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Macroeconomic Policy Effectiveness and Inequality:
Efficacy of Gender Budgeting in Asia Pacific

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ABSTRACT

Gender budgeting is a fiscal approach that seeks to use a country's national and/or local budget(s) to reduce inequality and promote economic growth and equitable development. While the literature has explored the connection between reducing gender inequality and achieving growth and equitable development, more empirical analysis is needed on whether gender budgeting reduces gender inequality. Our study follows the methodology of Stotsky and Zaman (2016) to investigate the impact of gender budgeting on promoting gender equality across Asia Pacific countries. The study classifies Asia Pacific countries as gender budgeting or non-gender budgeting according to whether they have formalized gender budgeting initiatives in laws and/or budget call circulars. To measure the effect of gender budgeting on reducing inequality, we measure the correlation between gender budgeting and the Gender Development Index (GDI) and the Gender Inequality Index (GII) scores in each country. The data for our gender inequality variables are mainly drawn from the IMF database on gender indicators and the World Development Indicators database over the 1990–2013 period. Our results show that gender budgeting has a significant effect on increasing the GDI and a small but significant potential to reduce the GII, strengthening the rationale for employing gender budgeting to promote inclusive development. However, our empirical results show no prioritization of gender budgeting in the fiscal space of health and education sectors in the region.

KEYWORDS: Gender Budgeting; Fiscal Policy; Gender Equality; Asia Pacific

JEL CLASSIFICATIONS: H00; I3; J1

I. INTRODUCTION

Gender budgeting is an approach to government fiscal policy that seeks to use a country's national and/or local budget(s) as a tool to resolve societal gender inequality and promote inclusive development. Gender budgeting does not involve the creation of separate budgets for men and women. Instead, it involves studying a budget's differing impacts on men and women so as to set new allocations and revenue policies to promote greater efficiency and equity as regards gender equality (Chinkin 2001; Stotsky 2016). Ideally, gender budgeting is an approach to fiscal policies and administration that translates gender-related commitments into fiscal commitments through identified processes, resources, and institutional mechanisms, impacting both the spending and revenue sides of the budget (Chakraborty 2014).

More than 90 governments around the world, a quarter of which are in Asia, are pursuing gender budgeting (Budlender 2015). The literature outlines two overarching primary motivations for gender budgeting: its perceived positive impacts on economic efficiency, growth, and productivity, and its positive impacts on equity in terms both of inclusive development and equal realization of human rights. The basic argument underlying both the efficiency/growth motivation and the equity motivation for gender budgeting is that, first, gender budgeting reduces gender inequality, which, second, causes growth, more equitable development of women and society generally, and equal achievement of human rights.

The links between reducing gender inequality and promoting growth and women's advancement in the second part of the argument have been explored extensively in the literature. The exact causal relationship between gender inequality and growth is a bit unclear, with evidence simultaneously suggesting that reducing inequality is the precursor to growth, that growth is in fact the precursor to reducing inequality, and even, concerningly, that maintaining inequality can yield growth (Cuberes and Teignier 2014). However, there is certainly strong evidence that gender budgeting can indirectly increase equitable growth through its impact on fiscal policies (Stotsky and Zaman 2016; Kabeer and Natali 2013). It is more assuredly found that reducing gender inequality does promote inclusive and equitable development, advancement of women and societies, and achievement of human rights (World Bank 2011).

The link in the first part of the argument, however—that gender budgeting actually reduces gender inequality—has been less clearly affirmed. As Stotsky and Zaman (2016) have observed, there have been few efforts to assess the results of gender budgeting in a quantitative manner. Stotsky and Zaman ask whether the practice of gender budgeting has yielded greater gender equality in school enrollment (as a proxy for gender equality) and increased spending on social services, education, health, welfare, and infrastructure in Indian states. Yet most other studies evaluating the success of gender budgeting initiatives tend to focus on the success of their *implementation*—that is, whether governments are following the steps of gender budgeting, rather than their *impact* in achieving their goals of equality, growth, inclusive development, and human rights (see, for example, Nakray [2009] and Mushi and Edward [2010]).

This study seeks to extend work begun by Stotsky and Zaman (2016) in India, in order to evaluate the impact of gender budgeting on gender equality and fiscal spending across a data set of Asia Pacific countries. We use the Gender Development Index (GDI) and the Gender Inequality Index (GII) as proxies for gender equality. We also measure the impact of fiscal spending on gender development on the assumption that higher spending in these areas yields better outcomes for inclusive development (Lahiri, Chakraborty, and Bhattacharyya 2002). We also show that gender budgeting matters for improving gender development indices.

In addition to the core analysis on the impact of gender budgeting on gender equality and fiscal spending in Asian countries, we also briefly observe differences between the covered countries in terms both of the formality of their approach to gender budgeting and their legal climate as regards gender equality more broadly. Gender budgeting may be undertaken at an impermanent policy level, or it may be formalized into the budget process through incorporation into budget circulars and gender budgeting statements, or even into law. This study notes differences in the degree or method of formalization of the gender budgeting initiative in each country studied. The authors are preparing a further study on whether formalization of budgeting, and in what form, is linked to better outcomes in equality and spending. In the appendix, our study similarly identifies the key economic and social laws advancing gender equality that have, or have not, been enacted across the countries studied. The authors' future study will additionally explore what, if any, the nexus is between these laws and gender budgeting, to elucidate whether, how, and why a country's legal climate for gender equality impacts its decision to pursue gender budgeting, its gender budgeting implementation method, and the results of its gender budgeting program.

The remainder of the paper is organized in the following manner. Section II surveys the literature exploring the relationship between gender inequality and a) efficiency, productivity, and growth, b) equity in terms of inclusive development, and c) equity in terms of equal realization of human rights. This section also surveys the literature on public fiscal policies, and assesses gaps in the literature evaluating the link between gender budgeting and outcomes in equality and spending. Section III provides an overview of which Asian countries are pursuing gender budgeting and through what means. Section IV identifies additional considerations on the method of the formalization of gender budgeting and the broader gender legal climate in the studied countries. Section V discusses our empirical approach and provides our econometric model and results. Section VI analyzes the results across gender budgeting and non-gender budgeting countries, and section VII offers concluding remarks and implications for gender budgeting policies.

II. LITERATURE REVIEW

Gender Inequality's Impact on Efficiency and Equity

Our analysis of the effectiveness of gender budgeting in Asia begins with a survey of the literature outlining what, exactly, gender budgeting is meant to achieve. Scholars and governments alike typically name two overarching primary motivations for gender budgeting: its perceived positive impacts on economic efficiency, growth, and productivity, and its positive impacts on equity, both in terms of inclusive development and equal realization of human rights. The arguments encouraging gender budgeting tend to proceed in two steps: first, that gender budgeting reduces gender inequality; and second, that reduction in gender inequality in turn leads to positive outcomes in efficiency and equity.

