

Development aid and women's legal empowerment

Anna Minasyan¹

Gabriela Montinola

University of Groningen

University of California at Davis

(Preliminary draft – please do not circulate without permission)

Abstract

This study advances our understanding of the role of international cooperation in improving women's economic rights and legal empowerment in non-OECD countries. It assesses empirically whether aid given for gender equality objectives is associated with women's legal empowerment within countries over time, holding other relevant factors constant. Using the recently constructed Women, Business and Law (WBL) database of laws affecting women's economic inclusion, and a sample of over 100 countries from 1990-2019, we show that gender-focused aid has a Granger-causal effect on women's legal economic empowerment. We find women's legal rights improve, not only with funding that is targeted specifically at promoting gender equality, but also when gender equality is mainstreamed in projects and programs targeted at all sectors of the economy. This study also has implications for the broader literature on globalization and women's economic rights.

¹ Corresponding author. Email: a.minasyan@rug.nl

Introduction

Gender equality first emerged as a priority of the international community during the United Nations World Conference on Women in 1975, which was followed by the Beijing Declaration and Platform of Action in 1995. Since then UN member states have reaffirmed their commitment to eliminating gender gaps with the adoption of the Millennium Development Goals in 2000, and the Sustainable Development Goals in 2015. Empowering women where gender gaps exist is considered an effective means to achieving other development goals (e.g. Klasen, 2020, Kabeer and Natali 2013, Duflo, 2012, World Bank 2011, Sen, 1989). Accordingly, many bilateral and multilateral donors have been funding projects targeted specifically at empowering women as well as incorporating the objective of gender equality in other aid projects and programs—a strategy often referred to as gender mainstreaming (UN, 2002).

Does gender-focused aid promote gender equality? The bulk of research on the relationship between foreign aid and gender performance focuses on whether the latter influences donors' allocation of aid. These studies investigate whether donors provide aid to help reduce gender gaps or to reward developing countries for promoting gender equality (e.g., Dreher, Gehring and Klasen 2015, Hicks and Maldonado 2020, Okundaye and Breuning 2021). In line with the idea that donors reward countries that reduce gender gaps with more foreign aid, other studies argue that aid-dependent countries adopt quotas to promote women's representation in legislatures as a means to ensure continuing aid flows (Bush 2011, Edgell 2017). In general, previous research does not consider whether funding aid interventions with a gender focus advances the legal status of women and girls.²

Using the World Bank's recently constructed Women, Business and Law (WBL) database of regulations and laws affecting women's economic inclusion, and a sample of up to 117 countries from 1990-2019, we show that gender-focused aid has a Granger-causal effect on women's legal economic rights. We find these rights improve, not only when funding is targeted specifically at promoting gender equality, but also when gender equality is mainstreamed in projects and programs undertaken for other purposes. We find no evidence that countries that reduce legal discrimination against women receive more gender-focused aid in subsequent years, suggesting that if recipient governments are reforming to attract more aid, they are not being rewarded with additional aid.

² With the exception of Edgell (2017), whose work is noted below and Beath, Christia and Enikopolov (2013) who provide evidence from a field experiment in Afghanistan on positive effect of aid on women empowerment.

These estimation results of panel fixed effects model augmented with recipient-specific linear time trend show that the share of gender aid in overall aid received by a country is positively associated with women's legal empowerment. The share of gender aid has a Granger-causal effect on women's legal empowerment as first and second lagged values show positive and strong statistically significant relationship while there is no statistically significant relationship in the case of lead values. The coefficient on the lagged share of aid from the most preferred specification shows that on average, for a gender-focused aid to generate a change in one law within a country, it should see an increase by 20 percentage points. Given that the average share of gender-focused assistance received by a country is 12 percent, a change in one law would require an increase to 32 percent. Several countries have received such large amounts of gender-focus aid. For example, Algeria, Bangladesh, Nepal, Rwanda, Zimbabwe, and many small islands have received more than 30 percent of gender-focused aid as part of overall aid more than 10 times in the 1990-2019 period.

Majority of studies that examine whether gender-focused aid is effective in reducing gender inequality consist of specific project evaluations by donor agencies. Syntheses of these evaluations indicate that the results of projects are mixed.³ Macro-level studies are few in number and concentrate on political empowerment. Edgell (2017) examines the impact of gender-focused aid commitments on the adoption of gender quotas. Balamoune-Lutz (2016) examines the impact of aid on the share of women in legislative office as well as gender quotas, however, her sample is restricted to countries in the Middle East and North Africa.

We build on this research in three ways. First, we focus on women's legal empowerment in the economic sphere, in large part because women's economic inclusion is crucial to increasing productivity and development, the explicitly stated goal of donors' official development assistance (OECD 2010; 2014). Second, we consider the effect not only of aid provided for projects whose principal goal is gender equality but include the broader class of aid projects in which gender equality has been mainstreamed. We argue that including a gender perspective in projects targeted toward different sectors of the economy can have a wider impact on women's rights. Finally, we perform a more comprehensive analysis than previous studies in an attempt to establish that financing projects with a gender perspective indeed works to improve women's economic rights and legal empowerment

Our work builds on the literature on the sectoral analysis of aid effectiveness, which has focused mainly on aid for education, health and trade (Dreher, Nunnenkamp, Thiele 2008; Mishra and Newhouse 2009; d'Aiglepiere and Wagner 2013; Jones and Tarp, 2016; Temple and Van de Sijpe 2017; Doucouliagos, Hennessy, Mallick 2021). Our results show that

