Gender-Equitable Macroeconomic Policy for Low- and Middle-Income Countries

REVIEW AND SYNTHESIS

June 2023

Photo: BMGF/Mansi Midha

Acknowledgements

This report was produced by the Global Center *for* Gender Equality (GC*f*GE). The report was researched and written by Michael Kevane, with contributions from Britni Wilcher and Judy Rein, each of whom is a consultant with the GC*f*GE. Elizabeth Katz, GC*f*GE director of Gender Data and Research, provided technical guidance and review. We are grateful to GC*f*GE consultant Sarah Pollock for valuable writing and editing support, and to the subject matter specialists who generously shared their expertise with us: Caren Grown (Brookings Institution), Lisa Kolovich (International Monetary Fund), Maria Floro (American University), Elissa Braunstein (Colorado State University), Sarah Iqbal, and Althea Anderson (William and Flora Hewlett Foundation). Whitney Walton provided valuable program management support. The report was prepared for the Bill & Melinda Gates Foundation's Development Policy and Finance Program Strategy Team in support of their proposed Body of Work on "Advancing Gender Equitable Macroeconomic and Macrostructural Policies." The technical service provided by the Global Center *for* Gender Equality is funded by the Bill & Melinda Gates Foundation Gender Integration Team.

Contents

Executive Summary

Evidence clearly establishes that increased gender equality contributes positively to macroeconomic growth, and that the burden of business cycle fluctuations, in terms of unemployment, reduced consumption, and reduced investment, falls more heavily on women because of norms about the gendering of childcare and eldercare activities. Furthermore, evidence shows that macroeconomic policy informed by gender analysis can contribute to women's economic empowerment, a top priority of the Bill & Melinda Gates Foundation.

So why aren't practices like gender budgeting more mainstreamed in low- and middle-income countries? How can the foundation best support high-quality research and effective advocacy for gender equitable macroeconomic policy? The answers are complex. They point to compelling needs: for training local officials in how to craft fiscal policies that promote gender equality; for gathering more gender-disaggregated data to support such budgeting work; for investment to strengthen women's rights organizations in their advocacy function; and for funding high-level research into the mechanisms that drive macroeconomic policy in low- and middle-income countries.

In this report, we review the current state of research and knowledge on key gendered economic structures relevant for macroeconomic performance and gender-intentional macroeconomic policy in the context of lower-income countries. We identify deficits in both theory and data that might usefully inform policymaking, and identify explanations for delays in adoption of best policymaking practices in this area. Based on the review, we propose promising areas of grantmaking.

The report contributes to the existing literature by focusing on macroeconomic policy in lower-income countries, by exploring specific areas of academic scholarship where progress might be most impactful in terms of gendered analysis, by identifying opportunities for improved and innovative gender-disaggregated data collection to inform macroeconomic policymaking in lower-income countries, and by discussing the political economy of gender-intentional macroeconomic policymaking.

Findings

In terms of gender-equitable macroeconomic policy, evidence shows that there is considerable agreement that **prioritizing policies to promote gender equity will likely increase the aggregate growth rate of per capita income for most countries**. The literature has identified and estimated the relevance of many channels, or mechanisms, through which policies (and social change) resulting in greater gender equality lead to higher average incomes.

An important implication of this focus on gender equity in macroeconomic policy is that f**emale labor force participation (FLFP) should continue to be viewed as a key macroeconomic indicator**. And the literature is clear that cost-effective policies can be implemented to increase female labor force participation, such as improving access to education opportunities for girls and young women, subsidizing adult vocational training programs, and investing in childcare.

Despite the general consensus about the value of macroeconomic policies that promote gender equity, knowledge gaps persist about which policies are effective and how best to implement them. Techniques have been improving for "gender budgeting," a label applied to the analysis of how government fiscal policies promote and impact gender equity – but such budgeting can be quite complex. One component of gender budgeting is to calculate an overall indicator of the extent to which the government's annual budget contributes to gender equality. Yet the extent of analysis required for even a "first-cut" of tracking and estimating direct effects of spending and tax policy changes may exceed the capabilities of most government ministries and affiliated research entities. Nonetheless, more governments have adopted and report on gender budgeting. To support them, numerous organizations, including the International Monetary Fund (IMF), have been developing programs for training and encouraging the adoption of gender budgeting.

In addition, it is important to highlight that **a significant limitation of most gender budget analyses is that they are conducted at the household level (as opposed to the individual level)**. This means that women's well-being is measured primarily in relation to female-headed households. When women reside in male-breadwinner or dual-earner households, data constraints typically make it impossible to examine female well-being as it varies with fiscal policies.

Moreover, macroeconomic policy is broader than concerns for FLFP and gender budgeting. **Macroeconomists recognize the need for complex models to credibly analyze general equilibrium and dynamic effects of shocks and policies, and the interactions of shocks and policy responses**. Most macroeconomic policies involve tradeoffs, usually between growth and inflation, or between growth and financial stability. A broader collection of practices, known collectively as "gender-responsive analysis," helps planners to choose among policy options that support the goal of promoting greater gender equality. The intent of gender-responsive analysis is not necessarily to prejudge the ultimate choice of the policy process, but rather to have the range of policy choices and their gendered impacts available to the fiscal and financial policy process. In recent years, capabilities and knowledge bases for gender-responsive analysis have advanced considerably. It is an important public good to foster consensus on appropriate models and facilitate their use.

As part of gender-responsive analysis, **it is essential to improve the collection of gender-disaggregated data in order to enable credible empirical estimation of the key parameters that are used in models**. Additionally, one of the most important issues in macroeconomic modeling is measuring the care economy and developing techniques so that the sector becomes a standard part of current and next-generation macroeconomic models, such as those utilized by the IMF to advise LMIC monetary authorities. This is particularly important to gender equity because social norms and institutions of the care economy explain a large part of change and variation in FLFP.

It is also important to develop a political understanding of how macroeconomic policy is shaped in order to pressure for the inclusion of gender in such policies. Macroeconomic policy emerges not just from data, but from interaction and contestation of organized interest groups (including women's rights organizations), a professional technocratic staff of central bank personnel and Finance Ministry officials, and political parties and leaders. Yet high-level research is lacking about the specific mechanisms that drive macroeconomic policy in low- and middle-income countries. We do know that over the past few decades there has been a clear shift by macroeconomic policymakers toward greater consideration of gender equity and environmental sustainability. Such a shift suggests that a combination of "inside out" and "outside in" advocacy strategies, such as those currently being incubated by the Hewlett Foundation as part of their Women's Economic Empowerment strategy, have the potential to influence macroeconomic policymaking in favor of gender equality. A key element of this advocacy will be to counter "zero-sum" thinking, in which policymakers worry that there is a cost to men of fiscal and monetary policies that increase female labor force participation and otherwise economically empower women.

In contrast to the strong case for including gender in fiscal policy, this review notes that the literature on gender analysis of monetary policy is much more limited. However, **one area for sectoral gender-responsive analysis is in understanding the impact of financial innovations, such as the rapid spread of e-money delivered through mobile phone applications, which monetary authorities are typically charged with regulating.** If the behavior of women e-money users is systematically and significantly different from that of men e-money users, then the two classes of users face different systemic risks (and benefits) from their behaviors.

Finally, this report addresses efforts to benchmark country-level progress on gender equitable macroeconomic policy. As an incentive for countries to adopt gender budgeting and other pro-equity measures, it would be useful to develop a benchmarking tool that establishes a broader index of best practices in integrating gender into macroeconomic planning processes. There are many models for gender-related benchmarking tools that might feed into the development of such an index. A collaborative process might be designed to reach consensus and validate the tool, and the collaborative process might itself be approached as an important first step in fostering a thriving and expanding network of academic, government, and civil society economists sharing ideas and research.

Recommendations

The foundation has the potential to significantly impact research and practice in gender macroeconomic policy by:

- Strengthening the **research and policy talent pipeline** through practitioner training and academic program development. One way to expand the knowledge base is to support doctoral and early-career researchers from lower-income countries who are committed to work on gender and macroeconomics with scholarships, data collection funds, dissemination venues, and networking and mentoring opportunities.
- Building competency among **civil society stakeholders**, including women's rights organizations, to participate in the development of gender-intentional macroeconomic policy and support related to accountability and transparency mechanisms in policymaking. Gender-responsive analysis and gender-intentional policymaking are areas often missing in higher education and graduate programs in macroeconomics. The returns on investments in training would seem to be substantial.
- Developing **benchmarking tools** for broad consensus and implementation of indexing gender-intentionality in macroeconomic policy. An ambitious benchmarking tool would construct an overall index of best practices in integrating gender into macroeconomic planning processes and outcomes.
- Constituting and facilitating **communities of practice/ research**. In addition to working toward the development of effective benchmarking tools, such communities of practice could develop collaborative research agendas informed by multi-stakeholder engagement. A select group of experts might be commissioned to generate proposals and conduct early research.
- Supporting improvement in collection, cleaning, and sharing of **gender-disaggregated data relevant for macroeconomic policymaking**. For example, the analysis required for gender budgeting would be significantly strengthened by using individual-level indicators, as opposed to household-level indicators. Another important contribution the foundation could make to strengthening the information base for gender-intentional macroeconomic policymaking would be investing in the identification of which variables are the most important to measure, and which ongoing data efforts can most effectively implement their collection and dissemination.
- Supporting national and regional advocacy organizations. There is promising scope for investing in **organizations that advocate for gender-equitable macroeconomic policy**. Specifically, the foundation could support competencies of and provide unrestricted operational support to advocacy organizations for understanding and adapting macroeconomic policy tools (CGE models) that integrate the care economy and contribute to macroeconomic policy discussions.

Photo: BMGF/Nana Kofi Acquah

1. Introduction

This report reviews the current state of research and knowledge on key gendered economic structures relevant for macroeconomic performance and gender-intentional macroeconomic policy, in the context of lower-income countries, largely located in Africa, the Middle East, and South Asia. The intent is to identify deficits in both theory and data that might usefully inform policymaking, and to identify explanations for delays in adoption of best policymaking practices in this area. Based on the review, we propose promising areas of grantmaking.

Our review builds on a growing literature that makes clear that gendered economic structures influence aggregate growth, as well as the distribution of the burdens of negative macroeconomic shocks and policy responses (Nallari and Griffith 2011; Seguino 2020; L. Kolovich et al. 2020; Seguino and Grown 2006; Fabrizio et al. 2020; Braunstein 2021; Heintz and Glyn 2015; P. Sen et al. 2017; Elborgh-Woytek et al. 2013; Sevilla 2020). For example, in many countries, the erosion of norms that restrict the labor force participation and entrepreneurial opportunities of women, and rapidly declining fertility rates, have accelerated growth in aggregate economic activity. Relatedly, norms about the gendering of childcare and eldercare activities mean that the burden of the business cycle in terms of unemployment, reduced consumption, and reduced investment, falls more heavily on women.

Existing reviews of gender-intentional macroeconomic policy often identify a variety of desirable broad, high-level changes in policy and process. First, they suggest that macroeconomic policy goals should be reframed to embrace a more distributionally oriented concern with the gender equity of growth and the gendered burden of unemployment and inflation. Second, they advocate for financial and fiscal policies that are based on gendered analysis. This analysis includes work to identify gendered patterns in the beneficiaries of fiscal programs, the incidence of the burden of tax changes, and the gendered distributional consequences of monetary, financial, and exchange rate policy. Third, they argue that informal employment and growth should be a key sector for policy. Informal economic activity dominates formal sector activity, in terms of employment, in most lower-income countries, and informal activity is relatively overrepresented with women economic actors. Fourth, they argue for greater inclusivity in the policy process. Macroeconomic policy personnel in the relevant ministries and central banks are largely male, and more women should be informing and participating in policy decision-making processes. Relatedly, they suggest that women's rights organizations and gender-focused academic groups in civil society be included in public policy discussions in the same way that industry and trade groups are influential advocates.

Our review contributes to this emerging consensus on best practices in several regards. First, the focus here is on macroeconomic policy in the lower-income countries. Second, we devote more time to specific areas of academic scholarship where progress (in developing new approaches, or in extending the breadth and application of existing methods) might be most impactful in terms of gendered analysis. Third, we devote greater attention to opportunities for improved and innovative gender-disaggregated data collection to inform macroeconomic policymaking in lower-income countries. Fourth, we devote relatively more attention to the political economy of gender-intentional macroeconomic policymaking. Appendix A provides some methodological details on the literature search process, inclusion and exclusion criteria, and number of sources reviewed, and also provides information on key informant interviews.

As a preview of recommendations for grantmaking, we suggest further investigation and consideration of several promising areas: innovative research across the scholarship pipeline, investment in policy-relevant data generation and modeling, direct training of LMIC macroeconomic policymakers, development of benchmarking tools, and support to national and regional advocacy organizations. These recommendations are described in more detail in Section 8.

Photo: BMGF/Alissa Everett

2. Gender-intentional macroeconomic policy for growth: Focus on female labor force participation

2.1 Evidence on the relationship between gender equality and economic growth

There is considerable agreement that greater prioritization of policies to promote gender equity will likely increase the aggregate growth rate of per capita income, for most countries. A signal of the relevance of this consensus comes from the International Monetary Fund (IMF), which in 2022 announced the first-ever gender strategy for the organization. The justification for the important policy change was expressed in a declarative sentence (International Monetary Fund 2022, 6): "Reducing gender disparities in opportunities, outcomes, and decision-making roles raises economic growth and enhances macro-financial stability."

The literature has identified and estimated the range of effect sizes of dozens of channels, or mechanisms, through which policies (and social change) resulting in greater gender equality lead to higher average incomes (Seguino and Grown 2006; Nallari and Griffith 2011; P. Sen et al. 2017; Elson and Seth 2019; Seguino 2020; 2021a). Stotsky (2006a), in a review for the IMF, summarized the literature: "… reducing gender inequality and improving the status of women may contribute to higher rates of economic growth and greater macroeconomic stability. Women's relative lack of opportunities in developing countries inhibits economic growth, while, at the same time, economic growth leads to a reduction in their disadvantaged condition." An example of recent evidence confirming the consensus comes from the Growth and Economic Opportunities for Women (GrOW) program, which supported 30 studies, including research on the growth-enhancing impact of education, transportation and public services infrastructure, and childcare. An overview by Kan and Klasen (2021, 1) concluded that, "A systematic review of the cross-country empirical evidence robustly shows that lowering gender gaps in education leads to higher economic performance. The literature on the impact of other gaps, including employment gaps, is much more limited but also points to higher growth as a result of lower gender gaps."

One area that has, apparently, received limited attention is the contribution of gender equality to innovation and technology adoption, at the macroeconomic level. While the literature is voluminous on gender discrimination in STEM, both in higher education and in the private corporations that account for much of the research and development in STEM, there appears to be little work accounting for the aggregate effects of this feature of most middle- and higher-income economies, and its relevance for lower-income economies.

2.2 Focus on female labor force participation

An implication of this focus on gender equity in macroeconomic policy is that the female labor force participation (FLFP) has been and should continue to be viewed as a key macroeconomic indicator. FLFP is what most macroeconomists talk about first, when they talk about gender. Numerous studies find that increases in FLFP are associated with higher income per person and more gender-equitable distribution of income (Klasen and Lamanna 2009; Cuberes and Teignier 2018; Cavalcanti and Tavares 2016; Elson and Fontana 2019).[1] Lagarde (2014) was unequivocal on this matter: "We know that eliminating gender gaps in labor force participation can lead to big jumps in income per capita. This is true everywhere in the world, but especially in lagging regions like the Middle East and North Africa, and South Asia."

BOX 1: What drives change in female labor force participation?

Stylized flow chart of Female Labor Force Participation (FLFP)

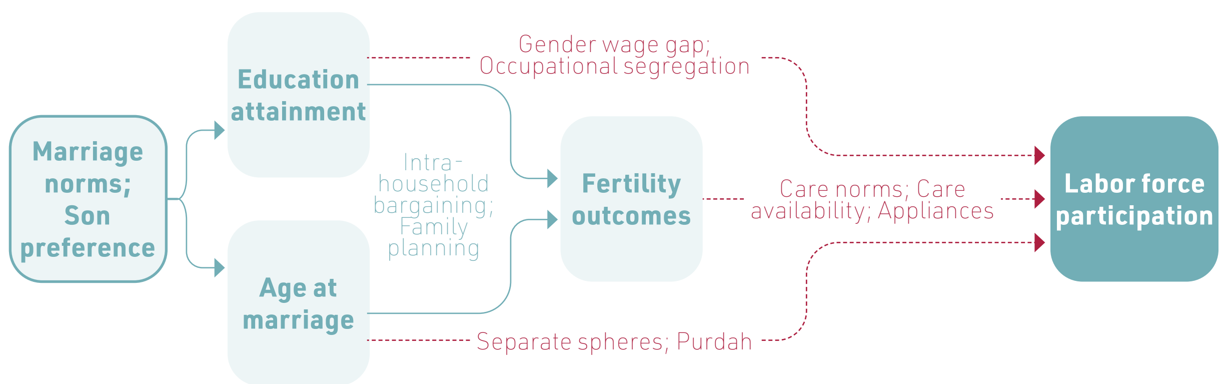


Figure 1 offers a stylized model of the determinants of FLFP, applicable to many countries. Changes in FLFP in any given country are due to global changes in incentives and technologies, local "pass-through" of those changes, and other, more localized processes and policies. Education opportunities and outcomes have been unequal by gender. Women marry relatively young, and their husbands control their labor force participation, preferring their wives to do home work and raise children. The advent of modern contraception in the 1960s, accompanied and reinforced by increasingly accepted aspirations to gender equality at the formal level (especially in terms of abrogation of overtly discriminatory institutions and laws) have likely been partly responsible for global trends of declining fertility and early marriage. Norms about appropriate women's work (notions of "separate spheres," referred to as purdah in South Asia, for example) discourage predominantly male employers from hiring women, especially married women. Due to limited opportunities for work outside the home, women have more children than they might otherwise. The higher fertility results in lower investment, per child, in skills. The relatively high fertility rate means that childcare costs aggravate the lower labor force participation. Likewise, access to electricity and water, together with inexpensive appliances for home production activities such as washing clothes, cooking, and storing food, reduce the returns to home production, long the socially accepted and valued activity of women in most societies. Technological change and urbanization increasingly reward knowledge workers, where there is little return to physical strength, and these processes change the relative returns to male and female labor.

1 Confirmation of this comes from Annex II of the recent document announcing the new gender strategy of the IMF (International Monetary Fund 2022), which listed the gender topics discussed in 80 IMF Article IV staff reports over the period 2015–21. FLFP was the topic discussed in a majority of cases, with the topic "gender gaps" (presumably gaps in wages and education outcomes) in close second. Apparently, almost no other gender analysis was included in these staff reports (the table does not report a number for how many staff reports included no reference to gender issues). Article IV reports included during a pilot phase encouraging such inclusion apparently were much more likely to include them; only 16 staff reports of the years 2020 and 2021, after the pilot period had ended, included any gender analysis.

For most countries of the world, and especially for lower-income countries, women's participation in the labor force, by which is usually meant carrying out work for pay outside of home production and outside of the family farm, has been below the levels of participation of men with similar levels of education (Assaad et al. 2020; Xiao and Asadullah 2020; Desai and Joshi 2019; Klasen 2019; Gaddis and Ranzani 2020; Backhaus and Loichinger 2022; Bailey and DiPrete 2016). There is extensive evidence documenting the low levels of FLFP in Middle East and North Africa (MENA) countries (Krafft, Assaad, and Keo 2019; Assaad, Krafft, and Selwaness 2022; Assaad, Ghazouani, and Krafft 2018; Assaad et al. 2020; Selwaness and Krafft 2021; Ehab 2022; Abouelenin and Hu 2022; Nazier and Ezzat 2022). Much of this research has found that social norms and institutions of the care economy explain a large part of change and variation in FLFP. Recent research, for example, has found that FLFP in MENA countries during the pandemic has changed more than men's labor force participation, and changes are closely linked to changes in care opportunities as care facilities and schools were closed (Krafft, Assaad, and Marouani 2021; Hendy and Yassin 2022a; Hlasny and AlAzzawi 2022; Hendy and Yassin 2022b).

There are many reasons for this low level of women's labor force participation, including discrimination in skill acquisition and discouragement stemming from the low quality of jobs and limited opportunities for advancement. Compounding these factors is exclusion from loan products for women microentrepreneurs and small business owners, based in part on the gender gap in asset ownership, which limits women's ability to offer collateral. The relative lack of female role models, mentors, and social networks further reinforces this low-FLFP equilibrium.

The research base for explaining locally relevant causes of trends in FLFP is growing for lower-income countries (Neef and Robilliard 2021; Backhaus and Loichinger 2022; Klasen 2019; Gaddis and Ranzani 2020). Changes in the demand for labor, especially in the service economy and the marketization of home production, are important in eroding patterns of low FLFP (Bridgman, Duernecker, and Herrendorf 2018; Ngai and Petrongolo 2017).[2] Bhalotra et al. (2022) estimated a complete labor demand and supply equilibrium model broken down by gender, job type, and sector, for Mexico. Their estimation suggested that "male and female labor are closer substitutes in high-paying analytical task-intensive occupations than in lower-paying manual and routine task-intensive occupations." The growth of demand for non-manual labor workers accounted for a substantial amount of the increase in FLFP. Moreover, they found that availability of appliances and electrification, and declining fertility, explained a significant share of the increase in FLFP.