Gender Inequality and Economic Growth

One primary motivation for gender budgeting is its perceived impact on growth. Growth is often cited as an outcome of reducing gender inequality, which serves to close inefficient gender gaps in workforce participation, education, and health (Berik, Rodgers, and Seguino 2009; Hill and King 1995; Dollar and Gatti 1999; Klasen 2002; Knowles, Lorgelly, and Owen 2002; Esteve-Volart 2004). However, as many scholars point out, pinning the direction of causality between growth and reduction of gender inequality is tricky, and indeed inequality itself (and not its reduction) has been found to cause growth (Stotsky and Zaman 2016; Cuberes and Teignier 2014).

The International Monetary Fund (IMF) (2015) asserts that fiscal reform policies influence growth by increasing workforce participation, encouraging personal and state investment, strengthening human capital, and raising total factor productivity. Papers arguing that reducing gender inequality sparks growth typically center on the first three IMF growth factors. Discussing labor force participation, for example, Aguirre et al. (2012) posit that raising female labor force participation to match country-specific male levels could raise GDP by percentage points ranging from 5 percent in the United States to 34 percent in Egypt. Cuberes and Teignier (2012) suggest that GDP per capita losses resulting from gender gaps in the labor market may be as high as 27 percent for some regions. The World Bank (2011) posits that "[s]pecifically in countries with a comparative advantage in female goods, gender differences in access to market work and persistent employment segregation by gender could severely undermine the country's capacity to compete internationally and ultimately hamper economic growth." Considering the second factor of personal investment, ensuring women equal property rights, for example, is seen as an important tool to help women receive credit to fund new small businesses (World Bank 2011). Strengthening women's property rights can also increase households' agricultural production through more efficient sharing of resources between men and women (Udry 1996). Finally, considering the factor of human capital, Klasen (1999) argues that a failure to provide women equal access to education and to utilize their talents equally is a form of market distortion or restriction on the human capital productivity of an economy. Kabeer and Natali (2013) also note that the demonstrated propensity of women to invest more in the human capital of their children compared to men has a long-term positive impact on growth.

But Bandiera and Natraj (2013) assert that the empirical research has yet to identify the causal link from inequality to growth, and Cuberes and Teignier (2014) survey theoretical and empirical studies that assert there is a causal chain going either one way or the other, or both ways, between gender inequality and growth. Indeed, Berik (2006) says the "contradictory" evidence gives "rise to an important debate on whether the net effect of gender inequality is a stimulus or a drag on growth." For example, Seguino's (2008) research in semi-industrialized nations has shown that women's comparatively low wages in low-skilled export industries (such as textiles) have been a leading factor in helping governments attract foreign direct investment and build their export economy. This inequality has been an impetus for trade and growth. Berik (2009) also observes that women's seasonal and daily wage labor in agricultural industries has, in some economies, helped keep food production costs low and exports high, to positively impact GDP.

What seems most likely is that the causality does in fact run in both directions, yielding the practical wisdom that it is worth pursuing efforts geared toward *both* growth and inequality reduction. To the extent that *in*equality itself yields growth, it is a reminder to policymakers that there are other reasons than growth—namely equity—to pursue inequality reduction.

Gender Inequality and Equitable Development

A second primary motivation for gender budgeting is its perceived potential to promote equitable development, distinct from economic growth. There are two facets to this motivation. A basic level, since women and girls tend to suffer greater disadvantages across a range of social and economic indicators, alleviating these development disparities through gender budgeting programs is a valid development end in itself. Secondly, policymakers and academics have long highlighted the value of gender equality as a precursor to, or tool for, promoting economic development more broadly (World Bank 2011).

Women and girls face significant social and economic disadvantage vis-à-vis men and boys, including: higher mortality rates than men in low- and middle-income countries; segregation into lower-paid and lower-skilled employment sectors; greater responsibilities in the care economy; lower levels of education, political participation, land ownership, and credit; and less power in household, community, and national decision-making (World Bank 2011). Recognizing these gendered development disparities, the international community has, in 2000 with the adoption of the Millennium Development Goals (MDGs) and again in 2015 with the adoption of the Sustainable Development Goals (SDGs), identified the promotion of gender equality and empowerment of women and girls as a development goal in and of itself. Literature on gender budgeting often posits advancement of gender equality and women's and girl's development as a motivation for gender budgeting (Stotsky 2016; Sharp and Elson 2008). Moreover, governments adopting gender budgeting also highlight amelioration of gender disparities and empowerment of women as the key motivation. For example, in Asia, the Indian, South Korean, and Afghan gender budgeting initiatives all posit women's advancement as the motivator for their programs (Chakraborty 2016; Kolovich and Shibuya 2016).

In addition to pursuing gender equality and development of women and girls for their own sake, these goals are also discussed as a means to development overall (Stotsky 2016). In 2005, the UN Department of Economic and Social Affairs called gender equality and women's empowerment a "prerequisite" to achieving the other MDGs, and, in 2011, the World Bank asserted that "[g]ender equality matters also as an instrument for development" (United Nations 2005; World Bank 2011). As discussed under the section on growth in this paper, a primary aspect of this argument is that women's development yields both immediate and long-term benefits for their children and for society. The World Bank (2011) identifies several studies discussing these linkages. For example, in China, increasing women's income by 10 percent of the average household income correspondingly increased by 1 percent the survival of girl children and increased years of schooling for girls and boys by 1 percent (Qian 2008). In Pakistan, a study found that children whose mothers attended even one year of school spend an hour more studying each day and have higher test scores (Andrabi, Das, and Khwaja 2011). Greater lands rights of mothers in Nepal have been linked to stronger health of children (Allendorf 2007), greater representation of women in local government in India has yielded increased provision of public goods desired by both men and women (Chattopadhyay and Dufflo 2004), and in India and Nepal, giving women a greater role in the management of forests has led to significantly stronger conservation results (Agarwal 2010a, 2010b). To the extent then that gender budgeting promotes women's advancement, it is argued to have a second trickle-down effect in advancing children, households, and society at large.

Gender Inequality and Human Rights

The third primary motivation for gender budgeting, also grounded in equity, is the achievement of women's equality and human rights. Scholars of gender budgeting argue that gender budgeting advances human rights in a few ways. First, the act of gender budgeting helps governments fulfill their international legal obligations to seek gender equality and equal realization of human rights within their states. Second, by helping states promote women's development and equal rights, gender budgeting can help women actually achieve those rights. And third, the process of gender budgeting, including the collection and evaluation of sex-disaggregated social and economic data and the study of challenges facing women, can encourage countries to promote the rights of women through new internal laws.

