BACKGROUND TO THIS SERIES

Reducing gender inequality makes economic sense apart from being the right thing to do. Achieving gender equality and empowering all women and girls is the fifth sustainable development goal and is a top priority for governments. Countries can achieve this goal if they take appropriate steps. This note is part of a series that aims to measure the economic cost of gender inequality globally and regionally by examining the impacts of gender inequality in a wide range of areas and the costs associated with those impacts. Given that gender inequality affects individuals throughout their life, economic costs are measured in terms of losses in human capital wealth, as opposed to annual losses in Gross Domestic Product (GDP) or GDP growth. The notes also aim to provide a synthesis of the available evidence on successful programs and policies that contribute to gender equality in multiple areas and achieve the Sustainable Development Goals (SDGs).

While gender parity in basic education has been achieved globally, in many low income countries, girls’ educational attainment remains lower than boys at the secondary level and adult women are less literate than men. Apart from these gender gaps in educational attainment, discrimination and social norms shape the terms of female labor force participation. Women are less likely than men to join the labor force and to work for pay. When they do, they are more likely to work part-time, in the informal sector, or in occupations that have lower pay. These disadvantages translate into substantial gender gaps in earnings, which in turn decrease women’s bargaining power and voice. In addition, many girls are married or have children before the age of 18, before they may be physically and emotionally ready to become wives and mothers. Women and girls also face higher risks of gender-based violence in their homes, at work, and in public spaces. Their voice and agency is often lower than that of men, whether this is within the household, at work, or in national institutions. This also affects their children. For example, children of young and poorly educated mothers often face higher risks of dying by age five, being malnourished, and doing poorly in school. Fundamentally, gender inequality disempowers women and girls in ways that deprive them of their basic human rights.

This lack of opportunities for girls and women entails large economic costs not only for them, but also for their households and countries. Achieving gender equality would have dramatic benefits for women and girls’ welfare and agency. This, in turn, would greatly benefit their households and communities, and help countries reach their full development potential. It would reduce fertility in countries with high population growth, as well as reduce under-five mortality and stunting, thereby contributing to ushering the demographic transition and the associated benefits from the demographic dividend.
KEY RESULTS

Gender inequality remains pervasive worldwide. While in some countries boys and men may be at a disadvantage in some areas, in most countries girls and women continue to bear the brunt of gender inequality. For this reason, this study focuses on the impacts of gender inequality on girls and women. To make the case for more and better investments to reduce gender inequality, the study provides estimates of the impacts and economic costs of gender inequality in five main domains of interest: (1) earnings and standards of living; (2) educational attainment, child marriage and early childbearing; (3) fertility and population growth; (4) health, nutrition, well-being, and violence; and (5) agency, decision-making, and social capital. Multiple development outcomes affected by gender inequality are considered. For some outcomes, estimates of impacts – or rather correlations – are obtained using household survey data for more than 100 countries. For other outcomes that may be more salient in developing countries, results are based on analysis for a core set of 19 countries located mostly in sub-Saharan Africa and South Asia (see Appendix 1 for a list of those countries and the data used, as well as the reason why those countries were selected).

The hope is that the associations documented in the study help illustrate the wide-ranging potential impacts and cost of gender inequality, and in this way foster greater policy mobilization towards achieving gender equality. While the study pulls together in one place results on potential impacts and costs in many domains, as noted in Box ES.1, the analysis only provides an order of magnitude of potential impacts and costs, not precise or definitive values. To realize the economic benefits that could arise from reductions in gender inequality, countries will need to make the investments necessary to ensure that girls and women get equal opportunities. Such investments have initial costs, but they pay off through higher standards of living and gains in human capital wealth leading to long-term growth.
This study summarizes findings from research on the potential negative impacts of gender inequality on development outcomes and related economic costs. The fact that investing in girls and women is essential for development is not new. This point was made by pioneers such as Boserup (1970) and more recently by a wide range of authors and organizations including – just to cite a few, Klasen and Lamanna (2009), Duflo (2012), World Bank (2012), Agenor and Canuto (2013), Elbargh-Woytek et al. (2013), Cuberes and Teigner (2015), McKinsey Global Institute (2015), Kabeer (2016), International Labour Organization (2018), Ostry et al. (2018), and World Economic Forum (2020). The purpose of this study is to illustrate the potential negative impacts of not investing in girls and women with more recent survey data, new measures, and for a larger set of countries than done so far. By pulling together evidence on the associations between gender inequality and multiple socio-economic domains in many countries, the analysis can help foster greater mobilization for gender equality. The framework for the study follows similar work devoted to the economic impacts of child marriage (Wodon et al., 2017), and the cost of not educating girls (Wodon et al., 2018). This study integrates and updates results from a previous analysis of the cost of gender inequality in earnings (Wodon and de la Brière, 2018).