These global and local trends of increasing FLFP and sectoral reallocation of women workers toward higher value-added activities that reward higher education and skill levels have led to relatively greater investments in education of women, as families choose to send daughters to school for longer periods. Gender gaps in educational attainment have been falling rapidly in virtually all countries of the world. Reinforcing the trends have been government policies to increase access to schooling for girls (through scholarships, recruiting female teachers, changing school infrastructure, etc.). Some processes are more localized, as for example the growth of English-speaking call-centers in some regions dramatically changed the returns to educating girls (Jensen 2012; Oster and Steinberg 2013).

Social norms appear to be more persistent and thus more influential in explaining variation across countries in labor force participation rates. There is, moreover, some evidence that higher labor force participation rates for women have slowed or stopped in the recent decades (Wang and Klugman 2020; Klasen 2020; Xiao and Asadullah 2020; Assaad et al. 2020; Das et al. 2015). For India, Desai and Joshi (2019) wondered whether, perhaps, "For both young and older women, rising prosperity allows for withdrawal from economic activities to focus on domestic duties." The slowing or even reversal might also have been happening in Egypt (Krafft et al.(2019).

2 Some macroeconomists and labor economists are concerned that just as the growth of knowledge and retail sector employment has improved FLFP, so recent advances in automation might disproportionately displace women workers (Brussevich et al. 2018; Blanas, Gancia, and Lee 2019; Aksoy, Özcan, and Philipp 2021). Dabla-Norris and Kochhar (2019), for example, warned about automation eroding the "hard-won gains" of women in the labor force.

2.3 Policies to address FLFP

The literature is clear that cost-effective policies can be implemented to increase female labor force participation (D. Z. Halim, Johnson, and Perova 2022; Cameron, Suarez, and Rowell 2020; Fruttero et al. 2020; Halim, Perova, and Reynolds 2023; Pimkina and de La Flor 2020). Some of these policy options, such as **improving access to education opportunities for girls and young women**, are already important policy goals for most countries. Research is clear that primary and secondary schooling expansion greatly increases FLFP (Ercan, Ozturk, and Tumen 2021; Akresh, Halim, and Kleemans 2023; Charlton and Taylor 2020; Chen and Guo 2022; Delesalle 2021). Tertiary education likewise has appeared to have a high impact. A study, using a difference-in-differences approach leveraging the rollout of universities in Egypt, found that access to higher education was associated with greater FLFP, particularly among poorer and more conservative women (Elsayed and Shirshikova 2020).

Government-subsidized **adult vocational training programs** are widespread, but there remains little consensus about the cost-effectiveness of these programs, especially in terms of whether programs for women are more cost-effective than programs for men. An RCT evaluation of a training and entrepreneurial support program in Egypt, for example, found that it substantially increased FLFP among women in very conservative communities (Elsayed, Namoro, and Roushdy 2022).

Cost-effectively **improving access to childcare** likewise appears to be a win-win policy, in that the longer-term government revenue returns from taxes on increased FLFP likely exceed the initial investment and recurring variable costs (De Henau et al. 2019; Hermes et al. 2022; Devercelli and Beaton-Day 2020; Fraym 2022). Halim, Perova, and Reynolds (2023) reviewed 22 studies that estimated the effects of institutional childcare availability on labor market outcomes in lower- and middle-income countries and found that all except one found positive effects. The impacts of preschool availability in Indonesia estimated by Halim, Johnson, and Perova (2022) suggested that even limited-hours preschool (in the Indonesia case, just three hours) boosted FLFP substantially, although mostly through increasing work in home enterprises. A growing body of work, moreover, estimates the effects of childcare, preschool, and kindergarten on cognitive capabilities of children, which is an important determinant of longer-term incomes (Araujo, Dormal, and Schady 2019; Ajayi, Dao, and Koussoubé 2022; Attanasio et al. 2022; Bloem and Wydick 2023).[3] There is also evidence that increasing men's share of chores, including childcare, enhances women's employment and working hours (Samtleben and Müller 2022).

Other policy areas remain the subject of discussion and empirical research. These include **improving urban commuting and transport infrastructure for women** (Lei, Desai, and Vanneman 2019; Chatterjee and Sircar 2021; Kotikula, Hill, and Raza 2019; Lei, Desai, and Vanneman 2019); **changing social norms, penalizing sexual harassment practices, and combatting stereotypes** that hamper women's labor force participation (Field et al. 2021; Jayachandran 2021; Bursztyn, González, and Yanagizawa-Drott 2020; Cislaghi et al. 2022; Xiao and Asadullah 2020); **reducing monopsonistic practices exploiting gender differences in labor supply elasticities** (Farmand and Ghilarducci 2022; Vick 2017; Webber 2016; Sharma 2022); and **encouraging unions and regulators to negotiate for and adopt win-win workplace policies that primarily benefit women workers** (Ward 2022; Ray 2019; Baird, Hill, and Colussi 2021; Corradini, Lagos, and Sharma 2022).

3 For higher income countries, new research on the care economy has developed innovative tools and methods for estimating these effects. Albanesi, Petrongolo, and Olivetti (2022) suggested that parental leave policies have had a lower impact on labor force participation rates, especially for lower-wage earners, than providing public childcare or providing care vouchers. Moreover, child skill development appeared not to suffer when low-wage earners substituted paid childcare for lower-quality home care (because low-wage earners had less time and skills to devote to quality childcare). Brilli (2022) and Moscini (2023) used data from the Panel Study of Income Dynamics to explore how childcare subsidies to parents with different education backgrounds impacted child cognitive development.

Photo: BMGF/Sumy Sadurni

3. Gender-intentional fiscal policy

A multi-sectoral, disaggregated-by-gender, computable general equilibrium (CGE) model is the standard way to properly estimate the direct and indirect effects of changes in government tax and spending policies. However, gender budgeting techniques, such as scoring the initial beneficiaries of public spending and the incidence of taxation, can be quite informative and influential. For higher-income countries, for example, FLFP is substantially correlated to the extent to which incomes are taxed at a household level through joint taxation (as opposed to gender-neutral individual taxation) because household-level taxation almost always implies very high marginal tax rates for secondary household workers, who are predominantly women (Bick and Fuchs-Schündeln 2018; Thomas and O'Reilly 2016).

In lower-income countries, government fiscal policy is an important determinant of economic outcomes, both for the short run through aggregate demand and redistributive channels, and in the longer run through investments in public goods and incentives or disincentives for private investment. The techniques for examining how government fiscal policies promote and impact gender equity have been labeled "gender budgeting" (Stotsky 2006b; Stotsky, Kolovich, and Kebhaj 2016; Chakraborty 2016; Budlender et al. 2002; Çağatay 2003; Rubin and Bartle 2021; Grown and Valodia 2010). The techniques have been improving, and more governments have adopted these techniques and report on them (Coelho et al. 2022; Ambel, Tesfaye, and Yonis 2022; Lahey 2018; Grown and Valodia 2010; International Monetary Fund 2017; Alonso-Albarran et al. 2021).[4]

One component of gender budgeting is to calculate an overall indicator of the extent to which the government's annual budget contributes to gender equity. A government budget may consist of thousands of expenditure line items and thousands of tax revenue line items. Each of these items can be scored according to the extent to which the allocation or incidence impacts women more than men (favorably on the spending side, unfavorably on the taxation side), and then weighted relative to the overall budget to compute an overall indicator. To take a simple example, assume that a balanced budget consisted of only two expenditure items, $500m for building girl-friendly schools (that would be expected to benefit 60 girls for every 100 students) and $500m for building a bridge enabling better market access for copper mines (whose labor force was 80% male). The spending side might then be scored as (.60*500 + .20*500)/1000 = .40, indicating that the budget on the spending side did not cross the .50 threshold of being gender neutral, let alone redressing gender inequity (by being more favorable to women, on the understanding that in most countries and territories, budgets have been historically unfavorable to women). The revenue side might be similarly unequal.

Gender budgeting can be quite complex. The extent of analysis required for even a first-cut of tracking and estimating direct effects of spending and tax policy changes may exceed the capabilities of most government ministries and affiliated research entities. Seguino (2021b), for example, enumerated more than 70 quantitative and qualitative indicators (many of them further subdivided into other indicators) that might be measured, and the impacts of changes in the indicators estimated, for comprehensive gender-budgeting analysis in the context of responses to the COVID-19 pandemic. Greenspun (2019) used microdata on income and consumption to estimate the gendered incidence of fiscal policy for five countries (Brazil, Colombia, Dominican Republic, Mexico, and Uruguay). She comprehensively discussed the assumptions, choices, data requirements, and parameter estimate requirements necessary for reasonably thorough analysis.

4 A state-of-the-art methodology for conducting gender budgeting was recently disseminated by the official consortium Public Expenditure and Financial Accountability program (Public Expenditure and Financial Accountability Secretariat 2020).

Beyond the direct (static) gender-disaggregated impacts of a particular public budget, there are indirect and general equilibrium effects, which are even more complex, and considerably more subject to researcher assumptions and choices. Arora, Braunstein, and Seguino (2023), for example, examined labor market trends in 15 countries in Latin America over the period 1990–2018 and found that the macroeconomic policy mix of infrastructure spending was correlated with positive labor market outcomes for women. They used gender-disaggregated employment and wage data across many industries and occupations to construct an outcome variable capturing "women's share of good jobs." They concluded that government spending on social welfare programs and infrastructure was reliably associated with improved women's share of good jobs.[5]

In addition, it is important to highlight that a significant limitation of much gender budget analysis is that it is often conducted at the household level (as opposed to the individual level). This means that women's well-being is measured only in relation to female-headed households. When women inhabit male-breadwinner or dual-earner households, data constraints typically make it impossible to examine female well-being as it varies with fiscal policies. Better individual-level data on labor market outcomes and well-being is essential for analysis of the gendered impacts of government spending and tax policies.

Numerous organizations have been developing programs for training and encouraging adoption of gender budgeting. Prominently, the Fiscal Affairs Department of the International Monetary Fund occasionally hosts training workshops. The IMF also coordinates a network of 10 IMF Regional Technical Assistance Centers (RTACs) that regularly offer training in gender budgeting. These centers and the training are financed through partnerships among the IMF, governments, and donors. Examples include the Africa Regional Technical Assistance Center in Nairobi, Kenya, the South Asia Regional Training and Technical Assistance Center, and the Caribbean Regional Technical Assistance Centre (CARTAC) in Barbados. The IMF gender strategy document aspires to enhance training capabilities to more country-specific capacity development (International Monetary Fund 2022, 16). These trainings and workshops would likely be coordinated closely with the internal training materials developed through the IMF's Institute for Capacity Development (ICD).

BOX 2: What is gender budgeting, and how widespread is the practice?

The OECD (Organisation for Economic Cooperation and Development) defines gender budgeting as the practice of "integrating a clear gender perspective within the overall context of the budgetary process through the use of special processes and analytical tools, with a view to promoting gender-responsive policies" (Downes, Von Trapp, and Nicol 2017). A more recent IMF policy paper defined gender budgeting as "understanding the impacts of public expenditure and revenue policies on women and girls, compared to men and boys, and addressing whether they reduce, increase or leave unchanged gender equality" (Alonso-Albarran et al. 2021, 10). Gender-budgeting practices emphasize integrating markers of gender into government accounting and budgeting processes. Gender-responsive analysis is usually viewed as broader, including policy changes that impact large swathes of an economy without being directly included in expenditure and revenue planning, and including impacts of financial policies (e.g., monetary and exchange rate policies).

More than 110 countries engage in some form of gender budgeting (Sayeh et al. 2021). Countries with prominent or substantive gender budgeting efforts have support from international organizations, bilateral aid agencies, or connection with broad development goals (i.e., millennium development goals, national development plan, or gender equity strategy). In addition, their fiscal policy efforts consider the differential impact of spending and revenue on women. Spending considerations range from key human development issues (education and health), physical infrastructure (e.g., transport, water, electricity, and energy), justice and security (violence against women, judicial assistance), jobs, entrepreneurship, wages, to structural reforms in spending (e.g., subsidies, transfers, incentive, or distributional objectives). In contrast, revenue considerations are concerned with the impact of personal, general, selective, and trade taxes on women.

5 Similarly, Oyvat and Onaran (2022) found that increases in public social infrastructure spending significantly increased nonagricultural output and employment in South Korea, using a structural vector autoregression (SVAR) analysis for the period of 1970–2012. The work was possible because of disaggregated data on sectoral value added, hourly wage rate, and hours of work of women and men for South Korea for the period of 1970–2012, part of the World KLEMS Consortium data harmonization project.

Photo: BMGF/Mansi Midha

4. Gender-responsive analysis to inform macroeconomic policies

Macroeconomic policy is broader than concerns for FLFP and gender budgeting, and macroeconomists recognize the need for more complex models to credibly analyze general equilibrium and dynamic effects of shocks and policies, and the interactions of shocks and policy responses. Moreover, a goal of gender-intentional macroeconomic policy is that various alternative fiscal and financial policies that involve important tradeoffs be considered through a gender lens, supported by empirical research on how various policies are likely to differentially affect men and women. In contrast with the longer-term FLFP macroeconomic policies discussed previously, where a consensus views the policies as win-win, most macroeconomic policies involve tradeoffs, usually between growth and inflation, or between growth and financial stability. Some fiscal and financial policies might well generate short-term growth, but at the expense of higher probability of high inflation or of financial fragility (and hence vulnerability to financial crisis). This is especially true for responding to negative economic shocks. A major responsibility of macroeconomic policymakers is adjusting policy in response to macro shocks, and so smoothen the disruptions of the business cycle. Likewise, it may not be the preference of government policymakers to promote gender equity through policies that reduce overall growth while increasing growth in sectors where women are concentrated.

Choosing among policy options in a manner that is responsive to the goal of promoting greater gender equality is partly fulfilled through a broader collection of practices to inform policymaking that are known collectively as **gender-responsive analysis**. These practices go beyond analysis of FLFP and gender budgeting. The intent of gender-responsive analysis is not necessarily to prejudge the ultimate choice of the policy process, but rather to have the range of policy choices, and their gendered impacts, available to the fiscal and financial policy process. Numerous governments have agreed on the importance of this analysis; in 2017, representatives to the World Trade Organization

BOX 3: Reforming the CFA monetary zone: An example of where gender-responsive analysis would likely be important

Consider the decision by Finance Ministers in French West Africa's CFA zone about how and when to eventually change the 28-year-old fixed exchange rate of 656 CFA per euro, and the more than 75-year-old common currency regime (Gulde and Tsangarides 2008; Kireyev 2015). The change in the rate might likely be bundled with decisions about capital movements, dissolving the common currency zone into separate monetary authorities, and changing regulation of the banking sector. It is a commonplace in local macroeconomic discourses that such changes might involve a trade-off between potential higher growth rates in income and greater vulnerability to instability emanating from financial sector crises and greater likelihood of higher inflation. These discourses, however, rarely mention the gender implications of such an important macroeconomic policy change. A Google Scholar search of academic journal articles with "CFA zone" or "franc zone" in the title, since the year 2000, returns 650 articles. Add "women" or "gender" to the search, and no articles are returned. The pattern is the same for articles in French. Yet, many sizable sectors of CFA zone economies, including tourism, gold mining, and cotton, exhibit dramatic patterns of gendered inequality of participation. A gender-responsive analysis process might produce a very different set of recommendations for CFA reform than standard macroeconomic analysis.

BOX 4: Gender analysis of African structural adjustment programs

An early example of gender-responsive analysis, although without using that label, was Collier's (1994) analysis of structural adjustment programs and gender in African countries in the 1980s. Collier adduced more than a dozen structural economic parameters that he argued likely varied by gender: intersectoral mobility, diffusion of information, elasticity of demand for labor by sector, ability to borrow, ability to use collateral, adoption of new technologies, wage gaps, job recruitment, elasticity of labor supply, influence of role models on economic decisions, obligations in households for care and food preparation, principal-agent problems within households, health effects of childbirth and breastfeeding, son preference in education investments, schooling attainment, extension services impacts, and intrahousehold control of income flows. Considering that many of these parameters likely varied from country to country, and across economic sectors within countries, Collier argued that the aggregate impacts of general macroeconomic policies of structural adjustment might vary considerably. Collier considered an extreme case, where a country in a balance-of-payments crisis might seek to resolve the structural conditions through a devaluation that would stimulate exports. But if women were primarily located in the non-tradeable domestic food sector, and had low mobility, had little ability to borrow in order to expand into the tradable sector, and had limited access to innovation knowledge, the export response to devaluation might be quite muted. He acknowledged the limitations of his analysis, sometimes drawing on a single study to generalize about the continent, for lack of other studies.

BOX 5: Planning for gender-responsive policy analysis for possible lower-income country debt defaults and renegotiations in the 2023–25 period

Consider lower-income countries that borrowed substantially using dollar-denominated debt instruments, and that now confront the high inflation and rising interest rate environment of the global economy of 2022. Policymakers must roll over external debt at higher interest rates (Raga, Ayele, and te Velde 2022). Difficult choices must be made. The macroeconomic goal is to engineer a "soft landing" of moderate inflation, smaller government budget deficit, and depreciated exchange rate, without reducing domestic aggregate demand too much. But the "soft landing" is not always feasible. At some point, it is likely that austerity policies involving sharp reductions in social welfare payments, reductions in direct government expenditures, and increases in interest rates and curtailing of bank lending may have to be adopted. The intended outcome of such policies is to bring about expenditure switching, where imported goods and services become more expensive, and exported goods and services more attractive on international markets. The resulting change in the balance of payments brings more foreign exchange into the reserves of the central bank, alleviating the perhaps-temporary insolvency arising from scheduled debt payments. The alternative to austerity is to default on debt payments, which some countries have done, hoping to renegotiate their debt service obligations (Annor 2022). Countries faced with these choices should conduct gender-responsive analysis of the impacts of their austerity policies.

(WTO) agreed on a "Declaration on Trade and Women's Economic Empowerment" document that committed them to developing best practices for certain kinds of gender-related analysis and data-collection activities (Fitzgerald et al. 2022).

Macroeconomic policymakers should assure due diligence in gender-responsive analysis before adopting new policies or approving policy changes. In many cases, the assurance of due diligence might be pro forma. Increasing the central bank lending rate by 0.5pp, for example, might not require significant gender analysis. The presumption might be that such a change will be diffused throughout the economy across most sectors, and will influence choices of households (and thus men and women) in complex ways. On the other hand, changes in financial regulations to allow rapid expansion of e-money might benefit from extensive gender-responsive analysis.

Macroeconomic general equilibrium gender-responsive analysis

Capabilities and knowledge bases for quantitative gender-responsive analysis have advanced considerably, although there remains much room for improvement in standardizing models and collecting and disseminating key data and parameters. Macroeconomic analysis at present is informed by general equilibrium models calibrated with estimated parameters to match key macroeconomic variables and deliver reasonable forecasts of the effects of shock and policy responses. Models may vary from dozens to hundreds of equations. These models generally cannot be solved analytically, and economists use numerical methods to calculate dynamic effects of shocks or policy changes.[6]

Fostering consensus on appropriate models and facilitating usage of models is an important public good. For example, policy discussants need to have shared estimates of how increased accessibility of care (through expansion of public and private care institutions, and primary schooling in places that do not yet attain universal primary schooling) and reduced care burdens (through access to family planning services) might be expected to increase FLFP, change the quality of work and remuneration, and further directly and indirectly increase government tax revenue collection. A common set of tools for estimating and integrating these effects in order to arrive at consensus projections is essential.

Current state-of-the-art models are called Heterogeneous Agent New Keynesian (HANK) models (Kaplan, Moll, and Violante 2018; Ravn and Sterk 2021; Dou et al. 2020; Cherrier, Garcia Duarte, and Saïdi 2022).[7] The usual dimension of heterogeneity incorporated into HANK models is wealth; a key feature is the modeling of how poorer agents plan around, and respond to, liquidity constraints. The models thus correspond to a growing empirical literature examining the wealth distribution effects of short-term macroeconomic policies, especially monetary policies. This research has been facilitated by new datasets that enable tracking of household wealth over time (Pallotti 2022; Amberg et al. 2022). A key input into the goals of enhancing growth policy and gender-responsive analysis is improved and expanded collection of gender-disaggregated data that enables credible empirical estimation of key parameters used in models (Fontana, Byambasuren, and Estrades 2019). In many countries, however, for various reasons, there has been limited investment in collecting and using gender-disaggregated data. Moreover, macroeconomic empirical analysis has not delivered robust findings on many key gender-related parameters that can be used in macroeconomic forecasting and policy models.

A key issue in macroeconomic modeling is measuring the care economy, estimating key structural parameters, and developing techniques so that the sector becomes a standard part of current and next-generation HANK models (Braunstein, Van Staveren, and Tavani 2011; Braunstein 2021; Blecker and Braunstein 2022; Meurs et al. 2020; King et al. 2021). This gap was salient during the pandemic, as a common public health measure was closing schools, which meant that children had to be cared for during the workday by parents. When schools resumed remote learning, parents had to adapt their work schedules to support their children. Numerous studies from countries all over the world found that the burden of this changing childcare responsibility fell disproportionately on women. Adequate modeling of the care economy is essential for determining the returns to public investment in care infrastructure, and oversight and subsidization of the private sector care sector.

Table 1 lists and summarizes a sample of published articles or working papers that incorporate gendered components of macroeconomic models.[8]

6 Models with closed-form analytic solutions are important in establishing how certain relationships influence other economic relationships and outcomes, in a logically coherent manner. This is especially true for models that focus on the links between the care economy, fertility, and investment in skills of children (Heintz and Folbre 2022; Agénor and Agénor 2023).

7 These models include nominal rigidities in price or wage-setting, and slow adjustment as agents in various categories update expectations. Slow adjustment is sometimes due to search frictions in labor markets, which mean that workers are only slowly matched to optimal jobs for their particular productivity levels.