Several international human rights conventions establish equality between men and women, including with respect to the enjoyment of numerous human rights. The International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), which both entered into force in 1976, assert the right of men and women to benefit equally from the civil, political, economic, social, and cultural human rights outlined in the conventions. In 1979, the United Nations General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which focuses specifically on ensuring equal human rights for women and relies on the first two conventions—the ICCPR and the ICESCR—for its definitions of basic human rights.

Elson (2006) has taken the lead in demonstrating how gender budgeting can help governments meet their treaty obligations to ensure gender equality. She provides a helpful overview of how human rights are relevant to budgets, focusing on CEDAW, and notes that CEDAW does not include provisions on budgeting, but does require states that are party to the convention to ensure equal rights (including both political and economic/social rights) for women. Key principles championed by CEDAW and highlighted by Elson are: formal and substantive equality between men and women; nondiscrimination against women; equal rights for women to participate in public and political life; and the modification of social and cultural patterns of conduct to eliminate discrimination against women. By pursuing gender budgeting to rectify inequality between the sexes, particularly under the government's own fiscal policy, governments can turn their legal obligations into practical action.

By the same token, gender budgeting employed by a government can help women actually achieve their internationally recognized human rights. Human rights in the ICESCR are particularly relevant for gender budgeting, including the rights: to work; to just and fair conditions of work (especially for women); to social security; to an adequate standard of living, including food, clothing, and housing; to the highest attainable standard of physical and mental health; and to education. As Elson (2006) notes, the budget regulates programs related to all of these rights, and thus can have direct bearing on women's ability to achieve these rights equally to men.

Finally, as an element of gender mainstreaming, the process of gender budgeting can have the positive externality of encouraging the passage of domestic laws creating or enforcing rights for women. One basic element of gender budgeting is the collection of sex-disaggregated statistics, and several countries have begun their gender budgeting efforts with a mandate for greater disaggregation of sector-specific statistics (Chakraborty 2016; Kolovich and Shubuya 2016). This sex-disaggregated data can be used to justify passage of laws addressing gender disparities, such as laws promoting women's health and safety, access to education, equal rights to work, etc.

Gender Budgeting and Gender Inequality

The literature surveyed above links gender inequality to arguments of efficiency and equity. It is still necessary to link gender budgeting to the *reduction* of gender inequality. As Stotsky and Zaman (2016) and Chakraborty (2016) observe, further research is needed to empirically test this first link in the chain. Some analysis of gender budgeting's tangible impact on gender equality has been done. For example, Chakraborty (2016) observes that the Indian government decided to transition from a method of earmarking funds for women to a more aggregate level of gender budgeting, because it found that the earmark approach did not in fact result in the full amount of earmarked funds reaching women. In the same study, Chakraborty also notes that provision of sex-disaggregated data in Pakistan has helped to increase the hiring of women in the government sector, decrease the gender wage gap, and spearhead public funding of daycare centers to lighten women's home care responsibilities. Stotsky and Zaman (2016) analyzed whether the practice of gender budgeting has yielded greater gender equality in school enrollment (as a proxy for gender equality) and increased spending on social services, education, health, welfare, and infrastructure in Indian states. They find that gender equality in school enrollment, at least at the primary level, has significantly improved in Indian states practicing gender budgeting, while the impact on spending is more ambiguous, with the greatest evidence of an impact appearing in connection with infrastructure spending.

Nevertheless, the majority of studies evaluating the success of gender budgeting initiatives tend to focus on the success of their implementation—that is, whether governments are holding internal trainings on gender, undertaking analyses of the gendered impacts of the budget, seeking and analyzing sex-disaggregated data, and designing programs and setting targets based on gender (e.g., Nakray [2009], for evaluating whether gender budgeting works in India by assessing its implementation, and Mushi and Edward [2010], for judging the success of gender budgeting initiatives in Tanzania by studying the success of programmatic implementation). Further study is needed to discern whether successful implementation of such programs helps countries achieve equality.

Public Spending and Inclusive Development

In addition to exploring the impact of gender budgeting on achieving gender equality, this paper also seeks to evaluate the impact of gender budgeting on spending, which is expected to produce better outcomes for inclusive development (Stotsky and Zaman 2016). Lahiri, Chakraborty, and Bhattacharyya (2002), using a fixed effects model of pooled least squares for the early 1990s, find that a 1 percent increase in spending on health and education resulted in a 0.33 percentage point increase in the UNDP's Human Development Index (HDI) and only a 0.06 percentage point increase in the GDI for the period between 1993 and 2005. This demonstrates that public expenditure on human capital formation positively impacts gender development indicators. It is important to note that the effectiveness of public expenditures on health and education may vary across regions according to asymmetric scales of socioeconomic development (Chakraborty 2016). This paper seeks to shed light on the nexus between spending and equitable development.

III. OVERVIEW OF GENDER BUDGETING AND ITS FORMALIZATION IN ASIA PACIFIC COUNTRIES

More than a quarter of the 90-odd countries pursuing gender budgeting are located in the Asia Pacific region (Budlender 2015). Chakraborty (2016) conducted a survey of 26 Asian countries' activities in gender budgeting, finding that many (including Brunei, China, Hong Kong, Japan, Myanmar, New Zealand, Papua New Guinea, Singapore, and Taiwan) have not implemented gender budgeting. Among Asian countries that are pursing gender responsive budgeting, several are doing so by use of a budget circular: Afghanistan, Bangladesh, Bhutan, India, Indonesia, Malaysia, Nepal, and Pakistan.[2] Korea, the Philippines, Timor Leste, Vietnam, the Lao People's Democratic Republic, and Mongolia have embodied gender budgeting in law. Cambodia and Sri Lanka are pursing gender budgeting but have not incorporated the initiative into a budget circular document or law.

