IMF Publication

Pursuing Women's Economic Empowerment

INTERNATIONAL MONETARY FUND

PURSUING WOMEN'S ECONOMIC EMPOWERMENT

May 2018

IMF staff regularly produces papers proposing new IMF policies, exploring options for reform, or reviewing existing IMF policies and operations. The report prepared by IMF staff and completed on May 29, 2018, has been released.

The paper was issued to the Executive Board for information. The report was prepared by IMF staff. The views expressed in this paper are those of the IMF staff and do not necessarily represent the views of the IMF's Executive Board.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

Electronic copies of IMF Policy Papers
are available to the public from
<http://www.imf.org/external/pp/ppindex.aspx>

International Monetary Fund
Washington, D.C.

GROUP OF SEVEN

PURSUING WOMEN'S ECONOMIC EMPOWERMENT

Meeting of G7 Ministers and Central Bank Governors, June 1-2, 2018
Whistler, Canada

Prepared by staff of the
INTERNATIONAL MONETARY FUND*

* The background note does not necessarily reflect the views of the IMF Executive Board.

This page intentionally left blank

PURSUING WOMEN'S ECONOMIC EMPOWERMENT

May 30, 2018

EXECUTIVE SUMMARY

The economic and social imperative for women's economic empowerment is clear.

Greater gender equality boosts economic growth and leads to better development outcomes. It contributes to reducing income inequality and boosting economic diversification and, in turn, supports economic resilience. Gender equality is one of the 17 global UN Sustainable Development Goals, which provide a roadmap for ending poverty, protecting the planet, and ensuring that all people enjoy peace and prosperity.

The G7 has emphasized the need for closing the gender gap. The Taormina Leaders' Summit in 2017 renewed the emphasis on promoting women's empowerment, which the leaders see as a crucial contribution to promoting sustainable development. In this regard, leaders committed to mainstreaming gender equality into all their policies. This is carried forward by Canada's G7 Presidency.

Gender inequality persists worldwide. Despite progress, women and men do not have the same opportunities to participate in economic activity, and when women do participate, they do not receive the same recognition, wages, or benefits as men. The World Economic Forum estimates that at the current rate of progress it will take 217 years to close the overall global gender gap in female labor force participation and equal opportunities.

Gender inequality takes different forms. Although the global average female labor force participation rate hovers around 50 percent, the average rate masks significant cross-regional differences in levels, from only about two-fifths of women participating in the labor market in the Middle East, North Africa, and Central Asia to almost two-thirds in sub-Saharan Africa. Gender wage gaps continue to be a global issue. Although some countries have made important progress in closing earning gaps, on average, women's earnings are about half those of men. Low inclusion of women in the labor market and political positions also reflects unequal opportunities in access to education and health from early childhood and to financial services. It is also impeded by the pervasive presence of gender-based legal restrictions in many countries.

The room for policy intervention is large, and interventions need to be tailored to country circumstances. As recent research, including from the IMF, shows, policies matter for women's employment decisions even after accounting for personal preferences towards working. Although there is no one-size-fits-all strategy, general priorities include:

- Policies that focus on providing equal opportunities from the start: (i) investing in *education and health* to provide a level playing field for women to take on economic activities and reduce the gender gap in skills and income; (ii) increasing access to *financial services, including digital financial services*, to provide women with equal access to resources, which in turn fosters labor productivity; and (iii) promoting *equal rights* for women in all areas, including the right to property ownership. Developing countries can benefit the most from these policies.
- Measures that support women in balancing work and family responsibilities, such as: (i) providing *affordable, high-quality child and elderly care* to support a more rapid return to work among women who are “sandwiched” between taking care of children and elderly parents and relatives; (ii) offering *publicly financed parental leave schemes* to reconcile work and family life and maintain connections to the labor market through a guaranteed return to the job; (iii) establishing *flexible work arrangements* to allow women to better balance their formal employment with other demands on their time; (iv) removing *tax provisions that discriminate against secondary (predominantly female) earners* that can potentially generate large efficiency gains and improve aggregate labor market outcomes; and (v) using *tax credits or benefits for low-wage earners* to reduce the net tax liability thereby increasing the net income gain from accepting a job. These policies can be particularly effective in advanced economies and some developing countries.

With growing recognition that gender equality promotes economic stability and growth, the IMF has scaled up its work in this area and is committed to continue these efforts. Work by the IMF will focus on (i) deepening its understanding of the economic benefits of women’s empowerment, both in the labor market and through more equal opportunities for boys and girls, also against the background of persistent megatrends, including in an environment of rapid technological change; (ii) integrating the analysis into Fund policy dialogue with member countries; (iii) providing customized assistance, workshops, and peer-learning courses in areas such as gender budgeting; and (iv) expanding collaboration with other international institutions on the subject to benefit from complementary areas of expertise.

Approved By
Kalpana Kochhar

Prepared by a team led by Stefania Fabrizio (SPR), comprising Lisa Kolovich (SPR) and Monique Newiak (AFR). Research assistance was provided by Annie Agarwal (HRD) and Rujun Joy Yin (SPR).

CONTENTS

I. INTRODUCTION	4
II. WHY DOES GENDER EQUALITY MATTER? AN ECONOMIC ARGUMENT	5
III. HOW FAR HAVE WE COME? THE FACTS ON GENDER INEQUALITY	7
A. More Equal Opportunities but Not the Same...Yet	8
B. Mixed Developments in Equality of Outcomes	10
IV. POLICIES TO FOSTER WOMEN'S PARTICIPATION IN ECONOMIC ACTIVITIES	12
V. THE IMF'S SUPPORT FOR COUNTRIES IN FOSTERING GENDER EQUALITY	16
References	20
BOXES	
1. Gender Budgeting	15
2. Operationalizing the IMF's Work on Gender	19
FIGURES	
1. Correlation Between Gender Inequality and Real GDP per Capita Growth	5
2. Correlation Between Gender Inequality and Income Inequality	6
3. Correlation Between Gender Inequality and Export Concentration	6
4. Snapshot of Gender Inequality, 2013	7
5. Gender Gaps in Education Enrollment and Literacy Rates	8
6. Gender Inequality: Labor Force, Wage Gaps, and Political Representation	11

I. INTRODUCTION

1. Gender equality is itself an important social objective, and the lack of it also imposes a heavy toll on strong and inclusive growth. An important repercussion of persistent gender gaps is that the potential economic contribution from women remains untapped in many countries. Greater inclusion of women is associated with lower income inequality and higher economic diversification. The latter, in turn, is related to increasing economic resilience, particularly in developing countries.