8 It appears that there is no survey in the macroeconomics modeling literature of the breadth of these modeling innovations, nor of the parameters required to realistically calibrate the equations so that they correspond with observed patterns and also mesh with other calibration parameters, focusing on gender-responsive analysis. We do not review the numerous papers estimating the partial equilibrium impacts of sectoral policy changes on women (e.g., trade and financial liberalization, privatization of public entities, broadband and connectivity policies, anti-trust policies, encouragement of formalization of informal economic activity, etc.).

Table 1: Macroeconomic models featuring gendered components

Reference	Country of application	Main model feature or question	Key empirical parameters	Implication
Fukui, Nakamura, and Steinsson (2023)	United States	How much does FLFP "crowd out" men in labor force? Home production means secondary worker in household has opportunity cost of home- versus market-work. Declining cost of women entering labor force drove aggregate GDP.	Crowding-out parameter; home production productivity; female-biased productivity shocks.	Convergence with men accounts for why employment recoveries from recessions have slowed.
Bardóczy (2020)	United States	Job loss of the primary earner leads to entry by secondary potential earner. This could cause crowding -out in aggregate, but also enhances consumption smoothing. Smoothing effect dominates crowding-out effect.	Job transition probabilities (into and out of) for primary and secondary earners.	Because of spousal labor force entry possibilities, households are more willing to smooth consumption in downturns, and this acts as an "automatic stabilizer" during business cycle and thus has macroeconomic implications.
Cavalcanti and Tavares (2016)	United States	Discrimination in labor market that generates gender wage gap leads to differential FLFP and hence lower income per capita. Moreover, wage gap results in higher fertility and lower-income per capita.	Earnings gap, and differential productivity of childcare and market work.	"... the output cost of gender discrimination is sizeable."
Lofgren and Cicowiez (2021)	South Korea	How accounting for the unpaid care economy, with services primarily provided by women, changes the assessment of the cost of growth-enhancing policies.	Earnings gap, inter-household transfers of unpaid care labor.	Increase in government spending on childcare per capita has positive impact overall, and especially on women's well-being.
Neyer and Stempel (2021)	OECD	Two kinds of discrimination in labor market (taste and statistical) generate differential hiring by gender.	Relative importance of taste and statistical discrimination in employment.	Monetary policy differentially affects men and women and has aggregate effects depending on level of discrimination.
Agénor and Canuto (2015)	Brazil	Overlapping generations model with intra-household bargaining and endogenous fertility.	Effects of infrastructure on investment in women's education.	Gender equality likely to raise income.

Photo: BMGF/Mansi Midha

5. Gender-responsive analysis of monetary policy and e-money financial innovation

The literature on gender analysis of monetary policy is much more limited than is the case for fiscal policy.[9] Papadavid and Pettinotti (2021), for example, examine gendered monetary policies depending on sectors with women entrepreneurs and workers. Braunstein and Heintz (2008) and Seguino and Heintz (2012) found that the ratio of women's to men's employment tended to decline when central banks pursued aggressive austerity contractionary policies to reduce inflation.

However, one area for sectoral gender-responsive analysis is in understanding the impact of expanding financial access and encouraging financial innovations, which monetary authorities are typically charged with regulating. This has been an expanding area of research and policy innovation, and the results are clear that most countries can benefit from rapid expansion of gender-inclusive access and innovation without risking greater financial instability (Agier and Szafarz 2013; Cabeza-García, Del Brio, and Oscanoa-Victorio 2019; Zins and Weill 2016; Aterido, Beck, and Iacovone 2013; Igwe and Adelusi 2021; Hess, Klapper, and Beegle 2021; Perrin and Hyland 2023; Dupas and Robinson 2013; Islam and Muzi 2022; Demirgüç-Kunt et al. 2020).

A pertinent example of the relevance of gender-responsive financial oversight policy is the rapid spread of e-money delivered through mobile phone applications in countries in Africa and Asia. The Kenyan case of M-Pesa has been the subject of considerable research (Jack, Suri, and Townsend 2010; Mbiti and Weil 2015; Suri and Jack 2016). Because of the significant exclusion of women from the formal financial sector prior to M-Pesa, attributable to a variety of causes, the spread of M-Pesa may have been gender-equalizing (apparently no study carefully estimates this question). That is, there likely has been considerably more of an increase in access (whether absolute or relative is not known) by women to the opportunities for remittances, payments, and savings made available by the financial technology. Had monetary authorities slowed or prevented the expansion, women's access would likely have been reduced relative to men's access. Similar empirical research has been conducted in other countries where e-money has rapidly expanded (Lee et al. 2022; Mader et al. 2022; Antonijević, Ljumović, and Ivanović 2022).

As e-money continues to expand and more transactions are carried out through the platform, and the complexity of intermediary agent networks and hierarchies grows, new gender-intentional policy issues arise. If the behavior of women e-money users is systematically and significantly different from that of men e-money users, then the two classes of users face different systemic risks (and benefits) from their behaviors. As the float in the system grows (the difference between the cash reserves held by all issuers of e-money), the system potentially becomes vulnerable to the equivalent of runs, and the possibility of sectoral financial collapse emerges. Aggressive e-money users benefit from the expansion of the system, while cautious, prudent users suffer when the system collapses.

9 Google Scholar searches for articles with "women" or "gender" and "monetary" in the title of articles in standard macroeconomics journals mostly return no articles.

Photo: BMGF/Ruhani Kaur

6. Inclusion and political economy of policy process

Gender-intentional macroeconomic policy is informed by an understanding that macroeconomic policy emerges from interaction and contestation among three social categories: (1) organized interest groups (both civil society and business) lobbying government officials and influencing discourses; (2) a professional technocratic staff of central bank personnel, Finance Ministry officials, and academics (with due consideration for revolving doors); and (3) political parties and leaders who vary in the relative emphasis they place on (and interpretation of) their fiduciary responsibilities as elected officials and their political calculus about how policies affect future political outcomes. Each of these categories is, typically, fractured in terms of understanding and interests. There are competing political parties, competing career bureaucrats with different scientific understandings, and different interest groups. Policy that favors some social groups over others, even at the cost of aggregate well-being, may easily emerge in such situations.

The question of how to most effectively advocate in this process is raised by the perception that professional staff and leadership who are involved in macroeconomic policymaking often adopt a rhetorical stance that policymaking should be gender neutral. Leaders in the relevant bureaucracies who wish to intentionally move to greater gender-responsive analysis and gender-intentional policy might aim for both enhanced gender representation and enhanced training in gender analysis. There is little research on the relative efficacy of the two complementary approaches.

In terms of training, staff at all levels in relevant ministries might benefit from sharing a common understanding of definitions and purposes relevant to gender budgeting and gender-responsive analysis. Fiscal processes in all countries are heavily routinized through public financial management (PFM) processes, due to their complexity. Often, the government might set, at the ministerial or cabinet level, a broad target for reallocation of spending or revenue collection that promotes gender equity, and then solicit changes and proposals from lower-level entities. Without training and unit-level guidance, the budget process might become a game of free-rider, where each lower-level budget authority waits for others to commit to making changes to promote gender equity.

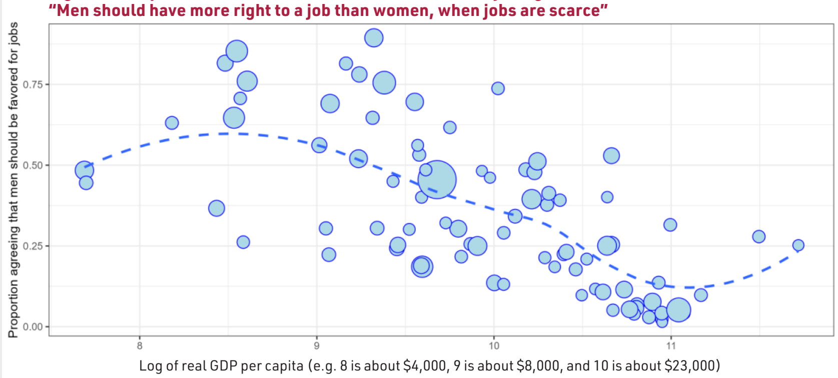
In terms of representation, numerous studies suggest that representation of women in central banking can shift fairly quickly if leadership actively pursues change, and that representation may affect policy and interpretations of policy by financial market participants. Monetary policy committees of central banks around the world have only about 17% women members (Masciandaro, Profeta, and Romelli 2018). Another study found similarly low representation, less than 20% women on bank supervision boards, except for sub-Saharan Africa with about 25% (Sahay et al. 2017). Yet another measure found that women held 11% of central bank board seats over the 2000–15 period (Bodea and Kerner 2022a). The staff of central banks are also disproportionately men. Hospido, Laeven, and Lamo (2022) analyzed personnel data from the European Central Bank (ECB) over the period 2003–2017. At the end of the period, women were about 40% of the expert staff, but only 17% of senior managers; in the main analysis sample of expert economists, women were 30% of staff. The authors found that for the first half of the period, gender differences in pay and promotion were evident. After the ECB adopted more gender-responsive policies, however, equality of opportunity appeared to lead to more promotion and lower pay gaps for women. The authors suggested that meritorious promotion, rather than positive discrimination, accounted for much of the change.

Representation on boards, management, and staff of central banks matters because there may well be differences in policy stances by women on boards (where their individual stances can be measured). Moreover, financial market participants and commentators on financial discourses may respond differently by gender to the same "spoken words." Furthermore, women board members might be endogenously selected for certain policy stances preferred by "selectors" (executive and legislative committees usually select board members). A small literature has begun to address how these various channels through which greater representation of women in central banks affect financial outcomes (Diouf and Pépin 2017; Bisbee, Fraccaroli, and Kern 2022; Blackmon 2021; Ainsley 2019; Bodea and Kerner 2022b).

There appears to be little research on how women's representation in ministries of finance and planning (typically in charge of fiscal policy) may influence policy (Armstrong et al. 2022; Muljono 2013; G. Sen 2000; Barnes and Taylor-Robinson 2018).

BOX 6: Why is accelerating FLFP low priority?

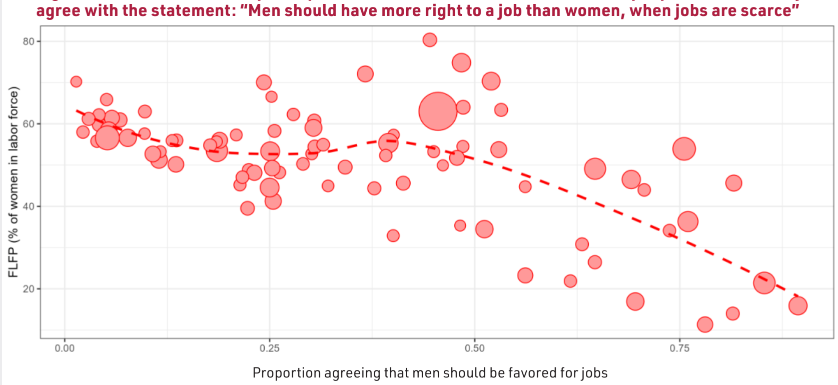
Figure 2: People in lower-income countries are more likely to agree with the statement: "Men should have more right to a job than women, when jobs are scarce"



Note: N=88. Income data from World Development Indicators, 2019, values data from World Values Survey, most recent survey for each country. The WVS sample includes relatively more higher-income countries. Countries are sized according to population. Smoothed loess line summarizes the relationship.

Despite the large benefits from accelerating FLFP, and the evidence that many policies work cost-effectively to accelerate FLFP, there remains reluctance on the part of many governments to prioritize FLFP policies (with the caveat that there currently exists no benchmarking index to indicate how policies to promote FLFP vary across countries and over time). One explanation for the non-prioritization of FLFP may be that government officials view the distributional impacts of policies to increase FLFP as significant, and to fall mainly on men. A static view of the economy, as having a limited number of jobs, sees increasing FLFP as coming at the expense of male jobs. Moreover, this sense of women crowding out men is coupled with a stated value preference for men having jobs, rather than women. As Figure 2 shows, surveys suggest that, in many lower-income countries, agreement with the statement, "Men should have more right to a job than women, when jobs are scarce" is substantial (Cislaghi et al. 2022).

Figure 3: Female labor force participation (FLFP) is lower in countries where people are more likely to agree with the statement: "Men should have more right to a job than women, when jobs are scarce"



Note: N=88. Income data from World Development Indicators, 2019, values data from World Values Survey, most recent survey for each country. The WVS sample includes relatively more higher-income countries. Countries are sized according to population. Smoothed loess line summarizes the relationship.

Although not necessarily causal, the shared sense that men should be given preference for jobs appears also to be correlated with standard measures of female labor force participation (FLFP). Figure 3 shows that for almost all countries where 60% or more of respondents agree that men should be favored for jobs, FLFP is below 50%.

Effective advocacy for policies that have the potential to increase female labor force participation must therefore address this zero-sum thinking, which may influence attitudes toward redistributive and interventionist policies (Chinoy et al. 2022).

Almost 30 years ago, (Taylor 1995) asked the question: "People who practice macroeconomics – heads of state, central bankers, Ministers of Finance, large-scale currency speculators – wield much more power than feminists and environmentalists. Are the latter's concerns substantive (let alone interesting) from the former's points of view?" Since that time, there has been a clear shift by the "people who practice macroeconomics" in considering concerns about gender equity and environmental sustainability. This is evidenced by, for example, the IMF's recent adoption of a formal gender strategy. Such a shift suggests that a combination of "inside out" and "outside in" advocacy strategies, such as those currently being incubated by the Hewlett Foundation as part of their Women's Economic Empowerment strategy, have the potential to influence macroeconomic policymaking in favor of gender equity. It remains to be seen, however, whether even more participatory and inclusive fiscal policymaking processes can be effectively implemented and lead to more gender-intentional macroeconomic policy (Çağatay et al. 2000).

BOX 7: International Monetary Fund 2017 questionnaire used to assess gender-responsiveness of public financial management (PFM) systems in G7 countries

INSTITUTIONAL FRAMEWORK

- Does the legal framework for public finance and budgeting include specific provisions related to gender issues or gender budgeting? Where can these provisions be found in the constitution, an organic law, a Public Finance Law, or other laws and regulations?
- Are there specific arrangements for coordinating discussions within the government on gender-related issues, in particular decisions related to expenditure programs or tax policy?
- Who is responsible for coordinating these decisions (e.g., a Ministry or Agency for Gender, an Inter-Ministerial Committee on Gender, the Prime Minister's Office, and/or the Ministry of Finance)?
- Is there a gender budget statement which has been adopted by the government and made public?

BUDGET PREPARATION

- Does the government occasionally/systematically carry out a gender impact assessment (or a gender incidence analysis) of new government policy initiatives, equivalent to an economic or financial impact assessment, before they are approved by the government? Which government ministries/agencies are responsible for carrying out this work?
- Does the budget circular issued by the Ministry of Finance at the beginning of the budget cycle each year, or other budget guidelines issued by the Ministry, include details or instructions on the application of gender budgeting (e.g., how to calculate the gender impact of new spending proposals or tax policies)?
- Does the government have in place a framework for managing and monitoring the performance of ministries and agencies in delivering public services (i.e., program/performance budgeting)? Does this framework include specific performance targets or indicators relating to gender equality? Are these data published?
- Does the government systematically collect fiscal data that are disaggregated by gender? Are these data published (e.g., in the annual budget documentation)? Please provide examples.
- Does the budget classification or chart of accounts incorporate a gender perspective? Is there a program or sub-program within this classification that specifically relates to gender equality?

BUDGET EXECUTION, MONITORING, AND CONTROL

- Do budget execution reports issued by the government or its annual financial statements include information on gender-related expenditures or tax policies?
- Has the legislature/parliament conducted any hearings, or published any reports in the past three years that discuss the impact of the budget or tax policy decisions on gender equality?
- Has the national audit office published any reports in the past three years that analyze the ex post impact of budget or tax policy decisions on gender equality?

Source: International Monetary Fund (2017, 26–27)

BOX 8: Suggested indicators to assess country implementation of tools to monitor gender-responsive budget action

GENDER BUDGET STATEMENT (GBS)

- Has the government provided (as part of its budget submission) a gender budget statement of the fiscal package? If yes, does the GBS include:
  - » a clear description of gender objectives to be achieved?
  - » a breakdown of resource allocations for the identified gender objectives?
  - » output indicators to measure performance in meeting the stated gender objectives?
  - » a public statement?

PARLIAMENTARY SCRUTINY

- Has Parliament raised questions on gender-responsive budgets in their review/scrutiny of the fiscal package?
- Have parliamentarians asked questions on the gender budget statement, including on adequacy of budget allocations to achieve gender objectives?
- Have parliamentarians asked questions about the gender impacts of proposed budget reallocations and/or cuts?
- Have parliamentarians requested progress reporting on the extent to which gender objectives (in GBS) are being achieved through budget execution?

EXPENDITURE TRACKING

- To what extent has government put in place a real-time tracking system that captures
- gender-responsive expenditures of the package?
- Is sex-disaggregated data on expenditures captured, including information on which individuals within households receive specific benefits (i.e., cash transfers, unemployment benefits, childcare credits)?
- Does the expenditure tracking system include a tagging/classification of gender-responsive spending?
- Is there a public report of expenditures that includes specific information on gender-responsive spending?

GENDER AUDITS

- Has an audit of the package been conducted? [Specify if audit is done by state institution or civil society]. If yes, has the audit included:
  - » an assessment of the extent to which budget expenditures contributed to gender equality objectives?
  - » a review of the services delivered through budget expenditures and who benefitted from these?
  - » an ex-post impact assessment of package budget and corresponding results to determine extent to which these promote gender equality?

Source: Seguino (2021b); slightly adapted to replace COVID-19 budget package with fiscal package

Photo: BMGF/Thomas Omondi

7. Benchmarking tool of best practices in gender and macroeconomic policy and planning processes

At various points in the review, we have alluded to informal measures of the extent to which gender is integrated into the macroeconomic policy and planning processes of countries around the world. We discussed the representation of women in central bank policymaking boards or finance ministries. We reviewed the degree of integration of gendered structural features of economies in the macroeconomic models used in central banks and finance ministries. We have surveyed numerous efforts to conduct gender-responsive analysis (and gender budgeting) on the incidence of fiscal spending and tax policies.

These measures and others might be aggregated into a broader index of best practices in integrating gender into macroeconomic planning processes. Such an index or tool might, for example, additionally include measures such as whether the care economy and FLFP are adequately modeled in government finance ministry and central bank macro models. The tool might measure process-oriented indicators, such as whether advocacy organizations meaningfully contribute to policy discussions before adoption of macroeconomic policy with gender implications. Measurement might be simple, acknowledging the difficulties of aggregating multi-dimensional processes into single numbers. The measure might be viewed as likely to evolve over time, becoming more complex as capacity for measurement and tracking improves.[10]

There are numerous models for gender-related benchmarking tools that might feed into the development of an index of best practices in integrating gender into macroeconomic planning processes. The Agricultural Development Women's Empowerment Team at the Bill & Melinda Gates Foundation is developing a country scorecard to indicate what they call "Progress towards a Gender-Equitable Agricultural Policy Environment." Components include the availability, existence, or extent of the following indicators, over relevant time periods: nationally representative sex-disaggregated agricultural data; national gender in agriculture strategy; significant budgetary resources supporting a gender-in-agriculture policy or strategy; female Minister of Agriculture or Livestock or other top leadership or quotas for women in senior relevant positions; gender equality in property and inheritance law; gender equality in laws related to mobility and entrepreneurship; and systems to track and make public allocations for gender equity and women's empowerment.

The International Livestock Research Institute (ILRI) and the International Food Policy Research Institute (IFPRI) are also planning to construct an indicator of gender integration in agricultural and livestock policy for African countries (Kimani 2022). The United Nations' COVID-19 Global Gender Response Tracker has included more than 5,000 policy measures adopted by 226 countries and territories around the world related to gender (United Nations Development Program 2023; UN Women 2022). These include paid leave for women, job protection measures, flexible work, cash transfers, and in-kind support for vulnerable households. The Gender Budgeting Indicator, based on Stotsky et al. (2006a), is, apparently, a snapshot of "84 national gender-budgeting initiatives around the world, of which 23 national initiatives are investigated in depth in six regional surveys." Another effort to measure and track gender budgeting in G20 countries was conducted by the IMF (Alonso-Albarran et al. 2021).

10 Numerous such efforts, not focusing on gender, are already widely disseminated in macroeconomics and in adjacent disciplines (Schmidt-Hebbel 2019). For example, there have been efforts to measure fiscal centralization for countries (Harguindéguy, Cole, and Pasquier 2021). Other examples in macroeconomics include measures of central bank independence, monetary policy regimes (e.g., inflation targeting, price stability, or money aggregate growth, nominal GDP targeting), capital market openness, and exchange rate regimes.

8. Recommendations for impactful grantmaking

Informed by this analytic review of the evidence, we suggest several promising areas for grantmaking: training of LMIC macroeconomic policymakers; developing benchmarking tools; promoting research across the scholarship pipeline; investing in policy-relevant data generation and modeling; and supporting national and regional advocacy organizations.

Training LMIC macroeconomic policymakers

Macroeconomic policymaking involves professional staff in ministries of finance and central banks, as well as persons with economics backgrounds working with advocacy organizations (including women's rights organizations) and think tanks, and staff of elected government officials. Gender-responsive analysis and gender-intentional policymaking are areas often missing in higher education and graduate programs in macroeconomics. The returns on investments in training, then, would seem to be substantial. Indeed, it is hard to envision effective gender-intentional macroeconomic policymaking without large investments in staff training. One example is the gender-budgeting trainings offered by the Regional Technical Assistance Centers (RTACs) of the International Monetary Fund. Appendix C describes a number of other training courses focused on gender and macroeconomic policy in which the foundation could consider investing.