Elements of Gender Budgeting

A typical budget may be composed of three primary elements—expenditures, revenues, and intergovernmental fiscal transfers—and all three are crucial elements of gender budgeting to advance gender equality. Government expenditures comprise the regular fiscal allocations for various departments and programs. When public expenditures are designed according to gender priorities, they are often grouped by the percentage of the expenditure that will impact women. When measuring expenditures through a gender lens it is especially critical to consider "fiscal marksmanship," or the difference between the authorized and actually allocated funds (Chakraborty 2016). Although government revenues have received less focus than expenditures as a means to advance gender equality goals, tax policies also can and should be designed with gendered priorities (Stotsky 2016). Too lenient concessions to high-earning individuals or corporations, taxation of certain household necessities, and insurance of payment of certain tax credits to caregivers as opposed to the primary earner have all been shown to impact women (Sharp and Elson 2008; Elson 2006; St. Hill 2002). Finally, intergovernmental fiscal transfers from the national government to lower-tier governments can also be modified to achieve gender-

[2] Australia was the first country to create gender budgeting statements, but because it ceased doing so in 2014, this study does not include it as a country that has formalized gender budgeting in a budget circular.

based priorities under a gender budgeting regime. Anand and Chakraborty (2016), for example, observing that climate change variables were factored into transfer formulas in India, have suggested that transfer formulas could similarly be based upon gender-related indicators, such as to reward lower-tier governments for success in promoting gender parity in school enrollment.

Formalizing Gender Budgeting: Budget Call Circulars, Budget Statements, and Budget Laws

Gender budgeting is most effective when it involves changes to both policymaking processes, such as determining budgeting allocations and designing programs, and administrative systems, such as tracking expenditures and monitoring program outcomes (Stotsky 2016). Changes may be made at a policy level through executive branch decision-making, and/or formalized in budget circulars, the national budget law, or a separate law on gender budgeting.

Almost all countries use a budget call circular or equivalent document that serves as an official notice from the finance ministry instructing government agencies how to submit their annual budget bids (Budlender 2015). The budget circular may set the annual ceiling for each agency, identify priorities, and/or provide templates on how each ministry should submit its allocation bid. Some budget circulars are internal government documents, while others are open to the public. In practice, the form of budget circulars varies widely across countries. Critically, budget circulars may be used to set gender-related priority requirements or seek sex-disaggregated data from each ministry. A budget circular may also require each covered agency to submit a gender budget statement, most often a document showing what each agency is doing with respect to gender equality. Such gender budget statements tend to be mostly used as accountability tools, although this is not the case in certain countries highlighted below. A gender budgeting statement tends to look backwards at what an agency has done; it therefore does not form part of the current years' policy prioritization and allocation determination. Budlender (2016) observes, however, that not all circulars require attention to gendered impacts, and, similarly, not all countries that incorporate gender into their budget circular require gender budget statements. Formalization of a gender budgeting initiative through the use of the budget circular has been termed gender budgeting by "fiscal fiat" (Chakraborty 2016).

IV. ADDITIONAL CONSIDERATIONS ON LEGAL FORMALIZATION AND LEGAL CLIMATE

Additional Considerations on Legal Formalization

The research question in this paper compares outcomes between countries employing or not employing gender budgeting, without distinction as to whether and how gender budgeting initiatives are formalized in each country. We have noted, however, differences in the approach to gender budgeting—mere policy approach, or fiscal or legal fiat—taken by these countries. The 2016 UN Women review of budget circulars found little positive or negative evidence that "engendered" budget circulars had effected changes in the allocations and expenditures of those countries' budgets, or created a difference in the lives of women and girls (Budlender 2015). However, that review focused specifically on those countries definitely engendering their budget circulars. Future broader comparative analyses may indicate that vis-à-vis countries not utilizing circulars at all for their gender budgeting initiative, countries pursuing gender budgeting by fiscal fiat may achieve better outcomes. We do not make this claim in the current paper, but note that further research into the potential benefits of formalization of gender budgeting is underway.

This paper also has not sought to assess whether countries like Korea and the Philippines, which arguably go a step further to cement their gender initiative by legal fiat, are yet more successful. At a theoretical level, a legislated gender budgeting initiative evidences buy-in from the legislative branch, which may suggest that a more participative and democratic process has been undertaken to generate the gender budgeting initiative. An initiative having broader-based popular support may be more successful and enduring. Additionally, in non-parliamentary democracies, where the party of the legislature may differ from the party of the executive, a gender budgeting initiative formalized in legislation may be more immune to shifts in political power and thus more difficult to reverse.

Yet counterarguments also exist. Clearly not all legislation has public buy-in: legislation may be passed for all sorts of political reasons, including to appease foreign donors. Where actual popular support is lacking, legislation may prove very weak. Further, if gender budgeting legislation is passed without strong support of the implementing ministries, its chances of success are practically zero. Moreover, legislation without adequate funding and enforcement will be ineffectual regardless of its popular support. As described above, Mongolia is an example of a country whose law on gender budgeting has, for unexplored reasons, gone unimplemented for over five years. Again, we would note only that a future study could drill more usefully into the comparative benefits of fiscal or legal fiat. Given the low numbers of countries globally that have pursued gender budgeting through law, such a study might need to cross a wider geographic range than the Asia Pacific region alone, and must control for other variables bearing on the success of legislative initiatives.

Additional Considerations on Legal Climate

In addition to or instead of gender budgeting, many countries drive for gender equity and women's advancement through constitutional provisions and laws. For example, countries may include a nondiscrimination and/or equal rights provision in their constitution. They may also pass legislation to address discrimination or violence against women in both economic and social settings, such as legislation requiring equal remuneration for equal work, setting quotas for women on company boards, invalidating child marriage, or ensuring equal property and inheritance rights. Countries may also ratify international conventions with bearing on gender equality issues, such as the International Labour Organization's (ILO) conventions on equal remuneration and nondiscrimination in the workplace.

Tables A1 and A2 in the appendix of this paper identify legal enactments in each of the studied countries that may be relevant in future study for understanding country conditions that lead to success in gender budgeting. Table A1 identifies key economic legal enactments, social legal enactments, and international commitments made by the covered countries, and identifies whether the countries have pursued gender budgeting through legal fiat, fiscal fiat, or neither. "Economic enactments" include, for example, whether the country has a law mandating equal pay for equal work or a law setting a quota for representation of women on corporate boards. "Social enactments" include whether the country has a law prohibiting or invalidating child or early marriage, or a quota for women's participation in parliament or local government. The international commitments identified focus on ratification of certain ILO conventions related to women in the workforce. Table A2 regroups these same enactments according to whether they promote equal working conditions for women, support women's dual reproductive (care economy) and productive responsibilities, or support women's economic advancement in society. By tracking these enactments across the countries studied, these tables help illustrate the legal climate regarding gender equality in these countries, which may correlate with their gender budgeting approaches or outcomes.

