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This article is based on the author's master's thesis obtained in Development Economics from the Université Paris-1 Panthéon-Sorbonne program based in Cairo University

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ABSTRACT

This paper attempts to examine the impact of IMF programs and subsequent policy conditions from a gender lens[1]. We argue that the IMF's orthodox adjustment policies deteriorate the development outcomes of women disproportionately, mainly due to undermining recipient states' expenditure capacity on female-dominated work and service sectors. Consequently, women face hardships in managing their dual roles -in both the market and the domestic spheres- which affects the efficiency of society's productive and reproductive sectors. First, we detect the main macro and political-economic determinants of IMF participation using a probit estimation. Second, we use the predicted probabilities in stage one to conduct a Heckman selection procedure between the participation in an IMF program and the observation of policy conditionalities. Finally, we estimate the impact of the IMF conditionality on different gendered outcomes. Our results indicate that a 1% increase in conditionality increases female unemployment, maternal mortality rates, girls' secondary school drop-out rates, and gender inequality by 1.1%, 6.7%, 6.8%, and 0.8% respectively. Furthermore, the results of our extended model confirm the crucial role of different institutions that protect women's rights -including laws and conventions that prohibit gender-based discrimination- in mitigating the adverse impacts of IMF policy conditions on gendered outcomes.

[1]This article is based on the author's master's thesis obtained in Development Economics from the Université Paris-1 Panthéon-Sorbonne program based in Cairo University

I. Introduction

As envisioned by the Bretton Woods (BW) Agreement, the International Monetary Fund (IMF) was established in 1944 with the main mandate of safeguarding the stability and integrity of the international financial system (IMF, 1997). The IMF provides financing to support countries reduce their current account and fiscal deficits to manageable proportions in the medium term through its Adjustment Lending (AL) programs. In return, fund recipient countries are obliged to implement some policy reforms – referred to as "conditionalities"- designed and tailored to correct their underlying BOP problems while maintaining the growth and development momentum (World Bank, 1980). The IMF's Structural Adjustment Programs (SAPs) comprise a set of stabilization policies that target primarily inflation control as well as the reduction of budget and external balance deficits to attract private sector investment in the short run. This effect is achieved through depressing domestic spending by imposing public expenditure cuts and contractionary macroeconomic policies and devaluating the domestic currency. Subsequently, trade liberalization, capital account liberalization, and the privatization of public services and state-owned enterprises (SOEs) are phased in as structural adjustment policies that aim for achieving growth in the productivity and competitiveness of exports in the long run (Berik and Rodgers, 2009).

However, the set of austerity policies imposed by SAPs is accused to be neo-classical supply-side macroeconomic policies that lead to the reduction of domestic purchasing power and welfare of the state in terms of rising inequalities and reduced employment. In effect, these policies are expected to disproportionately hurt the most vulnerable social groups, including females (Antrobus, 1993; Cagatay and Elson, 2000). Previous empirical literature tackling the gendered effects of IMF's orthodox reform programs arrive at a consensus on their adverse impacts on educational, health, and overall equality outcomes of females (Saadatmand and Toma, 2008; Pandolfelli et al, 2014; Stubbs et al, 2016; Chandra et al, 2018). These results can be mainly attributed to the reduction of females' access to assistive and affordable public services -including health, educational and social services- as a result of public spending cuts and privatization policy conditions (Antrobus, 1993). However, the literature remains inconclusive with regards to the impact of SAPs on women's economic outcomes as a result of two contradicting effects on female labor force participation. On one side, trade liberalization policies lead to higher job creation for females in low-skilled, low-paid jobs to increase export competitiveness (Cagatay and Ozler, 1995; Cerutti, 2000; Erten and Metzger, 2019). In the counterargument, privatization and efficiency-enhancing policies might reduce women's opportunities for formal (and public) employment; hence driving them out of the labor force (Saadatmand and Mcgrath, 2004; Saadatman and Toma, 2008).

This paper has two main contributions to the previous literature on SAPs and gendered outcomes. First, we estimate the impact of IMF conditionalities on gendered outcomes, while taking into consideration the selection bias between the participation of countries in IMF programs and the observation of policy conditionalities. Up to our knowledge, previous papers have not considered explicitly the heterogeneous policy context assigned by the IMF and have solely focused on the impact of IMF participation on gendered outcomes (Saadatmand and Mcgrath, 2004; Saadatman and Toma, 2008; Pandolfelli et al, 2014). Second, we provide a comprehensive analysis of the impact of IMF programs on gendered outcomes by incorporating four different outcome variables that account for economic, health, educational and overall gender inequality,

while previous papers have most considered two dimensions of the story (Saadatmand and McGrath, 2004; Detraz and Peksen, 2016). It is also worth mentioning that this paper has introduced the Gender Inequality Index as an outcome variable to validate that the impact of IMF policies spurs gender inequalities in favor of males and not just deteriorate the development outcomes of the whole recipient country's population in an equal matter.

This paper aims to empirically test the impact of IMF programs and subsequent policies on gendered outcomes, namely female unemployment rates, maternal mortality rates, secondary school enrollment rates, and gender inequality. We employ a Heckman selection procedure using a sample of 181 world countries between 1993 and 2018 to control for the selection bias between a country's participation in IMF programs and the observation of policy conditionalities. Second, we estimate the impact of the IMF conditionality on gendered outcomes.

Our results indicate a respective increase in female unemployment rates, maternal mortality rates, girls' school dropout rates, and overall gender inequality as a result of an increase in conditionality. These results represent the minimal deterioration caused by IMF austerity policies on female outcomes since the possibility of interdependence between the four considered outcomes is not accounted for. Our estimates confirm the disproportionate impact of public spending cuts on females as it increases their unpaid work burden, and limits their access to public services and formal employment opportunities (Saadatmand and Toma, 2008; Pandolfelli et al, 2014; Stubbs et al, 2016; Chandra et al, 2018). Finally, the results of our extended model confirm the crucial role played by different institutions that protect women's rights in mitigating the negative impacts of IMF policy conditions on gendered outcomes.

The remainder of this paper can be classified into 6 main sections. Section 2 summarizes the review of the literature on the topic. Section 3 presents some stylized facts. Section 4 details the methodological framework employed in our econometric analysis. Section 5 presents the empirical results. Section 6 presents some robustness checks. Finally, section 7 concludes and builds some policy recommendations.

II. Literature Review

To address our main research question, it is crucial to demonstrate the link between macroeconomic policies and gendered outcomes within the context of economic theory. We do the latter by introducing the main insights of feminist theories and their main critiques of neoclassical economic theories, including macro-theories of structural adjustment and economic reforms. In the second subsection, we present some empirical validations of the feminist predictions about the impact of austerity policies adopted by the IMF on different gendered outcomes.

i. Theoretical Background

Feminist economics mainly aims the introduction of a gender-aware perspective that re-thinks the main assumptions of traditional economics. The main argument of feminist economics is that gender is a crucial determinant of an individual's participation in the economy and that no economic theory or policy has a neutral impact on both genders. Feminists contribute to the orthodox critiques of neo-classical economic theories mainly by challenging the *Homo Economicus* (rational man) assumption of the rational choice theory that attributes an individual's behavior solely to his material well-being and ignores the dualistic nature of different genders with regards to physical and social constraints of privilege and sub-ordinance (Benhabib, 1993; Nelson,

1993). Therefore, the field of feminist economics promotes the urgency of considering such social stratifications in policymaking and analysis.

The second criticism directed by feminist economists to traditional economic theory is that the latter restricts the definition of production to paid work activities in the market and stipulates unpaid household activities under consumption or reproduction units. On the contrary, Feminist theory argues that domestic tasks carried out by women such as childbearing, elderly care, or domestic chores contribute to the household income by saving or providing the unpaid care services necessary for the sustainability of out-of-home production. Therefore, the neo-classical definition of production leads to the underestimation of women's non-remunerated work and their real contribution to household income (Beneria, 1982). Finally, Feminist theories highlight the importance of the patriarchal structure of domestic work that lays the majority of the unpaid care work burden on females, which in turn affects their ability to participate in the paid labor market activities due to time constraints (Paltasingh and Lingam, 2014).

Following the oil crisis in the 1970s and the debt crisis in the 1980s, developing countries increased their demand for SAPs that mainly aim at achieving export competitiveness through trade and investment liberalization, privatization, and fiscal austerity. Since the early 1990s, a growing body of feminist literature has emerged to emphasize the shortfalls of structural adjustment policies imposed by international financing institutions on the gendered outcomes in program participating countries.

In line with traditional orthodox reform theories, austerity policies adopted by lending institutions usually endorse consumption cuts, in the form of public spending cuts, currency devaluation, and privatization, as a method to achieve macro-economic stabilization. However, feminist critiques of such theory highlight the importance of recognizing the intertwining productive and reproductive roles of women to disentangle the impacts of IMF conditionalities on different gender groups. For instance, Antrobus (1993) argues that cuts in public social expenditures especially on health and education can affect women through different channels. First, it deteriorates their economic autonomy and access to financial resources since female workers dominate the social sphere of production. Secondly, it reduces their access to assistive and affordable services vital to the performance of their domestic and paid-work tasks, and thus obliges women to allocate more of their time to un-paid care services. Consequently, women face hardships in managing their dual roles -in both the market and the domestic spheres- affecting the efficiency and effectiveness of reproductive as well as the productive capacity of the society (Beneria, 1982). In addition, spillover effects on girls' education and fertility rates are possible leading to a vicious inter-generational circle of poverty based on gender (Elson, 1991; Sen, 1999).