³ See, for example, the studies discussed in various synthesis reports (Domingo et al. 2012, Garcia, Skinner and Pennarz 2017, Risby and Keller 2012)

providing aid for gender equality is effective at least in promoting women's legal rights. Also, noteworthy, we show that although the strategy of gender mainstreaming has been much criticized since its inception (Caglar 2013, Rao and Kelleher 2005), foreign aid projects in which gender equality has been mainstreamed do appear to be associated with positive changes for women in the legal landscape. Taken together with results from other studies on sectoral aid, our work suggests that targeting aid for specific purposes can be effective. Sectoral analysis can help reconcile the mixed results found in studies that focus on aggregate aid and development.⁴

This study also contributes to the broader literature on the determinants of women's economic rights, which has tended to focus on domestic forces, such as technological, cultural and other changes associated with development, or international forces, such as transnational advocacy and globalization of trade and investment. This literature has so far ignored the impact of foreign aid. Given the increasing amount of aid targeted toward gender equality and women's empowerment, we suggest that studies on women's economic rights would benefit from consideration of foreign aid as well.

Perspectives on Women's Legal Rights

Attention to women's legal rights has been increasing since the adoption of the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1979. A growing number of studies have been highlighting the benefits to societies as a whole from the promotion of women's rights (e.g., World Bank 2011, Doepke, Tertilt and Voena 2012). Thus, it comes as no surprise that the international community has developed two successive action plans that list gender equality among its goals, the Millennium Development Goals adopted in 2000 and the Sustainable Development Goals espoused in 2015. Yet, while some countries have made great strides in promoting women's rights, others continue to lag.

What explains variation in women's rights across countries and overtime? Current theories attribute the nature of women's rights to domestic or international factors. Among domestic factors, one condition often invoked is culture. As Norris and Inglehart (2004) argue, for example, different religious traditions display certain ideas about gender, and these long-standing traditions have an enduring impact on contemporary values of men and women, which are then institutionalized in policy and laws. This explanation generally depicts culture

⁴ See, for example, reviews of the literature on the effects of aggregate development aid on growth (Doucouliagos and Paldam 2009, Mekasha and Tarp 2013).

as inhibiting improvements in women's rights. It leaves open the question of why ideas about gender roles change, and how women have gained significant legal rights in many societies.

Doepke, Tertilt and Voena (2012) suggest that cultural change is underpinned by economic change. They advance a theory, claiming that technological change can alter men's attitudes towards women such that the former, who initially have all legal power, agree to endow the latter with economic rights. The theory assumes that men's utility is in part derived from the number and well-being of their descendants. The theory implies that if technological change increases return to education, a man would care greatly not only about the education of sons, but also the education of daughters, who would then have higher bargaining power vis-à-vis their husbands, and ensure higher investment in education for the man's grandchildren, both male and female. With higher education, in addition to more decision-making power in the household, women would have opportunities to enter the labor market, where they would be exposed to new ideas and have greater prospects for political mobilization and further advancement of their rights (Banaszak and Leighley 1991, Cherif 2010). In this way, technological change that increases the demand for human capital promotes women's rights.

In addition to the above domestic conditions, scholars have also attributed changes in women's rights around the world to the diffusion of international norms through transnational advocacy groups, international law and international institutions. As Keck and Sikkink (1998) argue, international and transnational actors act as norm entrepreneurs, lobbying states to adopt norms and conventions following their preferences. The driving forces behind this argument are ideas and persuasion. New gender norms must resonate with key audiences, who can persuade a sufficient number of actors such that a tipping point is reached, and the new norms are eventually institutionalized and internalized by the majority (Finnemore and Sikkink 1998). In terms of women's rights, the United Nations and various women's INGOs could be viewed as norm entrepreneurs, and the ratification of the CEDAW Convention as the cascading of gender equality norms around the world, leading to the institutionalization of women's rights within countries.

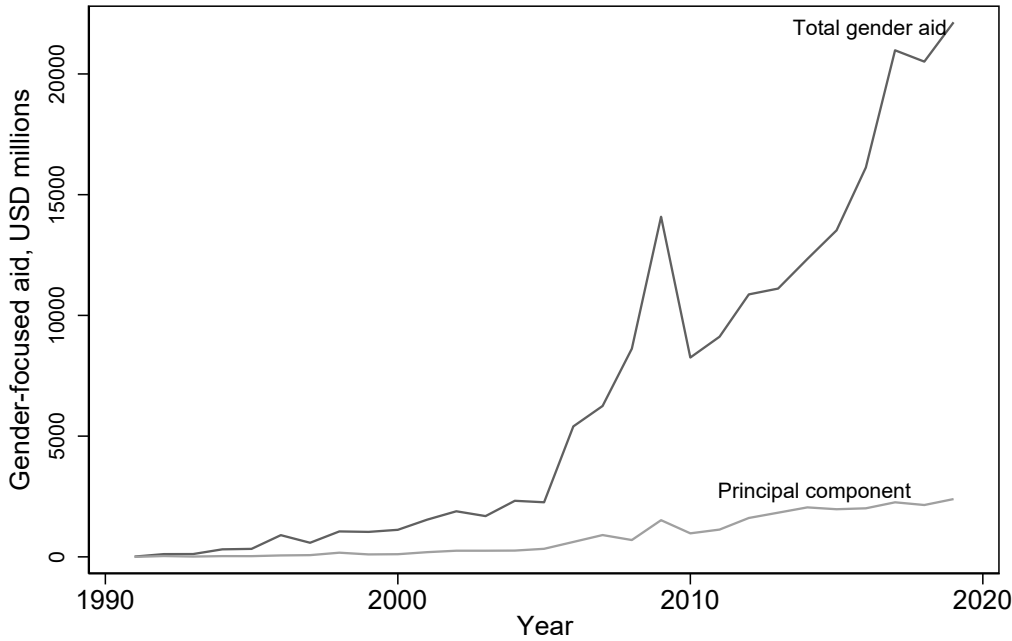
Finally, globalization in trade and foreign direct investment are international forces that have also been invoked as affecting women's rights, although there has been debate over the direction of this effect. As Neumayer and De Soysa (2011) point out, globalization critics see trade and foreign direct investment (FDI) links as leading to lower labor standards due to the profit motives of mobile global capital. It is assumed that lower standards would make countries more attractive to trade partners and multinational corporations. Enhancing women's economic and social rights would exacerbate this "race to the bottom" effect by adding to production costs, providing incentives for developing countries to avoid reforms. Advocates