Benchmarking tools

As noted above, macroeconomic policies are increasingly being scored and indexed across countries and over time. Yet, there are apparently no established indices of the gender-intentionality of macroeconomic policies. Some components of such an index are captured already, although not in a sustained way (such as efforts to carry out gender budgeting, and representativeness of women in central banking). An ambitious benchmarking tool would construct an overall index of best practices in integrating gender into macroeconomic planning processes and outcomes. A collaborative process among leading academics and practitioners might be designed to reach consensus and validate such a tool. The collaborative process leading to the tool might itself be approached as an important first step in fostering a thriving and expanding network of academic, government, and civil society economists sharing ideas and research. A select group of experts might be commissioned to generate proposals and conduct early research.

An overall benchmarking index would likely consist of various sub-indices or markers, some of which are already collected on an annual basis. Such sub-indices that are particularly relevant include: childcare availability, which may be measured both by the country-level overall availability per child, and by regional inequity; legal frameworks for workplace flexibility and protections against irregularity of hours for part-time workers; gender inequities arising from monetary policy, fiscal policy (taxation and spending), and exchange rate policies; and other markers.

Research across the scholarship pipeline

In the broad knowledge area of gender and macroeconomics, there is quite limited research that specifically addresses issues confronting lower-income countries. There are numerous questions that might be productively researched. Here is a sample:

- Gender analysis of taxation and monetary policies in LMICs
- In countries with low private costs, but perhaps high social cost, of untrained childcare (e.g., older siblings and elders), how can institutional childcare (public or private) achieve the scale to become a self-sustaining sector?
- How can tertiary education improve the pipeline of women studying economics, finance, accounting, and other business-related fields who might then pursue graduate degrees in order to work in public policy?
- What are effective strategies to scale programs to revise social norms about appropriate caregiving practices when working women become mothers?
- Support empirical research focused on credibly estimating (through RCT, or identifying natural experiments, or using high-quality observational data) parameters essential for modeling the care economy and FLFP. This empirical research program might also include measurement of the quality of care provision and extent and persistence of child skill development (e.g., cognitive capabilities). Improving the quality of care provision, through training and incentives, might be another area of research.
- At the macro level, how does greater gender equality contribute to innovation and technology adoption, particularly greater gender equality in STEM education outcomes?

One way to expand the knowledge base is to support doctoral and early-career researchers from lower-income countries who are committed to work on gender and macroeconomics with scholarships, data collection funds, dissemination venues, and networking and mentoring opportunities. Such a multifaceted program might further expand the pool of research talent and capabilities in a substantial way. The foundation could consider investing in a multi-tiered program encompassing – for example:

- Scholarships for ABD Ph.D. candidates
- Scholarships for students from LMICs pursuing an MA or Ph.D. to be one-year visiting students in their Ph.D. program of choice
- Grants for gender and macroeconomics for curriculum development in Ph.D.-granting economics programs in both the global North and LMICs
- Annual workshops of scholarship and grant recipients, for networking and knowledge sharing
- Direct support to lower-income Ph.D.-granting or research institutions

There have been several models for building these kinds of ambitious research networks, including the 1995-2005 MacArthur Foundation Research Network on Economic Inequality & Social Interactions, the John M. Olin Foundation support for research in law and economics, and the Russell Sage Foundation programs.

Policy-relevant data generation

Recommending specific data collection initiatives is beyond the scope of this report. It is clear, however, that there is considerable room for improvement in collection, cleaning, and sharing of gender-disaggregated data relevant for macroeconomic policymaking. For example, the analysis required for gender budgeting would be significantly strengthened by using individual-level, as opposed to household-level, indicators. Another important contribution the foundation could make to strengthening the information base for gender-intentional macroeconomic policymaking would be investing in the identification of which variables are the most important to measure, and which ongoing data efforts can most effectively implement their collection and dissemination.

Examples of areas where sex-disaggregated data could be impactful include:

- Labor market outcomes, including participation in formal work, informal work, home production, childcare at home, and other significant forms of work, and unemployment or underemployment
- Assets/wealth – e.g., land, housing, savings, consumer durables
- The distribution of control over household income
- The unpaid care economy, including, for example, high-quality time-use data

Support to national and regional advocacy organizations

In addition to leveraging the foundation's own advocacy position with LMIC governments and regional and international financial institutions, there is promising scope for investing in organizations that advocate for gender-equitable macroeconomic policy. The African Women's Development and Communication Network recently published a mapping of think tanks, mainstream organizations, women's rights and/or feminist groups, networks and initiatives, individuals, and donors working on the intersection of women's rights and macroeconomic policy (www.femnet.org/wp-content/uploads/2022/01/Mapping-Femonomics-Final-pages.pdf).

Appendix D, which provides a preliminary, non-exhaustive listing of current policy initiatives, research, and expertise in gender-equitable macroeconomics, includes a number of advocacy organizations focusing on taxation, budgeting, and IFI accountability. Some of these organizations in East and West Africa are already receiving support from the Hewlett Foundation as part of their women's economic empowerment strategy, and the Bill & Melinda Gates Foundation could complement and expand this funding to think tanks and civil society groups. Specifically, the foundation could support competencies of advocacy organizations in understanding and adapting macroeconomic policy tools (CGE models) that integrate the care economy and contribute to macroeconomic policy discussions.

Appendix A
Methodological details on the literature search process

A review of the economics literature that may be relevant for informing the Body of Work is different from a systematic review or meta-study. In the latter cases, a well-defined narrow empirical question is examined, and experts ascertain key search terms (encompassing the topic and the statistical methods used) and then limit their literature search to established large databases of academic research that return "hits" from the keyword search. In this case, the question is broad (gender and macroeconomics), the field of macroeconomics is vast, and there is no clear demarcation between microeconomics and macroeconomics. For this reason, the review here is more the result of an expert "snowball" search process (references and citations in a key article lead to further references and citations, included or not based on expert perusal of content of article) than a systematic search and selection process. The Google Scholar citation tool was used extensively in the review process, examining papers that cited relevant research.

Here we enumerate some of the more systematic searches.

The search focus generally was for relatively recent material, since 2000, and especially since 2010. We searched and reviewed relevant papers from various working paper archives, including:

- IMF working paper archive for "gender" and "macroeconomics" returned 349 articles. The same search with "women" instead of "gender" returned 467 working papers. Only about 20 were directly relevant. https://www.imf.org/en/Publications/Search#q=gender%20macroeconomics&sort=relevancy&numberOfResults=50&f:series=[WRKNGPPRS]
- The World Bank Policy Research working papers, for "gender" and "macroeconomics," returned 467 working papers, almost all micro oriented. https://documents.worldbank.org/en/publication/documents-reports/documentlist?docty_exact=Policy+Research+Working+Paper&qterm=gender%20macroeconomics
- NBER working paper archive for "gender" and "macroeconomics" returned 242 articles. https://www.nber.org/search?endDate=&facet=groups%3AInnovation%20Policy&page=1&perPage=50&q=gender%20macroeconomics&startDate=2009-12-31
- The Economic Research Forum (ERF) is a regional network of economists with a working paper series on Middle East and North Africa economic issues. We searched by title for every working paper relevant to gender. More than 50 papers, over the period 2017–22, dealt directly with gender issues. Several dozen were on female labor supply. The majority of these papers were observational empirical studies of female labor force participation (FLFP) in MENA countries, carrying out empirical analysis of labor force surveys and household surveys. A few papers used experimental or natural experiment approaches to estimate key parameters. Only a small number of papers were explicitly macro oriented.
- Google Scholar search with keywords ("gender" | "women") and "macroeconomics" in the academic journal title returned 46 articles, only several directly relevant. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=allintitle%3A+gender+OR+women+-source%3Amacroeconomics&btnG=
- Google Scholar search with keywords ("gender" | "women") and "monetary " in the academic journal title, and restricted to after 2010, returned 116 articles, only a handful directly relevant. https://scholar.google.com/scholar?q=allintitle%3A+gender+OR+women+source%3A-monetary&hl=en&as_sdt=0%2C5&as_ylo=2010&as_yhi=

We also searched and reviewed relevant papers from various working paper archives, including:

- Growth and Economic Opportunities for Women (GrOW) program of The International Development Research Centre (IDRC). The GrOW program worked with 14 research teams around the world to generate evidence on women's economic empowerment and to promote the use of research by key decision-makers.
- Care Work and the Economy program, encompassing American University-based 2017–21 Care Work and Economy (CWE–GAM). We reviewed publicly available online course material from 2020, Care Economy Africa Adaptation project, Care Economy Africa Replication Project. The course initially planned for 2020 was aimed at MS/Ph.D. economists from lower-income countries involved in research aimed at influencing policymaking in order to address care needs.
- Training modules on gender and macroeconomics from a variety of institutions (see Appendix C)

Expert interviews conducted

Caren Grown

- Senior Fellow, Global Economy and Development at Center for Sustainable Development – Brookings Institution
- Former The World Bank Group:
  - Global Director for Gender
  - Senior Technical Advisor – Macroeconomics, Trade, and Investment Global Practice

Lisa Kovolich

- Senior Economist, International Monetary Fund

Elissa Braunstein

- Professor and Chair of the Department of Economics, Colorado State University
- Editor, *Journal of Feminist Economics*

Maria S. Floro

- Professor Emeritus of Economics, American University
- Principal Investigator of Care Work and the Economy, a broad network of researchers incorporating issues related to care work and gender into the methods and tools used for formulating, implementing, and analyzing macroeconomic social policies

Sarah Iqbal

- Program Officer, Gender Equity and Governance, Hewlett Foundation

Althea Anderson

- Program Officer, Gender Equity and Governance, Hewlett Foundation

Appendix B
Country exemplars of gender budgeting

Introduction

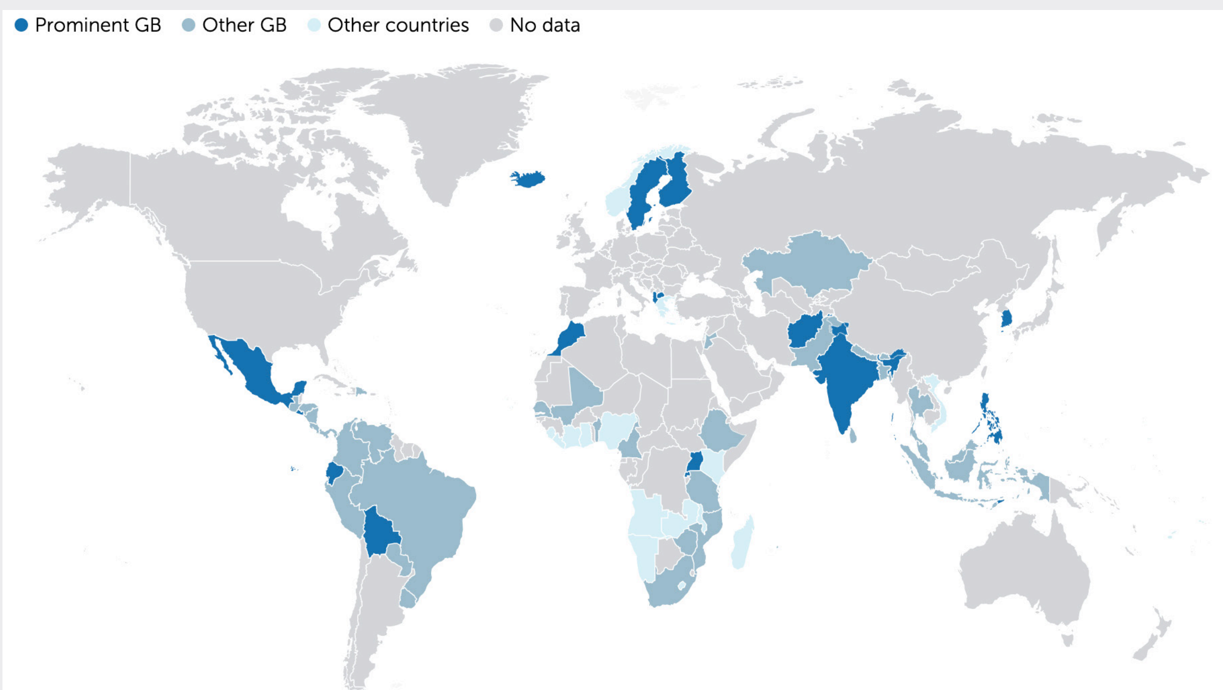
This appendix examines gender-sensitive or gender-responsive fiscal planning adopted by countries in Africa, Latin America, and South Asia. Country profiles were identified through a desk review of peer-reviewed literature, grey literature, and key informant interviews with experts in gender analysis of macroeconomic policy. The country profiles reflect both executed and planned activities involving both gender and budgets. The profiles also note stakeholder challenges and barriers related to implementing planned activities. These country profiles reflect activities as of 2021 and may not capture more recent developments.

More than 110 countries engage in some form of gender budgeting (Sayeh et al. 2021). Overall, we found that countries are more likely to have prominent or substantive gender budgeting efforts when their governments prioritize those efforts through laws and policies, and when international institutions provide technical support.

Gender budgeting efforts are stronger when reinforced by legal mandates and formal fiscal planning procedures, and are also strengthened when supported by international organizations, bilateral aid agencies, or connected with broad development goals.

Figure 1 illustrates the variation in the degree of gender budgeting activities across countries as of 2016 (Stotsky 2016). Countries with prominent or substantive gender budgeting efforts have fiscal policy efforts that consider the differential impact of spending and revenue on women. Spending considerations range from key human development issues (education and health), physical infrastructure (e.g., transport, water, electricity, and energy), justice and security (violence against women, judicial assistance), jobs, entrepreneurship, and wages to structural reforms in spending (e.g., subsidies, transfers, incentive, or distributional objectives). Revenue

Figure 1. Gender budgeting countries identified in the regional surveys



Source: Stotsky (2016)

considerations are concerned with the impact of personal, general, selective, and trade taxes on women.

We found that in countries with prominent or substantive gender budgeting, formal standard operating procedures for fiscal planning reinforced gender-sensitive budget activities. That includes, but is not limited to, a broad statement of gender budgeting as a goal by the Minister of Finance, as well as budget documentation. In addition, ministries governing budget and economic planning also issue a gender budgeting circular with guidelines on the gender budget process to state governments which are integrated into planning as well as programming. Gender budgeting is monitored through outcome reports, audits, or explicit reporting on gender equality spending.

The adoption of gender budgeting and monitoring may, in part, be attributable to legal mandates and engagement of key institutional players. Over 70% of countries with prominent gender-sensitive fiscal activities granted gender budgeting constitutional standing and incorporated it into organic budgets, or other finance laws. Notably, gender budget initiatives were often led by the Ministry of Finance, with other ministries or subnational government entities playing a consequential role. Civil society encouragement and participation have been key in institutionalizing efforts in countries with pronounced gender budgeting activities.

Assessment of gender budgeting efforts

1. Gender budgeting has led to changes in fiscal policies related to education, health, and infrastructure, and contributed to the achievement of gender-oriented goals in some countries (e.g., India and Mexico).
2. Gender budgeting has led to improvements in public spending accountability systems for gender-oriented purposes (e.g., in Ecuador). Incorporation of gender budgeting into program-based budgeting is one of the most promising mechanisms for ensuring that its goals are included in the budget process (e.g., in Rwanda). Other successful approaches have included adoption of government spending classification systems to facilitate more effective tracking of gender-oriented spending.
3. Gender budgeting efforts have led to meaningful fiscal policy changes only with support from the political center of fiscal decision-making (e.g., in Rwanda, Uganda, and the Indian state of Kerala). Other players key to incorporating gender-oriented roles are the Minister of Finance in the executive branch of government, parliamentarians, and parliamentary committees.
4. Gender budgeting statements, budget circulars, and follow-up on the spending (and revenue) by government entities is critical for the institutionalization of gender budgeting. The incorporation of relevant spending ministries into gender budgeting efforts is crucial for institutionalization (e.g., in the Philippines).
5. Gender budgeting efforts that have extended to sub-national entities that play a critical role in the provision of essential public services have been more substantive than those at the national level (e.g., in Bolivia).
6. Gender budgeting efforts receive important technical assistance and financial support from international organizations (e.g., UN Women) and donors.
7. Gender budgeting efforts are undergirded by nongovernmental organizations, academic scholarship, and advocacy groups (e.g., in Kenya). Some initiatives rely on constant support of entities outside government (e.g., in Tanzania) but do not develop without full participation from the government.
8. Gender budgeting is most effective when the government has the capability to improve policies over time and monitor results through government agencies. Only a few countries elevated the monitoring function to the level expected of government oversight or audit offices (e.g., Rwanda).

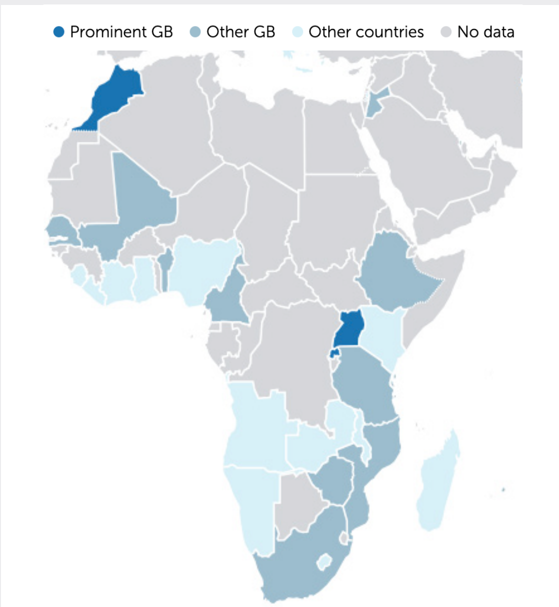
The following section highlights examples of how governments utilize gender budgeting to close gender equity gaps in education, health, and economic opportunities in sub-Saharan Africa, Latin American, and South Asia. It concludes with policy recommendations about how to implement gender-responsive budgeting in low-income countries, and how to prioritize those efforts strategically. Tables A1–A3 provide overviews of budgeting activities in each of the three regions.

Profiles by region

1. AFRICA

Significant advancements in gender-responsive budgeting in sub-Saharan Africa have occurred since its introduction via the 1995 Women's Budget Initiative in South Africa. Today, more than 30 countries in the region have introduced some form of gender budgeting. Figure 2 shows countries adopting gender budgets as of 2015.

Figure 2. Gender budgeting adoption, sub-Saharan Africa (2015)



Source: IMF DataMapper, Gender Budgeting (GD)

Table A1 summarizes gender-responsive budget activities in a small sample of sub-Saharan African countries with gender budget initiatives. The origins of initiatives are described, along with the components of fiscal policy (e.g., spending and revenue) captured by the gender budget initiatives. Reinforcement mechanisms such as monitoring, evaluation, and legal basis for gender budgeting are highlighted, along with the role played by the government and civil society. A detailed overview of several country experiences – Kenya, Namibia, Rwanda, and Uganda – is provided below to elucidate pathways for strengthening the engendering of macroeconomic policy.

1.1 KENYA

Effective in 2010, gender-responsive budgeting was integrated into Kenya's constitution. The road to a legal mandate mainstreaming gender in public investment plans and recurrent expenditures evolved out of efforts by international organizations and civil society. The Collaborative Centre for Gender and Development, International Federation of Women Lawyers (FIDA) NGO, and political buy-in were instrumental during the advocacy phase, and the project was supported by planners, economists, analysts, statisticians, researchers, and professionals in a variety of disciplines. Further, the initiative received strong support from the previous director of planning and current permanent secretary. Since legally mandating gender-responsive budgeting, the nation formally aligned the public finance management system with gender-responsive budgeting techniques under the 2012 Public Financial Management (PFM) Act. Kenya continues to work with government bodies, civil society organizations, UN agencies, and development partners to carry out gender budgetary objectives. Efforts by these key players tend to focus on research, advocacy, and gender-responsive training at the national and local levels. For example, UN Women has provided tailored technical assistance to support integration of gender in the public financial management reform process in Kenya since 2014, including:

- Positioning gendered responsive budget indicators in key policy frameworks such as the Public Financial Management (PFM) strategy 2013–2018;
- Offering key senior leadership, development, and strategic management training through the Kenya School of Government;
- Providing capacity-building of PFM institutions/actors in Kenya through a benchmarking visit of senior government officials to Morocco;
- Delivering gender-responsive budget training for all county officials in charge of planning and budgeting with the aim of slightly influencing the 2017–2018 budget.

While the experience of Kenya highlights the value of the multi-stakeholder engagement to codify gender-responsive budgeting, an implementation gap remains. Only three government ministries, departments, and agencies (MDAs) indicate how their funds support the National Policy on Gender and Development: the State Department for Gender, the National Gender Equality Commission (NGEC), and the Kenya National Commission on Human Rights (KNCHR) (Holton and Lewis 2021). The information gap is further exacerbated by the fact that the open Aid

Information Management System database intended to capture information on internationally funded projects hosted by Kenya's National Treasury, e-ProMIS, does not allow users to filter aid projects by a gender-responsive budget or OECD-DAC gender marker (*ibid.*). Lack of access to quality data outlining where sector funds go make it difficult for stakeholders across all organizations to identify and enact the appropriate programming to close gender equality gaps. A consistent and comprehensive application of gender-responsive budgeting would better position the Kenyan government to directly link allocations to its gender priorities.

1.2 NAMIBIA

Namibia's 1997 National Gender Policy (NGP) and National Plan of Action (NPAC) stated that gender should be integrated into all government policies, processes, and programs to reduce inequalities between men and women, opening the door for gender-sensitive budgets. Early gender budgeting efforts led by the Ministry of Finance, with support from the Swedish International Development Cooperation Agency (SIDA), focused on two ministries: (1) Education and Culture and (2) Agriculture, Water and Rural Development.