2. The G7 has emphasized the importance of reducing gender inequality and committed to accelerate women's economic empowerment. In the 2017 Taormina communique, leaders noted that: "Promoting women's empowerment and closing the gender gap is not only right, but also smart for our economies, and a crucial contribution to progress towards sustainable development. We are committed to mainstreaming gender equality into all our policies." These messages are carried forward by Canada's G7 Presidency, which established the Gender Equality Advisory Council for Canada's G7 Presidency with the mandate to promote a transformative G7 agenda and support leaders and ministers in ensuring that gender equality and gender-based analysis are integrated across all themes, activities, and outcomes of Canada's G7 Presidency.

3. Despite progress, wide gender gaps remain. Gender inequality is observed in many forms. This paper focuses on inequality of outcomes, such as female labor force participation, wages, and leadership positions, and inequality of opportunities, such as access to health, education and financial services. Globally, the average female labor force participation rate is more than 25 percentage points lower than the male rate, and the burden of unpaid care work disproportionately falls on women and girls. Women are overrepresented in the informal sector and underrepresented in leadership positions. Gender wage gaps, and earnings gaps more generally, remain a global issue.¹ Also, while equality of opportunities, such as access to health, education, and financial services has improved, and the number of legal restrictions on women's economic activity has declined, the playing field remains uneven between men and women and boys and girls.

4. The scope for policy intervention is large. Economic policy levers can be used to reduce gender inequality, but needs may vary across countries. Policies that focus on investment in education, health, and infrastructure as well as on increasing financial inclusion and reducing legal barriers can be particularly effective in developing countries. Policies such as addressing unpaid care work and child/elderly care, parental leave, flexible work arrangements, and tax disincentives for secondary earners can be very impactful in advanced economies and some developing countries.

5. The rest of the paper examines the importance of gender inclusiveness, analyzes trends, and offers policy lessons for greater gender equality at a global level drawing on recent analytical, policy, and operational work conducted at the IMF. It starts with a discussion

¹ Women on average have lower overall earnings than men due to a variety of factors including having lower rates of labor force participation, working fewer hours, and being more likely to be employed in the informal sector. However, gender wage gaps, measured after controlling for observable characteristics such as hours worked, type of employment, education levels, age, experience, etc. persist.

on why gender equality is integral to promoting economic stability, growth, and development (Section II). Section III provides an overview of trends in inequality of opportunities between men and women, including access to health, education, and financial services and legal barriers and gender inequality of outcomes, including labor force participation and wage gaps. Section IV offers broad policy lessons to support greater women's participation in and gains from economic activities. Section V discusses how the IMF supports countries in achieving gender equality.

II. WHY DOES GENDER EQUALITY MATTER? AN ECONOMIC ARGUMENT

6. Beyond being a global goal, gender equality boost growth and promotes economic stability. Gender equality is one of the 17 Sustainable Development Goals officially endorsed by 193 countries in 2015. A large literature has highlighted several dimensions in which gender inequality has macroeconomic and development-related implications (Elborgh-Woytek and others, 2013). Reducing gender gaps, both with respect to opportunities (ex-ante) and outcomes (ex-post), can...

- **...boost economic growth and productivity.** Women's economic empowerment is key for growth both through the direct impact of the size of the labor force on output and through the impact on productivity (Cuberes and Teignier 2016; Figure 1). Recent studies by IMF staff and others estimate that closing the gender gap could boost GDP in Canada by 4 percent (Petersson and others, 2017); Japan by 4 percent (Steinberg and Nakane, 2012); Pakistan by 30 percent (Cuberes and Teignier, 2016); and Niger by 32 percent (OECD, 2016; Cuberes and Teignier, 2015).² Diversity and education can foster new ideas and thereby enhance productivity (Loko and Diouf, 2009). King and Hill (1991) find that large gender disparities in education reduce gross national product—in countries where the female-to-male school enrollment ratio is lower than 0.75, gross national product is approximately 25 percent lower than in countries with greater gender parity in education. Klasen and Lamanna (2009) provide evidence that gender gaps in education had a negative impact on economic growth in the 1990s. Also, higher economic participation by women is related to higher

Figure 1. Correlation Between Gender Inequality and Real GDP per Capita Growth

Source: Gonzales and others (2015a).

Note: GDP per capita growth derived based on a regression of real GDP per capita growth on GDP per capita, to make rates comparable across levels of development.

² Estimates of the growth impact of women's empowerment depend largely on the factors considered in the calculations.

expenditure on schooling for children, with important implications for growth in the long run (Gonzales and others, 2015b).

- **... lead to greater equality in the overall income distribution.** Gender inequality is associated with higher income inequality (Figure 2), which in turn can undermine the sustainability of growth (Gonzales and others, 2015a; Ostry and others, 2014). This occurs through several channels. First, gender wage gaps directly contribute to income inequality, and higher gaps in labor force participation rates between men and women result in inequality of earnings, and unequal pensions. In addition, women are more likely to work in the informal sector, in which earnings are lower. Finally, inequality of opportunities, such as unequal access to education, health services, and finance inhibit equal chances to succeed on the labor market, and this is strongly associated with income inequality, particularly in emerging and developing countries.

Figure 2. Correlation Between Gender Inequality and Income Inequality

Source: Gonzales and others (2015a).

Note: See Gonzales and others (2015a) for further information on how the Gender Inequality Index was extended and calculated in a time-consistent manner.

- **... support higher corporate profits.** Evidence for Europe suggests that female representation in senior positions could boost potential output by improving firm profitability and supporting corporate investment. IMF research also finds that adding one more woman to senior management or a corporate board, while keeping the size of senior teams unchanged, is associated with 8–13 basis points higher return on assets (Christiansen and others, 2016).
- **... increase economic resilience.** Gender equality is associated with greater export diversification in developing countries, reducing the risk of export concentration in few commodities (Kazandjian and others, 2016; Figure 3). Looking at the other side of the coin, gender gaps in economic participation tend to restrict the talent pool in the labor market and can thus yield a less efficient allocation of resources, losses in total factor productivity, and lower output growth (Cuberes and Teignier, 2016; Esteve-Volart, 2004).

Figure 3. Correlation Between Gender Inequality and Export Concentration, 1990–2010

Source: Kazandjian and others (2016).

- **... support bank stability.** Sahay and others (2017) examine the gender gap in leadership positions in banks and bank supervision agencies worldwide and find that, even after controlling for relevant bank and country-specific factors, the presence of women as well as a higher share of women on bank boards is associated with greater bank stability.
- **... contribute to other development outcomes.** Lower gender inequality has been linked to improved health outcomes for women and children (World Bank 2011; and Knowles and others 2002). Positive associations have been identified between gender equality and per-capita GDP, the level of competitiveness, and human development indicators (World Economic Forum, 2014; Duflo, 2012).

III. HOW FAR HAVE WE COME? THE FACTS ON GENDER INEQUALITY

7. Gender inequities persist, in different degrees, across all countries. Women and men do not have the same opportunities to participate in economic activity and when women do participate, they do not receive, all other factors equal, the same recognition as men. In fact, the World Economic Forum estimates that at the current rate of progress it will take 217 years to close the overall global gender gap in economic participation and opportunity. The map shown in Figure 4 gives an overview of average gender equality, as measured by a time-consistent version of the UNDP Gender Development Index,³ which captures outcomes in the labor market as well as health and education gaps.