of globalization, on the other hand, argue that trade openness and FDI would promote women's rights. They would provide women with increased opportunities for employment, government incentives to invest in education which could decrease gender gaps in education, and ultimately, increase women's bargaining power and rights (Neumayer and De Soysa 2011, Ouedraogo and Marlet 2018).

Without directly disputing the above theories on women's rights, following Hyland et al. (2020), we argue that the push to promote gender equality and reduce discrimination against women can come from bilateral and multilateral organizations as well. Gender-focused aid has sharply increased in the last two decades. During this period, donors have been providing aid not only for projects whose principal objective is gender equality but they have also incorporated gendered perspectives in an increasing amount of aid undertaken for other purposes. Examples of the former include the assistance of USAID to draft legislation on sexual harassment for the Ethiopian government or financial assistance from the EBRD that lifted some workplace-related legal barriers in Kazakhstan (World Bank 2019). An example of the latter is a USAID project on sustainable water and sanitation in Kenya that called for program activities to be implemented in a way that leveraged women's leadership in water supply management (USAID 2015).

The OECD aid database provides information on whether certain projects have gender equality as either a principal or a significant objective of each of the aid projects carried out by the member donor countries of the Development Assistance Committee (DAC). Projects with gender equality as a significant objective are those where gender perspectives have been mainstreamed. As Figure 1 shows, over the last 15 years, gender-focused aid including both types of projects has quadrupled from around 5 billion in 2005 to over 20 billion USD in 2019. Has this gender-focused aid promoted women's economic and legal empowerment?

Figure 1 – Gender-marked aid disbursements, 1990-2019, USD million



Data and descriptive statistics

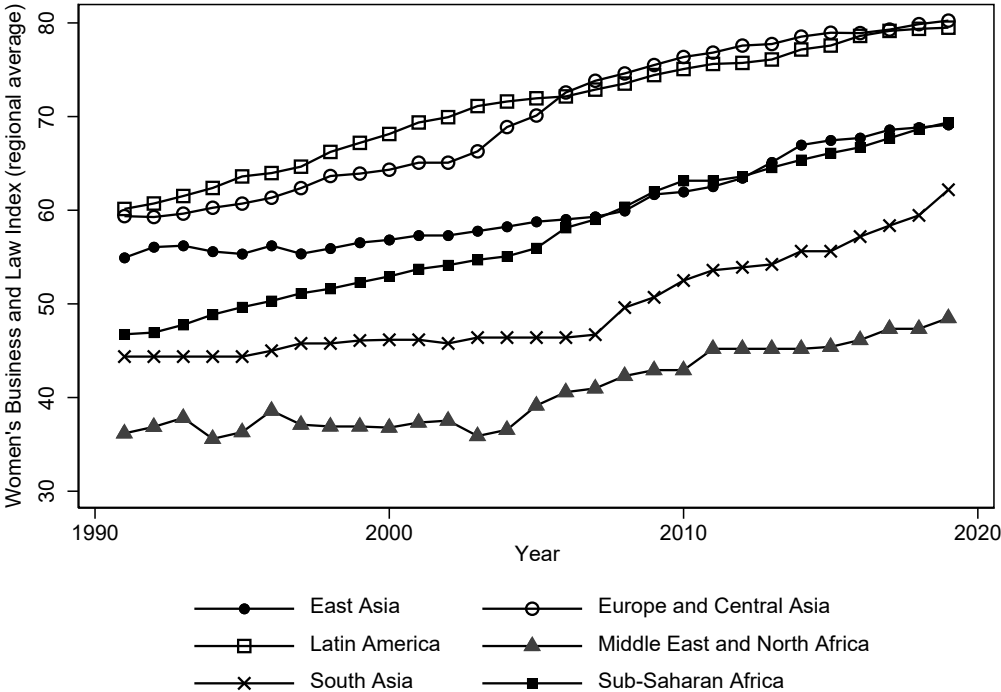
We investigate the relationship between women's legal empowerment and gender-focused aid from 1990 to 2019 for over 100 aid-receiving countries.⁵ Women's legal empowerment has been on an upward trend since the 1970s, and this progress has been faster in some regions than in others in the last decades (see Figure 1). For example, Sub-Saharan Africa made more reforms in the last decades than East Asia and caught up with that region in terms of women's rights. South Asian and MENA countries have been reforming as well but women's legal empowerment in these regions is still the lowest relative to the rest.