Between 2010 and 2020, the Namibian government created a gender unit in every office, ministry, and agency. In 2016, the Ministry of Gender Equality and Child Welfare (MGECW) came out with a set of gender-responsive budgeting guidelines, including the adoption of gender-specific expenditures that promote gender equality in public services, gender budget analysis, and gender-responsive budgeting tracking tools for the parliament.

As of 2022, the Namibian government allocated 9.2% of its annual budget to gender-responsive budgeting activities. Namibia adopted two key approaches for gender-responsive budgeting, as outlined in Table 3.

Ten of Namibia's offices, ministries, and agencies – comprising about 70% of the total budget allocation – analyzed their budgets through a gender lens. Nine out of the 10 offices, ministries, and agencies are implementing gender-responsive budgeting.

Table 3. The Namibian gender-responsive two-fold budget strategy

Three-category expenditure approach	Five-step approach to gender-responsive budgeting
1. **Gender-specific expenditures:** Allocations to programs that specifically target groups of women, men, girls, and boys. These include expenditure on maternal health, girls' education, micro-credit, and income-generation activities for women. 2. **Expenditures that promote gender equity in public service:** This comprises allocations to equal employment opportunities in government departments and authorities. 3. **General or mainstream expenditure:** The focus of this category is on the differential impact on women, men, girls, and boys. It covers all expenditures that the above two categories do not include. It consists of expenditures on education, health, infrastructure, mining, security, and defense.	1. **A situation analysis of women and men, girls, and boys:** Analyses the gender needs and uses them to plan, and design programs. 2. **Gender analyses of policy framework:** This step examines policies, plans, and programs to determine if they address the needs of groups identified in the first step. 3. **Gender analysis of the budget:** Involves the analysis of the required revenue and expenditures, in line with the policy objectives and priority needs of target groups. 4. **Monitoring budget implementation:** Involves taking measures that ensure spending is done as per the planned budget. 5. **Assessing the gender impact of policy and associated budget:** This is the evaluation stage where the impact is examined; it is mandatory to understand if the objectives are meeting the needs of the targeted groups.

1.3 RWANDA

Tackling gender inequality was at the forefront of Rwanda's priorities in the early 2000s. In turn, the Rwandan Ministry of Gender and Family Promotion launched the nation's first gender budgeting initiative in 2002 as a tool to evaluate how fiscal policies differentially affect men and women. The 2002 initiative was supported by external financing and experts but did little to build local capacity, and ultimately failed.

The Ministry of Finance led a second gender budgeting effort with support from the UNIFEM (now UN Women) in 2008. The effort coincided with a broad shift of the public financial management system to program budgeting. The shift to program budgeting elucidated the need to provide adequate resources to support programs and activities related to the National Gender Policy (Kolovich 2018). Four sectors adopted gender-responsive budgeting: agriculture, education, health, and infrastructure. The gender-responsive budget systems integrated (1) a gender budget statement to ensure accountability, (2) analysis of gender-related goals, and (3) reporting of gender-disaggregated employment data for the civil service. The Gender Monitoring Office (GMO), established in 2011, monitored and evaluated challenges with implementing gender budgeting activities.[11] Consequently, gender budgeting exercises required gender budget statements with explicit gender-related goals under the 2013 Organic Budget Law.

In addition to the national-level efforts, Rwanda surveyed local governments to identify government services with gender-related goals. The 2015–2016 Gender Monitoring Office Annual Report analyzed the impact, challenges, and recommendations associated with gender budget statements generated at the local, central, and national levels. Gender-sensitive fiscal policy priorities varied by level. For example, local and central governments focused on human development and physical infrastructure.[12] In contrast, districts focused on social protection and agriculture, whereas national priorities were justice, youth, refugee management, information and communication technology, land management, mining, and water resources.

Resources allocated to the gender budget statement in 2015/2016 increased relative to the previous fiscal year, with tangible benefits. For example, gender budget statements improved access to water, new primary- and secondary-level classrooms, and health services due to the construction of new facilities. Although Rwanda has an effective gender budgeting system, the Gender Monitoring Office highlights the need to improve gender-disaggregated data collection and analysis to enhance the government's ability to plan, budget, and report.

1.4 UGANDA

The Forum for Women in Democracy, an NGO established by female members of Parliament, spearheaded Uganda's initial gender budgeting efforts in 1997.[13] A gender focus was subsequently incorporated into the country's Poverty Eradication Action Plan in the mid-2000s and formally integrated into the budget call circular in the 2004/2005 fiscal year.

The promotion of gender equality in Uganda continued to be a priority at the national and local levels in the 2010s. Notably, the budget circular for the 2014/2015 fiscal year enhanced government accountability on gender equality in several ways. First, it required agencies and ministries to identify actions aimed at improving gender equality. Second, it required the collection of data by sex, age, disability, and location. Third, village clubs offered citizens a forum to express preferences, monitor use of public funds, and hold the government accountable (Dietl et al. 2014).[14][EK2] [SP3]

A key innovation of Uganda's gender budgeting program is its Gender and Equity Compliance Certificate. Under the 2015 Public Finance Management Act, all sectors, MDAs, and local governments are mandated to plan and budget in a gender- and equity-responsive manner to qualify for a certificate of compliance. Failure to receive a Gender and Equity Compliance Certificate means the plans and budgets of a particular government unit will not be approved by the Ministry of Finance. As of fiscal year 2021/2022, 158 MDAs were subject to assessment and received a Gender and Equity Compliance Certificate indicating an assessment score above a minimum threshold of 50% (Equal Opportunities Commission 2022). Despite ministries' commitment to complying with the legal requirements for gender and equity in the budget process, efforts were hindered by lack of capacity, training, and financial support. Further, some ministries identified gender-related outcomes but did not allocate funding to achieve those goals.

11 For example, the Gender Monitoring Office evaluated the 2011–12 Gender Budget Statement and examined progress and challenges associated with implementing the gender budget statement in its 2011 annual report.

12 The human development factors included the education, health, trade, disease control, environment, and housing/urban development sectors.

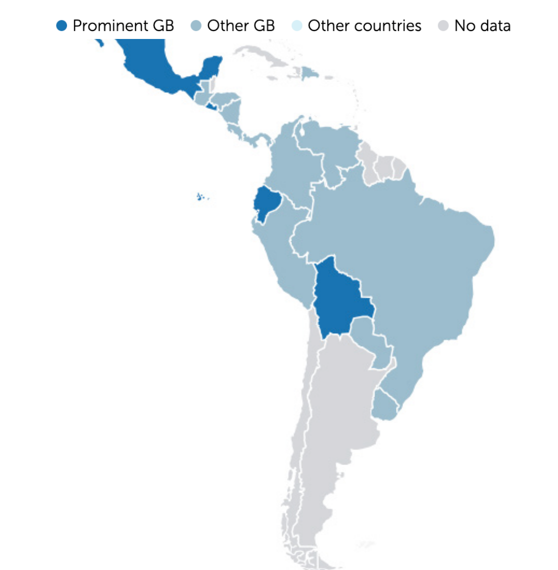
13 FOWODE was established by women MPs and has strong links with the special interest groups caucus in Parliament, which brings together those occupying reserved seats for women, people with disabilities, youth, and workers, as well as women who have won "open" seats.

14 The clubs allow women to advocate for spending on maternal health, infrastructure, and education.

2. LATIN AMERICA

Over a dozen countries in Latin America have adopted gender budgets (see Figure 3).

Figure 3. Gender budgeting adoption, Latin America (2015)



Source: IMF DataMapper, Gender Budgeting (GD)

2.1 MEXICO

National gender-responsive budgeting initiatives

Mexico adopted two national gender budgeting initiatives in the early 2000s. The first initiative, emerging in 2000, involved monitoring the Federation Budget's expenditures for women's and gender equity programs by the national parliament. Female parliamentarians subsequently worked with the Instituto National de las Mujeres (INMUJERES) to ensure that appropriate resources were devoted to policies and programs addressing the needs of women in 2003 (Kolovich et al. 2018; ECLAC 2013). The federal government began earmarking and registering these resources in the Annex of the Budget of the Federation in 2008. The earmarked programs were primarily related to women's health, economic empowerment, and childcare facilities, as well as legal resources. The share of public expenditures earmarked for gender equality increased from 0.13% in 2004 to 0.50% in 2015 (Kolovich 2018).[15]

Concurrently, a second gender budgeting initiative focused on health emerged in 2003. Civil society organizations worked with the Secretariat of Health to integrate gender into health sector budget policies and programs using the government's three-stage budgetary process (Pérez and Rangel 2004). In 2004, a guide to formulate public budgets in the health sector with a gender perspective was developed and applied at the National Center for the Prevention and Control of HIV/AIDS in the Michoacán state (Pérez and Rangel 2004). This approach was later broadly adopted across a wider range of the national government's spending areas and to municipal budgets. For example, INMUJERES promotes and facilitates gender integration into budget policies and programs and then works with the Secretariat of Finance to monitor compliance quarterly.

These gender budgeting initiatives have been reinforced through legislation, including the 2006 Federal Budget and Financial Responsibility Law, the law on General Gender Equality, the Budget Decree on Expenditure of the Federation, and the 2011 Law on Planning.

Sub-national gender-responsive budgeting initiatives

Mexico City launched an ongoing gender budgeting initiative in 2007 with support from: the city's Secretariat of Finance[16]; Mexico City Institute for Women (INMUJERES Ciudad de Mexico); and Gender Equity, Citizenship, Work and Family. Subsequently, the 2008 Decree for the Budget of Expenditure of Mexico City stipulated a gender perspective in executing programs in all decentralized government departments, delegations, and agencies for the first time ("Presupuestos Con Perspectiva de Género [Budgets with Gender Perspective]" 2014). Since 2008, most government departments in Mexico City have at least one program directed at addressing gender inequality. Notable results emerging from Mexico City's gender budget initiative include women-only public transport buses, which were set up in conjunction with the Viajemos Seguras (Let's Travel Safely) Program to ensure that women could travel safely around the city to carry out essential tasks, and programs to support victims of violence (e.g., legal advice, shelters, and psychological programs).

15 Note that the 2021 budget bill cut spending on programs supporting women by 10% to 20%.
16 The Secretariat of Finance is responsible for budget preparation.

2.2 ECUADOR

National gender-responsive budgeting initiatives

Ecuador adopted national gender budgeting in 2005, precipitated by advocacy from the Women's Machinery (then Comisión Nacional de las Mujeres) and the United Nations Organization for Women UNIFEM (now UN Women).[17] The National Directorate of Fiscal Equity Finance within the Finance Ministry's Undersecretariat of Fiscal Policy was established to ensure the institutionalization of the gender budgeting initiative (Coello Cremades 2015).

A requirement to report gaps in gender equality was incorporated into the Organic Code on Planning and Public Finance in 2010. In 2012, the gender equality budget classification system was transformed into a Catalog for Orientation of Expenditure on Gender Equality Policies (COGPIG), which enables the linking of activities of institutional program with strategic goals, recognition of cross-cutting application of expenditure on equality to other population groups, and facilitation of monitoring budget execution (Almeida 2012). Budget guidelines requiring institutions to define and register at least one activity related to gender equality policy in COGPIG encouraged use of the classification system.

Barba's (2013) evaluation of COGPIG found that a gender perspective was primarily incorporated into public sector management, education, and to a lesser extent the promotion of access to resources to facilitate sustainable development. Even though COGPIG supports monitoring, many of the resources earmarked for gender equality are not used for that purpose.

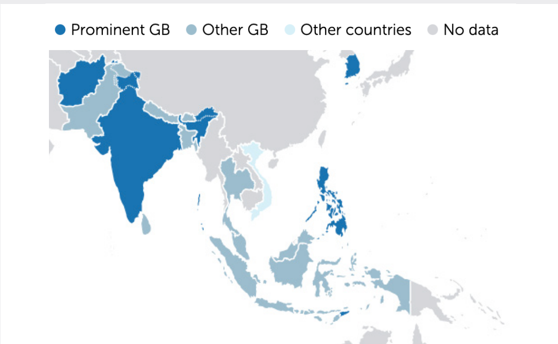
The Ecuadoran experience demonstrates the dual importance of government prioritization of gender-responsive budgeting and technical support from international institutions (e.g., UN Women). While Ecuador has made strides with institutionalizing gender budgeting, their experience suggests (1) the need for training/education of public officials to make use of the tools and (2) the need for government collection of sex-disaggregated information to enable improved assessments of the impact of public policies on the lives of women.

17 Local level gender budgeting in two municipalities, Cuenca and Esmeraldas, much like at the national level, emerged out of collaboration with the Andean Region UNIFEM.

3 SOUTH ASIA

Several Asian countries, including India and the Philippines, have adopted gender budgeting (see Figure 5).

Figure 5. Gender budgeting adoption, South Asia



Source: IMF DataMapper, Gender Budgeting (GD)

3.1 INDIA

India's Tenth Five-Year Plan, spanning 2002–2007, included the country's first mention of gender budgeting (Kanwar 2016). India subsequently incorporated gender budgeting into expenditure and revenue policies to reduce gender inequality. The consideration of revenue policies, even though it is limited, distinguishes India's gender budgeting efforts from most countries, which focus on expenditures to promote gender equality. As of 2016, India maintained national- and state-level gender budgeting with 18 of the 29 states and union territories implementing some form of gender budgeting (Kanwar 2016). The Centre for Budget and Governance Accountability, a civil society organization, analyzes national government budgets and processes.

A publicly available, two-part budget circular, used to identify gender equality goals and budget allocations, was introduced in the 2005/2006 fiscal year. Part A of the circular focuses on 100% women-specific programs, while Part B focuses on programs with at least 30% allocation for women. The budget statement has been criticized for its weak link to the budget-planning process and inaccurate reporting (Kolovich 2018). Nonetheless, its introduction corresponded with an increase in funds earmarked for gender equality. The percentage of budget dedicated to gender equality programs and issues increased from 2.8% in 2005/2006 to 5.2% of the total budget in the 2016/2017 fiscal year. Gender equality goals focused on improving girls' access to, and enrollment rates in, education, health, and investing in infrastructure.

In contrast to previous exemplars, the Ministry of Finance played an essential role in introducing gender budgeting, but current efforts are led by the Ministry of Women and Child Development. The Ministry of Women and Child Development published a handbook on gender budgeting. It provides sectoral ministries with (1) a description of gender budget statement; (2) how to incorporate gender into the budget process at the national and state levels; (3) guidance on monitoring and evaluation; (4) data collection; and (4) international examples of gender budgeting.

State-level gender budgeting efforts in India represent a diverse set of approaches in concert with civil society organizations. Some states mimic the national model of gender budget statements (e.g., Madhya Pradesh) or introduce a gender audit process (e.g., Karnataka). Other states, such as Kerala, set their own targets.

3.2 PHILIPPINES

The Philippine Commission on Women led the Philippines' first initiative on gender budgeting, precipitated by the 1995 Gender and Development Budget Policy. The national-level policy established the legal requirement for all departments, ministries, and agencies to earmark at least 5% of their budget for expenditures on women. Subsequently, in 1998, the requirement expanded to include local governments, colleges, and universities. Two unintended consequences emerged out of the initiative: (1) unspent funds at the end of the fiscal year because government agencies were not penalized for missing the 5% target and (2) inefficient spending because government staff had a limited understanding about gender needs (Chakraborty 2016). A joint budget circular was issued to agencies in 2012 to prevent inefficiencies and ensure the Gender and Development Budget Policy met its intended goals. It provided guidelines for preparing, implementing, and monitoring annual gender and development plans. In addition, agencies were expected to conduct gender audits and institutionalize the use of sex-disaggregated data (Kanwar 2016). Local-level gender budgeting has not been widespread or systematic.

CONCLUSION

These diverse examples of gender budgeting efforts provide noteworthy lessons and potential areas for improvement. They demonstrate that gender budgeting can be implemented successfully at the national, state, and/or local levels. One tool to reinforce gender budgets as a priority is through legal mandates. Legal requirements enforce gender budgeting and ensure continuity when political actors change. Leaders and supporting actions are also important for sustaining gender budgetary mandates. In fact, gender budgeting efforts are more likely to be sustained when led by the Ministry of Finance; key players (e.g., civil society, academia, other ministries) are also valuable advocates and fill gaps in local capacity.

While a considerable number of countries have introduced gender budgeting, reporting of budget exercise outcomes is limited, with few countries monitoring, collecting gender-disaggregated data related to, or evaluating gender-responsive budget activities. Policy recommendations for the implementation and strategic priorities of gender-responsive budgeting in low-income countries are described below:

Policy recommendations for low- and middle-income countries

IMPLEMENTATION

- Provide gender-focal persons at relevant government ministries, departments, and agencies (MDAs) with practical tools or methodologies to tag or classify their budget allocations. Consistent and comprehensive application ensures the government can directly link allocations with gender priorities.
- Improve MDAs' timeliness and collection of gender-disaggregated data through collaborative training with statistics departments, gender offices, data transparency consultations, and/or stakeholder funding for data host platforms.
- Introduce a budget allocation and public expenditures committee in the Ministry of Finance that monitors and evaluates gender budgeting activities.

STRATEGIC PRIORITIES

- Align gender budgeting efforts to goals in national development plans, including those related to the Sustainable Development Goals. Countries should ensure that their gender-oriented objectives are clear, ambitious, and fit into the budget process.
- Improve access of girls to secondary and tertiary education, and their participation in science, technology, and math education. Equal access of girls and boys to primary education across the world is within reach.
- Keep gender-oriented health goals as priorities. These goals include bringing down high rates of maternal mortality and sexually transmitted diseases, including HIV/AIDS, and providing contraception services.
- Remove obstacles that prevent girls and women from participating in educational and economic activities, such as inappropriate hygienic conditions and unsafe transportation.
- Improve the supply of electricity and water to households, as well as cooking technologies, to reduce girls' and women's time demands for domestic work.
- Assess key sectors of the economy in which women could participate more productively, identify the constraints to their participation, and develop fiscal policies to help address these constraints. Governments can extend fiscal incentives to individuals and employers, and to financial institutions to encourage greater women's participation in economic activities.
- Ensure that subsistence agriculture remains a focus of fiscal policies and programs, including through enhanced training of farmers, in sub-Saharan Africa and other regions where women continue to play a predominant role.
- Eliminate gender-based inequalities in tax, financial, civil, and other laws, and ensure that women's rights to ownership and control of property are equal to men's rights.
- Improve the administration of justice, law, and order, to reduce violence against girls and women.