Furthermore, theoretical predictions of feminist economics argue that policies imposed by the Fund fail to achieve gender-equitable outcomes due to the presence of three main biases embedded in their reforms (Catagay and Elson, 2000). First, the exclusive focus of governments on controlling inflation through the adoption of tight fiscal and monetary policies regardless of their social costs refers to a "deflationary bias". Under recessionary pressures, women are more likely to lose their formal employment opportunities, and crowd into informal employment markets, in which they dominate lower skill, lower hierarchy, and lower pay jobs. This leads eventually to widening wage gaps and inequalities in the labor market. Moreover, higher interest rates - resulting from a tight monetary policy- might hurt small-scale enterprise owners (who are disproportionately women) with limited or no collateral by restricting their access to credit. Second, the "male-

breadwinner bias" refers to another macro-economic entitlement failure made by SAPs in which men are perceived as the primary breadwinners that provide for various independents in the non-market reproduction sphere through their market income. According to this bias, men are entitled to decent jobs or opportunities in periods of economic recovery and women are either dependent on their male breadwinner's income or social transfers targeting the most vulnerable categories of the society (Beneria et al, 2015). Finally, the "commodification bias" refers to the tendency of privatized state-owned enterprises and services to eliminate inefficiencies and price distortions. Privatization strategies in this regard resulted in reduced public employment opportunities for females, and higher prices of public (health, educational and social) services, which in turn increases the unpaid work burden on females and deteriorates their distributional outcomes.

In line with export promotion policies endorsed by international institutions, trade liberalization policies represent a cornerstone of IMF reform programs. In the case of trade openness, more job opportunities are created for women in the low-skilled, labor-intensive manufacturing export sector to increase exports' competitiveness through exploiting females' cheap supply of labor. Such a phenomenon is known as the "feminization of labor". Although such opportunities could enhance the educational and health outcomes of women, they tend to trap them into low-paying low-quality jobs and further increase their vulnerability to financial shocks. Finally, the adoption of high-skill technology manufacturing techniques might lead to women's displacement or more explicitly, what is called the "de-feminization of labor" (Berik and Rogders, 2009).

In conclusion, feminist economics argues that in adjusting the composition of macro-policies, policymakers need to consider the severe effects of economic austerity measures on women to avoid exacerbating the prevailing gender inequalities in economic, education, and health aspects.

ii. Empirical Evidence

We classify the empirical studies that detect the impact of SAPs (including IMF programs) on gendered outcomes into four main clusters of outcomes namely economic, health, educational and overall inequality.

On the economic front, Cagatay and Ozler (1995) run a fixed effect panel estimation for a cross-country dataset of 96 countries to estimate the impact of SAPs on the feminization of the labor force in loan recipient countries. Results indicate that SAPs indeed lead to an increase in the female ratio of workers in the labor force due to increased openness and export orientation of the economy. Similar conclusions were reached by Cerutti (2000) in Latin America where labor markets were feminized as a consequence of the structural adjustment reforms. Similarly, Erten and Metzger (2019) estimate a positive and significant effect of currency devaluation on female labor force participation with larger effects for countries with lower initial levels of income. These findings indicate a U-shaped relationship between economic development and feminization of labor where at earlier stages of development, undervaluation might boost economic opportunities for women since the economy is usually specialized in low-skilled labor-intensive industries, while at later stages of development technology-based –male-dominated- industries prevail in the economy leading to the de-feminization of labor.

On the contrary, Saadatmand and McGrath (2004) present an alternative mechanism by which IMF policies can affect the economic outcomes of women. The authors estimate a negative

impact of SAPs on the reported female labor force participation rates in Latin America. This can be attributed to the entry of females into informal labor markets, prevailing cultural preferences for male employment, reduced employment in the public sector, and increased competition for formal jobs.

In a similar context, Detraz and Peksen (2016) estimate the impact of IMF-induced policies of privatization and their endeavors on political and economic instability on the level of respect for women's rights in loan recipient countries. To control for the IMF's non-random selection of lending, they employ a two-stage econometric model. Results show that the involvement in IMF programs increases a country's probability of women's economic rights violation regardless of the type of political regime or level of economic development in such a country, while it has no significant impact on women's political rights in recipient countries. These results are in line with the author's argument that austerity conditions of IMF lending undermine the government's ability to protect women's economic rights in the context of private-sector profit maximization strategies.

From an educational standpoint, Stubbs et al (2006) contribute to the literature by estimating the impact of both IMF participation and degree of conditionality on government educational expenditures by employing a 3SLS estimation. Results estimate that exposure to an additional condition results in a 0.05 percentage point decline in educational expenditure. On a similar front, Saadatmand and Toma (2008) estimate a negative impact of adjustment programs on female enrollment in primary and secondary schools due to the increased workload in the household or the informal economy. Saadatmand and McGrath (2004) found similar results for female secondary education in Latin American Countries.

For health outcomes, Pandolfelli et al (2014) conducted a cross-country analysis to test for the impact of IMF SAPs on women's health – proxied by maternal mortality rates- using data on 37 African countries for four-time points (1990, 1995, 2000, and 2005). The authors correct the endogeneity of selection into an IMF program using a two-step Heckman procedure (Heckman, 1979) The findings indicate that recipient countries of IMF loans have higher maternal mortality rates than non-recipients. These results can be further validated by Stubbs et al (2016) findings in which a 0.24% decline in health spending per capita is estimated following one additional binding IMF policy reform. This in turn leads to decreasing the access and affordability of health services for pregnant women mainly due to the higher prices of private-sector medical services. Furthermore, it weakens the state's capacity to invest in health thereby compromising the health outcomes of the most vulnerable groups including women.

Our assessment of the empirical evidence on the gendered effects of key neoliberal reforms imposed by the IMF confirms earlier hypotheses stated in feminist theories. Women and men weather the storm of macroeconomic shocks differently, and women bear the lion's share of losses under SAPs. Consensus in the literature holds on the adverse effects of adjustment lending on females' health and educational outcomes (Pandolfelli et al, 2014; Stubbs et al, 2016). While the literature remains inconclusive about their impact on female force participation, which might be affected positively by policies that lead to the "feminization of labor" in labor-intensive low-skilled jobs (Cagatay and Ozler, 1995; Cerutti, 2000). Alternatively, the economic outcomes of women can be negatively affected due to governments' downsizing of expenditures and privatization policies that increase females' unpaid work burden and decrease their formal employment opportunities. (Saadatmand and Mcgrath, 2004; Saadatmand and Toma, 2008)

This paper contributes to the literature on SAPs and gendered outcomes two-fold. First, none of the previously tackled papers takes into consideration the selection bias between countries' participation in IMF programs and observation of conditionalities. Previous papers have not considered explicitly the impact of the heterogeneous policy context assigned by the IMF on gendered outcomes and have solely focused on whether a country is an IMF program participant (Saadatmand and Mcgrath, 2004; Saadatman and Toma, 2008; Pandolfelli et al, 2014). Second, we provide a comprehensive analysis of the impact of IMF programs on gendered outcomes by incorporating four different outcome variables that account for economic, health, educational, and gender inequality, while previous papers have most considered two dimensions of the story (Saadatmand and McGrath, 2004; Detraz and Peksen, 2016). In our analysis, we use the Gender Inequality Index constructed in the 2010 Human Development Report by the United Nations Development Programme (UNDP). This index accounts for multiple dimensions that represent the main forces of discrimination against women and girls comprising health, education, political representation, and labor market participation, which up to our knowledge has not been used in previous empirical work.

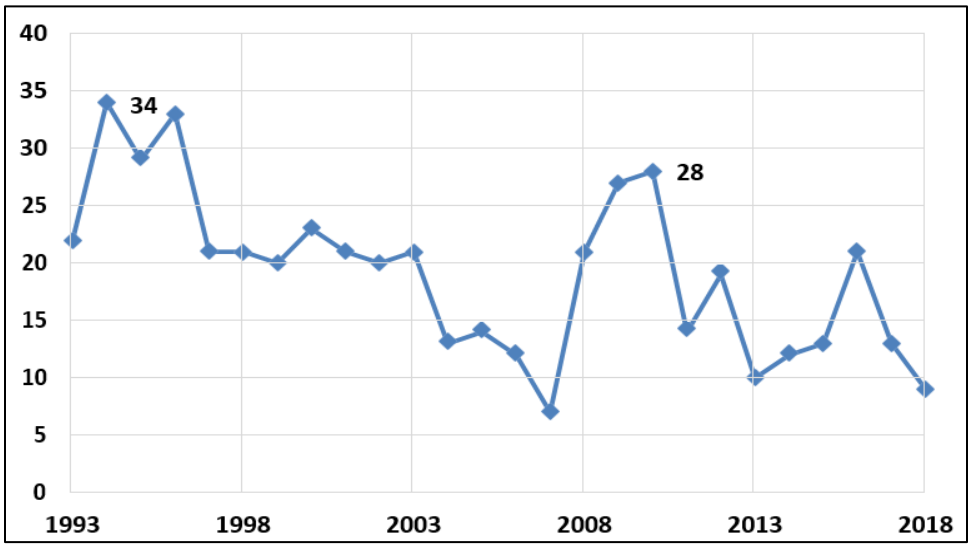
III. Stylized Facts

In this section, we present some stylized facts on our research question. We cluster our stylized facts into two sub-sections including an analysis of IMF lending and policy conditions, followed by a descriptive analysis of the relationship between IMF lending and subsequent policy conditions on gendered outcomes in loan recipient countries.

i. IMF Lending and Policy Conditions

During our period of analysis, the IMF has approved 498 loans under its different lending facilities. Figure 1 plots the evolution of IMF lending over time and signals the increased demand for IMF loans following major global or regional economic crises. A positive trend for IMF lending can be observed starting in the early 1990s with a peak of 34 loans in 1994. This coincides with the introduction of the Structural Adjustment Facility (SAF) by the IMF in 1986 -later replaced by the Poverty Reduction and Growth Trust (PRGT) - to provide concessional loans for low-income countries that were most adversely affected by the subsequent economic crises including the oil crisis in 1970, the second oil crisis in 1979, the debt crisis in the 1980s. The second peak occurs in 2010 at 28 loans following the global financial crisis in 2008. We expect the number of loans to climax again after the outbreak of COVID-19 in 2020.