The OECD aid database provides information on whether certain projects have gender equality as either principal or secondary objective of each of the aid projects carried out by the member donor countries of the Development Assistance Committee. During this period the international aid community designed two protocols highly relevant for improving gender quality in the aid recipient countries, Millennium Development Goals and Sustainable Development Goals. Over the last 15 years, gender-focused aid has quadrupled from around 5 billion in 2005 to over 20 billion USD in 2019. The estimation sample includes 101 DAC aid recipient countries observed over 27 years. Gender-focused aid is calculated based on the share

⁵ The actual database starts from 1970 and is updated annually.

of aid that is marked as having either a principal or significant gender component in the Creditor Reporting System of OECD/DAC Aid Statistics. (OECD DAC CRS, 2020).

Figure 2 – Trend in Women’s Business and Law Index, regional averages, 1990-2019



We use a newly constructed Women’s Business and Law (WBL) database by Hyland et al. (2020) to measure women’s legal empowerment over time across countries. The WBL database is built on legal information (e.g. Legal Acts, Codes) in each country due to a collaborative effort of legal experts at the Bank and the local experts, such as lawyers, judges, civil society representatives, and public officials. The database tracks the legal rights of women and men along eight dimensions of women empowerment such as workplace, mobility, pay, marriage, parenthood, entrepreneurship, assets, and pensions. It is a cumulative indicator based on these eight dimensions and ranges from 0 to 100, where 100 means legal equality between men and women. An increase in the WBL index by 1 point indicates a change in one of the laws along the eight dimensions of legal empowerment. WBL index provides an objective measure for comparing women's legal empowerment across countries in the short run (Hyland et al. 2020).⁶

⁶ WBL does not cover reproductive rights nor affirmative actions or quotas as it only focuses on negative discrimination and rewards countries whose laws treat men and women equally. WBL is based on changes in laws based on legal codes, which implies that it does not provide any information on the implementation of these laws. Clearly, de-jure empowerment does not imply one-to-one de-facto empowerment as in practice local traditions and cultural norms may overrule legal rights. Yet, studies

Table 1. Summary statistics

| | count | mean | sd | min | max |
|--|-------|------|------|-------|-------|
| WBL INDEX | 3913 | 60.0 | 15.4 | 17.5 | 96.9 |
| Share of gender aid | 4205 | 12.3 | 13.7 | 0.0 | 98.6 |
| Share of gender bilateral aid | 4205 | 11.1 | 12.5 | 0.0 | 98.6 |
| Share gender multilateral aid | 4205 | 0.9 | 3.1 | 0.0 | 73.9 |
| Share of gender aid: principal objective | 4205 | 1.4 | 2.7 | 0.0 | 48.4 |
| Share of women in parliament | 3370 | 12.2 | 10.0 | 0.0 | 61.3 |
| Trade/GDP ratio | 3508 | 79.1 | 41.4 | 0.0 | 348.0 |
| Total fertility rate | 3919 | 3.7 | 1.6 | 1.2 | 8.5 |
| FDI/GDP (inflow) | 3775 | 4.0 | 6.8 | -37.2 | 161.8 |
| FLFP, Total | 3762 | 53.2 | 18.6 | 6.3 | 91.4 |
| FLFP, 15-24 ages | 3762 | 39.3 | 17.6 | 4.6 | 88.4 |
| Gender gap in enrollment | 2273 | 0.9 | 0.1 | 0.0 | 1.2 |
| Number of Major Constitutional Changes | 3943 | 0.1 | 0.3 | 0.0 | 4.0 |
| Weighted (Internal) Conflict Index | 3953 | 0.0 | 0.2 | 0.0 | 4.6 |
| Dummy for battle related deaths | 4316 | 0.2 | 0.4 | 0.0 | 1.0 |
| GDP p.c. (ln) | 3838 | 7.8 | 1.1 | 5.1 | 11.1 |

Method

Gender-focused aid is not exogenous as countries that are doing worse on gender-specific issues such as women's rights may receive more aid from donors to improve these dimensions (need-based). It is also likely that countries with stronger women's rights (merit-based), may receive more education and health aid that are likely to promote gender equality, as suggested by Gehring et al. 2015.⁷ Therefore, the issue of reverse causality, as well as unobserved heterogeneity, complicates the identification of the effect of gender-focused aid on women's legal empowerment. In the following, we use an estimation method that mitigates the reverse causality to the extent possible as well as addresses additional threats to identification such as country-specific unobserved heterogeneity.⁸

show that changes in legal environment can also lead to changes in norms and values in practice (see Lazarev, 2019 and literature discussion therein).

⁷ Gehring et al 2015 also show that countries with higher gender gaps in education and health attract more aid from those sectors and aid overall.

⁸ Gehring et al measure of women's rights and aid for gender equality differ from those measures used in this study. In particular, Gehring et al use aid for sectors such as education and health as these are regarded to be most beneficial for women. Moreover, Gehring et al draw the women's rights measure from CIRI Human Rights database, which also includes women's political and civil rights. WBL does not include these dimensions, which helps to avoid strong correlation between women in parliament and women's legal rights index variables used in this paper, and some of the potential sources of reverse causality.

In our baseline specification we estimate the following regression model:

$$WBL_{i,t} = \beta GenderAid_{i,t-2} + C'_{i,t}\gamma + \alpha_i + \delta_t + T * a_i + \varepsilon_{i,t} \quad (1)$$

Where WBL is the dependent variable, which values range from 0 to 100 for country i in year t . *GenderAid* denotes the share of gender-focused aid disbursements in the overall aid received by country i in year $t - 2$. We lag gender aid by two years to allow enough time between aid disbursements and change in-laws, in line with the idea of Granger-causality where a change in the outcome variable follows the change in the explanatory variable. C' is a vector of control variables that vary per year and country. α_i denoted country-specific fixed effect and δ_t denotes time fixed effects. $T * a_i$ denotes the country-specific linear trend and $\varepsilon_{i,t}$ denotes error term clustered by country. The country-fixed effects alleviate endogeneity bias from unobserved country-specific time-invariant factors. The time-fixed effects eliminate the possible confounding effects driven by shocks common for all countries in the sample. For example, some of the international treaties that call for more global action and investment in gender equality may have led to an increase in gender-focused aid and encouraged the country to reform some gender-specific laws.