As with any empirical work of this nature, estimates of potential impacts and costs are subject to two important caveats. First, estimates from available observational data do not permit establishing causal relationships. Thus, when referring to potential impacts, the analysis should be taken as only suggestive of what might be achieved with gender equality for girls and women and related policy changes. What is measured are associations between aspects of gender inequality and other development outcomes. For several of the outcomes considered, whether these associations reflect causal relationships can be corroborated by evidence from empirical studies that are able more credibly to establish causality. But for other outcomes, such as impacts on decision making, the ability to engage in altruistic behaviors, or perceptions of well-being, fewer such studies are available. Second, simulations of the benefits of achieving gender equality obtained from the estimates of potential impacts do not account for broader effects in the economy arising from an expansion in opportunities for girls and women. The economics literature suggests that these effects could be sizable. For example, labor market earnings for men may be affected when women enter fields in which they were previously rarely active. Such potential general equilibrium effects are not reflected in this study. Assuming no changes for men in various areas may lead to under- or over-estimation of some of the effects suggested in the study.

TWO PILLARS OF THE GENDER EQUALITY AGENDA

- Gender inequality impacts women throughout their life, but its effects are especially detrimental in adolescence. The impacts of gender inequality are visible throughout women’s lives, from early childhood to old age. This implies that interventions and policies are necessary to reduce gender inequality throughout the life cycle. For example, research suggests that gender stereotypes are formed at an early age. Therefore, finding ways to support changes in attitude at early ages can be highly beneficial later on. At the same time, programs aiming to reduce gender inequality through investments in adolescent girls are especially likely to have high returns (this argument is not new; see for example National Research Council, 2005; Levine et al., 2008; Heckman and Mosso, 2014) There are at least three reasons why investing in adolescent girls – and even in younger girls may be especially beneficial. First, earlier investments tend to bear fruits that persist throughout a woman’s life after the intervention. If a girl completes her secondary education, this generates benefits – such as lower fertility and higher labor force participation – for many years afterwards. Second, the cost of interventions in adolescence, or in some cases even earlier, tends to be lower than the cost of interventions implemented later in life. This is especially the case for investments in early childhood to prevent some of the impacts of gender inequality on young
children, boys and girls. Third, at a formative age, interventions may be more successful in influencing values and behaviors. Later in life, it may become more difficult for girls and women to fully benefit from new opportunities provided to them. For example, preventing early marriage may help in strengthening women’s agency within the household. This does not mean that new opportunities should not be provided to and investments made in women in adulthood – examples of such interventions are provided in this study. But adolescence is a crucial time during which investments in girls may yield the highest returns.

- While adopting adequate laws and broad policies is a first step, targeted programs are needed in many contexts. Assessments of legal frameworks conducted by the Women, Business, and the Law program at the World Bank (2020) suggest that countries are making some progress, albeit slowly, in adopting adequate laws towards gender equality. However, much more is needed as laws by themselves are not sufficient. For example, two thirds of all child marriages take place below the minimum age for marriage adopted by countries in their national legislations. Beyond laws and broad-based policies, targeted interventions are still needed in multiple areas to achieve larger gains towards gender equality. This note focuses especially on two types of programs that may have especially large economic benefits: (i) programs helping adolescent girls to remain in school (or facilitate the school-to-work transition) and delay marriage and childbearing; and (ii) programs enabling adult women to improve their economic opportunities. The focus on these two types of programs does not mean that other interventions are not needed – simply such programs to address gender inequality are known to be fairly effective and have especially large economic benefits (on girls’ education and empowerment, see among others Unterhalter et al., 2014; Sperling and Winthrop, 2016; Botea et al., 2017, Evans and Yuan, 2019, and Wodon, 2020).
IMPACTS OF GENDER INEQUALITY BY DOMAIN