Figure 1
Evolution of IMF Lending over Time

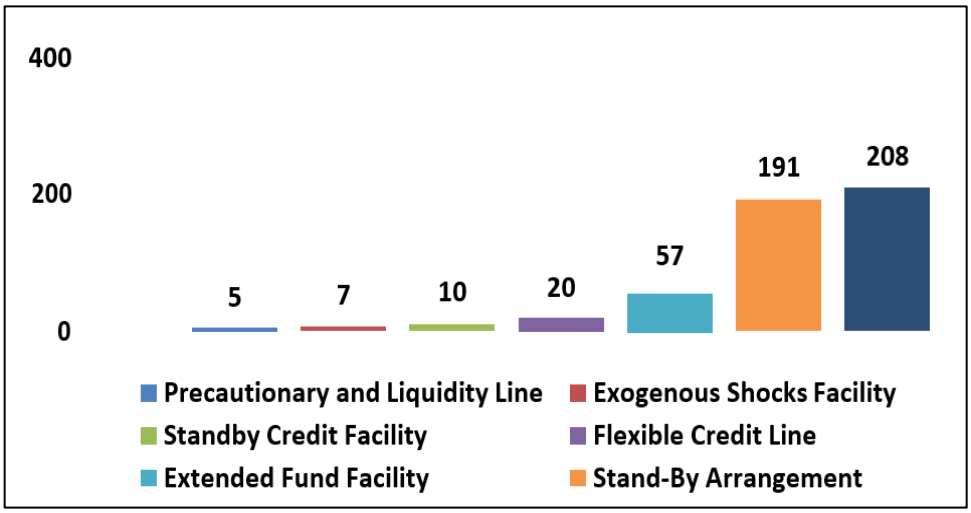


***Source**: Constructed by the author using the MoNA database by the IMF.*

The IMF has 8 different lending instruments that are tailored to meet the different needs and circumstances of the lending countries (see Table A2 in Appendix for further details). Upon disaggregating IMF loans by type of facility, we observe that the Extended Credit Facility (ECF) is the most frequently used within our period of analysis with a percentage of 41.77% of total loans, followed by Stand-By Arrangement (SBA) and Extend Fund Facility (EFF) that occupy 38.35% and 11.45% consecutively as can be seen in Figure 2. Our main analysis focuses on the IMF's Extended Fund Facility (EFF) and Stand-By Agreement (SBA) which constitute the two main IMF non-concessional lending tools and around 50% of total IMF lending (Barro and Lee, 2005)[2].

[2]We re-estimate the model using a participation dummy including both concessional and non-concessional loans and obtain similar quantitative results for the outcome equation

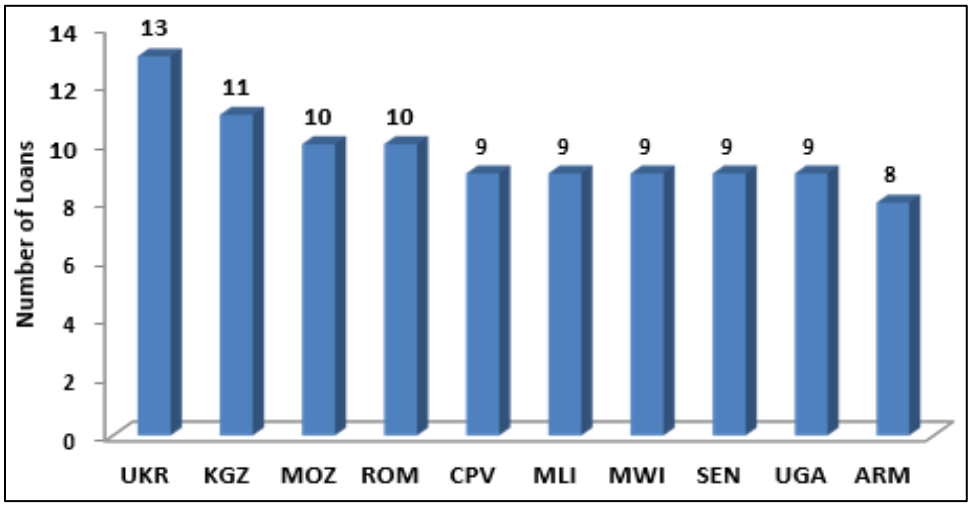
Figure 2
Disaggregation of Loans by Type of Facility (1993-2018)



Source: *Constructed by the author using the MoNA database by the IMF.*

Figure 3 ranks the top 10 loan recipient countries during the period of analysis. It is worth mentioning that 6 out of the 10 top recipient countries are located in Sub-Saharan Africa, while the other 4 are located in Europe and Central Asia indicating a strong regional spillover of economic difficulties and lending frequency.

Figure 3
The Intensity of Lending in Top 10 Recipient Countries



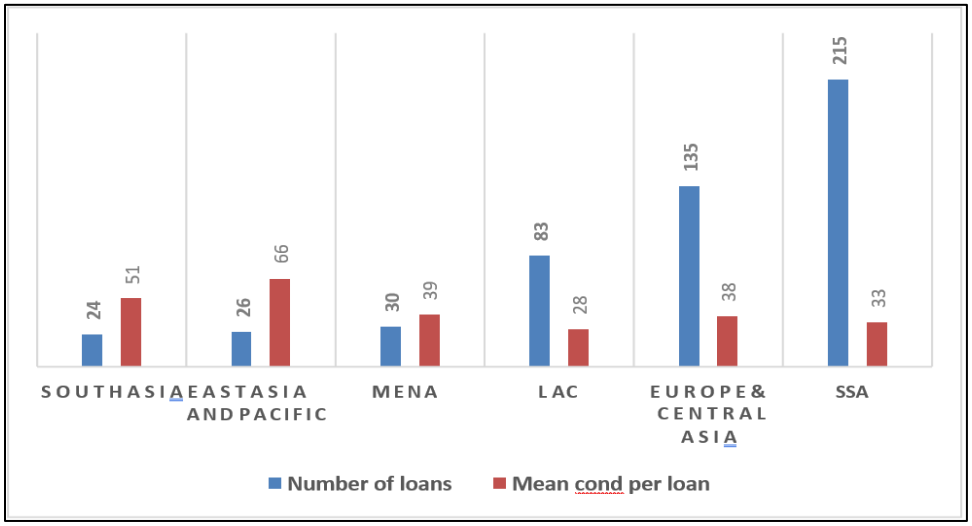
Source: *Constructed by the author using the MoNA database by the IMF.*

As previously mentioned, IMF loans are a two-way deal between the Fund and the recipient

country's government. In exchange for financial assistance provided by the IMF, the home government has to agree with the Fund on some policy reforms to adjust the economy and overcome the main obstacles that led the country to seek assistance in the first place. Conditionalities can take several forms comprising Prior Actions (PAs), Quantitative Performance Criteria (QPCs), Indicative Targets, and Structural Benchmarks (see Table A3 in Appendix).

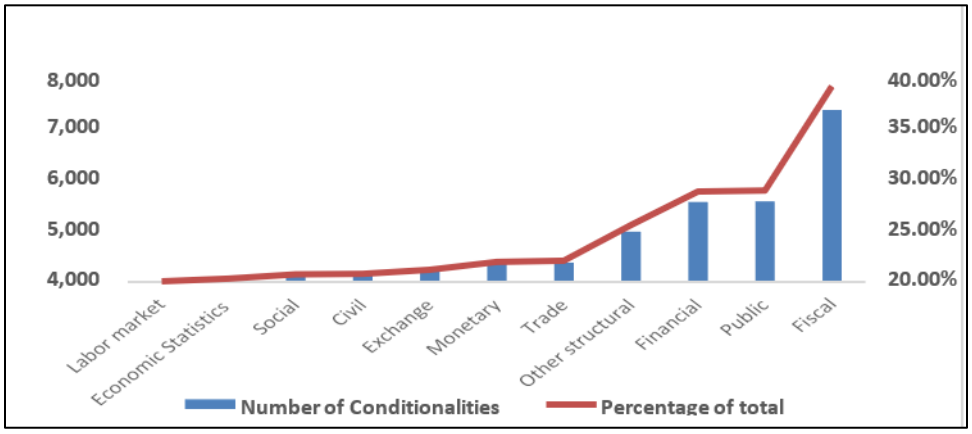
As can be seen in Figure 4, the IMF assigns a heterogeneous degree of conditionality across regions. Moreover, it can be observed that the regions with the largest share of loans (SSA, Europe, Central Asia, and LACs) are not the highest in terms of average conditionalities per loan.