Besides the common shocks and the country-specific time-invariant factors that may confound the relationship between gender aid and women's legal empowerment, country-specific time-invariant factors also threaten the identification of this relationship. Previous studies suggest that improvements in women's rights can be associated with demographic changes in the female workforce (Goldin 2013, 1988), the level of development and human capital (Doepke and Tertlit, 2019; Geddes and Lueck, 2002; Doepke, Tertlit, Voena 2012). Therefore, the model controls the most plausible drivers of women's empowerment, such as women's share in the parliament, trade to GDP ratio, fertility rate, female labor force participation of different age groups, gender parity in school enrollment, number of major constitutional changes, internal conflict measure, battle-related deaths and GDP per capita. These recipient-specific and time-varying variables serve to capture factors that may influence both women's legal empowerment and gender aid. Furthermore, we estimate the baseline specification with leads and lags for identifying Granger-causal effects.

In addition to the full set of fixed effects and time-varying control variables, in our extended specifications, we include (1) recipient-specific linear time trend (interaction between indicator variable for countries and year as a continuous variable) and (2) an interaction term between

a country's initial shares of aid and years as a binary variable. First, the recipient-specific linear time trend controls for the differential paths that each country may be on regarding women's legal empowerment. In other words, it controls for the recipient-specific unobserved linear changes. Second, the interaction term between initial shares of gender-focused aid and year dummies control for unobserved overtime non-linear time effects (shocks) in countries with higher initial shares of gender aid relative to those who received lower initial shares of gender aid. This term at least partially controls for recipient-specific non-linear unobserved changes over time. Altogether, we argue that these techniques help to eliminate the endogeneity bias stemming from recipient-specific heterogeneity and reverse causality to the extent possible.

Results

Column 1 of Table 2 shows the regression results for the pooled OLS estimation with the baseline controls and lagged share of gender aid. Column 2 includes the control variables but not the country and year fixed effects. The results from these two specifications show a positive and statistically significant relationship between the share of gender focus aid received by countries and women's legal rights. The results also indicate that share of women in parliament and female labor force participation are positively associated with women's rights while conflict and higher fertility rates have a negative association. In column 3 once we include country and year fixed effects, we observe that these fixed effects capture most of the variation in the baseline controls, and the coefficient size on the lagged share of gender aid shrinks by large but is statistically significant at the one percent level. This addition also shows that number of constitutional changes and increase in the labor supply of women in the 15-24 age group are negatively associated with women's legal empowerment. In column 4 we add a recipient-specific linear time trend as shown in equation (1), which constitutes our main specification. De-trending of the outcome variable (WBL) results in a lower coefficient for lagged gender aid, which remains statistically significant at the five percent level. The identification of the possible effect of gender aid on WBL in the specification comes from changes in the share of lagged aid that are associated with changes in the WBL that deviate from the trend. The size of the coefficient on the lagged share of gender aid implies that a 20-percentage point increase in the share of gender aid in a country can lead to a change in one law. That is, to have a meaningful impact on changes in gender-related laws a sizeable increase in a country would need a sizable increase in the share of gender aid, holding other factors constant. The average share of gender-focused aid a country received over the sample period is 12 percent.

Table 2. Gender-focused aid and women's legal empowerment.

| | (1) WBL INDEX | (2) WBL INDEX | (3) WBL INDEX | (4) WBL INDEX |
|----------------------------|----------------------|----------------------|-----------------------|----------------------|
| Share of gender aid (t-2) | 0.287*** (0.0480) | 0.203*** (0.0599) | 0.0969*** (0.0294) | 0.0503** (0.0241) |
| Women in parliament (%) | | 0.280*** (0.0888) | 0.116** (0.0504) | 0.0520 (0.0561) |
| Trade/GDP ratio | | -0.0200 (0.0327) | 0.00553 (0.0242) | -0.0195 (0.0199) |
| Total fertility rate | | -3.659*** (1.098) | -1.355 (1.375) | -0.905 (2.841) |
| FDI/GDP (inflow) | | 0.130 (0.126) | 0.0808 (0.0958) | 0.0389 (0.0461) |
| FLFP, Total | | 0.384*** (0.106) | 0.235 (0.170) | 0.0612 (0.263) |
| FLFP, 15-24 ages | | -0.102 (0.109) | -0.262* (0.142) | -0.125 (0.207) |
| Gender gap in enrollment | | 10.71 (9.486) | -0.0247 (10.05) | -9.904 (11.06) |
| Constitutional Changes (#) | | -1.852 (1.590) | -1.786*** (0.661) | -1.167* (0.628) |
| Internal Conflict Index | | 5.855 (5.622) | 2.110 (1.928) | 0.640 (1.869) |
| Battle related deaths | | -3.767* (1.945) | 0.401 (0.667) | -0.183 (0.428) |
| GDP p.c. (ln) | | 1.126 (1.502) | 3.012 (2.795) | -2.154 (3.331) |
| Country FE | no | no | yes | yes |
| Year FE | no | no | yes | yes |
| Recipient trend | no | no | no | yes |
| Number of countries | 147 | 108 | 108 | 108 |
| Number of years | 27 | 26 | 26 | 26 |
| Observations | 3558 | 1410 | 1410 | 1410 |
| R-squared | 0.0528 | 0.452 | 0.576 | 0.792 |
| Mean Dep. Variable | 60.85 | 62.44 | 62.44 | 62.44 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In Table 3, column 1 we introduce leads and lags to shed light on reverse causality and Granger causal effects of gender-focused aid. The results show that relative to the contemporaneous (reference category) association between gender aid disbursements and WBL, the association is larger in the case of the second lag of gender aid, statistically significant at the five percent level. In contrast, the first and third lags as well as the leads are statistically insignificant, which

implies that changes in the share of gender aid likely Granger-cause changes in women's economic rights in the recipient countries. The results in column 1 also do not provide any compelling evidence that recipient countries who reform in anticipation of more aid, end up receiving more gender aid in the following year.