Figure 4. Snapshot of Gender Equality, 2013

³ See Stotsky and others (2016) for details on the index calculation, included a discussion on the advantages and disadvantages of its use.

A. More Equal Opportunities but Not the Same...Yet

8. Access to education has become more gender balanced, but sizeable gaps remain in many countries. Over the past three decades, there has been a steady decline in gender differences in school enrollment across all regions. Between 1990 and 2015, gender gaps in primary school enrollment have largely closed, although three regions still have not achieved parity (Africa, Middle East and Central Asia, and Western Hemisphere). Furthermore, progress has been made in reducing gaps in secondary school enrollment. Asia and the Pacific now have gender parity in secondary education—particularly impressive given that just 65 females were enrolled for every 100 males in the region in the early 1980s. In Africa and in the Middle East and Central Asia, about 35 more girls are now enrolled in secondary education per 100 boys than in the early 1980s. However, gaps in the two regions remain. Women are now more likely than men to be enrolled in tertiary education in all regions except Africa (Figure 5).

9. Health indicators have improved globally, but maternal death and adolescent fertility rates remain high in some countries, particularly in sub-Saharan Africa.

- The risk of maternal death has declined in all regions over the past three decades. Looking at trends in maternal mortality ratios from 1980 to 2014 by region, sub-Saharan Africa has the highest rate of mortality, but the rate now stands at half that in 1980. Asia and the Pacific and the Middle East and Central Asia also achieved a significant decline in the maternal mortality ratio, while the decline in the Western Hemisphere was gradual and remains slightly higher than in Europe.
- Similarly, adolescent fertility rates—the number of births per 1,000 women ages 15 to 19—have declined in all regions from 1980 to 2014, with sub-Saharan Africa having the highest average rate. High fertility rates are associated with less economic activity by women. In particular, high adolescent fertility rates prevent girls from going to school thereby increasing gender gaps in education. Subsequently, these girls may remain out of the labor market altogether or enter the labor market with a low skill level, exacerbating gender gaps in economic participation and wages (Gonzalez and others, 2016).

10. Financial access has improved for both women and men, but the gender gap has barely narrowed. The gender gap in financial access is systematic and persistent (Allen and others, 2012; Demirguc-Kunt and Klapper, 2013, 2012a, 2012b). Worldwide, only 65 percent of women have a formal bank account compared with 72 percent of men, with much larger gaps in emerging and developing countries (World Bank Global Findex, 2018), and gaps also in the use of financial services such as credit and debit cards and borrowing services (Delechat and others, 2018). Women receive approximately only 40 percent of outstanding loans. However, country-specific data also reveal progress made in narrowing this gap. For instance, the IMF Financial Access Survey notes that Malaysia saw its share of female borrowers increase from 37 percent in 2004 to 44 percent in 2016.⁴

11. Gender-based legal restrictions are still pervasive in many countries. The lack of basic legal rights prevents women from participating fully in economic and political opportunities. Recent IMF work estimates that in half of the countries studied, when gender equity was reflected in the law, female labor force participation increased by at least five percentage points in the following five years (Gonzales and others, 2015b). According to the 2018 Women, Business, and the Law Report, globally over 2.7 billion women face legal restrictions from having the same choice of jobs as men; such restrictions on women's employment exist in all regions. In 18 countries, husbands can prevent their wives from working, while in 59 countries, there are no laws against sexual harassment in the workplace. Beyond laws and legal frameworks, social norms also cause gender inequality and can negatively impact the effectiveness of even the best-calibrated policies.

⁴ Reliable data are essential to inform and enhance the overall understanding of financial inclusion. In this context, there is an increasing demand for more granular information including on the gender dimension of financial inclusion. To this end, following up on the pilot exercises conducted since 2015 (see Section V), gender breakdown was added to the IMF's Financial Access Survey in 2018.

B. Mixed Developments in Equality of Outcomes

12. The last decades have seen important reductions of gender inequities in the labor market worldwide, but challenges remain. Concerning gender inequality of outcomes, gaps in labor force participation have been decreasing, and wage gaps have narrowed in many countries. There has also been progress in increasing female representation in political and corporate leadership positions. However, labor force participation rates, wages, and representation in parliament remain well below parity in all regions (Figure 6).

13. Female labor force participation rates vary significantly worldwide, but labor markets remain segmented across gender lines. Over the past three decades, there has been a general trend towards more women entering the labor force in all regions except for the Middle East and Central Asian region where it has plateaued. However, even where labor force participation rates are high, the quality of jobs differs for men and women. In many countries women are predominantly involved in the informal sector with low-paying and vulnerable jobs (United Nations High Level Panel for Women's Economic Empowerment, 2016) But also in countries with higher rates of formality and female labor force participation, women tend to hold lower quality jobs than men. For example, a recent study by Hsieh, Hurst, Jones, and Klenow (2018) documents extensive productivity losses stemming from misallocation of female workers across occupations in the United States. Both labor force participation gaps and selection of women into low-quality jobs contribute to lower growth.

14. Gender earnings gaps are a global issue. The World Economic Forum (2016) finds that, on average, women's earnings are about half those of men. However, some countries, spanning all regions and income levels, have made progress in closing the earnings gap; for example, in sub-Saharan Africa, the ratio of female-to-male estimated earnings approaches parity in Liberia (World Economic Forum, 2017). In Benin, Botswana, Lao P.D.R., Mozambique, Namibia, Nicaragua, Slovenia, Rwanda, and Vietnam, the ratio stands above 0.8. Research by the OECD shows that in OECD countries, the gender gap for average annual earnings for full-time workers is larger for highly educated workers (26 percent) than for less educated workers (22 percent) (OECD, 2017).

Figure 6. Gender Inequality: Labor Force, Wage Gaps, and Political Representation

Sources: World Bank World Development Indicators, OECD.

¹ 2016 or latest available data. According to the OECD, the gender wage gap is unadjusted and is defined as the difference between median earnings of men and women relative to median earnings of men. Data refer to full-time employees and to self-employed. AFR = sub-Saharan Africa; APD = Asia and Pacific; EUR = Europe; MCD = Middle East, North Africa, and Central Asia; WHD = Western Hemisphere.

IV. POLICIES TO FOSTER WOMEN'S PARTICIPATION IN ECONOMIC ACTIVITIES

15. The room for policy intervention is large. Policies matter for women's employment decisions even after accounting for personal preferences toward working (Christiansen and others, 2016). That said, needs often vary across countries by income and development levels. Also, some measures could imply fiscal costs that may require resource mobilization if fiscal space is not available.