Figure 4
Disaggregation of IMF Loans and Conditionalities by Region



Source: *Constructed by the author using the MoNA database by the IMF.*

Figure 5
Disaggregation of IMF Conditionalities by Type (1993-2018)



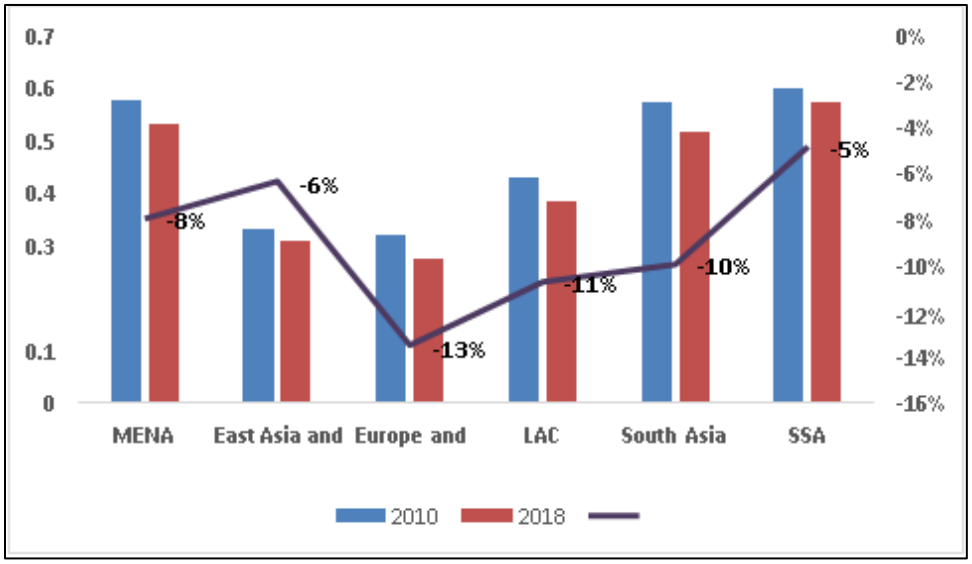
Source: *Constructed by the author using the MoNA database by the IMF*

ii. IMF and Gendered Outcomes: Stylized Facts

IMF's first female head, Christine Lagarde, addressed a speech at the 2013 Annual Meetings Plenary Session of the IMF in which she stressed the worrisome of IMF about the lack of progress in achieving gender equality around the globe. During her speech, she pledged that "the IMF will work with its member countries to enable women to contribute fully to global economic growth and prosperity" (Detraz and Peksen, 2018). In this subsection, we analyze some gendered outcomes in close parenthesis with IMF imposed policy conditions presented in the last subsection.

As clearly observed in Figure 6, the Gender Inequality Index has declined over the last decade in all regions. However, regions ranking the lowest in terms of enhanced gender inequality are the ones assigned the highest average conditionalities per loan (see Figure 4) by the IMF such as East Asia and Pacific, South Asia, and MENA (except for SSA).

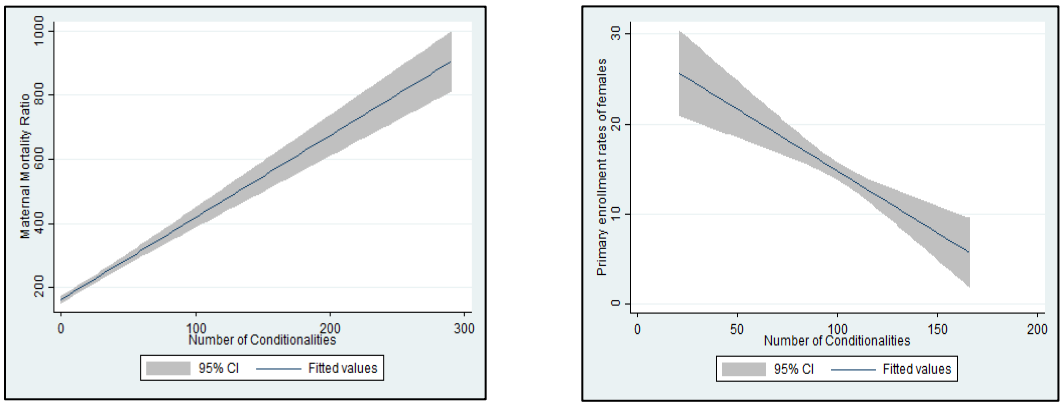
Figure 6
Evolution of GII by Region (2010-2018)



Source: *Constructed by the author using Human Development Reports (2010-2018.*

Plotting the degree of conditionality against maternal mortality ratio and enrollment rates for girls further validates the adverse effect of SAPs on females' human capital indicators. Figures 7 (a) and (b) show a positive association between the number of conditionalities and maternal mortality rates at the country level, and a negative association with primary enrollment rates of females, which comes in line with previous literature findings (Pandolfelli et al, 2014; Stubbs et al, 2016).

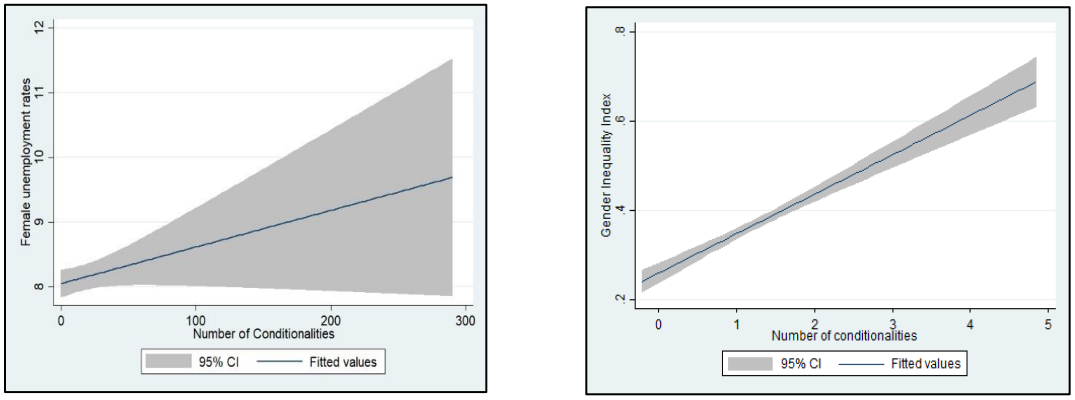
Figures 7 (a) and (b)
Association between Degree of Conditionality and Human Capital Outcomes



(a) (b)

Source: *Constructed by the author using MoNA and WDI databaseS.*

Figures 8 (a) and (b)
Association Between the Degree of Conditionality and Labor Market Indicators

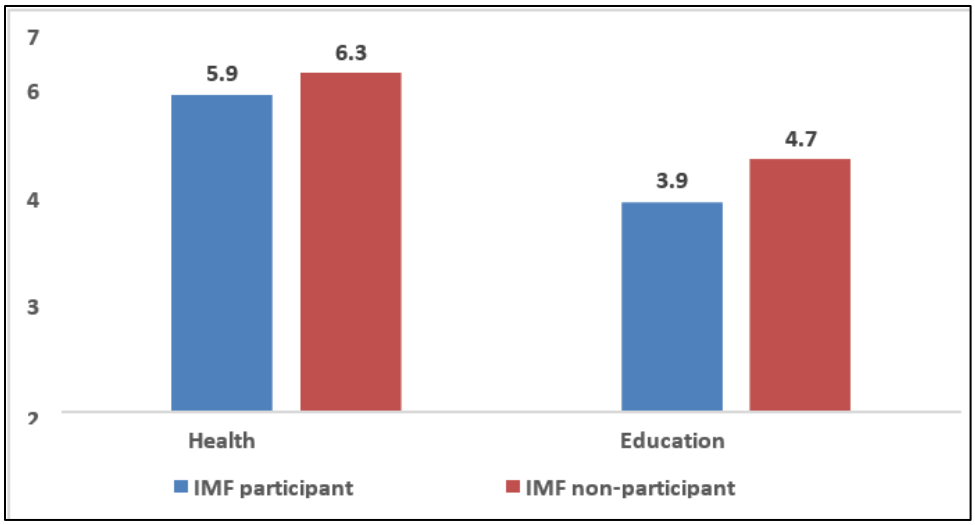


(a) (b)

Source: *Constructed by the author using MoNA, UNDP, and WDI databases.*

Figures 8 (a) and (b) elaborate a clear statement of deteriorated female outcomes by IMF policy conditions indicated by a positive relationship between the degree of conditionality and both the female unemployment rates and the gender inequality index. This can be mainly interpreted as a narrower opportunity window for females to be recruited in or even stay employed in their decent and formal employment opportunities at times of structural adjustment (Lundberg, 1985; Antrobus 1993; Beneria et al, 2015).

Figure 9
Mean Health and Educational Expenditure by IMF Participation (1993-2018)



Source: *Constructed by the author using MoNA and WDI databases.*
Note: *Health and education expenditures in the figure are computed as a percentage of GDP.*

Finally, we compare the average health and educational expenditure across IMF participant and non-participant countries. As can be observed in Figure 9, IMF non-participant countries have higher educational (4.7%) and health (6.3%) expenditures compared to IMF participant countries (3.9% and 5.9% respectively). This comes in line with the argument of undermined governments' spending capacities as a consequence of the IMF austerity reforms (Stubbs et al, 2006; Stubbs et al, 2016).