Source: Stosky (2016) and authors' desk review

Table A1. Overview of gender budgeting activities in sub-Saharan Africa

	Kenya	Mauritius	Namibia	Nigeria	Rwanda	Uganda
ORIGINS						
Does the government have a gender budgeting initiative?	Yes	Yes	Yes	Yes	Yes	Yes
If yes, start year	2010	2000	1997	2012	2002	2004/2005
If any, end year				2014		
Supported by international organizations or bilateral aid agencies	Yes	Yes	Yes	Yes	Yes	Yes
Tied to MDGs or national development plan or gender equality strategy	Yes	Yes	Yes	Yes	Yes	Yes
SELECTED COMPONENTS OF FISCAL POLICY						
Focus on spending	Yes	Yes	Yes	Yes	Yes	Yes
Spending focus on key human development (education and health)	Yes	Yes	Yes	Yes	Yes	Yes
Spending focus on physical infrastructure (transport, water, electricity, and energy)	No	No	Yes	Yes	Yes	Yes
Spending focus on justice and security (violence against women, judicial assistance)	No	No	Yes	No	Yes	Yes
Spending focus on jobs, entrepreneurship, wages, etc.	No	No	Yes	Yes	Yes	Yes
Structural reforms in spending (subsidies, transfers, incentive, or distributional objectives)	No	No	No	Yes	Yes	Yes
Focus on revenue	No	No	Yes	No	No	Yes
Personal income tax focus	No	No	No	No	No	No
Other tax focus, including general or selective sales and trade	No	No	No	No	No	Yes
INDICATORS TO PLACE GENDER BUDGETING IN THE FISCAL PROCESS						
Broad statement of goals of Minister of Finance	No	No	Yes	Yes	No	No
Gender budgeting statement in budget documentation	Yes	No	No	No	Yes	Yes
Gender budgeting circular or related to instruct the bureaucracy	No	No	No	No	Yes	Yes
Gender budgeting in planning and programming	Yes	No	No	No	Yes	Yes
Gender budgeting outcome report or audit	No	Yes	Yes	No	Yes	Yes
Explicit reporting on gender equality spending	No	No	Yes	Yes	Yes	Yes
LEGAL BASIS						
Gender budgeting has constitutional standing	Yes	No	No	No	Yes	No
Gender budgeting is incorporated in organic budget or other finance laws	Yes	No	No	No	Yes	Yes
ROLE OF GOVERNMENT						
Ministry of Finance lead entity	Yes	No	Yes	Yes	Yes	Yes
Other ministries play consequential role	Yes	Yes	Yes	Yes	Yes	Yes
Subnational government	Yes	No	No	No	Yes	Yes
ROLE OF CIVIL SOCIETY						
Significant encouragement or participation of civil society	Yes	No	Yes	No	Yes	Yes

Source: Kolovich (2018) and authors' review

Table A2. Overview of gender budgeting activities in Latin America

	Bolivia	Ecuador	El Salvador	Mexico
ORIGINS				
Does the government have a gender budgeting initiative?	Yes	Yes	Yes	Yes
If yes, start year	2001	2005	2002	2000
If any, end year				
Supported by international organizations or bilateral aid agencies	Yes	Yes	Yes	No
Tied to MDGs or national development plan or gender equality strategy	Yes	Yes	Yes	Yes
SELECTED COMPONENTS OF FISCAL POLICY				
Focus on spending	Yes	Yes	Yes	Yes
Spending focus on key human development (education and health)	Yes	Yes	Yes	Yes
Spending focus on physical infrastructure (transport, water, electricity, and energy)	Yes	Yes	Yes	Not known
Spending focus on justice and security (violence against women, judicial assistance)	Yes	Yes	Yes	Yes
Spending focus on jobs, entrepreneurship, wages, etc.	Yes	Not known	Yes	Yes
Structural reforms in spending (subsidies, transfers, incentive, or distributional objectives)	Not known	Yes	Not known	Yes
Focus on revenue	No	No	No	No
Personal income tax focus	No	No	No	No
Other tax focus, including general or selective sales and trade	No	No	No	No
INDICATORS TO PLACE GENDER BUDGETING IN THE FISCAL PROCESS				
Broad statement of goals of Minister of Finance	Not known	Not known	Not known	Not known
Gender budgeting statement in budget documentation	Not known	Yes	Not known	Yes
Gender budgeting circular or related to instruct the bureaucracy	Not known	Yes	Yes	Yes
Gender budgeting in planning and programming	Yes	Yes	Yes	Yes
Gender budgeting outcome report or audit	Not known	Not known	Not known	Not known
Explicit reporting on gender equality spending	Yes	Yes	Yes	Yes
LEGAL BASIS				
Gender budgeting has constitutional standing	Yes	Not known	No	No
Gender budgeting is incorporated in organic budget or other finance laws	Yes	Yes	Yes	Yes
ROLE OF GOVERNMENT				
Ministry of Finance lead entity	No	Yes	Yes	No
Other ministries play consequential role	Yes	Yes	Yes	Yes; Women's machinery
Subnational government	Yes	Yes	Yes	Yes
ROLE OF CIVIL SOCIETY				
Significant encouragement or participation of civil society	Yes	Yes	Yes	Yes

Source: Kolovich (2018)

Table A3. Overview of gender budgeting activities in South Asia

	India	Philippines	Korea
ORIGINS			
Does the government have a gender budgeting initiative?	Yes	Yes	Yes
If yes, start year	2002	2009	1995
If any, end year	2014		
Supported by international organizations or bilateral aid agencies	No	Yes	Yes
Tied to MDGs or national development plan or gender equality strategy	Yes	Yes	Yes
SELECTED COMPONENTS OF FISCAL POLICY			
Focus on spending	Yes	Yes	Yes
Spending focus on key human development (education and health)	Yes	Yes	Yes
Spending focus on physical infrastructure (transport, water, electricity, and energy)	Yes	No	Yes
Spending focus on justice and security (violence against women, judicial assistance)	Yes	Yes	Yes
Spending focus on jobs, entrepreneurship, wages, etc.	Yes	Yes	Yes
Structural reforms in spending (subsidies, transfers, incentive, or distributional objectives)	Yes	No	No
Focus on revenue	Yes	No	No
Personal income tax focus	Yes	No	No
Other tax focus, including general or selective sales and trade	No	No	No
INDICATORS TO PLACE GENDER BUDGETING IN THE FISCAL PROCESS			
Broad statement of goals of Minister of Finance	Yes	Yes	No
Gender budgeting statement in budget documentation	Yes	Yes	Yes
Gender budgeting circular or related to instruct the bureaucracy	Yes	No	Yes
Gender budgeting in planning and programming	Yes	Yes	Yes
Gender budgeting outcome report or audit	Yes	Yes	Yes
Explicit reporting on gender equality spending	Yes	Yes	Yes
LEGAL BASIS			
Gender budgeting has constitutional standing	No	No	No
Gender budgeting is incorporated in organic budget or other finance laws	Yes	Yes	Yes
ROLE OF GOVERNMENT			
Ministry of Finance lead entity	Yes	Yes	No
Other ministries play consequential role	Yes; Ministry of Women and Child Development	Yes; The Philippine Commission on Women	Yes; The Korean Women Development Institute; Gender Budgeting Task Force
Subnational government	Yes	Yes	Yes
ROLE OF CIVIL SOCIETY			
Significant encouragement or participation of civil society	Yes	Yes	No

Source: Kolovich (2018)

Appendix B References

"Annual Report on the State of Equal Opportunities in Uganda FY 2021/2022." Kampala, Uganda: Equal Opportunities Commission, October 2022. https://eoc.go.ug/eoc/wp-content/uploads/2022/10/Final-Annual-report-Report-2022.pdf

García, M. 2014. "La Evolución Federal del Presupuesto Sensible al Género (The Federal Development of Gender-responsive Budgets)." En Presupuestos Públicos con Perspectiva de Género. In Public Budgets with Gender Perspective.

Instituto Nacional de las Mujeres (INMUJERES DF). 2010. "Guía básica para la elaboración de políticas, programas y presupuestos desde la perspectiva de género (Basic Guide for the preparation of policies, programs, and budgets from the gender perspective)." Mexico.

---------------. 2016. "Análisis de Presupuesto 2008–2015. Documento Interno. (Budget Analysis 2008–2015). Internal Document." INMUJERES DF, Mexico City.

International Monetary Fund (IMF). 2018. Country Report No. 18/64: Nigeria. Washington, DC, March.

Malhotra, Shreya. "Lessons from Namibia: Does India's Gender Budget Need an Overhaul?" ORF. Observer Research Foundation, June 14, 2022. https://www.orfonline.org/expert-speak/lessons-from-namibia/

"Mexico." UN Women – Americas and the Caribbean, n.d. https://lac.unwomen.org/en/donde-estamos/mexico.

"Mexico: UN Experts Say Proposed Budget Cuts Could Hurt Vital Services for Women." OHCHR. United Nations Human Rights, Office of the High Commissioner, October 16, 2020. https://www.ohchr.org/en/press-releases/2020/10/mexico-un-experts-say-proposed-budget-cuts-could-hurt-vital-services-women

Micher, M. L. 2014. "Presupuestos con Perspectiva de Género (Budgets with Gender Perspective)." In Presupuestos Públicos con Perspectiva de Género (Public Budgets with Gender Perspective). Cuaderno de Trabajo 2. Commission for Gender Equality. Chamber of Deputies. Sixty-Second Legislature. Mexico. 18.

Stotsky, Janet G., Sakina Shibuya, Lisa Kolovich, and Suhaib Kebhaj. "Gender Budgeting Indicator Index." Map. Trends in Gender Equality and Women's Advancement 16. IMF Working paper. Washington, DC: International Monetary Fund, 2016. https://www.imf.org/external/datamapper/GRB_dummy@GD/gbtier_2/gb_othersource/gbtier_1/SPR_GD_AFR

United Nations Economic Commission for Latin America and the Caribbean (ECLAC). 2013. "El Gasto Etiquetado para las Mujeres y la Igualdad de Género en México. Un Avance para Garantizar la Autonomía de las Mujeres (Earmarked Expenditure for Women and Gender Equality in Mexico). Progress to Guarantee the Autonomy of Women)." Santiago.

UN Women Kenya. 2017. "Gender Budgeting: Closing The Gender Gap in Kenya" https://www.genderinkenya.org/publication/gender-budgeting-closing-the-gender-gap-in-kenya/

Appendix C
Select existing training courses on gender and macroeconomics

The following annotated list is based on desk research to identify resources available online. Information about program quality and impact could not be gleaned from these resources. Notes below suggest further exploration for potential support, expansion of depth and reach, or replication with similar partners.

1. IMF/UNWomen

The IMF has developed a course in *Gender Inequality and Macroeconomics* targeted at senior government officials involved in making gender-responsive policy focused on inclusive recovery from COVID-19, including measures related to taxes, government expenditures, public financial management, and structural issues such as financial access: https://www.imf.org/en/Capacity-Development/Training/ICDTC/Courses/GM A virtual version of this course in collaboration with UNWomen has been offered in Africa, with a focus on gender budgeting and modules on gender unemployment and social protection, gender equality practices, income inequality and poverty, gender, trade and value chains: https://www.imf.org/en/Capacity-Development/Training/ICDTC/Schedule/AT/2022/GMAT22-20V#course-description

UNWomen developed a *Training Manual on Gender and Economics*: https://www.shareweb.ch/site/Gender/Documents/Gendernet%20Toolbox/Toolbox/Thematic/The%20UN%20WOMEN%20Gender%20and%20Economics%20Training%20Manual-6%20November%202017-Final.pdf

UNWomen also sponsors a staff training on *Engendering Economics*: https://portal.trainingcentre.unwomen.org/product/gender-responsive-macroeconomics-and-public-policy/

2. American University/Levy Institute

The *Care Work and the Economy Project* at American University and the Levy Institute at Bard College developed a 15-day *Intensive Virtual Course in Gender-Sensitive Macroeconomic Modelling*: https://research.american.edu/careworkeconomy/community/intensive-course-on-gender-sensitive-macroeconomic-modeling/

Held in July 2021, the course was targeted at economists in academia, research institutions, government, and civil society organizations with advanced degrees in economics; it took on 71 fellows, predominantly women, from 32 countries (priority LMICs). The goal was to guide participants toward the formulation of viable research projects focused on addressing care needs in their countries by better understanding the care economy and the formulation of gender-sensitive macroeconomic policies.

3. UNECA

The UN African Institute for Economic Development and Planning in collaboration with UNDP offers regular versions of the online course, *Gender Responsive Economic Policy Management*, most recently focused on within the context of pandemic recovery: https://knowledge.uneca.org/idep/event/gender-responsive-economic-policy-management-within-context-post-covid-19-recovery#:~:text=The%20course%20on%20Gender%2DResponsive,budgets%20from%20a%20gender%20perspective%20

The six-week course is hybrid virtual/in-person and targets policymakers; development planners; researchers, in particular middle -and high-level public and private sectors officials from national governments; Regional Economic Communities (RECs); and management-level staff members of national, regional, and international civil society organizations. Modules cover policy analysis, unpaid care work, gender and macroeconomics, trade, access to finance, and public finance and gender budgeting.

4. The Partnership for Economic Policy (PEP)

In collaboration with the University of Florence (UNIFI), PEP offers an annual graduate microprogram in development economics that includes a course on *Gender Analysis in Economic Policy Research*. Supported by funding from MasterCard, Hewlett, Co-Impact, and the Government of Canada, the courses are targeted to policymakers, academics, and young professionals; the cost is $650 for developing country residents. Topics are broadly gender-related but include measuring and valuing unpaid domestic and care work, trade, and gender budgeting: https://www.pep-net.org/research-resources/online-courses-microprogram

5. International Centre for Parliamentary Studies (ICPS)

ICPS is a UK-based center that offers training to parliamentarians. *Professional Certificate in Strategic Gender and Development Planning* is a three-day virtual course that focuses on gender in economic planning, legislative and advocacy approaches, gender budgeting: https://parlicentre.org/courses/strategic-gender-equity-planning

6. Women's Budget Group (WBG)

WBG is developing courses on *Gender-Responsive Budgeting* for civil society organizations to help them engage in effective dialogue with their governments to influence policies and allocation of resources in ways that improve the lives of women. A recent three-day training was held In September 2022 in Nairobi: https://wbg.org.uk/gpl/partnerships/; https://wbg.org.uk/gpl/resources-on-gender-responsive-budgeting/

7. **Trade:** Training on gender analysis in the context of trade policy and the value chain, including treaty negotiations, and distributional impacts of trade promotion, trade liberalization, and customs implementation, is the subject of a number of recent multilateral trainings.

UNCTAD offers regular one-month virtual training courses on *Trade and Gender*: https://unctad.org/meetings-search?f[0]=sitemap%3A823; Prospectus for Spring 2023 course: https://unctad.org/system/files/information-document/ditc-gender-2023-02-03_prospectus_en.pdf

UNECA – *A Guide To Gender Mainstreaming in African Continental Free Trade Area* (AfCFTA) National AfCFTA Strategies (May 2022): https://knowledge.uneca.org/idep/node/114

WTO Training Course on *Trade and Gender* (Spring 2022): https://www.wto.org/english/news_e/news22_e/women_13may22_e.htm

Appendix D

Gender Equitable Macroeconomic Policy

Organizations and Experts: Preliminary Listing

Global Center *for* Gender Equality

BILL & MELINDA GATES *foundation*

The technical service provided by the Global Center for *Gender Equality is funded by the Bill & Melinda Gates Foundation Gender Integration Team*

Overview

- **Active Players in the Gender Macroeconomics Space**

Scope

- Preliminary, non-exhaustive listing of current policy initiatives, research and expertise in gender equitable macroeconomics
- Included resources are representative of work in the field – not intended as recommendations or statement of best work
- Generally, there is a limited universe of actors in the field – often disparate and not always well-connected

Resources

- Academic Research Programs
- Multilateral Initiatives
- Data Resources
- Think Tanks and Associations
- CSO/Advocacy Groups
- Individual Experts

Global Center *for* Gender Equality

Academic Research Programs

American University	***Program on Gender Analysis in Economics*** Graduate degrees and Graduate Certificate on Gender Analysis in Economics Research and convening https://www.american.edu/cas/economics/gender/	Care Work and the Economy project (Hewlett) https://research.american.edu/careworkeconomy/ https://research.american.edu/careworkeconomy/rethinking-macroeconomics/
Bard College	***Levy Economics Institute*** Gender Equality and the Economy https://www.levyinstitute.org/research/gender-equality-and-the-economy https://www.levyinstitute.org/gem-iwg/	Intensive Course in Gender-Sensitive Macroeconomic Modeling for Policy Analysis: https://www.levyinstitute.org/news/intensive-course-in-gender-sensitive-macroeconomic-modeling-for-policy-analysis-2021
Tulane University	***Commitment to Equity (CEQ) Institute*** https://commitmentoequity.org/	
University of Utah	https://econ.utah.edu/research/gender.php	

Global Center *for* Gender Equality

Multilateral Initiatives: IMF, World Bank

IMF	World Bank
https://www.imf.org/en/Topics/Gender IMF Strategy Toward Mainstreaming Gender (July 2022): https://www.imf.org/en/Publications/Policy-Papers/Issues/2022/07/28/IMF-Strategy-Toward-Mainstreaming-Gender-521344 Tackling Legal Impediments to Women's Economic Power (2022): https://www.imf.org/en/Publications/WP/Issues/2022/02/18/Tackling-Legal-Impediments-to-Womens-Economic-Empowerment-513392 Gendered Taxes: The Interaction of Tax Policy with Gender Equality (2022): https://www.imf.org/en/Publications/WP/Issues/2022/02/04/Gendered-Taxes-The-Interaction-of-Tax-Policy-with-Gender-Equality-512231	https://www.worldbank.org/en/topic/gender/overview Gender Equality and Tax Reform https://www.worldbank.org/en/programs/the-global-tax-program/gender Women, Business and the Law 2022: https://openknowledge.worldbank.org/handle/10986/36945 Women, Business and the Law: Saving for Old Age (2017): https://thedocs.worldbank.org/en/doc/121231541445506749-0050022018/original/WBLSavingForOldAgeFINALWEB.pdf

Global Center *for* Gender Equality

Multilateral Initiatives: UNWomen + ILO

ILO/UNWomen Joint Programme	UNWomen Research and Policy
Promoting decent employment for women through inclusive growth policies and investments in care: https://www.ilo.org/emppolicy/projects/inclusive-growth-and-gender/lang--en/index.htm Policy Tool: How to Assess Fiscal Stimulus Packages from a Gender Equality Perspective (2021): https://www.ilo.org/employment/Whatwedo/Publications/WCMS_766991/lang--en/index.htm	Gender equality and inclusive growth: Economic policies to achieve sustainable development (2019): https://www.unwomen.org/en/digital-library/publications/2019/01/gender-equality-and-inclusive-growth Gender Taxation and Equality in Developing Countries (2018): https://genderandsecurity.org/sites/default/files/Lahey_-_G_Taxatn_Equality_IN_Developng_Countries.pdf
Policy Tool: A Guide to Public Investments in the Care Economy (2021): https://www.unwomen.org/en/digital-library/publications/2021/04/policy-tool-care-economy Fiscal Space for Social Protection: A Handbook for Assessing Financing Options (2019): https://www.unwomen.org/en/digital-library/publications/2019/10/fiscal-space-for-social-protection	Macroeconomic Policy and Women's Economic Empowerment (2017): https://www.unwomen.org/en/digital-library/publications/2017/9/macroeconomic-policy-and-women-s-economic-empowerment Why Macroeconomic Policy Matters for Gender Equality (2015): https://www.unwomen.org/en/digital-library/publications/2015/12/macroeconomic-policy-matters-for-gender-equality

Global Center *for* Gender Equality

Other Multilateral Initiatives: PEFA, UNECA, WTO

Public Expenditure and Financial Accountability Program (PEFA)	UN Economic Commission for Africa (UNECA)
Gender Responsive Financial Management: https://www.pefa.org/gender Related, from UNWomen: How to make public finance reforms gender responsive (2016): https://gender-financing.unwomen.org/en/resources/h/o/w/how-can-pfm-reforms-contribute-to-gender-equality-outcomes	African Institute for Economic Development & Planning (IDEP) Short course: Gender Responsive Economic Policy Management Within the Context of Post-COVID Recovery https://knowledge.uneca.org/idep/event/gender-responsive-economic-policy-management-within-context-post-covid-19-recovery Gender-responsive implementation of the Agreement Establishing the African Continental Free Trade Area (2021): https://repository.uneca.org/bitstream/handle/10855/44278/b11993856.pdf?sequence=1&isAllowed=y

World Trade Organization (WTO)	Research data base on trade and gender: https://www.wto.org/english/tratop_e/womenandtrade_e/research_database_women_trade_e.htm

Global Center *for* Gender Equality

Data Resources

Gender Data Network (founded 2019)	https://paris21.org/gender-data-network Collaboration between PARIS21, Data2X, the United Nations Economic Commission for Africa (ECA), and Open Data Watch: Capacity building for national statistics in Africa
Data 2X	Women's Financial Inclusion Data (WFID) Partnership: https://data2x.org/financial-inclusion/
World Bank	https://genderdata.worldbank.org/
OECD	https://www.oecd.org/gender/data/
UN	https://unstats.un.org/Unsd/gender/about.html
ILO	https://ilostat.ilo.org/topics/women/
CEQ Data Center on Fiscal Redistribution	https://commitmentoequity.org/datacenter Monitors impact of fiscal policy on inequality and poverty
Gender Asset Gap Project (Oxford University)	https://www.qeh.ox.ac.uk/content/gender-asset-gap-project Collection methods for gender disaggregated data to inform policy
SheTrades Outlook International Trade Centre (UK)	https://www.shetrades.com/outlook/home Data on how countries are addressing gender in trade policies and practices

Global Center *for* Gender Equality

Think Tanks and Associations

International Association for Feminist Economists (IAFFE)	https://www.iaffe.org/ Publishes journal *Feminist Economics* and develops the academic field and the profession
Center for Global Development (CGD)	https://www.cgdev.org/blog/look-imfs-new-gender-mainstreaming-strategy Gender research and analysis of IFI policy – accountability for gender equality in IFI programming
ODI	A Gender Approach to Monetary and Financial Policies in the COVID-19 Recovery (2021): https://set.odi.org/wp-content/uploads/2021/11/A-GENDER-APPROACH-TO-MONETARY-AND-FINANCIAL-POLICIES-IN-THE-COVID-19-RECOVERY-.pdf
Alliance for Financial Inclusion (AFI)	Central bank and financial regulatory institutions policy leadership alliance Gender Inclusive Finance (GIF) initiative: https://www.afi-global.org/thematic-areas/gender-inclusive-finance/
Official Monetary and Financial Institutions Forum (OMFIF)	Gender Balance Index 2022: https://www.omfif.org/wp-content/uploads/2022/04/GBI-2022.pdf Measuring gender equality in central bank governance
GSMA	Digital and financial inclusion for women https://www.gsma.com/mobilefordevelopment/connected-women/?gclid=CjwKCAiAheacBhB8EiwAItVO29ZBUv2EoV9xXf_ggXBg9w1stHRvXw1WXpa8l7yMYxxduRQ7YNC29hoCtpkQAvD_BwE
International Capital Markets Association (ICMA) + UNWomen/IFC	Bonds to Bridge the Gender Gap: A Practitioner's Guide to Using Sustainable Debt for Gender Equality (2021): https://www.icmagroup.org/assets/documents/Sustainable-finance/ICMAUN-WomenIFC-Bonds-to-Bridge-the-Gender-Gap-A-Practitioners-Guide-to-Using-Sustainable-Debt-for-Gender-Equality-November-2021.pdf

Global Center *for* Gender Equality

Think Tanks: Gender and Tax

Institute of Development Studies (IDS)	Resource Pack: Conversations on Gender and Tax (2022) https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/17486/K4D_Tax_and_Gender_Resource_Pack_Final%20%28Updated%29.pdf?sequence=3&isAllowed=y
International Center for Tax and Development (ICTD)	Research on gender and tax https://www.ictd.ac/theme/gender-and-tax/
African Tax Administration Forum: ATAF Women in Tax Network	https://womenintax.org/ Are Tax Policies Developed to Reduce Gender Inequality in ATAF Member Countries? (2022): https://www.ataftax.org/new-study-by-ataf-tackles-gender-inequality-in-africas-tax-sector
ODI	K4D's Tax and Gender Learning Journey Boosting Social Reform in Pakistan (2022): https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/17718