16. In general, policies should focus on investing in education, health, infrastructure, increasing financial inclusion, and promoting equal rights. Unconditional cash transfers can also play an important role where there is a greater need to ensure protection of the informal sector. Low-income and developing countries in particular can benefit the most from these policies.

- *Education.* Empirical evidence suggests that educational attainment correlates positively with female labor force participation (Gonzales and others, 2015b; World Bank, 2011). In Turkey, for example, only 17 percent of illiterate women participate in the labor force, while the participation rate exceeds 70 percent among women holding a graduate degree (Ercan, Hoşgör, and Yımlaz, 2010). Countries such as Nigeria and Pakistan have used conditional cash transfers to increase female school enrollment (IMF, 2016a; IMF, 2016b). In Nigeria, the scheme included targeting to poor households and linked to girls' enrollment in school.
- *Health.* Evidence suggests that developing countries can go a long way in increasing economic opportunities for women by investing in healthcare (World Bank, 2011). Rwanda has outperformed its counterparts in reducing maternal mortality rates from 1990 to 2013, and this is associated with an increase in health expenditures as a share of GDP (Kadama and others, 2018). There was an increase of about seven percentage points from 2000 to 2014 in the percentage of women who received prenatal care from a skilled provider; thus, by 2014, almost 100 percent of Rwandan women were receiving this type of care.
- *Access to infrastructure.* Availability of safe transportation and better roads and mobile networks can help greatly women access work in many countries at different development levels and regions, from Rwanda to Jordan to Chile (IMF, 2017a; IMF, 2016c; and IMF, 2015a). Mexico introduced public transport buses for women only to ensure that they could travel safely (Perez Fragoso and Rodriguez Enriquez, 2018). The 2017-18 Gender and Child Budgeting plan for the Indian state of Kerala includes planned allocations aimed at providing gender-friendly infrastructure (Kolovich and Loungani, 2018). The provision of sanitation facilities, in particular in lower-income countries such as India, helps protect girls from incidences of gender-based violence and can increase school attendance (IMF 2017d; Jain-Chandra and others 2018).
- *Access to finance, including digital financial services,* could impact labor productivity and is associated with more equal incomes across countries (Aslan and others, 2018). Results from the 2017 IMF Financial Access Survey, which features gender-disaggregated data from 27 countries,

show a steady increase in the share of female borrowers in Chile, Indonesia, and Malaysia from 2012–16. Initiatives such as Malaysia's Women Entrepreneur Financing Program and Chile's Simplified Deposit Accounts may have helped close the gender gap in borrowing rates.

- *Promoting equal rights for women* to participate in property ownership and entrepreneurship, including by addressing female inheritance legislation, equal property rights, and laws against discrimination can stimulate female labor force participation (Novta and Wong, 2017). Malawi, Namibia, and Peru revised their legal frameworks to reduce gender discrimination, and in the decade following those changes, all three experienced substantial increases in female labor force participation rates (Gonzales and others, 2015b).

17. Policies can focus on investing in child and elderly care and parental leave, providing work flexibility, and reducing tax disincentives for secondary earners. This can be particularly impactful in advanced economies but is also applicable in some developing countries.

- *Providing affordable, high-quality child and elderly care* could support a more rapid return to work among women. Significant increases in life expectancy result in a longer period in which adults may have both parents and children who will need assistance, which is usually provided by women. This phenomenon is particularly pronounced in advanced economies, but it is becoming an obstacle to women's ability to participate in paid economic activities in emerging economies as well. In Mexico, one-third of women aged 25 to 44 spend at least 40 hours per week caring for both children under age 14 and elderly, dependent, or disabled individuals (Rogriguez-Chamussy and Lopez, 2018). In this context, incentives for caregivers to remain active in the labor force, such as pension credits, should ensure that they are not penalized by returning to work.
- *Offering publicly financed parental leave schemes* can help parents reconcile work and family life and maintain their connections to the labor market through a guaranteed return to their job. The average duration of paid parental leave in advanced economies is 26 weeks, and all OECD countries except the United States and Korea offer paid parental leave (Elborgh-Woytek and others, 2013). However, long periods outside the labor market could also lead to reductions in skills and earnings (Ruhm, 1998). Policies that provide and encourage greater parity between paternity and maternity leave could support a more rapid return to work among mothers and help shift underlying gender norms (World Bank, 2012). In addition, countries may want to consider a "use-it-or-lose-it" parental leave allowance, such as in Sweden, to promote more equal sharing of leave.
- *Establishing flexible work arrangements* allows women to better balance their formal employment with other demands on their time (Aguirre and others, 2012). Flexible work arrangements and more specifically, part-time work, serve as examples of policies that both men and women can benefit from in balancing their paid work with the time allocated to family commitments. However, due to the traditional intra-family division of labor, the availability of such arrangements tends to be more important for women. The modalities for flexible work

arrangements are both country- and company-specific and can include telework and compressed work schedules.

- *Removing tax provisions that discriminate against secondary earners.* Empirical studies show that the female labor supply is more responsive to taxes than the male labor supply (IMF, 2012). Hence, reducing the tax burden for (predominantly female) secondary earners by replacing family taxation with individual taxation can potentially generate large efficiency gains and improve aggregate labor market outcomes. Many advanced economies, in particular, European countries, have the potential to reduce the secondary earner tax wedge significantly (Elborgh-Woytek and others, 2013).
- *Using tax credits or benefits for low-wage earners.* These “in-work” tax credits reduce the net tax liability thereby increasing the net income gain from accepting a job. Typically, they are phased out as income rises; however, the phasing out of the credit with *family* income results in high marginal tax rates for both the primary and secondary earner in a family, creating strong adverse labor supply effects among secondary earners. In countries that emphasize labor force participation, credits are instead phased out with *individual* income, which offers a preferable policy alternative to increase female labor force participation, as the marginal tax rate applied to the secondary earner will generally remain lower (Elborgh-Woytek and others, 2013). This approach is followed in Belgium, Finland, Germany, the Netherlands, and Sweden.

18. Fiscal policy design and budget systems can also play a large role in reducing gender inequality. Fiscal authorities can ensure that tax and spending policies and/or public financial management instruments address gender inequality and the advancement of women in areas such as education, health, and economic empowerment (Budlender and Hewitt, 2003; Budlender and Sharp, 1998; Elson, 2003; Stotsky, 2006, Stotsky, 2016, and IMF, 2017). The approach is called gender-sensitive or gender-responsive budgeting. If designed well, gender budgeting can improve the efficiency and equity of the overall budget process. Fiscal authorities at any level of government can assess the needs of boys and girls and men and women; identify key outcomes or goals; plan, allocate, and distribute public funds; and monitor and evaluate achievements (Box 1).