IV. IMF Loans' Gendered Outcomes: Methodological Framework

We develop a cross-country dataset for 181 countries -including high, middle, and low income- countries for the period from 1993 to 2018. We draw data for macro-economic, gender, and IMF loans and conditionality variables from different reliable sources as shown in Table A1 in Appendix.

In this section, we present our empirical strategy employed to detect the impact of IMF loans and subsequent policy conditions on gendered outcomes, as follows:

$$W_{it} = \beta_o + \beta_1 IMF_{it} + \beta_2 X_{it} + \mu_t + \delta_i + \varepsilon_{it} \qquad (1)$$

Where i and t represent country and year, W is the outcome of interest (female unemployment rate, maternal mortality rate, secondary school enrollment rate of girls, and gender inequality index), IMF is IMF participation dummy (or the number of conditionalities) for country i and time t; X denotes a vector of covariates[3] affecting gendered outcomes including GDP growth rate, fertility rates, secondary school enrollment rates of girls, CEDAW ratification dummy, and

[3]The secondary enrollment variable is excluded from the school enrollment outcome equation.

law dummy. While μ is a set of year dummies, δ is a set of regional dummies and ε is the error term.

Equation (1) fails to account for the non-random selection of participation in IMF programs. In that regard, equation (2) takes into consideration the endogeneity of countries' selection for IMF loans. The selection of countries depends on multiple macro-economic and political-economic factors. Therefore, we adopt the political economy approach innovated by Barro and Lee (2005) in an attempt to isolate the effects of IMF programs on gendered outcomes from the borrowing countries' pre-existing conditions. To detect the main determinants of selection into an IMF loan, equation (2) is estimated using a panel probit model as follows:

$$I_{it} = \alpha + \beta X_{it} + \gamma Z_{it} + \mu_t + \varepsilon_{it} \quad (2)$$

Where I_{it} is a dummy variable that takes the value of 1 if the country is an IMF program participant in year *t* and *0* otherwise. On the right-hand side of equation (1), X_{it} is a vector of control variables that comprise supply and demand-side factors that influence the approval of an IMF program.

First, supply-side factors include IMF credit outstanding for all countries at year *t* (which serves as a proxy for the international demand for IMF funds), while demand-side factors include a country's quality of institutions -proxied by WGI's government effectiveness index-, real GDP, lagged foreign exchange reserves, current account balance, primary budget deficit, and government consumption[4] (Dreher and Vaubel, 2004).

The vector Z_{it} comprises a set of excludable instruments that measure each country's political-economy connections to the IMF such as the IMF Quota of country *i* at time *t* and its bilateral trade with the US and the major Western EU countries including Germany, France, and United Kingdom (Barro and Lee, 2005). μ_t are year dummies to control for common effects of external factors such as world interest rates.

Intuitively, the political-economy exclusion variables are mainly based on the fact that the IMF is a bureaucratic and political entity. Therefore, decisions are affected by the relative influence of its members (measured by the country's quota in the IMF), and the economic proximity of countries with the key stakeholders -referred to in this paper as "veto countries"- in the IMF's board of directors (Barro and Lee, 2005).

We argue for the validity of the political-economy variables as excludable instrumental variables between IMF participation and conditionalities for four reasons. First, the used instruments are influential for the IMF approval decision, especially for non-concessional lending facilities under the General Resource Account (GRA) as borrowing countries might be non-eligible for concessional loans and therefore approval of their loans would require a higher political bargaining power. Second, it is important to note that loan amounts and policy conditions are determined jointly –and in the first stage- by a country's government and the IMF national technical team in accordance with the country's domestic macro-economic stance to ensure loan repayment and program success. Consequently, the approval decision is taken in a second –and

[4]We use one year lagged macro-economic indicators for two main reasons. First, to avoid the potential endogeneity of contemporaneous variables to IMF participation and to account for the time inconsistency in IMF lending as the current lending decision are based on previous macro-economic stances.

separate- stage by the Fund's executive board once the agreed policy program and loan amounts are received from the country's government and domestic IMF technical team in a "letter of intent". Therefore, we can argue that the proposed instruments satisfy the exclusion criterion as they affect the loan approval decision made by the international board of directors without directly affecting the intensity of reforms agreed upon based on purely technical consultations on the national level. Third, the proposed instruments surpass the econometric tests of instruments' validity namely the under-identification, weak identification, and over-identification (Sargan-Hansen) tests. Finally, the proposed instruments have been previously used in the literature as excludable instruments for IMF participation (Barro and Lee, 2005; Detraz and Peksen, 2016).

We further incorporate the number of conditionalities (referred to as "degree of conditionality") into our analysis in the realization of the heterogeneous policy content of IMF programs imposed by the Fund on the lending countries, and their adverse impacts on governments' capacity to protect gendered outcomes (Stubbs et al, 2006). However, conditionalities can only be observed for countries currently participating in an IMF loan. The selection bias (s_i) between the observance of IMF conditionalities and IMF participation can be indicated by:

$$s_i = \begin{cases} 1 & \text{If } \alpha + \beta Xit + \gamma Zit = 1 \\ 0 & \text{Otherwise} \end{cases}$$

For the above-mentioned reasons, we use a manual Heckman selection procedure (Heckman, 1979) referred to in the literature as the two-part model. This method allows us to control for the determinants of the assigned degree of conditionalities to lending countries as well as rules out the possibility of incidental truncation –which might occur as conditionalities are only observed for countries currently participating in an IMF loan- in our sample.

In a second stage, we use the predicted probability of IMF participation from (2) to calculate the Inverse Mills ratio (ratio of the standard normal density and the standard normal cumulative distribution function). This ratio is in turn regressed along with the same vector of covariates (X_{it}) in (2) to estimate the determinants of the degree of conditionality assigned to a country as follows:

$$Cond_{it} = \alpha + \beta X_{it} + \lambda_{it}\, IMR + \mu_t + \varepsilon_{it} \quad (3)$$

The main macro-economic indicators of a country affect its assigned level of conditionalities through two main channels. First, the better a country's macro-economic stance, the stronger its bargaining power for a lower number of policy conditions. Second, the IMF technical team is more likely to assign a higher intensity reform program - and therefore a higher number of conditions - to countries with less promising macro-economic indicators to ensure the success of the reform program and minimize the risk of reimbursement default (Dreher and Vaubel, 2004; Stubbs et al, 2006).

Our final stage uses the predicted conditionality from the Heckman procedure to estimate the impact of IMF participation on health, education, economic and overall inequality of females by employing a random-effect cross-country panel analysis, as follows:

$$W_{it} = \beta o + \beta_1 Pr(Condit) + \beta_2 X_{it} + \mu_t + \delta_i + \varepsilon_{it} \quad (4)$$

V. Empirical Results

i. Determinants of IMF Lending and Conditionalities

In this section, we present the results of the Heckman procedure conducted to control for the selection bias between IMF participation and the degree of conditionality (Heckman, 1979).

Column 1 in Table 1 estimates the macro-economic and political-economic determinants of IMF participation. Results reveal that a country's GDP, level of international reserves, primary budget balance, and quality of institutions are the main determinants of a country's demand for IMF participation. Intuitively, a country with a higher level of government effectiveness, real GDP, foreign exchange reserves, or primary budget balance would most likely demand less participation in IMF loans. Previous studies conclude the same macro-economic determinants of IMF participation include foreign reserves, budget deficit, current account Balance, and GDP (Przecaski and Vreeland, 2000; Barro and Lee, 2005; Fidrmue and Kostagianni, 2015; Detraz and Peksen, 2016; Bird and Rowland, 2017). On the supply side, the probability of loan approval from the IMF increases as a country's economic proximity to the United States and the major Western European Countries increases, and as its IMF quota -and subsequently its voting power in the IMF- increases. The positive impact of political-economy instruments is in line with the findings of Barro and Lee (2005) and Detraz and Peksen (2016).

Column 2 in Table 1 estimates the determinants of the degree of conditionality assigned to a country. Firstly, we note that the coefficient of the inverse Mills ratio is negative and significant which signals the fact that countries with large negative conditionality estimates are not participating in an IMF loan and that selection between the two variables exists. As for the main determinants of IMF conditionality, results indicate that a country's real GDP, current account balance, primary budget balance, and institutions strengthen a country's bargaining position for a lower number of conditionalities. These results confirm the crucial role of a country's initial macro-economic stance in negotiating more preferential lending terms – in the form of lower intensity reform programs- with the IMF country team (Stubbs et al, 2006; Dreher and Vaubel, 2016).