CSO and Advocacy Groups: Tax and Budget

Women's Budget Group (UK)	https://wbg.org.uk/ Network of women's CSOs, academics and policy experts Global partnerships and learning programme: https://wbg.org.uk/blog/new-project-global-partnerships-learning-programme/
Oxfam	Oxfam in Kenya: Fiscal Justice for Women and Girls (2020): https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621079/cs-oxfam-kenya-fiscal-justice-women-girls-221020-en.pdf;jsessionid=F8F508B285D5B42046D7D4772F4C776C?sequence=1
Global Alliance for Tax Justice (Kenya)	Report on Tax Justice and Gender Equality Conference 2021: https://globaltaxjustice.org/libraries/report-tax-justice-and-gender-equality-conference-2021/ Framing Feminist Taxation (Uganda case study): https://globaltaxjustice.org/news/gatj-tax-and-gender-working-group-launches-framing-feminist-taxation-vol-2-2/
Gender and Development Network (GAD Network)	Advocacy for "feminist macroeconomic alternatives" https://gadnetwork.org/issues/womens-economic-justice
Centre for Budget and Governance Accountability (CBGA) (India)	Training Resource on Gender Responsive Budgeting in India (2021): https://www.cbgaindia.org/wp-content/uploads/2021/08/Training-Resource-on-Gender-Responsive-Budgeting-in-India-1.pdf
Centre for Policy Research Accountability Initiative (India)	The Status of Gender Budgeting in India: https://accountabilityindia.in/blog/gender-budgeting-in-india/

CSOs and Advocacy: IFI Accountability

ActionAid International	The Care Contradiction: The IMF, Gender and Austerity (2022): https://actionaid.org/sites/default/files/publications/The%20Care%20Contradiction%20-%20The%20IMF%20Gender%20and%20Austerity.pdf
Bretton Woods Project	https://www.brettonwoodsproject.org/gender-equality-macroeconomics-project/
Gender Action	https://www.genderaction.org/index.html Joint Civil Society Position on IMF Gender Strategy (2022): https://genderaction.org/pdf/Joint-Civil-Society-Position-on-IMF-Gender-Strategy-FINAL.pdf
Campaign of Campaigns (feminist organizations, networks and individuals)	Open Letter on IMF Gender Mainstreaming Strategy (October 6, 2022): https://www.campaignofcampaigns.com/index.php/en/our-work/actions/354-rejection-of-international-monetary-fund-s-strategy-toward-mainstreaming-gender-2
Gender and Trade Coalition	https://sites.google.com/regionsrefocus.org/gtc/home

Global Center *for* Gender Equality

Individual Experts

- **Non-exhaustive list of currently active thinkers and examples of types of topics (alphabetical)**

Gunseli Berik	University of Utah https://faculty.utah.edu/u0030433-GUNSELI_BERIK/research/index.hml	Feminist Economics of Inequality, Development, and Growth (2009): https://www.tandfonline.com/doi/abs/10.1080/13545700903093524
Elissa Braunstein	Colorado State University https://www.libarts.colostate.edu/people/elissab/	"Feminist Macroeconomics and Monetary Policy," in Louis-Philippe Rochon and Sylvio Kappes (eds.), *The Future of Central Banking*, Edward Elgar, forthcoming in 2022. "Care and the Macroeconomy," in Günseli Berik and Ebru Kongar (eds.) *The Routledge Handbook of Feminist Economics*. Routledge, (2021). (With J Heintz) Gender bias and central bank policy: employment and inflation reduction (2008): https://www.tandfonline.com/doi/abs/10.1080/02692170801889643
Debbie Budlender	Independent Research Consultant; Co-founder of the South Africa Women's Budget Initiative	https://www.apc.org/users/debbie https://www.researchgate.net/profile/Debbie-Budlender

Global Center *for* Gender Equality

Individual Experts (cont'd)

Diane Elson	Chair, Women's Budget Group (UK), Consultant to UNWomen https://wbg.org.uk/commission/commissioners/dianeelson/	With Marzia Fontana for UNWomen Gender equality and inclusive growth: Economic policies to achieve sustainable development (2019): https://www.unwomen.org/en/digital-library/publications/2019/01/gender-equality-and-inclusive-growth
Marzia Fontana	LSE: https://www.lse.ac.uk/international-development/people/Marzia-Fontana	"Gender in economy-wide modelling," in Rai, S. and G. Waylen, *New Frontiers in Feminist Political Economy,* London: Routledge (2014) IDS: https://www.ids.ac.uk/people/marzia-fontana/
Jayati Ghosh	Umass-Amherst https://peri.umass.edu/economists/jayatighosh	Gender concerns in debt relief (2021): https://www.iied.org/sites/default/files/pdfs/2021-12/20691iied.pdf
Caren Grown	Brookings -- Former World Bank Global Director for Gender https://www.brookings.edu/experts/caren-grown/	Widely published across the field of gender equality in macroeconomics. Founder of program at American University. (With Imraan Valodia) *Taxation and Gender Equity*. Routledge London (2010).

Individual Experts (cont'd)

James Heintz	UMass-Amherst https://www.umass.edu/economics/heintz	(With S. Fukuda-Parr and S. Seguino) Critical Perspectives on financial and economic crises: Heterodox macroeconomics meets feminist economics (2013): https://www.tandfonline.com/doi/abs/10.1080/13545701.2013.806990 (ILO) Globalization, economic policy and employment: Poverty and gender implications (2006).
Romina Kazandjian	American University https://www.american.edu/cas/faculty/kazandjian.cfm	Gender Equality and Economic Diversification (2019): https://www.mdpi.com/2076-0760/8/4/118
Lisa Kolovich	IMF Senior Economist	Kolovich et al., Gender equality and macroeconomic outcomes: evidence and policy implications (2020): https://academic.oup.com/oxrep/article-abstract/36/4/743/6124294?redirectedFrom=fulltext Edited Volume: Fiscal Policies and Gender Equality (2018): https://www.elibrary.imf.org/display/book/9781513590363/9781513590363.xml?rskey=XIZCZc&result=5

Individual Experts (cont'd)

Abena Oduro	University of Ghana https://www.ug.edu.gh/economics/people/staff-faculty/abena-daagye-oduro	(With Irene van Staveren) Engendering Economic Policy in Africa (2015): https://www.tandfonline.com/doi/abs/10.1080/13545701.2015.1059467
Stephanie Seguino	University of Vermont https://www.uvm.edu/cas/economics/profiles/stephanie-seguino	Engendering Macroeconomic Theory and Policy (2020): https://stephanieseguino.weebly.com/uploads/2/3/2/7/23270372/121781-wp-engenderingmacrotheoryandpolicynov-public.pdf Macroeconomic policy tools to finance gender equality (2019): https://stephanieseguino.weebly.com/uploads/2/3/2/7/23270372/seguino_dpr_final.pdf
Ana Maria Tribin	UNDP (Formerly Colombian Minister for Gender Equality, and Analyst at the Central Bank of Colombia) https://www.linkedin.com/in/ana-tribin-ph-d-1a881170?trk=public_profile_browsemap	(With Mieke Meurs, et al.) Prospects for Gender-Sensitive Macroeconomic Modelling for Policy Analysis in Colombia: Integrating the Care Economy (2020): https://research.american.edu/careworkeconomy/wp-content/uploads/sites/2/2020/05/ColombiaReportPDFReady.pdf

References

Abouelenin, Mariam, and Yang Hu. 2022. "Maternal Employment Shapes Daughters' Employment Stability in Egypt: Evidence for the Intergenerational Transmission of Labor Force Attachment." Sex Roles, 1–17.

Agénor, Pierre-Richard, and Madina Agénor. 2023. "Access to Infrastructure and Women's Time Allocation: Implications for Growth and Gender Equality." *Journal of Macroeconomics* 75: 103472.

Agénor, Pierre-Richard, and Otaviano Canuto. 2015. "Gender Equality and Economic Growth in Brazil: A Long-Run Analysis." *Journal of Macroeconomics* 43: 155–72.

Agier, Isabelle, and Ariane Szafarz. 2013. "Microfinance and Gender: Is There a Glass Ceiling on Loan Size?" *World Development* 42: 165–81.

Ainsley, Caitlin T. 2019. "The Consequences of Gender Diversity at the Federal Reserve: An Empirical Analysis of FOMC Voting and Discourse." *Unpublished working paper*, 1–33.

Ajayi, Kehinde F, Aziz Dao, and Estelle Koussoubé. 2022. "The Effects of Childcare on Women and Children." The World Bank.

Akresh, Richard, Daniel Halim, and Marieke Kleemans. 2023. "Long-Term and Intergenerational Effects of Education: Evidence from School Construction in Indonesia." *The Economic Journal* 133 (650): 582–612.

Aksoy, Cevat Giray, Berkay Özcan, and Julia Philipp. 2021. "Robots and the Gender Pay Gap in Europe." *European Economic Review* 134: 103693.

Albanesi, Stefania, Claudia Olivetti, and Barbara Petrongolo. 2022. "Families, Labor Markets, and Policy." National Bureau of Economic Research.

Almeida, Maria D. 2012. "Metodología de Seguimiento Presupuestario Sensible al Género (Methodology for Monitoring Gender Responsive Budgeting)." Presented at the Commission on the Status of Women 52, New York, March 1, 2012.

Alonso-Albarran, Virginia, Teresa R Curristine, Gemma Preston, Alberto Soler, Nino Tchelishvili, and Sureni Weerathunga. 2021. *Gender Budgeting in G20 Countries*. International Monetary Fund.

Ambel, Alemayehu A, Wondimagegn M Tesfaye, and Manex B Yonis. 2022. "A Gendered Fiscal Incidence Analysis for Ethiopia."

Amberg, Niklas, Thomas Jansson, Mathias Klein, and Anna Rogantini Picco. 2022. "Five Facts about the Distributional Income Effects of Monetary Policy Shocks." *American Economic Review: Insights* 4 (3): 289–304.

Annor, Ignatius. 2022. "Why African Countries Default on External Debt Payments." Voice of America Website. December 23, 2022. https://www.voaafrica.com/a/why-african-countries-default-on-external-debt-payments/6889059.html

Antonijević, Marija, Isidora Ljumović, and Đina Ivanović. 2022. "Is There a Gender Gap in Financial Inclusion Worldwide?" *Journal of Women's Entrepreneurship and Education*, no. 1–2: 79–96.

Araujo, M Caridad, Marta Dormal, and Norbert Schady. 2019. "Childcare Quality and Child Development." *Journal of Human Resources* 54 (3): 656–82.

Armstrong, Brenna, Tiffany D Barnes, Diana Z O'Brien, and Michelle M Taylor-Robinson. 2022. "Corruption, Accountability, and Women's Access to Power." *The Journal of Politics* 84 (2): 1207–13.

Arora, Diksha, Elissa Braunstein, and Stephanie Seguino. 2023. "A Macro Analysis of Gender Segregation and Job Quality in Latin America." *World Development* 164: 106153.

Assaad, Ragui, Samir Ghazouani, and Caroline Krafft. 2018. "Marriage, Fertility, and Women's Agency in Tunisia." *The Tunisian Labor Market in an Era of Transition*, 171–93.

Assaad, Ragui, Rana Hendy, Moundir Lassassi, and Shaimaa Yassin. 2020. "Explaining the MENA Paradox: Rising Educational Attainment, yet Stagnant Female Labor Force Participation." *Demographic Research* 43: 817.

Assaad, Ragui, Caroline Krafft, and Irene Selwaness. 2022. "The Impact of Marriage on Women's Employment in the Middle East and North Africa." *Feminist Economics* 28 (2): 247–79.

Aterido, Reyes, Thorsten Beck, and Leonardo Iacovone. 2013. "Access to Finance in Sub-Saharan Africa: Is There a Gender Gap?" *World Development* 47: 102–20.

Attanasio, Orazio, Ricardo Paes de Barros, Pedro Carneiro, David K Evans, Lycia Lima, Pedro Olinto, and Norbert Schady. 2022. "Public Childcare, Labor Market Outcomes of Caregivers, and Child Development: Experimental Evidence from Brazil." National Bureau of Economic Research.

Backhaus, Andreas, and Elke Loichinger. 2022. "Female Labor Force Participation in Sub-Saharan Africa: A Cohort Analysis." *Population and Development Review* 48 (2): 379–411.

Bailey, Martha J, and Thomas A DiPrete. 2016. "Five Decades of Remarkable but Slowing Change in US Women's Economic and Social Status and Political Participation." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2 (4): 1–32.

Baird, Marian, Elizabeth Hill, and Sydney Colussi. 2021. "Mapping Menstrual Leave Legislation and Policy Historically and Globally: A Labor Entitlement to Reinforce, Remedy, or Revolutionize Gender Equality at Work?" *Comp. Lab. L. & Pol'y J.* 42: 187.

Barba, Lorena. 2013. "Evaluación Cualitativa Del Uso Del Catálogo de Orientación Del Gasto En Políticas de Igualdad Para Hacer Visible La Inversión Para La Igualdad de Género En Ecuador, Años 2012 y 2013. (Qualitative Assessment of the Use of the Catalog for Direction of Expenditure on Equality Policies to Increase the Visibility of Investment in Gender Equality in Ecuador, 2012 and 2013)." Presented at the Fourth Congress on Feminist Economics, Seville, Spain, October 2013.

Bardóczy, Bence. 2020. "Spousal Insurance and the Amplification of Business Cycles." *Unpublished manuscript, Northwestern University*.

Barnes, Tiffany D, and Michelle M Taylor-Robinson. 2018. "Women Cabinet Ministers in Highly Visible Posts and Empowerment of Women: Are the Two Related?" *Measuring Women's Political Empowerment across the Globe: Strategies, Challenges and Future Research*, 229–55.

Bhalotra, Sonia, Manuel Fernandez Sierra, and Fan Wang. 2022. "The Distribution of the Gender Wage Gap: An Equilibrium Model." *Available at SSRN 3202481*.

Bick, Alexander, and Nicola Fuchs-Schündeln. 2018. "Taxation and Labour Supply of Married Couples across Countries: A Macroeconomic Analysis." *The Review of Economic Studies* 85 (3): 1543–76.

Bisbee, James, Nicolò Fraccaroli, and Andreas Kern. 2022. "Yellin' at Yellen: Gender Bias in the Federal Reserve Congressional Hearings." *Available at SSRN*.

Blackmon, Pamela. 2021. "The Lagarde Effect: Assessing Policy Change Under the First Female Managing Director of the International Monetary Fund (IMF)." *Global Society* 35 (2): 171–90.

Blanas, Sotiris, Gino Gancia, and Sang Yoon Lee. 2019. "Who Is Afraid of Machines?" *Economic Policy* 34 (100): 627–90.

Blecker, Robert A, and Elissa Braunstein. 2022. "Feminist Perspectives on Care and Macroeconomic Modeling: Introduction to the Special Issue." *Feminist Economics* 28 (3): 1–22.

Bloem, Jeffrey R, and Bruce Wydick. 2023. "All I Really Need to Know I Learned in Kindergarten? Evidence from the Philippines." *Economic Development and Cultural Change* 71 (2): 000–000.

Bodea, Cristina, and Andrew Kerner. 2022a. "Fear of Inflation and Gender Representation in Central Banking." *European Journal of Political Economy* 74: 102192.

——. 2022b. "Gender Bias and Central Bank Communication: Do Americans Trust Female Policy Makers?" *Available at SSRN 4186248*.

Braunstein, Elissa. 2021. "Care and the Macroeconomy." In *The Routledge Handbook of Feminist Economics*, 351–59. Routledge.

Braunstein, Elissa, and James Heintz. 2008. "Gender Bias and Central Bank Policy: Employment and Inflation Reduction." *International Review of Applied Economics* 22 (2): 173–86.

Braunstein, Elissa, Irene Van Staveren, and Daniele Tavani. 2011. "Embedding Care and Unpaid Work in Macroeconomic Modeling: A Structuralist Approach." *Feminist Economics* 17 (4): 5–31.

Bridgman, Benjamin, Georg Duernecker, and Berthold Herrendorf. 2018. "Structural Transformation, Marketization, and Household Production around the World." *Journal of Development Economics* 133: 102–26.

Brilli, Ylenia. 2022. "Mother's Time Allocation, Childcare, and Child Cognitive Development." *Journal of Human Capital* 16 (2): 000–000.

Brussevich, Mariya, Era Dabla-Norris, Christine Kamunge, Pooja Karnane, Salma Khalid, and Kalpana Kochhar. 2018. "Gender, Technology, and the Future of Work." International Monetary Fund.

Budlender, Debbie, Diane Elston, Guy Hewitt, and Tanni Mukhopadhyay. 2002. *Gender Budgets Make Cents: Understanding Gender Responsive Budgets*. Commonwealth Secretariat.

Bursztyn, Leonardo, Alessandra L González, and David Yanagizawa-Drott. 2020. "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia." *American Economic Review* 110 (10): 2997–3029.

Cabeza-García, Laura, Esther B Del Brio, and Mery Luz Oscanoa-Victorio. 2019. "Female Financial Inclusion and Its Impacts on Inclusive Economic Development." Women's Studies International Forum, Volume 77, 102300.

Çağatay, Nilüfer. 2003. "Gender Budgets and beyond: Feminist Fiscal Policy in the Context of Globalisation." *Gender & Development* 11 (1): 15–24.

Çağatay, Nilüfer, Mümtaz Keklik, Radhika Lal, and James Lang. 2000. "Budgets as If People Mattered: Democratizing Macroeconomic Policies."

Cameron, Lisa, Diana Contreras Suarez, and William Rowell. 2020. "Female Labour Force Participation in Indonesia: Why Has It Stalled." *Achieving Inclusive Growth in the Asia Pacific* 241.

Cavalcanti, Tiago, and José Tavares. 2016. "The Output Cost of Gender Discrimination: A Model-based Macroeconomics Estimate." *The Economic Journal* 126 (590): 109–34.

Chakraborty, Lekha. 2016. "Asia: A Survey of Gender Budgeting Efforts."

Charlton, Diane, and J Edward Taylor. 2020. "Rural School Access and the Agricultural Transformation." *Agricultural Economics* 51 (5): 641–54.

Chatterjee, Deepaboli, and Neelanjan Sircar. 2021. "Why Is Female Labour Force Participation so Low in India?" *Urbanisation* 6 (1_suppl): S40–57.

Chen, Jiwei, and Jiangying Guo. 2022. "The Effect of Female Education on Fertility: Evidence from China's Compulsory Schooling Reform." *Economics of Education Review* 88: 102257.

Cherrier, Beatrice, Pedro Garcia Duarte, and Aurélien Saïdi. 2022. "Household Heterogeneity in Macroeconomic Models: A Historical Perspective." *Available at SSRN*.

Chinoy, Sahil, Nathan Nunn, Sandra Sequeira, and Stefanie Stantcheva. 2022. "Zero-Sum Thinking and the Roots of US Political Divides."

Cislaghi, Beniamino, Amiya Bhatia, Emma Sofia Thonander Hallgren, Nour Horanieh, Ann M Weber, and Gary L Darmstadt. 2022. "Gender Norms and Gender Equality in Full-Time Employment and Health: A 97-Country Analysis of the World Values Survey." *Frontiers in Psychology* 13.

Coelho, Maria Delgado, Aieshwarya Davis, Alexander D Klemm, and Carolina Osorio Buitron. 2022. "Gendered Taxes: The Interaction of Tax Policy with Gender Equality." International Monetary Fund.

Coello Cremades, R. 2015. "Presupuestos Con Perspectiva de Género En América Latina: Una Mirada Desde La Economía Institucionalista y Feminista (Gender Perspective Budgets in Latin America: A Look at the Institutionalist and Feminist Economics)." Universidad Complutense de Madrid.

Collier, Paul. 1994. "Gender Aspects of Labour Allocation during Structural Adjustment: A Theoretical Framework and the Africa Experience." In *Labor Markets in an Era of Adjustment*, edited by Susan Horton, Ravi Kanbur, and Dipak Mazumdar, 1:277–307. The World Bank.

Corradini, Viola, Lorenzo Lagos, and Garima Sharma. 2022. "Collective Bargaining for Women: How Unions Can Create Female-Friendly Jobs."

Cuberes, David, and Marc Teignier. 2018. "Macroeconomic Costs of Gender Gaps in a Model with Entrepreneurship and Household Production." *The BE Journal of Macroeconomics* 18 (1).

Dabla-Norris, Era, and Kalpana Kochhar. 2019. "Closing the Gender Gap." *Finance and Development* 56 (1): 8–11.

Das, Sonali, Sonali Jain-Chandra, Kalpana Kochhar, and Naresh Kumar. 2015. *Women Workers in India: Why so Few among so Many?* International Monetary Fund.

De Henau, Jérôme, Debbie Budlender, Fernando Filgueira, Ipek Ilkkaracan, Kijong Kim, and Rafael Mantero. 2019. "Investing in Free Universal Childcare in South Africa, Turkey and Uruguay: A Comparative Analysis of Costs, Short-Term Employment Effects and Fiscal Revenue."

Delesalle, Esther. 2021. "The Effect of the Universal Primary Education Program on Consumption and on the Employment Sector: Evidence from Tanzania." *World Development* 142: 105345.

Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2020. "The Global Findex Database 2017: Measuring Financial Inclusion and Opportunities to Expand Access to and Use of Financial Services." *The World Bank Economic Review* 34 (Supplement_1): S2–8.

Desai, Sonalde, and Omkar Joshi. 2019. "The Paradox of Declining Female Work Participation in an Era of Economic Growth." *The Indian Journal of Labour Economics* 62 (1): 55–71.

Devercelli, Amanda, and Frances Beaton-Day. 2020. "Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital." The World Bank, Washington, DC.

Dietl, Susanne, Luise Gubitzer, Consolata Kabonesa, and Elisabeth Klatzer. 2014. "The Budget Process in Uganda: Entry Points for Gender and Gender Responsive Budgeting in the Budget Process in Uganda." *Austrian Development Cooperation*, working paper.