Box 1. Gender Budgeting

Sound fiscal policies can promote macroeconomic stability, which is essential for boosting growth, jobs, and incomes for all citizens. But fiscal policy can also be actively shaped to achieve gender equality goals—the basic idea behind gender budgeting. With gender budgeting, fiscal authorities consider the expected benefits of gender equality and women's empowerment for both women and society as a whole. Gender budgeting in a broad sense involves both the adoption of fiscal policies (on the expenditure and revenue side) related to gender equality and gender-responsive public financial management. Well-designed gender budgets can improve the efficiency and equity of the overall budget process and improve gender-related outcomes. For example, gender budgeting in Morocco is associated with an increase in female primary school enrollment in rural areas by more than 18 percentage points over 10 years (Kolovich and Shibuya, 2016). In India, states with gender budgeting efforts have made more progress on gender equality in primary school enrollment than states without (Stotsky and Zaman, 2017).

Results from a global study (Kolovich, 2018)¹ on gender budgeting as well as from research focused on G7 countries (IMF, 2017c)² show that:

- Gender budgeting has been implemented by countries across all regions and income levels and at the national, state, and/or local levels. Countries with state and/or local level initiatives include Germany, India, Mexico, Spain, and Uganda.
- The leadership of the ministry of finance is crucial. Ministries of finance can promote gender budgeting by including requirements in the budget call circular; Afghanistan, Albania, Ecuador, Finland, the Philippines, and Sweden are a few examples of countries that include gender budgeting instructions in budget call circulars.
- Legal requirements for gender budgeting matter: Austria, Bolivia, and Rwanda mandate gender budgeting in their constitutions.
- Public financial management institutions play an enabling role in operationalizing gender-responsive fiscal policies and can be adapted to achieve improved gender outcomes at the various stages of the budget cycle. Ukraine's gender budgeting effort has been implemented within the framework of public financial management reforms.
- Civil society, gender and other ministries, parliaments, and academia are also key players. The United Kingdom's Women's Budget Group and Canada's Alternative Federal Budget are two examples of civil society organizations. Gender units in line ministries have proved useful in gender budgeting streamlining, but in some countries coordination of these units is found to be an issue. Political support may be particularly important when additional resources and concerted efforts across the administration are needed, such as for the development of gender-related indicators.
- Gender budgeting has typically focused on expenditures and overlooked taxes, but tax policies are not always gender neutral. Discriminatory tax and financial laws remain in many legal systems. Several countries have incorporated a greater focus on revenues, including Finland, Iceland, India, and Uganda. A significant number of countries engaged in gender budgeting have not incorporated program or

¹ This global survey was part of a joint research collaboration between the IMF and the UK Department for International Development.

² The IMF developed an analytical framework to study how gender budgeting is applied in different countries from the public financial management viewpoint. Both the global study (Kolovich, 2018) and the G7 study (IMF, 2017c) relied on questionnaires sent to the ministries of finance for IMF member countries, among other sources. Recent updates to the G7 survey focus on South Eastern and Southern European countries and some Central American countries.

Box 1. Gender Budgeting *(concluded)*

performance budgeting, though it is widely recognized that these practices can improve the effectiveness of gender policies.

To strengthen gender budgeting efforts, countries should aim to improve reporting, transparency, and cooperation between various levels of government. Gender budgeting statements can help ensure transparency. Australia, Bangladesh, Canada, India, Korea, Morocco, and Nepal have issued various forms of these statements. Collecting gender-disaggregated data to allow for better gender-based analysis is also important. Ex-ante impact assessments of gender policies, as well as ex-post monitoring and gender auditing are common gaps in most surveyed countries. Among the G7 countries, Japan and France have made the most progress in systematically collecting fiscal data disaggregated by gender, though they have not yet published these data in the annual budget documentation. Korea stands out as one country that requires that the government examine the gender impacts of the budget and whether men and women are equally receiving benefits from the budget.

19. Importantly, achieving gender equality requires cooperation between various levels of government as well as non-governmental actors. For example, in Mexico, the federal government earmarked resources nationally for women's health and economic empowerment programs, and locally, Mexico City implemented a program aimed at providing safe public transportation options for women. Uganda's "local budget clubs" allow citizens to discuss spending priorities and maintain government accountability. In both Germany and Spain, gender budgeting initiatives have been introduced at the local level. Civil society, gender and other ministries, parliaments, and academia are also pivotal players in promoting transparency, conducting gender-based analysis, and development a legal framework for gender equality policies in a country. The United Kingdom's Women's Budget Group started in the 1980s and conducts a thorough annual, gender-sensitive analysis of the budget. Canada's Alternative Federal Budget is another example of how civil society organizations are working to ensure a gender perspective in fiscal policies.

V. THE IMF'S SUPPORT FOR COUNTRIES IN FOSTERING GENDER EQUALITY

20. Gender equality promotes economic stability and growth—key objectives under the Fund's mandate. The focus on inclusive growth has been enforced by the evidence of the link between inequality, including gender, and lower and less sustainable growth. Thus, gender issues are increasingly featured in the Fund's work program. The 2013 IMF Board paper "Jobs and Growth: Analytical and Operational Considerations for the Fund" (IMF, 2013a) and the accompanying Guidance Note (IMF, 2013b) noted the need for IMF work on issues related to jobs and growth—including gender inequality—to be consistent with its mandate and areas of expertise. In 2015, the Article IV Surveillance Guidance Note (IMF, 2015b) was updated to cover emerging issues and included the operationalization of gender issues in the IMF Board work program. The IMF is working on a "how-to" note (IMF, forthcoming) that provides an overview of good practices in covering gender issues in its country work and therefore provides guidance to IMF teams that are increasingly

covering this issue in their work. The IMF has done extensive analytical and policy research on gender-related issues. Its operational work on gender is along its three main work streams: surveillance; use of Fund resources (financial assistance to Fund members), and provision of technical assistance (which includes capacity development and training).

21. Analytical work at the IMF examines the underlying drivers of gender equality and how they relate to sustained and inclusive growth. Research has focused on the economic gains from gender equity as well as policies to enhance women's empowerment and participation in economic activities. Recent work includes explores legal restrictions,⁵ financial inclusion,⁶ female labor force participation,⁷ access to infrastructure,⁸ and gender budgeting.⁹ Ongoing Fund work examines: (i) the impact of technological advancement on the future of work, focusing on gender differences in labor market outcomes across countries (Brussevich and others, forthcoming; Jain-Chandra and others, 2018); (ii) the relationship between gender diversity and structural transformation, for example, shifting from working in traditional agriculture to services, in developing countries and the resulting effect on productivity and growth (Ostry and others, forthcoming); (iii) the potential gains in female labor force participation resulting from tax-and-transfer reform in a number of advanced economies (Wingender and Moreno-Badia, forthcoming); and the link between gender gaps and financial resilience, analyzing gender gaps not only in access to and use of finance, but also in the inclusion of women among financial services providers and regulators (Sahay and Cihak, forthcoming). Analytical and policy work informs IMF's operational work.