Table 3 – Leads and lags, overall aid commitments and social sector aid

| | (1) | (2) | (3) |
|----------------------------------|----------------------|----------------------|----------------------|
| | WBL INDEX | WBL INDEX | WBL INDEX |
| Share of gender aid (t-1) | 0.0202 (0.0186) | | |
| Share of gender aid (t-2) | 0.0371** (0.0177) | 0.0469** (0.0195) | 0.0492** (0.0206) |
| Share of gender aid (t-3) | 0.0308 (0.0239) | | |
| Share of gender aid (t+1) | 0.00910 (0.0210) | | |
| Share of gender aid (t+2) | 0.0155 (0.0196) | | |
| Share of gender aid (t+3) | 0.0156 (0.0209) | | |
| Aid per capita commitments (ln) | | -0.289 (0.253) | |
| Share of social sector aid (t-2) | | | -0.00567 (0.0113) |
| Country FE | yes | yes | yes |
| Year FE | yes | yes | yes |
| Recipient trend | yes | yes | yes |
| Baseline controls | yes | yes | yes |
| Number of countries | 107 | 108 | 108 |
| Number of years | 23 | 26 | 26 |
| Observations | 1324 | 1410 | 1410 |
| R-squared | 0.794 | 0.786 | 0.786 |
| Mean Dep. Variable | 62.59 | 62.44 | 62.44 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In column 2, we present another test for reverse causality as well as for the argument that recipient countries make changes to their laws in anticipation of more aid from the donor countries. Therefore, in column 3 we add the overall aid commitments to gauge whether contemporaneous changes in WBL are associated with changes in the overall aid commitments to that country in the same year. We use commitments instead of disbursements as donors would first pledge the funds if they want to reward a recipient followed by disbursements in the following years. The results in column 3 show do not provide statistically significant evidence that reforming countries are rewarded with higher aid pledges. Given that gender aid is part of social sector aid, which constitutes one of the largest aid sectors, one may argue that it is not, per se, aid with gender objectives in general but aid to a social sector that leads to changes in women's lot and their legal empowerment. Therefore, in column 3, we control for

social sector aid to differentiate between gender-marked aid and non-gender marked but social aid. This is yet another way to test for identification issues in the model; namely, if the social aid is equally significant for women's rights, it is then plausible that there remain issues of reverse causality with our variable of interests. The results show that the statistically significant relationship between gender-marked aid and WBL is robust to the inclusion of social sector aid.

Table 4. Women's legal empowerment, Democratic transition and Political risks

| | (1) WBL INDEX | (2) WBL INDEX | (3) WBL INDEX |
|---------------------------|----------------------|----------------------|----------------------|
| Share of gender aid (t-2) | 0.0557** (0.0260) | 0.0691** (0.0338) | 0.0670** (0.0318) |
| Democratic change year 1 | -2.649 (1.926) | | -4.281** (1.935) |
| Democratic change year 2 | -2.213 (1.794) | | -2.491 (2.028) |
| Democratic change year 3 | -0.0992 (1.090) | | -0.134 (1.317) |
| Democratic change year 4 | 1.180 (2.002) | | 1.598 (2.143) |
| Democratic change year 5 | 1.719 (2.987) | | 2.755 (2.966) |
| Corruption | | 0.616 (0.487) | 0.446 (0.498) |
| Military in politics | | 1.091* (0.574) | 1.357** (0.560) |
| Religious tensions | | 0.821 (0.532) | 0.621 (0.556) |
| Law and order | | -1.058 (0.747) | -1.125 (0.731) |
| Country FE | yes | yes | yes |
| Year FE | yes | yes | yes |
| Recipient trend | yes | yes | yes |
| Baseline Controls | yes | yes | yes |
| Number of countries | 101 | 79 | 79 |
| Number of years | 26 | 25 | 25 |
| Observations | 1315 | 1009 | 1009 |
| R-squared | 0.803 | 0.790 | 0.795 |
| Mean Dep. Variable | 62.79 | 62.32 | 62.32 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In Table 4 we test for alternative explanations, such as episodes and years of democratization and political instability that may influence both share of gender-focused aid as well as women's legal rights. In column 1, we introduce variables for transition to democracy. PPD1 is a dummy for one year after the transition to democracy, and PPD5 is 5-years after the transition to a

democratic regime.⁹ The results in column 1 show that years after the democratic transition do not confound our findings. In column 2, we introduce variables that determine political stability in the country based on the International Country Risk Guide (ICRG) database. Lower values of ICRG data indicate high risk. The result shows that low risks of military stability are positively associated with women’s legal empowerment within a country. At the same time, the inclusion of these variables does not alter the positive impact of gender aid on women's economic rights. In column 3, we include all the control variables from columns 1 and 2, in addition to the baseline controls, and our main finding remains robust. The size of the coefficient on the share of gender aid increases slightly, yet the number of observations drops due to the missing data on the newly added variables for over 20 countries.

