Aid	-0.005 (0.022)	0.043 (0.054)	-0.106 (0.143)	-0.057 (0.078)
Only Aid	-0.012 (0.017)	0.010 (0.059)	-0.224 (0.163)	-0.013 (0.074)
Aid Dependence	0.004*** (0.001)	0.002 (0.003)	0.00001 (0.004)	-0.026 (0.018)
Non-Aid*Aid Dep.	-0.003 (0.003)			
With Aid*Aid Dep	0.002 (0.001)	0.005 (0.004)	0.005 (0.005)	0.040** (0.018)
Only Aid*Aid Dep	0.002 (0.002)	0.002 (0.004)	0.011** (0.006)	0.028 (0.018)
Power	-0.483*** (0.072)	-0.549*** (0.172)	-0.242 (0.360)	-0.642*** (0.237)
VDem	-0.042 (0.048)	-0.064 (0.103)	-0.252 (0.183)	-0.108 (0.162)
Conflict	0.013 (0.015)	-0.048* (0.028)	-0.066 (0.053)	-0.042 (0.039)
Growth in GDP	0.104*** (0.024)	0.002* (0.001)	0.001 (0.003)	0.003 (0.002)
Military Exp.	0.006 (0.004)	0.034*** (0.011)	0.078*** (0.027)	-0.001 (0.015)
Combined Harm	0.358*** (0.022)	0.141*** (0.048)	-0.046 (0.084)	0.086 (0.068)
Multilateral		-0.046	-0.291**	0.100

		(0.052)	(0.129)	(0.081)
Universal		-0.209**	-0.216	-0.256*
		(0.094)	(0.179)	(0.150)
Streak		-0.004	-0.018	-0.008
		(0.004)	(0.017)	(0.005)
Multilateral*Streak		0.011**	0.040**	-0.007
		(0.005)	(0.016)	(0.007)
Universal*Streak		0.016***	0.021	0.021**
		(0.006)	(0.019)	(0.009)
Observations	2,363	620	252	368
Note: *p<0.1; **p<0.05; ***p<0.01				

Contrary to expectations, there were no significant differences in harm to women the year after sanctions were present in countries that were under aid sanctions and the comparison group, countries that did not experience any sanctions. For the second model, which allows us to examine realized sanctions only with non-aid sanctions as the baseline, we directly compare outcomes in countries that experienced some form of aid sanctions with those that experienced other non-aid sanction types. In model 2, we do not see a significant difference in harm to women based on sanction type. However, our proxies for sanction severity reveal that universal sanctions, which almost always involve the UN, decrease harm in the short term on average -0.209, or 4.8% (p<0.05) the year after sanctions are present, but as duration increases, so does harm for both universal and multilateral sanctions by 0.16 or 3.7% (p<0.16) and 0.11 or 2.6% (p<0.05), respectively. Finally, model 3 allows us to examine the impact of sender motivation on harm to women. Like model 2, this sample is all country-years with sanctions and the reference group is country-years without any aid sanctions. Harm increases slightly in aid dependent countries the year after aid only sanctions are present (0.011; p<0.05). Harm decreases the year following the presence of multilateral sanctions (-0.291 p<0.05), however as the duration of sanctions is extended, harm increases (0.040 p<0.05). The combined evidence provides weak support for the link between aid sanctions and harm to women in target countries.

Life Expectancy

Table 4. Results for DV: Life Expectancy, Models 1 and 2

	Model 1: Full Sample (base: states without any sanctions)			Model 2: Realized Sanctions (base: sanctioned states without any aid sanctions)		
	Total LE	Female LE	Male LE	Total LE	Female LE	Male LE
Non-Aid	-0.050	-0.057	-0.047			
	(0.051)	(0.056)	(0.050)			
With Aid	0.007	0.008	0.008	-0.048	0.003	-0.083
	(0.035)	(0.039)	(0.034)	(0.075)	(0.079)	(0.076)
Only Aid	-0.055**	-0.065**	-0.047*	-0.061	-0.005	-0.112
	(0.028)	(0.031)	(0.027)	(0.077)	(0.080)	(0.077)
Aid Dependence	-0.0002	0.0002	-0.001	0.0003	0.0005	0.0002
	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)	(0.003)
Non-Aid*Aid Dep.	0.005	0.005	0.005			
	(0.004)	(0.004)	(0.003)			