22. Gender issues will be covered in IMF's surveillance when they are macro-critical. In 2015, the Fund adopted a more systematic approach on gender issues, integrating analysis of gender equality into its regular consultations with member country authorities (referred to as Article IV consultations) with specific members under a pilot initiative (Box 2). These covered macroeconomic and labor market policies, including the impact of female labor force participation on productivity and growth, gender gaps in financial inclusion, and legal barriers to women's economic participation, among others. The effort has covered almost a fourth of its member countries spanning all geographic regions and included advanced, emerging market, and low-income and developing economies. Gender inequality has also been considered in the context of Fund-supported programs. The recent IMF-supported program for Egypt focuses on investing in public nurseries and is working towards implementing gender budgeting (IMF, 2017f). The program for Jordan contains a range of measures to reduce child-care costs, including publicly-subsidized nurseries for low-income employees in small and medium size enterprises (IMF, 2016c). In Niger, the program includes conditionality on formulating a gender development plan (IMF, 2016d). Following the conclusion of the third and final phase of the pilot initiative, the plan is to incorporate gender

⁵ See Gonzales and others, 2015a.

⁶ See for example, the 2017 Financial Access Survey, which includes gender disaggregated data and Delechat and others, 2018.

⁷ See for example Christiansen and other, 2016; Elborgh-Woytek and others, 2013; Khera, 2016; Kochhar and others., 2017; and Novta and Wong, 2017.

⁸ See IMF, 2017d; IMF, 2017e.

⁹ See IMF, 2017c; Kolovich, 2018; and Stotsky, 2016.

issues into Article IV consultations with the entire membership wherever they are sufficiently relevant under the Fund's mandate. Furthermore, if gender equality issues are considered by the IMF as critical for the success or monitoring of a Fund-supported program, then they will be addressed through program design and conditionality.

23. The IMF technical assistance and capacity development work on gender-related issues has also expanded.

Through training courses for country authorities and technical assistance missions, the Fund is increasingly engaging with its membership on various aspects of gender equality. Technical level staff in many countries benefit from additional training on conducting gender-based analysis and implementing policy recommendations. To address this need, the IMF has offered workshops, in partnership with ministries of finance and/or gender and UN Women at IMF regional technical assistance centers. These joint workshops at IMF regional capacity development centers have brought countries together through peer-learning workshops to disseminate best practices and share experiences within the region and with partners from other regions. The IMF has worked with 60 countries thus far, including at our regional centers in Barbados (CARTAC), Guatemala (CAPTAC-DR), India (SARTTAC), Mauritius (ATI), and Austria (JVI). Furthermore, in early 2018, staff delivered a workshop to the Gender Budget Council and the Ministry of Finance of the United Arab Emirates, as a framework to the design of the Action Plan of Gender Budgeting Implementation in the country. The IMF has also provided technical assistance on gender budgeting in Bahrain, Cambodia, and Ukraine, among others. Additional technical assistance missions and peer learning workshops are planned for 2018. The Fund is currently developing a toolkit that will provide staff, country authorities, civil society organizations, and academics with user-friendly charts and graphs highlighting key indicators of gender inequality by country and region. In addition, the toolkit will allow users to identify which gaps are contributing to macroeconomic losses (such as a reduction in GDP growth or per capita income) and identify policy prescriptions that can be used to close the gaps. It has also extended its modeling framework for macro and distributional impact of policies to analyze the impact on gender inequality. The extended framework has been applied to Argentina and Iran to analyze the macroeconomic and distributional impact, including on gender, of possible tax reforms and measures to reduce the gender gaps and discrimination (IMF, 2018a and 2018b).

24. Looking ahead, the Fund will continue with its efforts to foster gender equality.

Promoting gender equality can not only strengthen economies through higher economic growth and stability but can also bring significant change and benefits to people's lives. The Fund, in accordance with its role and mandate, is prepared to support our members in these important efforts.

Box 2. Operationalizing the IMF's Work on Gender

To support surveillance and program discussions, the IMF has stepped up efforts to operationalize its work on gender inequality. Under a pilot initiative that started in 2015, gender inequality issues have been included in policy discussions in 38 countries.

The pilot studies have examined a variety of issues, from barriers to female labor force to the impact of specific reforms and policies on gender inequality and potential economic gains from eliminating gender inequality in countries at different level of developments. Advice was provided in different areas, including:

- **Financial inclusion.** IMF staff assessed the level of access to formal and informal financial services, microfinance, and mobile banking ([India](#), [Rwanda](#)); impediments to access to formal finance through participation costs, borrowing constraints, and intermediation costs ([Guatemala](#)); and financial literacy among women ([Jordan](#))—even in the context of overall high financial development ([Mauritius](#)). These analyses suggest that enhancing financial inclusion would increase female labor force participation and entrepreneurship, support small and medium size enterprises, and improve competitiveness and boost potential growth ([India](#), [Pakistan](#)).
- **Labor market reforms and human capital accumulation.** IMF staff analyzed ways to address skill mismatches, lack of private sector labor demand, the need for supply-side policies (including education to provide relevant skills) ([Chile](#), [Hungary](#), [Iran](#), [Mali](#)), low human capital accumulation ([Guatemala](#)), labor market rigidities ([India](#)), and labor market duality ([Japan](#)) to increase female labor force participation in the formal sector and accumulate human capital.
- **Impact of policy measures on gender equality and female labor force participation.** IMF staff identified the need for increasing access to education; investing in infrastructure and information technology ([Canada](#), [India](#), [Japan](#)); reforming the tax system (individual taxation ([Germany](#)), working tax credits ([Italy](#)), and spousal tax deductions ([Japan](#)); and reassessing social spending measures (provision of childcare ([Austria](#), [Egypt](#), [Hungary](#), [Japan](#), [Jordan](#), [Poland](#)), long-term care for the elderly ([Austria](#)), and cash transfers targeting girls' education), to help address gender inequality and female labor force participation ([Guatemala](#), [Jordan](#), [Morocco](#), [Nigeria](#), [Pakistan](#)).
- **Gender budgeting.** For [Morocco](#), IMF staff highlighted the scope for improving gender budgeting. [Rwanda](#) offers insight into several best practices. Also, staff reports have pointed to progress in enshrining gender budgeting into legal or formal budgetary frameworks in various countries. A recent example is [Canada](#), which published its first gender statement in the 2017 federal budget. Other examples include [Iceland](#) and [Nigeria](#). Iceland has restructured its budget practice (revenues and expenditures) to include formal adoption of gender budgeting, and Nigeria has introduced gender-sensitive budgeting targeted to women in the agricultural sector.
- **Access to infrastructure.** IMF staff discussed how the availability of safe transportation, better roads, and mobile networks help women participate in the labor force in [Chile](#), [Jordan](#), and [Rwanda](#). In [India](#), staff pointed to the need for rural infrastructure investment in sanitation, access to drinking water, and transportation to reduce the time women spend on domestic tasks and to facilitate their access to markets.
- **Legal barriers.** IMF staff noted that inequality in inheritance rights ([Morocco](#), [Niger](#), [Pakistan](#)), tax deductions or tax credits specific to men ([Morocco](#)), and regulations preventing women from working at certain institutions and positions ([Niger](#)) impact gender gaps in labor force participation. In at least half of WAEMU countries, women cannot be head of household. In contrast, in Latin America and the Caribbean, progress in equalizing legal rights for women and men has helped increase female labor force participation—though more needs to be done.