Table 5. Gender as a principal objective and aid for women rights

| | (1) WBL INDEX | (2) WBL INDEX | (3) ΔWBL INDEX |
|---------------------------------|-----------------------|---------------------|---------------------|
| Share of gender aid (t-2) | 0.0895*** (0.0296) | | |
| Principal objective (t-2) | | 0.159** (0.0728) | |
| For women rights (t-2), 0/1 | | | 0.983*** (0.366) |
| NOT for women rights (t-2), 0/1 | | | 0.723* (0.372) |
| Country FE | yes | yes | yes |
| Year FE | yes | yes | yes |
| Inishar sharesXyear | yes | yes | yes |
| Baseline controls | yes | yes | yes |
| Number of countries | 108 | 108 | 108 |
| Number of years | 26 | 26 | 26 |
| Observations | 1410 | 1410 | 1412 |
| R-squared | 0.588 | 0.583 | 0.0464 |
| Mean Dep. Variable | 62.44 | 62.44 | 0.865 |

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

In Table 5, instead of using a recipient-specific linear time trend, we use recipient-specific non-linear trend conditional on their initial shares of gender aid. This term helps to capture any unobserved heterogeneity related to countries initially acquiring higher shares of gender aid than others. For example, countries most in need might have received higher initial shares of

⁹ The extended data on democratic transition is taken from Méon and Sekkat (2021).

aid, which may have led them to be on a different path for women's rights. We implement this term in regression as an interaction between time dummies and the first non-missing value of a share of gender aid for each country. The result shows that lagged share of gender aid remains positively associated with WBL, statistically significant at the one percent level. In column 2, we use the share of gender aid, where the gender component is the principal objective of the given aid fund. Even though this is the small percentage of overall gender-marked aid, its coefficient size is larger, implying that aid targeting especially for gender issues can be more effective in impacting changes in such laws. In column 3, we further sharpen the identification of aid focused on women's rights relative to aid that has a gender marker does not include projects that focus on improving women's rights. We define a dummy variable equal to 1 when the share of gender aid received is given for women's rights purposes and 0 otherwise.¹⁰ We define a dummy variable NOT for women's rights but marked for gender component as 1 and 0 otherwise. The dependent variable in column 3 is the change in the WBL. The results in column 3 show that receipt of aid for women's rights is associated with a positive change in the laws two years after, statistically significant at the 1 percent level. The coefficient size of 0.983 indicates that such aid increases the average change (0.865) in WBL within a country by nine percent. The coefficient on the variable that indicates receipt of gender-marked aid but not specifically for women's rights is also positively associated with changes in the WBL albeit with lower statistical power and coefficient size. Thus, the results in Table 5 indicate that increases in aid, which the main objective is improving gender equality and women's right in the country is effective in bringing positive changes in the gender-equal laws in recipient countries. More precise targeting and increases in funds allocated for this purpose can work equally well if not better than general gender mainstreaming in aid projects.

¹⁰These purpose codes in the CRS OECD DAC database are These are purpose code, 15160, 15170, 15180.

Concluding remarks

This paper studies the relationship between development aid marked for gender equality and women's legal empowerment in aid recipient countries – an issue that has been the focus of international development cooperation since the 1990s. We use panel data for over 100 countries from 1990 to 2019 to estimate the effectiveness of such gender-focused aid. Our estimation method controls for several determinants of women's empowerment shown in the previous literature as well as includes recipient-specific linear time trends and non-linear trends conditional on the initial shares of gender aid received by countries. These terms help to capture unobserved confounding factors that change over time in addition to those factors captured by country and year fixed effects included in the estimation. We also include a specification with leads and lags to test for Granger causality.

We find robust evidence for a positive and statistically significant Granger causal association between gender aid and changes in the gender equality laws in the recipient countries. Our main specification indicates that a 20 percent increase in the average share of gender aid, from 12 percent to 22 percent, can lead to a change in one law contributing to gender equality in a recipient country. The average share of gender-focused aid is 12 percent of the overall aid received by countries. The findings of this study suggest that if donors include gender components in all their projects and increase the share of aid specifically for women's rights, this can lead to substantial changes in the gender-equal laws in that country.

In this study we focus on laws only, however, changes in-laws do not necessarily lead to changes in practice. Nonetheless, legal changes open up opportunities for changes in practice and serve as a stepping stone for changing traditions and norms that can be harmful to women. Changes in norms and traditions are likely to take longer than one political cycle. Future research with longer time coverage, for example over three generations, can shed more light on how well government-initiated changes in gender-equal laws translate into practice.