Table 1
Heckman Selection Estimation between IMF Participation and Conditionalities

	(1)	(2)
	IMF participation	Conditionality
Ln (GDP)	-0.382***	-0.0677**
	(0.0770)	(0.0331)
Ln reserves (-1)	-0.0310**	-0.00939
	(0.0128)	(0.0193)
Current Account (-1)	-0.00117	-0.0217***
	(0.00561)	(0.00717)
Primary Budget (-1)	-0.0260**	-0.0315**
	(0.0105)	(0.0156)
Gov. consumption (-1)	0.00699	-0.00800
	(0.00853)	(0.0109)
Institutions	-0.153**	-0.460***
	(0.0666)	(0.0900)
Ln (IMF credit-outstanding)	0.128	-0.0158
	(0.0818)	(0.0951)
Ln (US trade)	0.0535*	
	(0.0309)	
Ln (EU trade)	0.0752**	
	(0.0349)	
IMF Quota	0.304***	
	(0.0786)	
Constant	-3.238	6.693***
	(2.096)	(2.507)
IMR		-2.224***
		(0.331)
Year dummies	Yes	Yes
Observations	1,333	1,333
Number of Years	26	26

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*

ii. Impact of IMF Lending on Gendered Outcomes

In this section, we present our findings on the impact of the degree of policy conditions assigned by the IMF on gendered outcomes after having controlled for the endogeneity of IMF participation, and the selection bias between IMF conditionality and participation using the Heckman selection procedure (Heckman, 1979).

Results in Table 2 are aligned with the argument of the gender-insensitivity of IMF programs and the empirical findings of their adverse effects on gendered outcomes in participating countries (Pandolfelli et al, 2014; Stubbs et al, 2016; Chandra et al, 2018; Saadatmand and Mcgrath, 2004 and Saadatmand and Toma, 2008).

Column 1 of Table 2 shows a positive and significant relationship between the degree of conditionality assigned by the IMF and female unemployment rates (Saadatmand and Mcgrath, 2004). These results can be mainly attributed to the downsizing of social expenditures and privatization policies embedded in IMF programs, which in turn increases the unpaid work burden of females and decreases their formal employment opportunities. As expected, higher GDP growth rates and better women's rights protection institutions decrease their unemployment rates as indicated by the negative and significant coefficients of GDPGR, Law, and CEDAW dummies. The coefficient of secondary enrollment rates of females is counter-intuitive but can be explained by the prevailing phenomenon -especially in low- and middle-income countries- of higher educational attainment of females with stagnantly low female labor force participation and high female unemployment rates (Assaad et al, 2018).

As for health outcomes, column 2 of Table 2 indicates a positive significant impact of IMF conditionalities on maternal mortality rates, which was previously obtained by Pandolfelli et al (2014). The undermined health outcomes of females under structural adjustment programs can be explained by the decline in health expenditures of borrowing countries due to fiscal austerity obligations, which in turn compromises the access and affordability of health services to pregnant women (Stubs et al, 2016). In addition, we can observe that maternal mortality rates increase as fertility rates increase due to the excess demand for limited health services (Pandolfelli et al, 2014). The negative and significant coefficient of secondary enrollment rates is expected as higher educational attainment is expected to delay females' first birth and increase the period between subsequent births leading to better health outcomes and lower maternal mortality rates (Krafft and Sieverding, 2018).

Table 2
Outcome Equations with Predicted Conditionalities

	(1)	(2)	(3)	(4)
	Unemployment Rate	Maternal-Mortality	Secondary Enrollment	Gender Inequality
Pr (cond)	0.0115***	0.0673**	-0.0684***	0.00829**
	(0.00334)	(0.0333)	(0.00694)	(0.00417)
GDPGR	-0.267***	0.02544***	-0.202	0.213***
	(0.0580)	(0.600)	(0.136)	(0.0736)
Sec. Enrollment	0.145***	-1.386***		-0.165***
	(0.0122)	(0.127)		(0.0151)
Fertility	-0.00602	0.677***	-0.131***	0.0928***
	(0.00462)	(0.0477)	(0.00673)	(0.00485)
CEDAW	-0.111***	-0.196	0.0115	0.00997*
	(0.0203)	(0.242)	(0.0479)	(0.00544)
Law	-0.00824*	0.0407	-.0000807	-0.0704***
	(0.00430)	(0.0438)	(0.0101)	(0.0226)
Constant	0.0443	3.104***	1.115***	0.320***
	(0.0279)	(0.325)	(0.0553)	(0.0334)
Year dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
Observations	965	799	980	504
Number of Years	26	18	26	12

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*

Furthermore, the policy conditions assigned by the IMF exhibit an adverse impact on secondary school enrollment rates of girls (as seen in column 3 in Table 2). These results were previously obtained in the country-level analysis conducted by Saadatmand and Toma (2008) and the regional-level analysis conducted by Saadatmand and McGrath (2004). This negative causality can be explained by the increased workload of young girls inside the household or in the informal sector due to the deterioration of the economic conditions of households following structural adjustment. Furthermore, the constrained government's ability to invest in education induces further gender gaps in educational attainment (Chandra et al, 2018). Additionally, results reveal a negative and significant impact of fertility rates on secondary school enrollment rates of girls, which enforces the tri-partite relationship between educational attainment, fertility rates, and maternal mortality rates (Krafft and Sieverding, 2018).

Finally, Column 4 in Table 2 shows that gender inequality is exacerbated in the presence

of IMF programs and conditions, and higher fertility rates, while it is reduced with higher secondary school enrollment rates of girls and the adoption of anti-gender discrimination conventions. The adverse impact of IMF participation on the gender inequality index comes in line with the interpretation of Detraz and Peksen (2016) who argue that privatization policies imposed by the SAPs undermine the governments' ability to protect women's rights, especially on the economic front. The coefficient of GDP growth is surprising as it indicates a positive and significant relationship with gender inequality. However, it might be explained by the adverse effects of early modernization strategies of agricultural transformation and industrialization on women's economic and social empowerment earlier explained by Boserup (1970).

Since – to our knowledge - no empirical studies detect the impact of conditionalities on gendered outcomes, we can interpret the results of Table 2 based on theoretical and factual grounds. Referring to Figure 5 in section 3, we observe that fiscal policy conditions, public enterprise reforms, and financial sector reforms constitute around 73.42% of the total conditionalities imposed by the IMF on lending countries. First, fiscal austerity reforms and conditionalities introduced by the IMF decrease governments' social, educational, health, and public spending capacities (Stubbs et al, 2006; Stubbs et al, 2016). This in turn deteriorates the health and educational outcomes of females, increases their unpaid workload, and lowers their ability to participate in paid employment opportunities (Antrobus, 1993; Elson, 1991). According to the "deflationary bias", recessionary pressures force females into the informal employment sector with lower pay and lower job quality and thus deteriorate their distributional outcomes.

Second, public enterprise and financial sector reforms are different faces of privatization policies that decrease the decent public employment opportunities for females, which leads to the deterioration of their economic status. Additionally, the increased prices of health, educational and social services -due to private sector profit maximization pricing strategies- increase the unpaid work burden of females and deteriorate their health and educational outcomes (Catagay and Elson, 2000).

iii. Model Extensions

In this section, we extend our analysis to examine whether the presence of an institutional setup to protect women's rights (i.e., the presence of a law that prohibits discrimination against women in the labor market or the country's ratification of the International Convention on the Elimination of all Forms of Discrimination Against Women) can mitigate the adverse impacts of policy conditions imposed by the IMF on program participant countries.

Table 3
An Extended Model with Conditionality-Law Interaction Term

	(1) Unemployment Rate	(2) Maternal-Mortality	(3) Secondary Enrollment	(4) Gender Inequality
Pr (cond)	0.0222***	0.151***	-0.0340***	0.0410***
	(0.00501)	(0.0519)	(0.0115)	(0.00703)
GDPGR	-0.262***	2.612***	-0.178	0.219***
	(0.0578)	(0.599)	(0.135)	(0.0713)
Sec. Enrollment	0.143***	-1.397***		-0.173***
	(0.0122)	(0.127)		(0.0147)
Fertility	-0.00660	0.668***	-0.135***	0.0918***
	(0.00461)	(0.0478)	(0.00676)	(0.00470)
CEDAW	-0.111***	-0.169	0.0103	0.0646***
	(0.0202)	(0.242)	(0.0476)	(0.0109)
Law	0.0118	0.189**	0.0620***	-0.0590***
	(0.00819)	(0.0830)	(0.0194)	(0.0220)
Cond*Law	-0.0157***	-0.116**	-0.0490***	-0.0426***
	(0.00548)	(0.0553)	(0.0130)	(0.00749)
Constant	0.0336	3.000***	1.085***	0.275***
	(0.0280)	(0.328)	(0.0555)	(0.0333)
Year dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
Observations	965	799	980	504
Number of Years	26	18	26	12

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*

First, we add an interaction term between the predicted conditionality and the law dummy to our outcome equation. Results in Table 3 validate the important role of institutions in mitigating the negative impact of conditionalities on gendered outcomes. The negative and significant interaction coefficients for female unemployment, maternal mortality, and gender inequality equations signal a reduced adverse impact of conditionalities on females in the presence of anti-discrimination law. While the interaction term for school enrollment equation is counter-intuitive but can be explained by the irrelevance of labor market laws and regulations with school enrollment rates of girls.