• **Lifetime earnings.** The analysis of the impact of gender inequality on earnings is based on measures of human capital wealth, which is the value today of the future earnings of all individuals – men and women – active in the labor force. Globally, for every dollar in earnings expected to be earned by men in the future, women are expected to earn only two thirds of what men earn. This suggests that women globally will earn over their remaining time in the labor force slightly less than two thirds of what men can be expected to earn. There has been only slow progress over the last two decades towards lower gender inequality in lifetime earnings as measured through human capital wealth. In 1995, women were expected to contribute 58 cents on the dollar in comparison to men. Twenty years later the proportion was 63 cents. At current rates of progress (five cents in 20 years), it could take 150 years to reach parity. Two main factors lead women to have lower lifetime earnings than men. First, they have lower labor force participation rates and work fewer hours in the labor market than men. Second, they tend to be paid less well when they are in paid employment. These factors keep many women in a productivity trap driven by many factors, including social norms relegating them to household care responsibilities or unpaid work. However, when measuring the returns to educational attainment for women, they tend to be as large as those observed for men.

• **Educational attainment, child marriage, and early childbearing.** Globally, girls have caught up with boys in attainment for basic education. Nine in ten girls (89.3 percent) complete their primary education, and three in four (76.0 percent) complete their lower secondary education. For boys, the proportions are 89.9 percent and 75.3 percent. However, in low income countries, substantial gender gaps in attainment persist for basic education, especially at the secondary level where the completion rate for girls at 36.9 percent is below that of boys. Part of this gap is due to persistently high rates of child marriage (marrying before the age of 18) and early childbearing (having a first child before 18) in many low income countries. In turn, early childbearing appears to be mostly due to child marriage in many (but not all) countries. Across two dozen low and middle income countries for which estimations have been conducted, three fourths of all instances of early childbearing come after (and therefore appear to be due to) child marriage, rather than the other way around (Wodon et al., forthcoming). The prevalence of child marriage has declined substantially in India and South Asia over the last two decades, although it remains high at 27.0 percent in 2017 (Le Nestour et al., 2019). In sub-Saharan Africa (prevalence at 35.1 percent) and in Latin America and the Caribbean (prevalence at 25.8 percent), much less progress has been achieved over time towards reducing child marriage.

• **Fertility and population growth.** While reducing
fertility rates is not be an objective in itself, high rates of population growth in low income countries is driven by high fertility come with various consequences – not least a stalled demographic dividend and high burdens on governments to maintain (let alone increase) public investments in children as well as adults. Gender inequality has a large impact on fertility and population growth. When girls marry or have children early, they tend to have more children over their lifetime. Lack of access to modern contraceptive use, leading to unmet demand for family planning, also contributes to high fertility rates. Achieving gender equality – for example by ending child marriage and raising educational attainment for girls in countries where they lag behind boys - would change some of the factors that lead to high fertility rates. Estimates from regression analysis for 19 developing countries suggest that achieving gender equality could reduce total fertility on average by 0.70 children per woman in those countries. This would represent a reduction in total fertility of 13.1 percent versus current levels for those countries. Analysis also suggests an impact of gender inequality on the likelihood of using modern contraception, although the estimated impacts are smaller: an increase of three percentage points in modern contraceptive use or 12 percent from the (low) base in the countries. Through its potential impact on total fertility, achieving gender equality would lead to a reduction in annual rates of population growth. Estimates for a set of developing countries suggest an average reduction of the annual rate of population growth of 0.26 percentage points with gender equality. This estimate is valid only for those countries and would not extend to developed countries were no large reduction in population growth would come from gender equality.