References

- Baliamoune-Lutz, M. (2016). The effectiveness of foreign aid to women's equality organization's in the MENA. *Journal of International Development*, 28(3), 320-341.
- Banaszak, L. A., & Leighley, J. E. (1991). How employment affects women's gender attitudes: The workplace as a locus of contextual effects. *Political Geography Quarterly*, 10(2), 174-185.
- Bush, S. S. (2011). International politics and the spread of quotas for women in legislatures. *International Organization*, 65(1), 103-137.
- Caglar, G. (2013). Gender mainstreaming. *Politics & Gender*, 9(3), 336-344.
- Cherif, F. M. (2010). Culture, rights, and norms: Women's rights reform in Muslim countries. *The Journal of Politics*, 72(4), 1144-1160.
- d'Aiglepierre, R., & Wagner, L. (2013). Aid and universal primary education. *Economics of Education Review*, 37, 95-112.
- Doepke, M., & Tertilt, M. (2019). Does female empowerment promote economic development?. *Journal of Economic Growth*, 24(4), 309-343.
- Doepke, M., Tertilt, M., & Voena, A. (2012). The economics and politics of women's rights. *Annual Review of Economics*, 4(1), 339-372.
- Domingo, P., Bihirabake, A. M., Denney, L., Hassim, S., Lukman, S., O'Neil, T., ... & Foresti, M. (2012). Joint evaluation: UN Women/UNDP support to women's political participation in sub-Saharan Africa. Evaluation synthesis report. *UN Women/UNDP*.
- Doucouliagos, C., Hennessy, J., & Mallick, D. (2021). Health aid, governance and infant mortality. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 184(2), 761-783.
- Doucouliagos, H., & Paldam, M. (2009). The aid effectiveness literature: The sad results of 40 years of research. *Journal of economic surveys*, 23(3), 433-461.
- Dreher, A., Gehring, K., & Klasen, S. (2015). Gesture politics or real commitment? Gender inequality and the allocation of aid. *World Development*, 70, 464-480.
- Dreher, A., Nunnenkamp, P., & Thiele, R. (2008). Does aid for education educate children? Evidence from panel data. *The World Bank Economic Review*, 22(2), 291-314.
- Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, 50(4), 1051-79.
- Edgell, A. B. (2017). Foreign aid, democracy, and gender quota laws. *Democratization*, 24(6), 1103-1141.
- Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International organization*, 52(4), 887-917.
- Garcia, O. A., Skinner, W., & Pennarz, J. (2017). Evaluation synthesis report on what works for gender equality and women's empowerment—a review of practices and results.
- Geddes, R., & Lueck, D. (2002). The gains from self-ownership and the expansion of women's rights. *American Economic Review*, 92(4), 1079-1092.

- Goldin, C. (1988). Marriage bars: Discrimination against married women workers, 1920's to 1950's.
- Goldin, C., & Olivetti, C. (2013). Shocking labor supply: A reassessment of the role of World War II on women's labor supply. *American Economic Review*, 103(3), 257-62.
- Hicks, D. L., & Maldonado, B. (2020). Do foreign aid donors reward recipients for improving gender outcomes?. *Applied economics letters*, 27(1), 46-51.
- Hyland, M., Djankov, S., & Goldberg, P. K. (2020). Gendered laws and women in the workforce. *American Economic Review: Insights*, 2(4), 475-90.
- Jones, S., & Tarp, F. (2016). Does foreign aid harm political institutions?. *Journal of Development Economics*, 118, 266-281.
- Kabeer, N. and Natali, L. 2013. "Gender Equality and Economic Growth: Is there a Win-Win?" *Institute of Development Studies Working Paper* Volume 2013 No 417.
- Keck, M. E., & Sikkink, K. (2014). *Activists beyond borders*. Cornell University Press.
- Klasen, S. (2020). From 'MeToo' to Boko Haram: A survey of levels and trends of gender inequality in the world. *World Development*, 128, 104862.
- Mekasha, T. J., & Tarp, F. (2013). Aid and growth: What meta-analysis reveals. *The journal of development studies*, 49(4), 564-583.
- Méon, P., & Sekkat, K. (2021). A time to throw stones, a time to reap: How long does it take for democratic transitions to improve institutional outcomes? *Journal of Institutional Economics*, 1-15.
- Mishra, P., & Newhouse, D. (2009). Does health aid matter? *Journal of health economics*, 28(4), 855-872.
- Neumayer, E., & De Soysa, I. (2011). Globalization and the empowerment of women: an analysis of spatial dependence via trade and foreign direct investment. *World development*, 39(7), 1065-1075.
- Norris, Pippa and Ronald Inglehart. (2004). *Sacred and Secular: Politics and Religion Worldwide*. New York: Cambridge University Press
- OECD (2010). Investing in Women and Girls. The Breakthrough Strategy for Achieving all the MDGs.
- OECD (2014). Financing the unfinished business of gender equality and women's rights: priorities for the post-2015 framework. Technical brief.
- Okundaye, G., & Breuning, M. (2021). Is the Expansion of Women's Access to Political Leadership Rewarded? Evidence from the Allocation of US Foreign Aid. *Journal of Women, Politics & Policy*, 42(3), 225-242.
- Ouedraogo, R., & Marlet, E. (2018). *Foreign direct investment and women empowerment: New evidence on developing countries*. International Monetary Fund.
- Rao, A., & Kelleher, D. (2005). Is there life after gender mainstreaming?. *Gender & Development*, 13(2), 57-69.

Risby, L. A., & Keller, O. (2012). Mainstreaming gender equality: A road to results or a road to nowhere. *Operations Evaluation Department. African Development World Bank Group*, Tunis.

Sen, A. (1989). Women's survival as a development problem. *Bulletin of the American Academy of Arts and Sciences*, 43(2), 14-29.

Temple, J., & Van de Sijpe, N. (2017). Foreign aid and domestic absorption. *Journal of International Economics*, 108, 431-443.

U. N. (2002). *Gender mainstreaming: An overview*. New York: United Nations.

USAID (2015). *Sustainable Water and Sanitation in Africa (SUWASA): A Tool for Mainstreaming Gender in Water Supply and Sanitation Services*. United States Agency for International Development.

World Bank. (2011). *World development report 2012: Gender equality and development*. The World Bank.

World Bank. 2019. *Women, Business and the Law 2019: A Decade of Reform*. Washington, DC: International Bank for Reconstruction and Development and the World Bank.