With Aid*Aid Dep.	0.002 (0.002)	0.002 (0.003)	0.001 (0.002)	0.001 (0.004)	0.002 (0.004)	0.0003 (0.004)
Only Aid*Aid Dep.	0.005* (0.003)	0.0006* (0.003)	0.004 (0.003)	-0.0002 (0.006)	0.0003 (0.006)	-0.001 (0.006)
Power	0.063 (0.151)	0.044 (0.165)	0.077 (0.144)	-0.289 (0.322)	-0.394 (0.340)	-0.180 (0.323)
VDem	-0.080 (0.092)	-0.159 (0.099)	-0.003 (0.088)	0.390** (0.195)	0.353* (0.203)	0.441** (0.198)
Conflict	-0.026 (0.024)	-0.014 (0.026)	-0.037 (0.023)	-0.095** (0.039)	-0.105** (0.041)	-0.089** (0.040)
Growth in GDP	-0.196*** (0.054)	-0.237*** (0.058)	-0.161*** (0.052)	0.0003 (0.002)	-0.0001 (0.002)	0.001 (0.002)
Health%GDP	0.016** (0.007)	0.022*** (0.007)	0.011* (0.007)	-0.003 (0.015)	-0.008 (0.015)	0.001 (0.015)
Multilateral				-0.0004 (0.078)	0.039 (0.082)	-0.039 (0.079)
Universal				0.304*** (0.109)	0.393*** (0.114)	0.218** (0.110)
Streak				-0.002 (0.006)	0.003 (0.006)	-0.007 (0.006)
Multilateral*Streak				0.009 (0.008)	0.001 (0.008)	0.016** (0.008)
Universal*Streak				-0.013* (0.007)	-0.024*** (0.008)	-0.002 (0.007)
Life Exp Total	0.996*** (0.005)			0.972*** (0.014)		
Life Exp Female		1.004*** (0.005)			0.962*** (0.015)	
Life Exp Male			0.986*** (0.005)			0.978*** (0.015)
Observations	1684	1684	1684	498	498	498

Note: *p<0.1; **p<0.05; ***p<0.01

Consistent with our hypothesis, compared with countries that do not have any type of sanctions, total life expectancy at birth decreases in countries that experience aid-only sanctions by -0.055 (p<0.05) the year after aid sanctions are present. Life expectancy for women decreases more than life expectancy for men (women: -0.065, p<0.05; men: -0.047, p<0.1), which is also consistent with our assumption that aid sanctions will have a differential impact on women than men. In aid dependent countries that only receive aid sanctions, total life expectancy slightly increases by 0.005 (p<0.01) as does life expectancy for women by 0.006 (p<0.1). This is contrary to our expectations that aid dependency will exacerbate the effects of aid withdrawal, particularly for women.

When focusing on only countries that received sanctions, we do not see any significant differences in life expectancy compared with countries that were not under any type of sanction instrument. Examining sanction severity, we see that universal sanctions, those that typically

include the UN, increase total life expectancy in countries subject to aid sanctions by 0.304 (p<0.01), with a higher increase for women (0.393; p<0.01) than for men (0.218; p<0.01). However, when universal sanctions are extended over multiple years in these aid sanctioned countries (unilateral interacted with streak), there is a decrease in total life expectancy by -0.013 (p<0.1) and female life expectancy by -0.024 (p<0.01) in the following year. For men, multi-year multilateral sanctions are associated with an increase in life expectancy of 0.016 (p<0.05) in the year following the presence of aid sanctions.

Finally, when investigating the impact of sanction motivation (see Table 20), the results show that there is a decrease in total life expectancy (-0.194; p<0.1) and female life expectancy (-.212; p<0.05) the year after sanctioned countries are subjected to aid termination for human rights reasons. This is contrary to our hypothesis that aid termination for humanitarian rights reasons would be associated with positive outcomes for women. Overall, we see some support for the association between aid sanctions and negative impacts on life expectancy, particularly for women. We also see indications that coordinated sanctions, especially that involve the UN, might attenuate those negative impacts, perhaps through well-crafted sanctions packages.

Table 5. Results for DV: Life Expectancy, Model 3 Human Rights Motivation, Realized Sanctions (base: sanctioned states without any aid sanctions)