For some of the reasons outlined in this section, it is difficult to use countries' legal climate on gender equality to meaningfully evaluate their *actual* success in promoting gender equality. A range of factors can cause legislation to be enacted, including a groundswell of popular support, the forward thinking of politicians, leadership in the executive branch, encouragement from civil society, or international pressure. A combination of these factors may be at play in any particular case. Additionally, a range of factors impact whether legislation will be implemented once enacted, such as the legislation's clarity, the level of funding for the legislation, the level of executive branch support, the level of public awareness of the legislation, and the level of popular support, including among enforcement officials (such as police officers and regulators). The possible combinations among all these variables are myriad and yield diverse legislative landscapes and levels of enforcement across different countries and cultures.

Further study to evaluate the relation between such laws and the existence or success of a country's gender budgeting initiative could be enlightening. However, given the complexities of assessing the legal climate of even one country, such analysis is reserved for consideration in a future paper. Instead, we have simply categorized countries according to their use of gender budgeting as per the budget call circular.

V. MEASURING GENDER EQUALITY: ECONOMETRIC MODELS AND RESULTS

This section establishes an econometric estimation of the determinants of gender equality by using the GDI and GII as proxies for gender equality. As a precursor to our results, the following sections discuss complexities and challenges in measuring gender-sensitive human development, drawing considerably from a similar discussion in Agarwal and Chakraborty (2016).

The Gender Development Index (GDI)

Human development can be understood as a process of enlarging people's choices and raising their level of well-being. The United Nations Development Programme (UNDP) has identified three elements of choice and well-being that are the most socially critical: the ability to lead a long and healthy life; the ability to acquire knowledge and be educated; and the ability to access the resources (often synonymous with income) necessary for a decent level of living (UNDP Human Development Reports, various years). To assess the levels of these elements, a gender-neutral geometric mean of these three development dimensions, known as the Human Development Index (HDI), was created

In 1995, the UNDP constructed the GDI as an offshoot from the HDI. The GDI has been used to measure global gender development since then, using the same variables as the HDI, but adjusting them according to a country's degree of disparity in achievement across genders. Under the GDI, the average value of each of the component variables is substituted with "equally distributed equivalent achievements." The equally distributed equivalent achievement (X_{ede}) represents the level of achievement that would, if attained equally by women and men, be considered exactly as valuable to society as the actually observed disparate achievements.

Lahiri, Chakraborty, Bhattacharyya (2002) found that taking an additively separable, symmetric, and constant elasticity marginal valuation function with an elasticity of 2, the equally distributed equivalent achievement (X_{ede}) for any variable X is the following:

$$X_{ede} = [\, n_f\,(1/X_f) + n_m\,(1/X_m)]^{-1}$$

where X_f and X_m are the values of the variable for females and males, and n_f and n_m are the population shares of females and males. X_{ede} is a "gender-equity-sensitive indicator"(GESI). Under this calculation, for a chosen value of 2 for the constant elasticity marginal valuation function, the GDI is computed as follows:

GDI = $\{L_{ede} + (2/3 \text{ x } A_{ede} + 1/3 \text{ x } E_{ede}) + Y_{ede}\}/3$.

The Gender Inequality Index (GII)

The GII replaced the GDI in 2010, serving as a measure of disparities between the genders across three dimensions: (i) reproductive health, represented by the maternal mortality ratio (MMR) and the adolescent fertility rate (AFR);[3] (ii) women's empowerment, represented by the proportion of parliamentary seats held by each sex (PR) and the sexes' rates of attainment of secondary education (SE); and (iii) economic activity, represented by the labor force participation rate (LFPR) of men and women in the market economy. The GII shows the loss in development resulting from gender inequality, where a score of 0 represents complete equality and a score of 1 implies complete inequality.

GII is calculated by assessing the geometric mean across the dimensions. Because a mean cannot be calculated for zero values, a minimum of 0.1 percent is set for all "outlying" extreme values. For the MMR, a maximum rate is taken as 1,000 deaths per 100,000 births and a minimum rate is taken as 10 per 100,000 births.

To calculate the geometric means for reproductive health, the aggregation formula for men and women must be different. For females (Gf):

$$Gf = \sqrt[3]{\left(\sqrt{\left(\frac{10}{MMR}.\frac{1}{AFR}\right)}.\sqrt{(PRf.SEf)}.LFRPf\right)}$$

[3] MMR is defined as the number of female deaths per 100,000 live births annually, from any cause related to, or aggravated by pregnancy or its management. AFR is the number of births per 1,000 women, aged 15–19.

Rescaling by 0.1 helps quantify the truncation of the MMR minimum at 10.

For males (Gm), the formula is as follows:

$$Gm = \sqrt[3]{\left(1.\sqrt{(PRm.SEm)}.LFRPm\right)}$$

After the geometric mean of the three is calculated, the harmonic mean is used to aggregate across gender. Use of the harmonic mean has been criticized (Hawken and Munck 2012); however, the rationale for its use is that it captures the inequality between women and men and further adjusts for association between dimensions.

The harmonic mean (HARM) index is as follows:

$$HARM(Gf, Gm) = \left(\frac{((Gf)^{-1} + (Gm)^{-1})}{2}\right)^{-1}$$

Before calculating the final index, a composite index is calculated using the geometric means of the arithmetic means. This ensures equal weight is given to both the genders and then aggregated across the various dimensions, i.e., health, empowerment, and economic activity. The composite index is as follows:

$$G(\overline{f}, \overline{m}) = \sqrt[3]{\left(\overline{Health}.\overline{Empowerment}.\overline{LFPR}\right)}$$

Where

$$\overline{Health} = \frac{\left(\sqrt{\left(\frac{10}{MMR} \cdot \frac{1}{AFR}\right)} + 1\right)}{2}$$

$$\overline{Empowerment} = \frac{\left(\sqrt{(PRf.SEf)} + \sqrt{(PRm.SEm)}\right)}{2}$$

$$\overline{LFPR} = \frac{(LFPRf + LFPRm)}{2}$$

Symbolically, the GII is represented as follows:

$$\mathrm{GII} = 1 - \frac{HARM(Gf, Gm)}{G(\overline{f}, \overline{m})}$$

The higher the value of the GII, the higher is the corresponding gender gap and loss in potential human development. By highlighting this gendered loss in development potential, the GII helps identify where gender gaps could productively be closed.

Criticisms of the GII

Although we have used the GII to understand links between gender budgeting and economic growth and public spending on health and education, we feel it is important to highlight several conceptual and methodological shortcomings associated with the design of the GII—shortcomings we, too, criticize.