• Health, nutrition, well-being, and violence. By weakening conditions for early childhood development, gender inequality may have negative impacts on young children with lasting negative consequences. The study measures the impact of gender inequality for mothers on the risks of under-five stunting and mortality. The issue is not whether there are differences between boys and girls in those risks. Rather, the focus is on whether gender inequality as it impacts mothers in turns leads to higher risks for both boys and girls. For the same 19 countries, gender equality could help reduce under-five mortality rates by 0.32 percentage point, a reduction of slightly more than five percent from base rates. For under-five stunting, the reduction is estimated at 2.1 percentage points on average, or seven percent from base rates. In other words, while gender inequality affects under-five mortality and stunting, it is probably not one of their main drivers. The study also documents impacts of gender inequality on other aspects of women’s lives including the risk of intimate partner and other forms of violence, knowledge of HIV/AIDS, and whether children are registered at birth. Finally, the study considers the issue of violence in and around school, and how various forms of violence may affect boys and girls differently.

• Decision-making and social capital. Gender inequality is generally associated with lower levels of decision-making for women. A woman’s agency or capacity to exercise choice depends on the enabling environment – including policies, regulations, social norms, as well as on access to resources and past achievements. Gender inequality has an impact on resources, for example by contributing to girls’ premature school drop-out and lower future earnings. It also affects past achievements (as well as capabilities), as is the case when women do not have access to the same employment or earnings as men. Finally, it affects agency by reducing decision-making in the household. Across the same set of 19 countries as before, achieving gender equality could increase women’s decision-making by 24 points on a scale from zero to 100 (as measured through simulations with an index accounting for individual and joint decision-making in various areas). This represents an increase of almost half from base values of the index. As another example of impact, the study estimates that achieving gender equality could lead to a small increase in birth registrations for children. Finally, the study notes that lack of educational attainment for women is associated with a lower likelihood of being able to engage in altruistic behaviors, such as volunteering, donating to charity and helping strangers.
ECONOMIC COSTS OF GENDER INEQUALITY

Estimates of the potential economic costs of gender inequality are based on measures of national wealth, which is the assets base that enables countries to produce income (Gross Domestic Product or GDP). A country’s wealth includes produced capital (assets such as factories, equipment, or infrastructure), natural capital (assets such as agricultural land and other renewable and non-renewable natural resources), and human capital (present value of the future earnings of the labor force). Human capital accounts for two thirds of global wealth. If gender equality in earnings were achieved, countries could increase their human capital wealth, and thereby their national wealth substantially. By reducing population growth, countries would also increase their level of national wealth per capita. This would enable them to strengthen the sustainability of their development path. Specifically, key findings on the economic cost of gender inequality are as follows:

- **Lost human capital wealth due to inequality in earnings (across all countries).** If women were earning as much as men, women’s human capital wealth could increase by more than half globally (Table ES.1; see Box ES.2 on the limits of the analysis). Gains would differ between regions and countries, but globally for the 141 countries included in the analysis, the total gain in human capital wealth from gender equality is estimated at US$172.3 trillion in 2017 or US$24,586 per person. This estimate, which is in 2014 price levels to be comparable to estimates for 2014 in Wodon and de la Briere (2018), represents about twice the value of GDP globally. Human capital wealth could increase by about one fifth globally under gender equality in earnings, leading to substantial gains in global wealth (including natural and produced capital). Losses in human capital wealth due to gender inequality are higher in absolute value in richer countries because levels of human capital wealth are also higher in those countries. But as a proportion of human capital wealth, losses due to gender inequality are slightly larger in low income countries.