	Total Life Expectancy		Female Life Expectancy		Male Life Expectancy	
	Human Rights	Non-Human Rights	Human Rights	Non-Human Rights	Human Rights	Non-Human Rights
With Aid	-0.194*	0.138	-0.212**	0.247	-0.173	0.066
	(0.112)	(0.254)	(0.101)	(0.284)	(0.152)	(0.242)
Only Aid	-0.180	-0.011	-0.254	0.935	-0.153	-0.050
	(0.119)	(0.134)	(0.107)	(0.147)	(0.141)	(0.127)
Aid Dependence	0.003	0.008	0.003	0.005	0.003	0.011
	(0.003)	(0.028)	(0.002)	(0.030)	(0.003)	(0.026)
With Aid*Aid Dep.	0.001	-0.028	0.201	-2.026	-0.002	-0.011
	(0.003)	(0.045)	(0.203)	(0.909)	(0.004)	(0.044)
Only Aid*Aid Dep.	-0.008	-0.022	-0.207	0.001	-0.009	-0.025
	(0.006)	(0.031)	(0.205)	(0.034)	(0.007)	(0.029)
Power	-0.818**	0.188	-0.827**	-0.026	-0.852*	0.380
	(0.371)	(0.674)	(0.334)	(0.690)	(0.436)	(0.578)
VDem	0.226	1.066**	0.239	1.059**	0.395*	1.056**
	(0.203)	(0.486)	(0.183)	(0.530)	(0.237)	(0.465)
Conflict	-0.035	-0.107	-0.020	-0.138	-0.058	-0.078
	(0.045)	(0.001)	(0.240)	(0.007)	(0.053)	(0.076)
Growth in GDP	-0.002	0.001	-0.023**	0.003	-0.001	0.001
	(0.007)	(0.006)	(0.201)	(0.005)	(0.007)	(0.006)
Health%GDP	-0.007	0.060*	-0.203	0.038	-0.011	0.898***
	(0.014)	(0.039)	(0012)	(0.042)	(0.016)	(0.037)
Multilateral	0.053	0.019	0.286	0.0700	0.015	-0.022
	(0.129)	(0.184)	(0.139)	(200)	(0.149)	(0.174)
Universal	0.020	0.711**	0.298	0.828**	-0.050	0.617**
	(0.122)	(0.318)	(0.110)	(0.348)	(0.144)	(0.304)
Streak	-0.031	-0.001	-0.834*	0.006	-0.028	-0.007

	(0.022)	(0.006)	(0.219)	(0.013)	(0.026)	(0.011)
Multilateral*Streak	0.010 (0.020)	0.022 (0.017)	0.210 (0.218)	-0.925 (0.019)	0018 (0.024)	0.019 (0.016)
Universal*Streak	0.021 (0.029)	-0.032* (0.018)	0.820 (0.821)	-0.045** (0.019)	0.022 (0.028)	-0.020 (0.017)
Life Exp Total	0.958*** (0.018)	0.960*** (0.027)				
Life Exp Female			0.956*** (0.016)	0.954*** (0.029)		
Life Exp Male					0.965*** (0.022)	0.958*** (0.026)
Observations	221	277	221	227	221	227

Note: *p<0.1; **p<0.05; ***p<0.01

Maternal Mortality

Table 6. Results for DV: Maternal Mortality

	Model 1: Full Sample (base: no sanctions)	Model 2: Realized Sanctions (base: sanctioned states without any aid sanctions)	Model 3: Realized Sanctions (base: sanctions states without any aid sanctions)	
			Human Rights	Non-Human Rights
Non-Aid	3.270 (3.102)			
With Aid	-0.617 (2.652)	10.077* (5.922)	3.510 (13.796)	-21.513** (9.686)
Only Aid	-3.249** (1.416)	-12.644*** (4.561)	-21.592 (14.842)	-6.3370* (3.739)
Aid Dependence	-0.152 (0.120)	-0.206 (0.404)	-1.017* (0.609)	3.684*** (0.502)
Non-Aid*Aid Dep.	0.289 (0.253)			
With Aid*Aid Dep	0.725 (0.506)	-1.263 (1.002)	0.628 (1.987)	-3.234*** (1.072)
Only Aid*Aid Dep	0.093 (0.162)	1.423*** (0.536)	1.729* (0.878)	-2.801*** (0.655)
Power	-13.221* (7.438)	-6.906 (18.139)	-7.526 (39.5536)	4.821 (12.878)
VDem	12.975** (5.231)	26.508** (11.713)	4.301 (22.510)	5.088 (10.373)
Conflict	2.654** (1.243)	1.343 (2.309)	0.212 (5.269)	2.828 (1.739)
Growth in GDP	9.827*** (3.411)	0.256** (0.113)	0.240 (0.294)	0.073 (0.119)
Health%GDP	-0.853** (0.399)	-1.865** (0.924)	0.070 (1.623)	-1.316 (0.839)
Maternal Mortality	0.895*** (0.006)	0.884*** (0.016)	0.731*** (0.047)	0.926*** (0.021)

Gender Parity	-38.842***	107.321***	-32.155	99.392***
	(10.585)	(31.866)	(74.964)	(28.796)
Multilateral		-10.256**	-13.175	3.518
		(5.012)	(23.622)	(4.016)
Universal		4.158	13.000	-16.651*
		(7.153)	(12.371)	(9.422)
Streak		0.975**	4.714**	1.621***
		(0.428)	(2.317)	(0.502)
Multilateral*Streak		0.120	-2.121	-0.406
		(0.438)	(2.033)	(0.365)
Universal*Streak		-0.250	-5.123*	0.891*
		(0.420)	(2.588)	(0.490)
Observations	1116	352	128	214