One of the main drawbacks of using the GII is that it merges women and men together in one index, but some indicators are defined only for women, namely the MMR and AFR. Because these numbers do not exist for men, the GII assigns a corresponding value for men of 1, which is far from realistic and leads to overestimation of the gap between women's and men's health standards. Further, as Permanyer (2013) notes, an increase in the MMR and AFR systematically represents a worsening of gender inequality levels, while on the other hand, decreases in women's education or LFPR do not necessarily represent a decline if men's education and LFPR decrease by the same amount. Another broader problem with using reproductive health as an indicator is that for lower-income countries it does not distinguish between poor reproductive health results that truly derive from gender-related inequalities and poor health results that derive simply from poverty or other nongendered factors.

The GII empowerment variable is also criticized for a couple reasons. First, it measures only the share of women in national parliaments, not state or local parliaments—or the other branches of government, for that matter.

A third key criticism of the GII is its measure of labor force participation. The GII's labor force variable measures only participation in the market economy, and thus fails to capture women's labor in housework, childcare, and care of elderly relatives, which economists increasingly understand as having indispensable financial benefit to the entire economy. Time-use statistics can be used to quantify labor across three market and nonmarket activity types: Systems of National Accounts (SNA) activities that are included in GDP calculations; extended SNA activities that are not included in GDP but should be included in the satellite accounts; and residual non-SNA activities. Challenges exist in calculating time-use statistics, however: it is difficult to get the economic activity in utils (i.e., units utilized) of time, and also to impute market price or market wages to time (Chakraborty 2014). Indeed, researchers often must use the lowest wage in the wage hierarchy in the market economy to approximate a value for work in the unpaid care economy. At any rate, time-use statistics are not incorporated into the GII for two reasons. First, time-use surveys themselves are not conducted at a macro level in many developing countries and, second, empirically, the process of collecting labor force participation statistics still rarely incorporates unpaid care work.

Owing to the importance of unpaid work and the differences in representation of genders in SNA and extended SNA activities, it is desirable to incorporate women's unpaid work into the GII in some fashion. Incorporation must occur in a manner that recognizes the actual (GDP-boosting) labor of women without equating it to labor in the formal economy in a manner that masks the barriers that often prevent women from working in the paid formal economy. A measure of inequality should evaluate differentials in (both) men's and women's participation in (both) the informal and formal economies.

As for the GII's measurement of health inequality, the under-five survival rate can be useful to capture gender discrimination in access to healthcare and nutrition between girls and boys. The under-five survival rate is the probability per 1,000 that a newborn baby will live past the age five. Because women have a biological advantage in longevity, evidence of higher rates of female deaths per 1,000 live births suggests some sort of gender bias in most countries where it occurs, and therefore the rate is used as a proxy for health in the measurement of inequality.

Despite these limitations of the GII, we use these indices to try to understand their links with public spending on health and education, economic growth, and gender budgeting experiences using panel regressions.

Econometric Investigation

This section evaluates the relationship between gender budgeting and gender equality. The hypothesis we try to test is whether gender budgeting has a positive impact on gender equality in the Asia Pacific region. The GDI and GII scores for each country are used as measures of gender equality or inequality. For both types of equality measures, the econometric analysis estimates the determinants of gender equality, and includes gender budgeting among those determinants.

The dynamic panel estimation analysis is used in this paper in an effort to correct any endogeneity issues occurring in the static (fixed and random effects) models. The dynamic panel estimation methodology by Arellano and Bond (1991) is based on the instrumental variables approach. We can generate better—more efficient—estimates of the dynamic panel data model by applying an instrumental variable method in a generalized method of moments (GMM) context. As the dynamic panel estimators are instrumental variable methods, it is particularly important to evaluate the Sargan–Hansen test results when they are applied.

The estimates are checked for robustness. In the Arenello–Bond methodology, the residuals of the differenced equation may have serial correlation. The Arenello–Bond methodology deals with endogeneity by transforming the data by differentiating it and removing the fixed effects. However, any first difference transformation removes the fixed effects at the cost of initiating a correlation between $\Delta y_{i,t-1}$ and Δv_{it} , both of which have a term dated $(t - 1)$. The disadvantage of the first difference transformation is that it widens the gaps in unbalanced panels. If some value of y_{it} is missing, then both Δy_{it} and $\Delta y_{i,t-1}$ will be missing in the transformed data. However, the panel we used for the analysis is highly balanced and therefore it will not affect our Arenello–Bond dynamic models.

The model we consider for analysis is as follows, where we test whether gender budgeting (GB) is a significant determinant of gender equality (GE) in the Asia Pacific region, along with control variables (X).

$$GE_{it} = a + b_1 GB_{it} + b_2 X_{it} + \mu_{it}$$

The control variables we use in our models are log of public spending on health and education, GDP per capita, and female labor force participation. Gender equality is proxied by two variables, the GDI and the GII.

The dynamic panel estimates in table 1 show that gender budgeting is significantly and positively related to the GDI in the Asia Pacific countries. In the dynamic panel model, public spending on health and education, as well as growth, are found to be insignificant in determining the GDI.

Table 1: Determinants of GDI and GII: Dynamic Panel Estimates

Variables	**Model (1) GDI**	**Model (2) GII**
Lagged GDI	0.7711* (10.5700)	0.7167* (0.0571)
Log of GDP per capita	0.0001 (0.8300)	0.0000 (0.0000)
Female labor force participation rate	0.0019 (1.6200)	-0.0041* (0.0017)
Log of public spending on education	0.0004 (0.2800)	0.0031 (0.0022)
Log of public spending on health	-0.0011 (-0.7400)	-0.0045* (0.0024)
Gender budgeting in call circular regime	0.0024* (3.1100)	-0.0035* (0.0008)
Constant	-1.8669* (-3.1300)	2.9819* (0.6693)

Note: The figures in the brackets refer to standard errors.
Source: UN Human Development Reports, IMF Gender Database, and World Development Indicators (various years, basic data)

The results also show that the GII is significantly determined by gender budgeting initiatives, public spending on health, and female labor force participation. Spending on education and economic growth variables are found to be insignificant in reducing the GII. The estimates showed that a 1 percent increase in public health spending in the Asia Pacific region can reduce the GII by 0.0045 percentage points, while an increase in female labor force participation can reduce the GII by 0.0041 percentage points.

Impact of Gender Budgeting on Fiscal Space

Against a backdrop of fiscal consolidation and rule-based fiscal policy, countries in the Asia Pacific region are increasingly adhering to a 3 percent ratio of fiscal deficit to GDP. In India, the Fiscal Responsibility and Management Review committee has recommended that national and subnational governments adhere to a debt–GDP ratio of 60 percent. In determining fiscal space, could gender budgeting be a determinant? To analyze this, we have examined sectoral patterns in public spending in education and health, and examined whether gender budgeting has any impact on public spending on these sectors.