- **Lost human capital wealth due to stunting for young children (in selected developing countries).** Stunting in early childhood leads to losses in earnings in adult life. Estimates from impact evaluations suggest that stunted children may lose up to one fourth of their expected earnings in adulthood due to stunting in early childhood. As gender inequality (experienced by mothers) contributes to high stunting rates (for their children) in developing countries, it reduces expected earnings and thereby human capital wealth for the adult workforce. The economic cost of gender inequality due to its impact on stunting for young children is estimated at US$71 billion in 2014 for a set of 17 developing countries with a population of more than two billion people. This is much smaller than the lost human capital wealth from gender inequality in earnings, but still substantial for the countries affected, and especially the people affected by losses in earnings in adulthood due to stunting during their childhood.

- **Lost welfare from high population growth (in selected developing countries).** Women should have agency in terms of the number of children that they have over their lifetime. Through child marriage and early childbearing as well as lower educational attainment for girls as compared to boys in many low-income countries, gender inequality for girls is associated with higher fertility and population growth. This reduces levels of overall wealth per person in those countries. The gains in wealth per capita that could result from lower population growth by achieving gender equality and reducing fertility are cumulative over time. If

<table>
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<tr>
<th>Table ES.1: Human Capital Wealth by Gender and Potential Loss Due to Gender Inequality (US$ of 2014)</th>
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<td>-----------------------------------------------</td>
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<tr>
<td>Human capital wealth per capita, men</td>
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<td>Human capital wealth per capita, women</td>
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<tr>
<td>Ratio of women versus men’s human capital</td>
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<td>Loss as share of baseline human capital</td>
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<td>Loss as share of baseline total wealth</td>
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<td>Loss in human capital wealth per capita</td>
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Source: Authors. See also Wodon (2018) and Wodon and de la Brière (2018) for estimates up to 2014.
Note: (*) Estimates for 2017 are based on projections taking into account GDP growth between 2014 and 2017. The share of human capital in total wealth in 2017 is not provided because projections are not available for total wealth.
BOX ES.2: THE CHANGING NATURE OF PAID EMPLOYMENT AND OTHER SHIFTS

The estimates of the global cost of gender inequality in earnings are based on current conditions, since they rely on estimations of expected future earnings of today’s labor force, with expected earnings measured based on existing household surveys and therefore current conditions. As such, the estimates do not account for potential future shifts, whether those are related to demographic change, the changing nature of work, technological advances, or the potential impact of fragility and conflict among others. For example, men and women are expected to be affected in similar proportions by automation (McKinsey Global Institute, 2019). However, if men are over-represented in emerging technology-related fields with high levels of pay and future opportunities, it could be that gender inequality in earnings may worsen in the future in some countries due to technological change (on how to promote digital jobs for women, see Solutions for Youth Employment, 2018). As another example, although the issue of the potential impact of gender inequality on population growth is considered in this study, the role that population growth will play for human capital wealth through the size of the labor force is not fully taken into account since estimates only consider individuals older than 15. Considering the potential impact of future shifts in the labor market on estimates of gender inequality in earnings is beyond the scope of this study, but those issues could be considered in follow up work.

gender equality could be achieved, first year benefits from lower population growth are valued at US$80 billion for 16 developing countries with a combined population of 2.3 billion people. Additional benefits would accrue in subsequent years. This is a mechanical relationship whereby lower population growth results in higher GDP per capita, and it does not capture additional economic gains from lower fertility. These benefits would rise over time as standards of living in the countries improve and population grows, ultimately representing a substantial share of total gains from gender equality in these high population growth countries. However, while very salient to these countries, from a global perspective, the costs related to high population growth are substantially smaller because the countries that would benefit from reductions in population growth have lower levels of wealth than upper middle and high income countries where impacts on population growth would likely be smaller.