Note: *p<0.1; **p<0.05; ***p<0.01

The maternal mortality ratio decreases by 3.249 (p<0.05) for women in countries that experience aid-only sanctions compared with countries that do not receive any sanctions at all. This is a positive indicator for women and contrary to our expectation that aid sanctions would negatively impact maternal mortality. In the sample focusing on countries with realized sanctions, the maternal mortality ratio in countries with aid-only sanctions experiences an even sharper decrease of 12.644 (p<0.01). In countries with sanctions that include aid among other forms of sanction instruments, the maternal mortality ratio increases by 10.256 (p<0.05). We also see a slight increase by 1.423 (p<0.01) in countries with just aid that are aid dependent. Maternal mortality increases in this same group when sanctions are imposed for human rights reasons (1.729 p<0.1). We do not see evidence to support that aid sanctions imposed for human rights reasons lead to improved outcomes. We see the opposite, as countries that experience aid only sanctions (-6.3370; p<0.1) and aid sanctions plus other types of sanctions (-21.513 p<0.05) have a significant decrease in maternal mortality in the non-human rights sample.

Discussion and Conclusion

Although aid sanctions are the most prevalent type of sanction instrument in the data set, one of the major limitations with this study is the sample size, particularly when analyzing the impact of human rights motivations on aid sanctions. Splitting the sample led to a small sample size, which may not produce results with strong external validity. International data that are disaggregated by sex are also difficult to find. We used the most robust data available with theoretical significance, but due to missing data, observations were occasionally dropped in the analyses and we were limited in the number of years we could analyze. This also prohibited us from performing alternative analyses such as measuring the outcome variables in differences between $year_{n+1}$ and $year_n$, since this type of analysis requires two consecutive years of complete data. Like all large-N studies, we can provide an overview with our analyses and point to areas for future research, but we cannot claim causality. We have tried to address endogeneity by lagging the dependent variables and controlling for a number of factors that would impact both the probability of being sanctioned and the bodily outcomes for women.

This paper provides an overview of how aid sanctions impact women's outcomes in target countries. While we understand that sanctions, broadly applied, negatively impact citizens, we do not have a clear understanding of the ways in which different sanction types may impact the population. Since aid sanctions are one of the most widely used instruments, often employed to minimize harm to targeted citizens, we have empirically tested their effects on women, who suffer poor outcomes from broad sanctions.

We found that aid sanctions in some cases do affect women's bodily rights differently than other types of economic sanctions. These effects, though, are mediated by the scope and severity of economic sanctions, as well as sanction objective. When looking at sanction severity, universal sanctions, or those that typically include the UN, are associated with better outcomes for women in the following year. For example, in countries that experience universally imposed aid sanctions, harm to women decreases and female life expectancy increases. It is possible that with more coordinated sanctions, such as we would see with UN involvement, thoughtful policies are put in place to protect citizens as much as possible. In the case of women's harm, however, this positive effect went away over time, as there was an increase in harm when interacting universal sanctions with the number of years sanctions were in place. This suggests that any positive effect may be fleeting, and policy makers interested in protecting target citizens should consider how sanction duration will impact the population.

Another pattern revealed in the results is that the extent to which a country is dependent upon aid can influence the impact. For example, countries that received only aid sanctions saw a decrease in maternal mortality the year after aid sanctions were present. Yet when we examined the impact of aid-only sanctions on countries with higher levels of aid dependence, we saw the opposite effect. As levels of aid dependence increased, so did maternal mortality, suggesting that countries more reliant to aid were unable to combat maternal mortality once aid was terminated. Both the universal sanctions example and the aid dependence example demonstrate that this is a complex topic requiring additional investigation. The overall effect of one factor is conditional upon the value of another. There may exist other interactions that we did not explore in this analysis. We recommend that future research explore this topic through a micro-level analysis so that we can understand not just overall impacts, but how termination of different aid channels, such as budgetary aid versus bypass aid could impact women.

As policy makers continue to employ aid sanctions as targeted instruments, it is important to question the assumption that aid sanctions cause limited harm to the population. Our analyses show that in some conditions, women's outcomes are worse under aid sanctions, both when compared to countries that do not experience any sanctions at all and when compared to countries that are subjected to non-aid sanctions. More research should be done to better understand this heterogeneity of effects so that policy makers can understand in what contexts aid sanctions can be employed to minimize harm and encourage positive human development for women in target countries. As the results of our preliminary analyses show, aid sanctions do not merely harm the elites, as has been theorized.

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