The dynamic panel estimates in table 2 reveal that gender budgeting is found to be insignificant in increasing fiscal spending on health. We used the MMR to proxy the gender-related health indicator, which was found to be significant in determining fiscal spending on health. Public spending on health does increase with an increase in economic growth.

Table 2: Effect of Gender Budgeting on Fiscal Space: Dynamic Panel Estimates for the Health Sector in Asia Pacific

Variables	**Coefficients**
Lagged (health spending)	0.6795* (.0447)
Log of GDP per capita	0.0001* (0.0000)
Gender budgeting in call circular	-0.0068 (0.0167)
Maternal mortality rate	0.0017* (0.0007)
_constant	6.3525 (14.4790)

Source: UN Human Development Reports, IMF Gender Database, and World Development Indicators (various years, basic data)

The dynamic panel estimates in table 3 show that gender budgeting does not have impact on fiscal space in the education sector. Moreover, the impact of gender budgeting on aggregate fiscal space has not been attempted, as the sectoral inferences are insignificant. Overall GDP and the sectoral outcome indicators are found to be the determinants of sectoral fiscal space.

Table 3: Effect of Gender Budgeting on Fiscal Space: Dynamic Panel Estimates for Education

Variables	**Coefficients**
Lagged education spending	0.7065 (0.5473)
Log of public spending on health	0.8933 (0.5774)
Log of GDP per capita	0.0020* (0.0010)
Gender budgeting in call circular	0.1982 (0.3511)
Female literacy rate	-0.1893* (0.0991)
Constant	-172.6384 (297.4006)

Note: The figures in the brackets refer to standard errors.
Source: UN Human Development Reports, IMF Gender Database, and World Development Indicators (various years, basic data)

VI. CONCLUSION

Following the methodology of Stotsky and Zaman (2016), we have analyzed the impact of gender budgeting on gender equality indicators in gender budgeting and non-gender budgeting countries at the aggregate and disaggregated levels. We have used the GDI based on equally distributed equivalent (X_{ede}) methodology to arrive at gender-equality-sensitive indicators for three dimensions—education, health, and income. We have also used the GII to capture the gender disparities in health, women's empowerment, and labor force participation.

We have categorized the countries into gender budgeting and non-gender budgeting countries based on whether countries have integrated the gender budgeting processes in a formalized manner. Using dynamic GMM estimation for the panel data, the study has found that gender budgeting efforts have a more significant impact on gender-equality-sensitive indices as compared to economic growth. Public policy variables, like public spending on health and education, were also found to be relevant for the progress of gender equality in the region.

Finally, we studied the impact of gender budgeting on increasing fiscal spending in health and education, using the MMR as a proxy for health and the gender disparity ratio in school enrollment (ratio of female to male students enrolled in the relevant schooling, divided by the cohort of that age group) as a proxy variable for education outcomes. The implications of gender budgeting in these areas were insignificant. This has public policy implications, as the countries in the Asia Pacific region have not yet incorporated gender budgeting as a priority in their spending decisions in the education and health sectors.

The quantitative effect of the legal fiat of gender budgeting on the GDI and gender inequality is beyond the scope of the paper, and will be investigated in future studies.

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APPENDIX

Table A1: Gender-Related Laws Adopted by Each Country

Country (34)	**Gender-related enactments (social)**	**Gender-related enactments (economic) (excluding gender budgeting)**	**Gender-related commitments (international)**	**GBR-related fiscal fiat (FF) and/or legal fiat (LF)**
Afghanistan	a, c, g, h (statistics law to be reviewed)	C, E, H, N	i, ii	FF
Australia	a, (b N/A), c, d, e, f, i	A, B, F, J, K, L, M, N	i, ii, iii, iv	
Bangladesh	a, b, c, d, f, g	A, C, E, G, H, J, L	i, ii	FF
Bhutan	a, b, d, e, f	A (equal remuneration for equal worker qualifications), C, D, G, H, J, L		FF
Brunei Darussalam	b, c, d, i	C, F, J, L		
Cambodia	a, b, c, d, f, i	A, B, C, F, G, H, J, L, M, N	i, ii	
China	a, b, d, f, g, i	B, C, E, H, J, L, N	i, ii	
Cook Islands				
Fiji	a, (b N/A), d, f, i	A, C, D, G, H, J, L	i, ii	
Hong Kong	a, b, c, d, e, f, i	B, C, F, H, J, K, L, N	N/A	
India	a, b, c, d, f, g (local level only), i	B, C, G, H, I, J, L	i, ii	FF
Indonesia	a, b, c, d, e, f, g	C, F, H, I, L	i, ii	FF
Japan	a, (b N/A), c, d, f, i	B, C, G, H, L, M, N	iii	
Kiribati	a, (b N/A), c, d, f	A, C, F, J	i, ii	
Korea	a, b, c, d, e, f, g, h, i	B, C, D, G, H, J, L, M, N	iii	FF; LF
Laos	a, (b N/A), c, d, f, i	C, F, H, J, L, M	i, ii	FF; LF
Malaysia	a, b, c, d	C, G, H, I, J, L, N	i	FF
Maldives	a, b, d, e, f, i	B, C, D, E, F, G, H, L, M		
Mongolia	a, b, c, d, f, g, h, i	C, D, G, H, J, K, N	i, ii	
Myanmar	a, b, c, f, g, i	C, G, H, J, L		
Nepal	a, (b N/A), d, e, f, g, h (statistics law to be reviewed), i	C, F, G, H, J	i, ii	FF

New Zealand	a, (b N/A), d, e, f, h, i	B, C, F, G, J, K, L, M, N	i, ii	
Pakistan	a, c, d, f, g	C, G, H, J, L, N	i, ii	FF
Papua New Guinea	a, b, c, d, f, i	C, H	i, ii	
Philippines	(b N/A), c, d, e, f, i	A, C, F, H, J, K, L, N	i, ii	FF; LF
Samoa	a, (b N/A), d, e, f, h, i	A, C, D, E, F, G, H, L	i, ii	
Singapore	a, b, c, d, f, i	C, F, H, J, L, N	i	
Solomon Islands	a, (b N/A), d, f, i	C, E, G, J	i, ii	
Sri Lanka	a, b, c, d, f, h (statistics law to be reviewed), i	C, G, H, J, L	i, ii	
Taiwan	a, b, c, d, e, g, h, i	A, B, C, E, F, G, H, J, L, M, N	N/A	
Thailand	a, b, c, d, e, f, i	C, H, J, L, N	i	
Timor-Leste	a, b, c, d, e, f, h (statistics law to be reviewed), i	B, C, D, E, F, G, H, J, L, M, N		FF; LF
Vanuatu	a, (b N/A), d, f	C, D, E, F, G, H	i, ii	
Vietnam	a, b, c, d, e, f, h (statistics law to be reviewed), i	A, B, C, D, G, H, J, K (gender only) L, M, N	i, ii	LF