- **Budget costs from high population growth (in selected developing countries).** By contributing to high fertility and thereby population growth, gender inequality may contribute to lower quality services provided by governments to their population. This is because higher population growth may require spreading budget resources more thinly to provide basic education to ever larger cohorts of students. While reducing population growth is not an end in itself, if population growth were lower by addressing unmet contraception needs and empowering women in high fertility contexts, more resources could be available to invest in higher quality services. The savings that could be reinvested in higher quality services can be estimated based on the reduction in the population to be served when population growth is itself reduced by achieving gender equality. For savings related to the provision of public education, benefits start to be reaped six years after gender equality is achieved since this is the time needed for fewer children to enter primary school. Savings are estimated as the reduction in the anticipated cost of reaching universal secondary education by 2030 in 16 countries. The benefits increase over time and could reach up to $27 billion by 2030 in those countries. This is an upper bound estimate of potential savings since countries may not reach universal secondary education by 2030. But this is by no means a negligible amount that could be reinvested in improving the quality of the education being provided.

- **Difference between developed and developing countries.** There is a major difference between developed and developing countries in the economic costs generated by gender inequality. In developed countries, costs related to gaps in labor market earnings tend to dominate, given that other costs (as measured in this study) tend to be small since the countries have lower levels of population growth and under-five stunting,
among others. By contrast, in developing countries, while costs associated with gender inequality in earnings are also high, costs related to population growth and under-five stunting are far from being negligible, and in some cases may exceed costs related to gender gaps in earnings, at least over a sufficiently long period of time. The implication is that in developed counties interventions to reduce the costs of gender equality may focus in large part on labor market earnings and other factors affecting income levels. However, in developed countries, and especially in low income countries, high rates of population growth as well as poor education, health, and nutrition outcomes must be tackled as well. This is why in low income countries, investments in adolescent girls are so important, including to improve educational attainment, reduce child marriage, and prevent early childbearing.

SUMMARY OF KEY FINDINGS

Table ES.2 provides the main estimated potential impacts of gender inequality by domain, together with an indication of country coverage for the estimations. This is done by distinguishing estimates based on global data from those based on a core set of up to two dozen developing countries. Potential impacts are summarized by showing gains from achieving gender equality in comparison to current conditions. It should again be emphasized that what is measured when using regression analysis is associations, not necessarily causal impacts. In addition, simulations of the benefits of achieving gender equality are based on simple comparative statics – they do not take into account potential broader effects in the economy arising from, for example, an expansion in opportunities for girls and women. Assuming no changes for men in various areas such as labor force participation and earnings may lead to under- or over-estimating some of the benefits from gender equality. Finally, for some indicators, especially in the case of agency and decision-making, and social capital and institutions, the data pertain to reported behaviors and perceptions, thereby making interpretation more tentative. As a results, estimates of potential impacts and for some of the impacts associated economic costs are not meant to be precise since they depend on models and assumptions. But they nonetheless demonstrate that the potential economic impacts and costs of gender inequality are high not only for girls and women, but also for their communities and for societies overall.

SELECTED POLICY OPTIONS TO ACHIEVE GENDER EQUALITY

Since gender inequality affects girls and women in virtually all aspects of their life, a wide range of interventions to reduce gender inequality and mitigate its impacts should be implemented. But to keep the discussion of policy options manageable, the focus is on three types of investments along the life cycle: (1) Investments in early childhood development to reduce the impact of gender inequality on young children, including through the provision of care for very young children; (2) Investments in adolescent girls to delay marriage and childbearing while improving education opportunities and reducing fertility; and (3) Investments in adult women to improve employment and earnings opportunities. This categorization in three buckets is for expository purposes. In practice the various types of policies matter for all the impacts and economic costs identified in the study. The focus on a subset of the investments needed to achieve gender equality does not mean that other types of investments are not important or needed. But because these three types of investments are related directly to identified impacts and economic costs of gender inequality in this study, these are the investments considered in more detail. In addition, the study suggests to target high prevalence areas for gender inequality or some of its manifestations through interventions and prepare diagnostics and strategies to reduce gender inequality.