Table 4
An Extended Model with Conditionality-CEDAW Interaction Term

	(1)	(2)	(3)	(4)
	Unemployment Rate	Maternal-Mortality	Secondary Enrollment	Gender Inequality
Pr (conditionality)	0.113***	0.303	-0.392***	0.00697
	(0.0438)	(1.556)	(0.103)	(0.141)
GDPGR	-0.261***	2.547***	-0.217	0.213***
	(0.0579)	(0.600)	(0.136)	(0.0737)
Sec. Enrollment	0.148***	-1.386***		-0.165***
	(0.0123)	(0.127)		(0.0151)
Fertility	-0.00587	0.677***	-0.131***	0.0928***
	(0.00461)	(0.0477)	(0.00670)	(0.00486)
CEDAW	0.0555	0.182	-0.519***	-0.0725
	(0.0743)	(2.500)	(0.175)	(0.227)
Law	-0.00893**	0.0407	0.00209	0.00997*
	(0.00430)	(0.0438)	(0.0101)	(0.00544)
CEDAW.cond	-0.102**	-0.236	0.325***	0.00133
	(0.0438)	(1.557)	(0.103)	(0.141)
Constant	-0.126	2.727	1.645***	0.322
	(0.0781)	(2.510)	(0.177)	(0.228)
Year dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
Observations	965	799	980	504
Number of Years	26	18	26	12

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*

In a second step, we add a similar interaction term with the CEDAW dummy. Observing the results of our extended regression with the conditionality-CEDAW interaction term in Table 4, we can conclude that the ratification of the CEDAW can mitigate the adverse impacts of conditionalities in unemployment and school enrollment outcomes (as indicated by the significant interaction coefficients). While it yields insignificant results for maternal mortality rates and overall gender inequality.

Therefore, we can conclude that institutions play a crucial role in reducing gender gaps. Thus, a country with stronger institutions for protecting women's rights is expected to witness a lower level of deterioration in female outcomes under SAPs. Similar results were obtained by

Chandra et al (2018) for both the law and CEDAW dummies.

We further check the robustness of our results by first using different outcome measurements (we replace female unemployment rates with female labor force participation and secondary enrollment rates of girls by tertiary enrollment rates) to validate that our results are not specific to the measurements used in the former analysis (Tables A6 in Annex). Second, we re-estimate our outcome regression while considering four concessional and non-concessional IMF lending facilities namely: Extended Fund Facility, Extended Credit Facility, Stand-by Arrangement, and Stand-by Credit Facility (Table A7 in Annex). Results of our main regression hold in both checks indicating that IMF austerity policies deteriorate gendered outcomes regardless of the measurements employed, and in the cases of concessional and non-concessional lending.

To sum up, our main results indicate that the IMF's decisions are not only limited to the prevailing macro-economic conditions in the country but are further influenced by political-economic factors. The observation of policy conditions is not random and depends on the IMF participation in loans (as indicated by the significance of the inverse Mills ratio). Furthermore, a country's bargaining power for reform programs' intensity merely depends on its current macro-economic stance. Finally, IMF-imposed policies and reforms have a negative impact on the four examined gendered outcomes, which might be slightly mitigated in the presence of a strong institutional setup that prohibits discrimination against women.

VI. Conclusion

> "*Though IMF programs provide lifelines to governments to help ease their short-term balance of payment problems, the policy prescriptions that accompany IMF programs often come with significant political and social costs for both the governments that implement them and the citizens that experience them*" *(Detraz and Peksen, 2016).*

More precisely, feminist economists criticize the "gender-blind" orthodox policy discourse imposed by the IMF for disregarding the differential impact of its austerity policies on different social groups, including females (Beneria, 1982). For the above mentioned, this paper attempts to examine the impact of IMF programs and subsequent policy conditions from a gender lens (Saadatmand and Mcgrath, 2004; Saadatmand and Toma, 2008; Stubbs et al, 2016).

To estimate such a causal relationship, we use a world sample of 181 countries for the years 1993 to 2018. Results reveal that a country's GDP, level of foreign exchange reserves, primary budget balance, and quality of institutions are the main determinants of its demand for participation in IMF programs. However, power relationships also play a crucial role in such decisions as higher economic proximity to the veto countries and bigger IMF quotas (and subsequently voting powers) significantly increase the probability of IMF participation. Second, results denote a country's real GDP, current account balance, primary budget balance, and institutions as the main determinants of its assigned degree of policy conditions by the IMF. A better macro-economic stance enhances a country's bargaining position and reduces its risk of reimbursement default. Furthermore, results of our outcome regressions indicate that a 1% increase in conditionality increases female unemployment, maternal mortality rates, girls' secondary school drop-out rates, and overall gender inequality by 1.1%, 6.7%, 6.8%, and 0.8% respectively. These results confirm the hypotheses of feminist theories regarding the constraining impact of austerity policies on governments' ability to provide public services, formal employment opportunities, or protect women's rights (Beneria,

1982; Antrobus, 1993). These findings are robust to using different education and labor market proxies, as well as using IMF participation in concessional and non-concessional loans. Finally, we extend our analysis to detect whether the presence of an institutional setup to protect women's rights can mitigate the negative impacts of IMF policy conditions on gendered outcomes and the results validate our hypothesis.

It is suggested for future studies to further incorporate the type of conditionalities into the analysis, and further disaggregate conditionalities into structural (allocation) and stabilization conditions. This would allow the detection of the most influential conditionality types on gendered outcomes, and hence provide more informed recommendations to both the IMF and the loan recipient governments. Data limitations in our analysis are two-fold. First, the IMF MoNA dataset only provides a categorical classification of conditionalities assigned to each country with no quantitative measures or actual implementation indicators. Secondly, data on gender wage gaps are largely unavailable to run a panel regression that looks further into the evolution of females' quality of employment not just their magnitudes.

From a policy perspective, our findings of deteriorated gender outcomes mainly stem from the fact that Bretton Wood institutions adopt strictly orthodox-based reform strategies that rely on fiscal adjustment and austerity. These policies weaken the state's capacity to invest in female-dominated sectors, provide adequate public services (in terms of quality and quantity) and protect women's rights in the labor market. This in turn deteriorates female development outcomes, especially in emerging countries where females are more likely to participate in the informal sector markets due to the prevalent male breadwinner bias as proposed by Catagay and Elson (2000). These programs must thus adopt a more heterodox approach that complements the fiscal adjustment efforts by a higher number of social and income policies -currently representing less than 3% of the total conditionalities imposed by the IMF- that outweigh the negative impacts of austerity reforms on vulnerable groups and considers the social rules of sub-ordinance that allocates a disproportionate share of unpaid care work to women. For instance, The World Bank/IMF development committee has assigned the WB to develop some principles to guide social policy following the Asian financial crisis. Such guidelines were used by the state to implement well-targeted social welfare and social insurance programs to mitigate the consequences of IMF programs in south Asia, especially on vulnerable groups including women (World Bank, 1999). Furthermore, the IMF should consider adding some indicative targets to its programs to guard females against privatization bias and ensure their continued access to essential services and opportunities. For example, the IMF yearly program review might monitor some gender-sensitive indicators including the proportion of females with access to adequately functioning primary health care clinics, or the percentage of female employment in private sector firms (Elson, 2002).

Finally, in light of our findings on the crucial role that institutions can exert in mitigating the adverse impacts of IMF policy conditions on females and in accordance with goal number 5 of the 2030 Sustainable Development Agenda, it is recommended for governments of recipient countries to implement gender-mainstreaming policies (promoted by the United Nations in 1997). Such strategies ensure that central focus is laid on gender perspectives as well as the implications of different programs and policies on different social groups, and the achievement of gender equality. These efforts shall formulate a strong institutional setup in the form of anti-discrimination public policies, laws, and regulations to protect women's social and economic rights and promote their equal participation in all spheres of life.

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Appendix

Table A1
Data Description and Sources

Variable Label	Description	Source
I_{it}	**Dependent Variable:** Dummy =1 if country i is an IMF program participant in year t.	MoNA Database by the IMF
$Cond_{it}$	**Dependent Variable:** Number of IMF conditionalities for country i and year t.	MoNA Database by the IMF
GDPGR	Growth Rate of GDP of country i at year t.	WDI, World Bank
Institutions	Institutions proxied by government effectiveness index in country i a year t.	WGI, World Bank
Reserves (-1)	One year lagged foreign exchange reserves in number of months of imports.	WDI, World Bank
US trade	Bilateral trade of County i at year t with the United States.	ITC Trade Map
EU trade	Bilateral trade of County i at year t with the major western European countries (UK, France, and Germany)	ITC Trade Map
IMF Quota	IMF Quota of country i at year t.	IMF database (imf.org)
Gov. Consumption (-1)	One year lagged Government consumption of country I at year.	WDI, World Bank
GDP	Real GDP of country i at year t.	WDI, World Bank
Current Account (-1)	One year lagged Current Account Balance of country i at year t.	WDI, World Bank
Primary Budget (-1)	One year lagged Budget deficit of country I at year (generated as the difference between government revenues and expenditures).	WDI, World Bank
IMF credit outstanding	IMF credit (outstanding) for all members at year t.	MoNA Database by the IMF
FLFP	**Dependent Variable:** Female Labor Force Participation for country I at year t.	WDI, World Bank
GII	**Dependent Variable:** Gender Inequality Index for country i at year t (starts in 2010).	Human Development Reports (2010-2018)
Unemployment rate	**Dependent Variable:** Female unemployment rates for country i at year t.	WDI, World Bank
Secondary & Tertiary Enrollment	**Dependent Variable:** Net Secondary Enrollment rates (%, females).	WDI, World Bank
Maternal Mortality Rate	**Dependent Variable:** Maternal Mortality ratio per 1,000 births.	WDI, World Bank
Fertility	Fertility rates in country i at year t.	WDI, World Bank
CEDAW	Dummy =1 if country i has ratified CEDAW in year t and 0 otherwise.	UN treaties collection
Law	Presence of a law that prohibits gender discrimination in the labor market in country i.	Women, Business and the law (WBL) database, World Bank