References

- Allen, F., A. Demirgüç-Kunt, L. Klapper, M. S. Martinez Peria. 2012. "The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts," Policy Research Working Paper WPS6290, World Bank, Washington, DC.
- Aslan G., C. Deléchat, M. Newiak, and F. Yang. 2017. "Inequality in Financial Inclusion and Income Inequality." IMF Working Paper 17/236, International Monetary Fund, Washington, DC.
- Brussevich M., E. Dabla-Norris, C. Kamunge, P. Karnane, S. Khalid, and K. Kochhar. Forthcoming. "Gender, Technology, and the Future of Work." International Monetary Fund, Washington.
- Budlender, D., and G. Hewitt. 2003. "Engendering Budgets: A Practitioner's Guide to Understanding and Implementing Gender-Responsive Budgets". Commonwealth Secretariat, London.
- Budlender, D., and R. Sharp. 1998. "How to Do a Gender-Sensitive Budget Analysis: Contemporary Research and Practice." Sydney: Commonwealth Secretariat/Australian Agency for International Development.
- Christiansen, L., L. Huidan, J. Pereira, P. Topalova, and R. Turk. 2016. "Unlocking Female Employment Potential in Europe." IMF Departmental Paper. International Monetary Fund, Washington, DC.
- Cuberes, D., and M. Teignier. 2016. "Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate." *Journal of Human Capital* 10 (1): 1–32.
- Deléchat, C., M. Newiak, R. Xu, F. Yang and G. Aslan. 2018. "What is Driving Women's Financial Inclusion Across Countries?" IMF Working Paper 18/38, International Monetary Fund, Washington, DC.
- Demirgüç-Kunt, A., L. Klapper, and D. Singer. 2013. "Financial Inclusion and Legal Discrimination against Women: Evidence from Developing Countries." World Bank Policy Research Working Paper 6416. World Bank, Washington, DC.
- Demirgüç-Kunt, A., L. Klapper. 2012. "Measuring Financial Inclusion: The Global Findex Database," World Bank Policy Research Working Paper 6025, World Bank, Washington, DC.
- Duflo, E. 2012. "Women Empowerment and Economic Development." *Journal of Economic Literature* 50 (4): 1051–79.
- Elborgh-Woytek, K., M. Newiak, K. Kochhar, S. Fabrizio, K. Kpodar, P. Wingender, B. Clements, and G. Schwartz. 2013. "Women, Work, and the Economy: Macroeconomic Gains from Gender Equity." Staff Discussion Note 13/10, International Monetary Fund, Washington, DC.
- Elson, D. 2003. "Gender Mainstreaming and Gender Budgeting." Gender Equality and Europe's Future. Women's Budget Group. Paper from the European Commission, DG Education and Culture and Jean Monnet Project, Brussels, March 4.

- Ercan, H., A. G. Hoşgör, and O. Yilmaz. 2010. "Factors that Affect Women's Labor Force Participation and Suggestions for Provincial Employment and Vocational Education Boards: Ankara, Gaziantep and Konya." Ankara: Middle East Technical University.
- Esteve-Volart, B. 2004. "Gender Discrimination and Growth: Theory and Evidence from India." LSE STICERD Research Paper DEDPS42, London School of Economic, London.
- Fragoso, L. P., and C. R. Enríquez. 2018. "Latin America." In *Fiscal Policies and Gender Equality*, edited by L. Kolovich. International Monetary Fund, Washington, DC.
- Gonzales, C., S. Jain-Chandra, K. Kochhar, M. Newiak, and T. Zeinullayev. 2015a. "Catalyst for Change: Empowering Women and Tackling Income Inequality." IMF Staff Discussion Note 15/20, International Monetary Fund, Washington, DC.
- Gonzales, C., S. Jain-Chandra, K. Kochhar, and M. Newiak. 2015b. "Fair Play: More Equal Laws Boost Female Labor Force Participation." IMF Staff Discussion Note, 15/02, International Monetary Fund, Washington, DC.
- Hsieh, C., E. Hurst, C. Jones, and P. Klenow. 2018. "The Allocation of Talent and U.S. Economic Growth," Working Paper.
- International Monetary Fund, 2013a, "Jobs and Growth: Analytical and Operational Considerations for the Fund," IMF Board Paper, March, Washington, DC.
- _____. 2013b. "Guidance Note on Jobs and Growth Issues in Surveillance and Program Work," IMF Policy Document, Washington, DC.
- _____. 2015a. "2015 Article IV Consultation for Chile." IMF Country Report No. 15/227, Washington, DC.
- _____. 2015b. "Guidance Note for Surveillance under Article IV Consultations," Washington, DC.
- _____. 2015c. "Mali: Selected Issues for the 2015 Article IV Consultation." Country Report No. 15/340, Washington, DC.
- _____. 2015d. "Germany: Selected Issues for the 2015 Article IV Consultation." Country Report No. 15/187, Washington, DC.
- _____. 2015e. "2015 Article IV Consultation for Iceland." IMF Country Report No. 15/160, Washington, DC.
- _____. 2015f. "2015 Article IV Consultation for Hungary." IMF Country Report No. 15/92, Washington, DC.
- _____. 2016a. "2016 Article IV Consultation for Nigeria." IMF Country Report No. 16/101, Washington, DC.

- . 2016b. "2016 Article IV Consultation for Pakistan." IMF Country Report No. 16/94, Washington, DC.
- . 2016c. "2016 Article IV Consultation for Jordan." IMF Country Report No. 16/295, Washington, DC.
- . 2016d. "2016 Article IV Consultation for Mauritius." IMF Country Report No. 16/89, Washington, DC.
- . 2016e. "2016 Article IV Consultation for Niger." IMF Country Report No. 17/59, Washington, DC.
- . 2016f. "Niger: Selected Issues for the 2017 Article IV Consultation." Country Report No. 17/60, Washington, DC.
- . 2016g. "2016 Article IV Consultation for the Republic of Poland." IMF Country Report No. 16/210, Washington, DC.
- . 2016h. "2016 Article IV Consultation for Guatemala." IMF Country Report No. 16/281, Washington, DC.
- . 2017a. "2017 Article IV Consultation for Rwanda." IMF Country Report No. 17/217, Washington, DC.
- . 2017b. "Jordan: Selected Issues for the 2017 Article IV Consultation." Country Report No. 17/232, Washington, DC.
- . 2017c. "Gender Budgeting in G7 Countries." Washington, DC.
- . 2017d. "2017 Article IV Consultation for India." IMF Country Report No. 17/54, Washington, DC.
- . 2017e. "India: Selected Issues for the 2017 Article IV Consultation." IMF Country Report No. 17/55, Washington, DC.
- . 2017f. "2017 Article IV Consultation for the Arab Republic of Egypt." IMF Country Report No. 17/17, Washington, DC.
- . 2017g. "2017 Article IV Consultation for the Japan." IMF Country Report No. 17/243, Washington, DC.
- . 2017h. "Japan: Selected Issues for the 2017 Article IV Consultation." Country Report No. 17/243, Washington, DC.
- . 2017i. "2017 Article IV Consultation for Austria." IMF Country Report No. 17/26, Washington, DC.
- . 2017j. "2017 Article IV Consultation for Morocco." IMF Country Report No. 17/36, Washington, DC.