• Investing in young children. Gender inequality manifests itself from early childhood and even before, as in the case of “missing girls” due to parental preferences for boys. After birth, girls may be at a disadvantage as they may not benefit from the same investments as boys. In addition, and this is where this study provides measures of impact, gender inequality as experienced by mothers may affect both boys and girls, as is the case when early childbearing and low educational attainment for mothers lead to higher risk of under-five mortality and stunting. In order to prevent such negative impacts, investing in young children is one of the best investments that countries can make. A child’s earliest years present a unique window of opportunity to address inequality (including gender inequality), break the cycle of poverty, and improve
<table>
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<th>Domain</th>
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<td><strong>Earnings and standards of living</strong></td>
<td></td>
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</tr>
<tr>
<td>Global</td>
<td></td>
<td>Increase in women’s human capital wealth of more than half</td>
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<tr>
<td>Global</td>
<td></td>
<td>Gain in women’s labor force participation and full-time work of 20 percentage points</td>
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<tr>
<td>Global</td>
<td></td>
<td>Substantial reduction in poverty from higher earnings and lower fertility</td>
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<td><strong>Educational attainment, child marriage and early childbearing</strong></td>
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<tr>
<td>Global</td>
<td></td>
<td>Elimination of child marriage</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Reduction in early childbearing by at least three fourths</td>
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<tr>
<td>Global</td>
<td></td>
<td>Gains in educational attainment for girls in low-income countries</td>
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<tr>
<td><strong>Fertility and population growth</strong></td>
<td>DCs</td>
<td>Reduction in total fertility by 13 percent</td>
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<tr>
<td>Global</td>
<td></td>
<td>Increase in contraceptive use by 12 percent</td>
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<tr>
<td>Global</td>
<td></td>
<td>Reduction in population growth rate by 0.26 percentage point in 16 countries</td>
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<tr>
<td><strong>Health, nutrition, well-being, and violence</strong></td>
<td>Global</td>
<td>Improvement in women’s health and psychological well-being</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Reduction in under-five mortality rate by 5 percent</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Reduction in under-five stunting rate by 7 percent</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Increase in women’s knowledge of HIV/AIDS and reduction in violence</td>
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<tr>
<td><strong>Agency, decision-making, and social capital</strong></td>
<td>DCs</td>
<td>Increase in women’s decision-making by 45 percent</td>
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<tr>
<td>Global</td>
<td></td>
<td>Improvement in women’s ability to assess quality of basic services</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Increase in likelihood of birth registration by 5 percent</td>
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<tr>
<td>Global</td>
<td></td>
<td>Increase in women’s ability to engage in altruistic behaviors</td>
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<td>Global</td>
<td></td>
<td>Increase in women’s reported ability to rely on friends when in need</td>
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<td><strong>Potential economic costs</strong></td>
<td></td>
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<tr>
<td>Global</td>
<td></td>
<td>Loss in HC wealth from earnings inequality of US$172 trillion</td>
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<tr>
<td>DCs</td>
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<td>Loss in HC wealth from stunting of US$71 billion in 17 countries</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Loss in wealth per capita equivalent to US$80 billion in first year in 16 countries due to high population growth (with cumulative effects over time)</td>
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<tr>
<td>DCs</td>
<td></td>
<td>Budget costs in education of up to US$27 billion by 2030 in 16 countries</td>
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Source: Authors
Note: DCs = Selected developing countries.
a wide range of outcomes later in life. Denboba et al. (2014) suggest a list of 25 interventions considered as essential for young children. These interventions can be delivered through five integrated packages at different stages in a child’s life: (i) the family support package, which should be provided throughout the ECD period and which includes interventions to provide care options for young children that enable women to work, (ii) the pregnancy package, (iii) the birth package from birth to six months, (iv) the child health and development package, and (v) the preschool package. Of special importance for the focus of this study are interventions related to planning for family size and spacing, given that a woman’s ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy, in addition to the impacts and costs of gender inequality through higher fertility as estimated in this study.

**Investing in adolescent girls to delay marriage and childbearing while also improving their education opportunities.** Three-pronged strategies are likely to be needed to invest in adolescent girls and provide them with better opportunities in life: (1) General basic conditions must be met for access to education and learning; (2) Targeted interventions must be implemented to reach vulnerable girls; and (3) Efforts must be undertaken to change gender-based social norms and gender-based laws, which affect all women but especially adolescent girls (for a review of constraints and promising interventions with a focus on Africa, see also Chakravarty et al., 2017).