Notes:

Gender-related economic enactments (World Bank Data, 2015–16)

A. Law mandates equal remuneration for men and women for equal work
B. Law mandates nondiscrimination based on gender in hiring
C. Law mandates paid or unpaid maternity leave
D. Law requires that mothers are guaranteed an equivalent position after maternity leave
E. Law gives special protections to pregnant or nursing workers
F. Law allows non-pregnant and non-nursing women to do the same jobs as men
G. Constitution has nondiscrimination clause mentioning gender
H. Constitution has an equality provision
I. Quota exists for women on corporate boards
J. Law specifically addresses sexual harassment
K. Law prohibits discrimination by creditors on the basis of gender and marital status in access to credit
L. Law allows women to do the same night hours as men
M. Law requires employer to provide leave to care for sick relatives
N. Childcare is subsidized or publicly available

Gender-related social enactments (World Bank Data, 2015–16, except where otherwise indicated in parentheses)

a. Law grants equal property ownership rights to men and women
b. Law allows married women same process as for married men to achieve National ID
c. Law prohibits or invalidates child or early marriage
d. Legislation exists on domestic violence
e. Law explicitly criminalizes marital rape
f. Law does not require married women to obey their husbands
g. Quota exists for women in parliament or local government
h. Existence of law on gender statistics (UNSD)
i. Inheritance rights discriminate do not against women and/or girls

Gender-related international commitments (ILO Data, 2015–16)

i. Country has ratified ILO C100: Equal Remuneration Convention
ii. Country has ratified ILO C111: Discrimination (employment and occupation)
iii. Country has ratified ILO C156: Workers with Family Responsibilities
iv. Country has ratified ILO C175: Part-time Work
v. Country has ratified ILO C177: Home Work
vi. Country has ratified ILO C183: Maternity Protection

Table A2: Gender-Related Laws Adopted by Each Country, Grouped by Purpose of the Law

Country	Laws promoting equal working conditions for women (A, B, F, I J, L)	Laws supporting women's dual reproductive and productive responsibilities (C, D, E, M, N)	Laws supporting women's economic advancement in society (K, a, b, c, f, g, i)
Australia	A, B, F, J, L	M, N	K, a, (b N/A), c, f, i
Bangladesh	A, J, L	C, E	a, b, c, f, g
Bhutan	A, J, L	C, D	a, b, c, f
Brunei Darussalam	F, J, L	C	b, c, i
Cambodia	A, B, F, J, L	C, M, N	a, b, c, f, i
China	B, J, L	C, E, N	a, b, f, g, i
Cook Islands			
Fiji	A, J, L	C, D	a, (b N/A), f, i
Hong Kong	B, F, J, L	C, N	K, a, b, c, f, i
India	B, I, J, L	C	a, b, c, f, g, i
Indonesia	F, I, L	C	a, b, c, f, g
Japan	B, L	C, M, N	a, (b N/A), c, f, i
Kiribati	A, F, J	C	a, (b N/A), c, f
Korea	B, J, L	C, D, M, N	a, b, c, f, g, i
Laos	F, J, L	C, M	a, (b N/A), c, f, i
Malaysia	I, J, L	C, N	a, b, c
Maldives	B, F, L	C, D, E, M	a, b, f, i
Mongolia	J	C, D, N	K, a, b, c, f, g, i
Myanmar	J, L	C	a, b, c, f, g, i
Nepal	F, J	C	a, (b N/A), f, g
New Zealand	B, F, J, L	C, M, N	K, a, (b N/A), f, i
Pakistan	J, L	C, N	a, c, f, g
Papua New Guinea	--	C	a, b, c, f, i
Philippines	A, F, J, L	C, N	K, (b N/A), c, f, i
Samoa	A, F, L	C, D, E	a, (b N/A), f, i
Singapore	J, L	C, N	a, b, c, f, i
Solomon Islands	J	C, E	a, (b N/A), f, i
Sri Lanka	J, L	C	a, b, c, f, i
Taiwan	A, B, F, J, L	C, E, M, N	a, b, c, g, i
Thailand	J, L	C, N	a, b, c, f, i
Timor-Leste	B, F, J, L	C, D, E, M, N	a, b, c, f, i
Vanuatu	F	C, D, E	a, (b N/A), f
Vietnam	A, B, J, L	C, D, M, N	K (gender only), a, b, c, f, i

Notes:
Laws promoting equal working conditions for women

A. Law mandates equal remuneration for men and women for equal work
B. Law mandates nondiscrimination based on gender in hiring
C. Law mandates paid or unpaid maternity leave
D. Law requires that mothers are guaranteed an equivalent position after maternity leave
E. Law gives special protections to pregnant or nursing workers
F. Law allows non-pregnant and non-nursing women to do the same jobs as men
G. Constitution has nondiscrimination clause mentioning gender
H. Constitution has an equality provision
I. Quota exists for women on corporate boards
J. Law specifically addresses sexual harassment
K. Law prohibits discrimination by creditors on the basis of gender and marital status in access to credit
L. Law allows women to do the same night hours as men
M. Law requires employer to provide leave to care for sick relatives
N. Childcare is subsidized or publicly available
O. Law mandates equal remuneration for men and women for equal work
P. Law mandates nondiscrimination based on gender in hiring

Laws supporting women's dual reproductive (care economy) and productive (market economy) responsibilities

L. Law requires employer to provide leave to care for sick relatives
M. Childcare is subsidized or publicly available
Q. Law mandates paid or unpaid maternity leave
R. Law requires that mothers are guaranteed an equivalent position after maternity leave
S. Law gives special protections to pregnant or nursing workers

Laws supporting women's economic advancement in society

I. Law prohibits discrimination by creditors on the basis of gender and marital status in access to credit
a. Law grants equal property ownership rights to men and women
b. Law allows married women same process as for married men to achieve National ID
c. Law prohibits or invalidates child or early marriage
f. Law does not require married women to obey their husbands
g. Quota exists for women in parliament or local government
i. Inheritance rights discriminate do not against women and/or girls

Legal Cases Analyzed

Vishaka and others v. State of Rajasthan and others (1997) 6 SCC 241, AIR 1997 SC 3011, (1998) BHRC 261, (1997) 3 LRC 361, (1997) 2 CHRLD 202.