- . 2017k. “2017 Article IV Consultation for Argentina.” IMF Country Report No. 17/409, Washington, DC.
- . “Nigeria: Selected Issues for the 2018 Article IV Consultation.” 2018a. Country Report No. 18/64, Washington, DC.
- . 2018b. “2017 Article IV Consultation for the Islamic Republic of Iran.” IMF Country Report No. 18/94, Washington, DC.
- . Forthcoming. “How to Operationalize Gender Issues in Country Work. Washington, DC.
- Jain-Chandra, S., K. Kochhar, M. Newiak, Y. Yang, and E. Zoli. 2018. “Gender Equality: Which Policies Have the Biggest Bang for the Buck?” IMF Working Paper 18/105, International Monetary Fund, Washington, DC.
- Kazandjian, R., L. Kolovich, K. Kochhar, and M. Newiak. 2016. “Gender Equality and Economic Diversification.” IMF Working Paper 16/140. International Monetary Fund, Washington, DC.
- Kadama, C., L. Kolovich, S. Kwalingana, M. Newiak, C. Ntumwa, and F. Nyankiye. 2018. “Africa,” in *Fiscal Policies and Gender Equality*. International Monetary Fund, Washington, DC.
- Khera, P. 2016. “Macroeconomic Impacts of Gender Inequality and Informality in India,” IMF Working Paper 16/16, International Monetary Fund, Washington, DC.
- King, E. and A. Hill. 1991. “Women's Education in Developing Countries: Barriers, Benefits and Policy.” Education and Employment Division Background Paper Series 91/40, World Bank, Washington, DC.
- Klasen, S., and F. 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.
- Knowles, S., P. K. Lorgelly, and P. D. Owen. 2002. “Are Educational Gender Gaps a Brake on Economic Development? Some Cross-Country Empirical Evidence.” *Oxford Economic Papers* 54 (1): 118–49.
- Kochhar, K., J. Jain-Chandra, and M. Newiak (Eds.). 2017. *Women, Work, and Economic Growth. Leveling the Playing Field*. International Monetary Fund, Washington, DC.
- Kolovich, L., and S. Shibuya. 2016. “Middle East and Central Asia: A Survey of Gender Budgeting Efforts.” IMF Working Paper 16/151, International Monetary Fund, Washington, DC.
- Kolovich, L. (Ed.) 2018. *Fiscal Policies and Gender Equality*. International Monetary Fund, Washington, DC.
- Loko, B., and M. A. Diouf. 2009. “Revisiting the Determinants of Productivity Growth: What's New?” IMF Working Paper 09/225, International Monetary Fund, Washington, DC.
- Novta, N., and J. Wong. 2017. “Women at Work in Latin America and the Caribbean”. IMF Working Paper 17/34, International Monetary Fund, Washington, DC.

- Organisation for Economic Co-operation and Development (OECD). 2016. Sub-Saharan Africa (SIGI), 2016 Regional Report, OECD, Paris.
- . 2017. "LMF1.5: Gender Pay Gaps for Full-Time Workers and Earnings Differentials by Educational Attainment." OECD, Paris.
- Ostry, J., A. Berg, and C. Tsangarides. 2014. "Redistribution, Inequality, and Growth." IMF Staff Discussion Note 14/02, International Monetary Fund, Washington.
- Ostry J., J. Alvarez, R. Espinosa, and C. Papageorgiou. Forthcoming. "Gender Diversity and Growth," International Monetary Fund, Washington, DC.
- Petersson B., R. Mariscal, and K. Ishi. 2017. "Women Are Key for Future Growth: Evidence from Canada," IMF Working Paper 17/166, International Monetary Fund, Washington, DC.
- Rodriguez-Chamussy and H. Lopez. 2018. "A Growing Burden for the Women of the "Generation Sandwich." <http://blogs.worldbank.org/latinamerica/node/1188>.
- Ruhm, C.J. 1998. "The Economic Consequences of Parental Leave Mandates: Lessons from Europe." *Quarterly Journal of Economics*, 113 (1): 285–317.
- Sahay, R., M. Cihak, P. N'Diaye, A. Barajas, A. Kyobe, S. Mitra, Y.N. Mooi, and R. Yousefi. 2017. "Banking on Women Leaders: A Case for More?" IMF Working Paper 17/199, International Monetary Fund, Washington, DC.
- Sahay R. and M. Cihak. Forthcoming. "Role of Gender in Enhancing Financial Resilience," International Monetary Fund, Washington, DC.
- Steinberg, C., and M. Nakane. 2012. "Can Women Save Japan?" IMF Working Paper 12/48, International Monetary Fund, Washington, DC.
- Stotsky, J. 2006. "Gender Budgeting." IMF Working Paper 06/232, International Monetary Fund, Washington, DC.
- Stotsky, J., and A. Zaman. 2016. "The Influence of Gender Budgeting in Indian States on Gender Inequality and Fiscal Spending." IMF Working Paper 16/227, International Monetary Fund, Washington, DC.
- Stotsky, J., S. Shibuya, L. Kolovich, and S. Kebhaj. 2016. "Trends in Women's Development and Gender Equality." IMF Working Paper 16/21, International Monetary Fund, Washington, DC.
- Wingender, P., and M. Moreno-Badia. Forthcoming. "Optimal Tax and Transfer Reform and Female Labor Force Participation in Advanced Economies." International Monetary Fund, Washington, DC.
- World Bank. 2018. "Women, Business and the Law, 2018." World Bank, Washington, DC.

World Bank. 2011. "World Development Report 2012. Gender Equality and Development." World Bank, Washington, DC.

World Economic Forum. 2014. *The Global Iceland Gender Gap Report 2014*. World Economic Forum, Basel.

———. 2016. *The Global Gender Gap Report 2016*. World Economic Forum, Basel.

———. 2017. *The Global Gender Gap Report 2017*. World Economic Forum, Basel.