Diouf, Ibrahima, and Dominique Pépin. 2017. "Gender and Central Banking." *Economic Modelling* 61: 193–206.

Dou, Winston W, Andrew W Lo, Ameya Muley, and Harald Uhlig. 2020. "Macroeconomic Models for Monetary Policy: A Critical Review from a Finance Perspective." *Annual Review of Financial Economics* 12: 95–140.

Downes, Ronnie, Lisa Von Trapp, and Scherie Nicol. 2017. "Gender Budgeting in OECD Countries." *OECD Journal on Budgeting* 16 (3): 71–107.

Dupas, Pascaline, and Jonathan Robinson. 2013. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics* 5 (1): 163–92.

Ehab, Maye. 2022. "Women's Employment Exits in Egypt: The Roles of Marriage, Children, Job Characteristics, and Women's Empowerment." *Middle East Development Journal*, 1–21.

Elborgh-Woytek, Katrin, Monique Newiak, Kalpana Kochhar, Stefania Fabrizio, Kangni Kpodar, Philippe Wingender, Benedict J Clements, and Gerd Schwartz. 2013. "Women, Work, and the Economy: Macroeconomic Gains from Gender Equity." International Monetary Fund.

Elsayed, Ahmed, Soiliou Daw Namoro, and Rania Roushdy. 2022. "Empowering Women in Conservative Settings: Evidence from an Intervention in Rural Egypt." *Review of Economics of the Household* 20 (4): 1287–1322.

Elsayed, Ahmed, and Alina Shirshikova. 2020. "The Women Empowering Effect of Higher Education."

Elson, Diane, and Marzia Fontana. 2019. "Conceptualizing Gender-Equitable Inclusive Growth." In *Gender Equality and Inclusive Growth: Economic Policies to Achieve Sustainable Development*, edited by Diane Elson and Marzia Fontana, 20–45. New York: UN Women.

Elson, Diane, and Anuradha Seth, eds. 2019. *Gender Equality and Inclusive Growth: Economic Policies to Achieve Sustainable Development*. UN Women.

Equal Opportunities Commission. 2022. "Annual Report on the State of Equal Opportunities in Uganda FY 2021/2022." Kampala, Uganda: Equal Opportunities Commission. https://eoc.go.ug/eoc/wp-content/uploads/2022/10/Final-Annual-report-Report-2022.pdf

Hakan Ercan & Ahmet Ozturk & Semih Tumen, 2021. "The Effect of Primary School Construction on Later Outcomes," Working Papers 1522, Economic Research Forum, revised 20 Dec 2021. Fabrizio, Stefania, Anna Fruttero, Daniel Gurara, Lisa Kolovich, Vivian Malta, Marina M Tavares, and Nino Tchelishvili. 2020. "Women in the Labor Force: The Role of Fiscal Policies." International Monetary Fund.

Farmand, Aida, and Teresa Ghilarducci. 2022. "Monopsony Power, Race, and Gender." In *Oxford Research Encyclopedia of Economics and Finance*.

Field, Erica, Rohini Pande, Natalia Rigol, Simone Schaner, and Charity Troyer Moore. 2021. "On Her Own Account: How Strengthening Women's Financial Control Impacts Labor Supply and Gender Norms." *American Economic Review* 111 (7): 2342–75.

Fitzgerald, Oonagh E, Susana Malcorra, François-Philippe Champagne, Arancha González, Nursel Aydiner-Avsar, Chiara Piovani, Diane Elson, Marzia Fontana, Rohini Acharya, and Patricia Goff. 2022. "Reshaping Trade through Women's Economic Empowerment." *Democracy* 20: G7.

Fontana, Marzia, Binderiya Byambasuren, and Carmen Estrades. 2019. "Applied Modelling of Gender Equitable Macro-Policies and Care Provision: The Contribution of Computable General Equilibrium (CGE) Models."

Fraym. 2022. "Kenya Caregiving Return On Investment: Complete Report."

Fruttero, Anna, Daniel Gurara, Lisa L Kolovich, Vivian Malta, Marina Mendes Tavares, Nino Tchelishvili, and Stefania Fabrizio. 2020. *Women in the Labor Force: The Role of Fiscal Policies*. International Monetary Fund.

Fukui, Masao, Emi Nakamura, and Jón Steinsson. 2023. "Women, Wealth Effects, and Slow Recoveries." *American Economic Journal: Macroeconomics* 15 (1): 269–313.

Gaddis, Isis, and Marco Ranzani. 2020. "Fostering Labor Force Participation Among Mauritian Women." Working paper. The World Bank.

Greenspun, Samantha J. 2019. "A Gender Sensitive Fiscal Incidence Analysis for Latin America: Brazil, Colombia, the Dominican Republic, Mexico, and Uruguay."

Grown, Caren, and Imraan Valodia. 2010. *Taxation and Gender Equity*. Routledge London.

Gulde, Anne Marie, and Charalambos G Tsangarides. 2008. *The CFA Franc Zone: Common Currency, Uncommon Challenges*. International Monetary Fund.

Halim, Daniel, Elizaveta Perova, and Sarah Reynolds. 2023. "Childcare and Mothers' Labor Market Outcomes in Lower-and Middle-Income Countries." *The World Bank Research Observer* 38 (1): 73–114.

Halim, Daniel Zefanya, Hillary C Johnson, and Elizaveta Perova. 2022. "Preschool Availability and Employment: Evidence from Indonesia." *Economic Development and Cultural Change* 71 (1): 39–61.

Harguindéguy, Jean-Baptiste Paul, Alistair Cole, and Romain Pasquier. 2021. "The Variety of Decentralization Indexes: A Review of the Literature." *Regional & Federal Studies* 31 (2): 185–208.

Heintz, James, and Nancy Folbre. 2022. "Endogenous Growth, Population Dynamics, and Economic Structure: Long-Run Macroeconomics When Demography Matters." *Feminist Economics* 28 (3): 145–63.

Heintz, James, and Andrew Glyn. 2015. "Why Macroeconomic Policy Matters for Gender Equality." Policy Brief no. 4. UN Women.

Hendy, Rana, and Shaimaa Yassin, 2022a. "COVID19 and the Value of Non-Monetary Job Attributes to Women:Evidence from A Choice Experiment in Egypt," Working Papers 1575, Economic Research Forum, revised 20 Sep 2022.

——. 2022b. "COVID-19...Who Will Wash the Dishes and Change the Diapers? Evidence from A Post COVID-19 Time Use Survey on Egypt," Working Papers 1565, Economic Research Forum, revised 20 Aug 2022.

Hermes, Henning, Marina Krauß, Philipp Lergetporer, Frauke Peter, and Simon Wiederhold. 2022. "Early Child Care and Labor Supply of Lower-SES Mothers: A Randomized Controlled Trial."

Hess, Jake, Leora Klapper, and Kathleen Beegle. 2021. "Financial Inclusion, Women, and Building Back Better."

Hlasny, Vladimir, and Shireen AlAzzawi. 2022. "First out, Last in Amid Covid-19: Employment Vulnerability of Youths in Arab Countries," Working Papers 1566, Economic Research Forum, revised 20 Aug 2022.

Holton, Jamie, and Henry Lewis. 2021. "Gender Financing in Kenya: Mapping Funding to Improve Gender Equality." Save the Children.

Hospido, Laura, Luc Laeven, and Ana Lamo. 2022. "The Gender Promotion Gap: Evidence from Central Banking." *Review of Economics and Statistics* 104 (5): 981–96.

Igwe, Gloria U, and Olawunmi A Adelusi. 2021. "Role of Financial Regulators and Supervisors in Promoting Women's Financial Inclusion: Evidence from the Central Bank of Nigeria." *Igwe, GU & Adelusi, OA (2021). Role of Financial Regulators and Supervisors in Promoting Women's Financial Inclusion: Evidence from the Central Bank of Nigeria. CBN Bullion* 45 (1).

International Monetary Fund. 2017. "Gender Budgeting in G7 Countries."

——. 2018. *Fiscal Transparency Handbook*. Washington, DC: International Monetary Fund.

——. 2022. "IMF Strategy Toward Mainstreaming Gender." IMF Staff report Strategy paper. Washington, DC.

Islam, Asif M, and Silvia Muzi. 2022. "Does Mobile Money Enable Women-Owned Businesses to Invest? Firm-Level Evidence from Sub-Saharan Africa." *Small Business Economics* 59 (3): 1245–71.

Jack, William, Tavneet Suri, and Robert M Townsend. 2010. "Monetary Theory and Electronic Money: Reflections on the Kenyan Experience." *Economic Quarterly* 96 (1): 83–112.

Jayachandran, Seema. 2021. "Social Norms as a Barrier to Women's Employment in Developing Countries." *IMF Economic Review* 69 (3): 576–95.

Jensen, Robert. 2012. "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India." *The Quarterly Journal of Economics* 127 (2): 753–92.

Kan, Sophia, and Stephan Klasen. 2021. "Macroeconomics and Gender: Recent Research on Economic Growth and Women's Economic Empowerment." *Women's Economic Empowerment*, 75–101.

Kanwar, Sheena. 2016. "Gender Responsive Budgeting in the Asia-Pacific Region: A Status Report." https://asiapacific.unwomen.org/en/digital-library/publications/2016/12/gender-responsive-budgeting-in-the-asia-pacific

Kaplan, Greg, Benjamin Moll, and Giovanni L Violante. 2018. "Monetary Policy According to HANK." *American Economic Review* 108 (3): 697–743.

Kimani, Judy. 2022. “Mapping the Extent of Gender Responsiveness in Agriculture and Food Policies in Africa.” International Livestock Research Institute. 2022. https://www.ilri.org/news/mapping-extent-gender-responsiveness-agriculture-and-food-policies-africa

King, Elizabeth M, Hannah L Randolph, Maria S Floro, and Jooyeoun Suh. 2021. “Demographic, Health, and Economic Transitions and the Future Care Burden.” *World Development* 140: 105371.

Kireyev, Alexei. 2015. *How to Improve the Effectiveness of Monetary Policy in the West African Economic and Monetary Union*. International Monetary Fund.

Klasen, Stephan. 2019. “What Explains Uneven Female Labor Force Participation Levels and Trends in Developing Countries?” *The World Bank Research Observer* 34 (2): 161–97.

——. 2020. “From ‘Me Too’ to Boko Haram: A Survey of Levels and Trends of Gender Inequality in the World.” *World Development* 128: 104862.

Klasen, Stephan, and Francesca Lamanna. 2009. “The Impact of Gender Inequality in Education and Employment on Economic Growth: New Evidence for a Panel of Countries.” *Feminist Economics* 15 (3): 91–132.

Kolovich, Lisa L. 2018. *Fiscal Policies and Gender Equality*. International Monetary Fund.

Kolovich, Lisa, Vivian Malta, Monique Newiak, and David Robinson. 2020. “Gender Equality and Macroeconomic Outcomes: Evidence and Policy Implications.” *Oxford Review of Economic Policy* 36 (4): 743–59.

Kotikula, Aphichoke, Ruth Hill, and Wameq Azfar Raza. 2019. “What Works for Working Women?”

Krafft, Caroline, Ragui Assaad, and Caitlyn Keo. 2019. “The Evolution of Labor Supply in Egypt from 1988-2018: A Gendered Analysis.” Economic Research Forum (ERF).

Krafft, Caroline, Ragui Assaad, and Mohamed Ali Marouani. 2021. “The Impact of Covid-19 on Middle Eastern and North African Labor Markets.” ERF Policy Brief No. 55.

Lagarde, Christine. 2014. “The Economic Power of Women’s Empowerment.” International Monetary Fund. 2014. https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp091214.

Lahey, Kathleen. 2018. “Gender, Taxation and Equality in Developing Countries: Issues and Policy Recommendations.” *UN Women*.

Lee, Jean N, Jonathan Morduch, Saravana Ravindran, and Abu S Shonchoy. 2022. “Narrowing the Gender Gap in Mobile Banking.” *Journal of Economic Behavior & Organization* 193: 276–93.

Lei, Lei, Sonalde Desai, and Reeve Vanneman. 2019. “The Impact of Transportation Infrastructure on Women’s Employment in India.” *Feminist Economics* 25 (4): 94–125.

Lofgren, Hans, and Martín Cicowiez. 2021. “CWE-GAM Methodology Report GEM-CARE: A Gendered Dynamic General Equilibrium Model for Analysis of Care.”

Mader, Philip, Maren Duvendack, Adrienne Lees, Aurelie Larquemin, and Keir Macdonald. 2022. “Enablers, Barriers and Impacts of Digital Financial Services: Insights from an Evidence Gap Map and Implications for Taxation.”

Masciandaro, Donato, Paola Profeta, and Davide Romelli. 2018. “Do Women Matter in Monetary Policymaking?” *BAFFI CAREFIN Centre Research Paper*, no. 2018–88.

Mbiti, Isaac, and David N Weil. 2015. “Mobile Banking: The Impact of M-Pesa in Kenya.” In *African Successes, Volume III: Modernization and Development*, 247–93. University of Chicago Press.

McKinsey & Company. 2015. “The Power of Parity: How Advancing Women’s Equality Can Add $12 Trillion to Global Growth.” McKinsey & Company.

Meurs, Mieke, Ana Maria Tribin, Maria Floro, and Stephan Lefebvre. 2020. “Prospects for Gender-Sensitive Macroeconomic Modelling for Policy Analysis in Colombia: Integrating the Care Economy.” CWE-GAM working paper Series: 20–02.

Moschini, Emily G. 2023. “Childcare Subsidies and Child Skill Accumulation in One-and Two-Parent Families.” *American Economic Journal: Macroeconomics* 15 (1): 475–516.

Muljono, Paramita. 2013. “Negotiating Gender and Bureaucracy: Female Managers in Indonesia’s Ministry of Finance.”

Nallari, Raj, and Breda Griffith. 2011. *Gender and Macroeconomic Policy*. The World Bank Publications.

Nazier, Hanan, and Asmaa Ezzat. 2022. “Gender Differences and Time Allocation: A Comparative Analysis of Egypt and Tunisia.” *The Quarterly Review of Economics and Finance* 85: 174–93.

Neef, Theresa, and Anne-Sophie Robilliard. 2021. “Half the Sky? The Female Labor Income Share in a Global Perspective.” World Inequality Lab.

Neyer, Ulrike, and Daniel Stempel. 2021. "Gender Discrimination, Inflation, and the Business Cycle." *Journal of Macroeconomics* 70: 103352.

Ngai, L Rachel, and Barbara Petrongolo. 2017. "Gender Gaps and the Rise of the Service Economy." *American Economic Journal: Macroeconomics* 9 (4): 1–44.

Oster, Emily, and Bryce Millett Steinberg. 2013. "Do IT Service Centers Promote School Enrollment? Evidence from India." *Journal of Development Economics* 104: 123–35.

Oyvat, Cem, and Özlem Onaran. 2022. "The Effects of Social Infrastructure and Gender Equality on Output and Employment: The Case of South Korea." *World Development* 158: 105987.

Pallotti, Filippo. 2022. "Winners and Losers From Unexpected Inflation."

Papadavid, Phyllis, and Laetitia Pettinotti. 2021. "A Gender Approach to Monetary and Financial Policies in the Covid-19 Recovery."

Pérez, L, and R Rangel. 2004. "Guía Para La Formulación de Presupuestos Públicos Con Enfoque de Género En El Sector Salud (Guide for the Formulation of Public Budgets with a Gender Focus in the Health Sector)." Secretaría de Salud, México.

Perrin, Caroline, and Marie Hyland. 2023. "Gendered Laws and Women's Financial Inclusion."

Pimkina, Svetlana, and Luciana de La Flor. 2020. "Promoting Female Labor Force Participation."

"Presupuestos Con Perspectiva de Género (Budgets with Gender Perspective)." 2014. Mexico: Cuaderno de Trabajo.

Public Expenditure and Financial Accountability Secretariat. 2020. "Supplementary Framework for Assessing Gender Responsive Public Financial Management." PEFA, Washington, DC.

Raga, Sherillyn, Yohannes Ayele, and Dirk Willem te Velde. 2022. "Public Debt Profile of Selected African Countries."

Ravn, Morten O, and Vincent Sterk. 2021. "Macroeconomic Fluctuations with HANK & SAM: An Analytical Approach." *Journal of the European Economic Association* 19 (2): 1162–1202.

Ray, Panchali. 2019. "Women in/and Trade Unions: Consciousness, Agency, and (Im) Possibilities of Alliances amongst Nurses and Attendants in Kolkata." *Contemporary South Asia* 27 (4): 502–15.

Rubin, Marilyn Marks, and John R Bartle. 2021. "Gender-responsive Budgeting: A Budget Reform to Address Gender Inequity." *Public Administration*.

Sahay, Ratna, Martin Cihak, Papa M N'Diaye, Adolfo Barajas, Annette J Kyobe, Srobona Mitra, Yen N Mooi, and Reza Yousefi. 2017. *Banking on Women Leaders: A Case for More?* International Monetary Fund.

Samtleben, Claire and Kai-Uwe Müller (2022). Care and careers: Gender (in)equality in unpaid care, housework and employment. *Research in Social Stratification and Mobility*, Volume 77, 100659. https://doi.org/10.1016/j.rssm.2021.100659.

Sayeh, Antoinette M, Carolina Renteria, Vincent Tang, and Jiro Honda. 2021. "Engendering the Recovery: Budgeting with Women in Mind." *International Monetary Fund Blog* (blog). March 5, 2021. https://www.imf.org/en/Blogs/Articles/2021/03/05/blog-engendering-the-recovery-budgeting-with-women-in-mind#:~:text=The%20IMF%20remains%20deeply%20committed,policies%20to%20promote%20gender%20equality.

Schmidt-Hebbel, Klaus. 2019. "Macroeconomic Institutions: Lessons from World Experience for MENA Countries." Working Papers 1311, Economic Research Forum, revised 21 Aug 2019..

Seguino, Stephanie. 2020. "Engendering Macroeconomic Theory and Policy." *Feminist Economics* 26 (2): 27–61.

———. 2021a. "Gender and Economic Growth." In *The Routledge Handbook of Feminist Economics*, 341–50. Routledge.

———. 2021b. "How to Assess Fiscal Stimulus Packages from a Gender Equality Perspective." UN Women – ILO Joint Programme Promoting Decent Employment for Women through Inclusive Growth Policies and Investments in Care.

Seguino, Stephanie, and Caren Grown. 2006. "Gender Equity and Globalization: Macroeconomic Policy for Developing Countries." *Journal of International Development* 18 (8): 1081–1104.

Seguino, Stephanie, and James Heintz. 2012. "Monetary Tightening and the Dynamics of US Race and Gender Stratification." *American Journal of Economics and Sociology* 71 (3): 603–38.

Selwaness, Irene, and Caroline Krafft. 2021. "The Dynamics of Family Formation and Women's Work: What Facilitates and Hinders Female Employment in the Middle East and North Africa?" *Population Research and Policy Review* 40 (3): 533–87.

Sen, Gita. 2000. "Gender Mainstreaming in Finance Ministries." *World Development* 28 (7): 1379–90.

Sen, Purna, Anuradha Seth, Martha Chen, Jessica Woodroffe, Shauna Olney, Uma Rani Amara, Francesca Rhodes, et al. 2017. "Macroeconomic Policy and Women's Economic Empowerment." UN Women.

Sevilla, Almudena. 2020. "Gender Economics: An Assessment." *Oxford Review of Economic Policy* 36 (4): 725–42.

Sharma, Garima. 2022. "Monopsony and Gender."

Stotsky, Janet Gale. 2006a. "Gender and Its Relevance to Macroeconomic Policy: A Survey." IMF working paper.

——. 2006b. "Gender Budgeting." IMF working paper.

——. 2016. *Gender Budgeting: Fiscal Context and Current Outcomes*. International Monetary Fund.

Stotsky, Janet Gale, Lisa Kolovich, and Suhaib Kebhaj. 2016. "Sub-Saharan Africa: A Survey of Gender Budgeting Efforts." International Monetary Fund.

Suri, Tavneet, and William Jack. 2016. "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science* 354 (6317): 1288–92.

Taylor, Lance. 1995. "Environmental and Gender Feedbacks in Macroeconomics." *World Development* 23 (11): 1953–61.

Thomas, Alastair, and Pierce O'Reilly. 2016. "The Impact of Tax and Benefit Systems on the Workforce Participation Incentives of Women."

UN Women. 2022. "Government Responses to COVID-19: Lessons on Gender Equality for a World in Turmoil."

United Nations Development Program. 2023. "COVID-19 Global Gender Response Tracker." UNDP Data Futures Platform. 2023. https://data.undp.org/gendertracker/

Vick, Brandon. 2017. "Measuring Links between Labor Monopsony and the Gender Pay Gap in Brazil." *IZA Journal of Development and Migration* 7 (1): 1–28.

Wang, Limin, and Jeni Klugman. 2020. "How Women Have Fared in the Labour Market with China's Rise as a Global Economic Power." *Asia & the Pacific Policy Studies* 7 (1): 43–64.

Ward, Kristy. 2022. "Gender Regimes and Cambodian Labor Unions." *Gender & Society* 36 (4): 578–601.

Webber, Douglas A. 2016. "Firm-level Monopsony and the Gender Pay Gap." *Industrial Relations: A Journal of Economy and Society* 55 (2): 323–45.

Xiao, Saizi, and M Niaz Asadullah. 2020. "Social Norms and Gender Differences in Labor Force Participation in China." *Feminist Economics* 26 (4): 114–48.

Zins, Alexandra, and Laurent Weill. 2016. "The Determinants of Financial Inclusion in Africa." *Review of Development Finance* 6 (1): 46–57.

Bill & Melinda Gates foundation