Source: *Constructed by the authors using data sources cited*

Table A2
Types of IMF Lending Facilities

Fund	Facility	Purpose	Duration	Lending rate	Repayment	Conditionalities
GRA	Standby Agreement (SBA)	Address short term or potential B.O.P problems	Up to 3 years	Special Drawing Rights (SDR) interest rate + Surcharges per case.	Within 3¼-5 years of disbursement	Ex-post disbursement
PRGT	Standby Credit Facility (SCF)			Zero-interest rate + 0.15 percent per year on the undrawn portion of the available amount every 6 months.	A grace period of four years and a final maturity of eight years.	
GRA	Extended Fund Facility (EFF)	Address medium-term or protracted BOP problems because of structural impediments or slow growth	Up to 4 years	Special Drawing Rights (SDR) interest rate + Surcharges per case.	Within 4½– 10 years of disbursement.	Ex-post disbursement (with special emphasis on structural reforms to address institutional or economic weaknesses).
PRGT	Extended Credit Facility (ECF)		3-4 years and extendable to 5 years.	Zero-interest rate (reviewed every two years based on concessional lending interest rates.	Within 5½ years, and final maturity of 10 years	
GRA	Flexible Credit Line (FCL)	Support countries with already strong policies to prevent or mitigate crises during times of heightened risks.	1-2 years	Special Drawing Rights (SDR) interest rate + Surcharges per case.	Within 3¼ to 5-year.	Ex-ante (Prior actions) and annual reviews for the 2 years arrangement.
PRGT	Precautionary and Liquidity Line (PLL)		6 months-2 years	Special Drawing Rights (SDR) interest rate + Surcharges per case.	Within 3¼ to 5-year.	Ex-ante and Ex-post
GRA	Rapid Financing Instrument (RFI)	Rapid assistance to countries with urgent B.O.P. Problems need including natural disasters and domestic fragilities.	Outright/ Immediate Purchase	Special Drawing Rights (SDR) interest rate + Surcharges per case.	Within 3¼ to 5 years	Ex-ante (Prior actions)
PRGT	Rapid Credit Facility (RCF)		Outright/ Immediate disbursement	Zero-interest rate	Within 5½ years, and a final maturity of 10 years	Ex-ante (program based) and Ex-post conditions

Source: *Constructed by the author using IMF.org*

Table A3
Forms of IMF Conditionalities

Form of Conditionality	**Description**
Prior Actions (PAs)	Steps that a lending country must accomplish before the IMF approves the loan to ensure the basic milestones for a successful program.
Quantitative Performance Criteria (QPCs)	Measurable indicators for macro-economic variables under the control of the authorities such as credit and monetary aggregates.
Indicative Targets (ITs)	Targets set for macro-economic indicators to facilitate the assessment of the progress of the program in meeting its objectives.
Structural Benchmarks	Non-quantifiable structural reforms that represent a significant cornerstone for program success

Source: *Constructed by the author using IMF.org*

Table A4
Types of IMF Conditionalities

1. General government (fiscal policy)

1.1. Revenue measures, excluding trade policy
1.2. Revenue administration, including customs
1.3. Expenditure measures, including arrears clearance
1.4. Combined expenditure and revenue measures
1.5. Debt Management
1.6. Expenditure auditing, accounting, and financial controls
1.7. Fiscal transparency (publication, parliamentary oversight)
1.8. Budget preparation (e.g., submission or approval)
1.9. Inter-governmental relations

2. Central Bank (Monetary Policy)

2.1. Central bank operations and reforms
2.2. Central bank auditing, transparency, and financial controls

3. Civil service and public employment reforms, and wages

4. Pension and other social sector reforms

4.1. Pension reforms
4.2. Other social sector reforms (e.g., social safety nets, health, and education)

5. Public enterprise reform and pricing (non-financial sector)

5.1. Public enterprise pricing and subsidies
5.2. Privatization, public enterprise reform, and restructuring, other than pricing
5.3. Price controls and marketing restrictions

6. Financial sector

6.1. Financial sector legal reforms, regulation, and supervision
6.2. Restructuring and privatization of financial institutions

7. Exchange systems and restrictions (current and capital)

8. International trade policy, excluding customs reforms

9. Labor markets, excluding public sector employment

10. Economic statistics (excluding fiscal and central bank transparency and similar measures)

11. Other structural measures

11.1. Private sector legal and regulatory environment reform (non-financial sector)
11.2. Natural resource and agricultural policies (excl. public enterprises and pricing)
11.3. PRSP development and implementation
11.4. Anti-corruption legislation/policy

Source: *Constructed by the author using IMF's MoNA dataset*

Table A5
List of Countries used in Estimation

Afghanistan	Chad	Kyrgyz	Madagascar	Poland	United Kingdom
Albania	Chile	Germany	Malawi Malaysia	Portugal Romania	United States
Algeria	China	Greece	Maldives	Russia	Uruguay
Angola	Colombia	Grenada	Mali	Rwanda	Uzbekistan
Antigua and	Comoros	Guatemala	Malta	St. Kitts and Nevis	Vanuatu
Barbuda	Congo	Guinea	Marshal Island	St. Lucia	Venezuela
Argentina	Congo, Democratic	Guinea Bissau	Mauritania	St. Vincent and the	Vietnam
Armenia	Rep.	Guyana	Mauritius	Grenadines	Yemen
Australia	Costa Rica	Haiti	Mexico	Samoa	Zambia
Austria	Cote d'Ivoire	Honduras	Micronesia	San Marino	Zimbabwe
Azerbaijan	Croatia	Hungary	Moldova	Sao Tome and Principe	Somalia
Bahamas	Cyprus	Iceland	Mongolia	Saudi Arabia	South Africa
Bahrain	Czech	India	Montenegro	Senegal	South Sudan
Bangladesh.	Denmark	Indonesia	Morocco	Serbia	Spain
Barbados	Djibouti	Iran	Mozambique	Seychelles	Sri Lanka
Belarus	Dominic	Israel	Myanmar	Sierra Leone	Sudan
Belgium	Dominican	Iraq	Namibia	Singapore	Suriname
Belize.	Republic	Ireland	Nauru	Slovak	Sweden
Benin	Ecuador	Italy	Nepal	Slovenia	Switzerland
Bhutan	Egypt	Jamaica	Netherlands	Solomon Islands	Syria
Bolivia	El Salvador	Japan	New-Zealand	Trinidad and Tobago	Tajikistan
Belarus	Equatorial Guinea	Jordan	Niger	Tunisia	Tanzania
Belize	Eritrea	Kazakhstan	North Macedonia	Turkey	Thailand
Brazil	Estonia	Kenya	Norway	Turkmenistan	Timor-Leste
Brunei-Darussalam	Eswatini Ethiopia	Korea	Oman	Tuvalu	Togo
Bulgaria	Fiji	Kuwait	Pakistan	Uganda	Tonga
Burundi	Finland	Lao	Panama	Ukraine	
Cape Verde	France	Latvia	Papua New	United-Arab Emirates	
Cambodia	Gabon	Lebanon Lesotho	Guinea		
Cameroon	The Gambia	Liberia	Paraguay		
Canada	Georgia	Libya	Peru		
Central- African		Lithuania	Philippines		
Republic		Luxembourg			

Source: *Constructed by the author using IMF's MoNA dataset*

Table A6
Outcome Regression with Alternative Measurements of Gendered Outcomes

	(1)	(2)
	FLFP	Tertiary Enrollment
Pr (conditionality)	-0.0185***	-0.0173*
	(0.00606)	(0.0100)
GDPGR	0.118	-0.00377**
	(0.105)	(0.00180)
Sec. Enrollment	-0.0575***	
	(0.0222)	
Fertility	0.264***	-0.0566
	(0.0367)	(0.0731)
CEDAW	0.00724	-0.109***
	(0.00838)	(0.0141)
Law	0.0193**	0.0388***
	(0.00780)	(0.0143)
Constant	0.347***	0.655***
	(0.0505)	(0.0882)
Year dummies	Yes	Yes
Region dummies	Yes	Yes
Observations	965	903
Number of Years	26	26

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*

Table A7
Outcome Regression with Concessional and Non-concessional Loans

	(1) Unemployment Rate	(2) Maternal-Mortality	(4) Secondary Enrollment	(3) Gender Inequality
Pr (conditionality)	0.0121***	0.0658**	-0.0669***	0.00786**
	(0.00324)	(0.0321)	(0.00675)	(0.00398)
GDPGR	-0.259***	0.0258***	-0.239*	0.217***
	(0.0580)	(0.00601)	(0.136)	(0.0738)
Sec. Enrollment	0.145***	-1.390***		-0.165***
	(0.0122)	(0.127)		(0.0151)
Fertility	-0.00634	0.677***	-0.133***	0.0931***
	(0.00460)	(0.0475)	(0.00668)	(0.00480)
CEDAW	-0.110***	-0.186	0.00456	-0.0696***
	(0.0203)	(0.242)	(0.0479)	(0.0226)
Law	-0.00864**	0.0384	0.00220	0.00971*
	(0.00429)	(0.0437)	(0.0101)	(0.00542)
Constant	0.0424	3.093***	1.132***	0.317***
	(0.0278)	(0.325)	(0.0553)	(0.0334)
Year dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
Observations	1,240	1,098	1,310	646
Number of Years	26	18	26	12

*Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1*