- **Ensuring general conditions for access to education and learning.** Several reviews discuss the basic general conditions required for improving girls’ education (Unterhalter et al., 2014; Sperling and Winthrop, 2016; Evans and Yuan, 2019; Wodon, 2020). Some of the interventions required to ensure these basic conditions are met are likely to be as effective to improve education for girls as interventions targeted to girls specifically (Evans and Yuan, 2019). In many countries with a high prevalence of child marriage and low educational attainment for girls, there is a need to build secondary schools closer to where girls (and boys) live or provide modes of transportation and in some cases boarding to enable them to attend schools, especially at the secondary level. Providing adequate water, sanitation and hygiene facilities for girls is essential for school infrastructure. Addressing prevention and responses to the risk of violence and sexual harassment either at or en route to school is also critical for school systems and communities to address. It is also essential to ensure that schools improve learning outcomes and provide girls (and boys) with appropriate skills. Among various entry points that can be used to that end, the following can be mentioned (1) reducing disadvantages that girls face in remote communities, often due in part to poor targeting of Government resources; (2) creating a more inclusive school culture for girls – including protocols for gender-based violence prevention and response; (3) providing girls with role models—including through female teachers; and (4) raising the returns to secondary education for women through better employment opportunities. This list is not exhaustive and entry points vary between countries. In addition, many interventions that can benefit girls need not be specific to girls. For example, cash transfers for access to schooling or pedagogical interventions to improve learning may benefit boys as well as girls, and in some case may have larger impacts than girls-specific interventions.

- **Implementing interventions to reach especially vulnerable girls:** The focus here is on delaying marriage and early childbearing, while also improving knowledge of sexual and reproductive rights and health. The study outlines three types of interventions that were recently reviewed on the basis of the available evidence from experimental or quasi-experimental studies: (1) There is a need for interventions to expand economic opportunities for adolescent girls who dropped out of school and who are unlikely to be able to return; (2) Imparting adolescent girls with life skills and reproductive health knowledge is also needed, whether girls are in school or out of school. Evidence suggests that safe space clubs where girls may discuss issues of sexual and reproductive health as well as other topics with female mentors may be an effective means of achieving this; (3) However, according to the literature, the most effective targeted interventions to delay marriage and childbearing are those that enable girls to remain in school, especially through incentives offsetting the out-
of-pocket and opportunity costs of schooling (see Botea et al., 2017, for a more detailed review, as well as Bandiera et al., forthcoming, and Baird et al, 2011, as examples of interventions).

* Changing gender-based social norms and gender-biased laws: Child marriage, early childbearing, low educational attainment for girls, and other forms of gender inequality are rooted in social norms that perpetuate gender discrimination. To tackle this challenge, beyond general conditions that education systems should meet and targeted interventions to reach vulnerable girls, additional community-based interventions that involve all members of the community may be an effective means of changing these norms (see for example the review by Jayachandran, 2019). Such interventions should target men and community leaders and not only women. Finally, adequate laws – for example on the minimum age for marriage without exceptions for parental and judicial consent, but also in many other areas related to work, inheritance, and many other aspects of women’s lives are also essential as noted among others in successive Women, Business and the Law reports, but often not sufficient on their own to achieve change. Processes for registering marriages and births may be instrumental in ensuring that legislation related to the minimum age for marriage are respected.

* Investing in women to improve employment and earnings opportunities. In middle and high income countries, gender parity has been achieved in educational attainment, with girls even edging boys in many countries. Yet this does not mean that women do as well as men in labor markets, as documented by human capital wealth gaps between men and women. A review of the literature prepared for this study suggests that interventions can be implemented in three main areas: (1) reducing time spent by women in unpaid work and redistributing care responsibilities within households and between households and public and private service providers; (2) increasing women’s ownership and control over productive assets, especially finance; and (3) addressing a variety of market and institutional failures.

* Reducing, redistributing and recognizing (three Rs) unpaid work and care: Elson (2017) suggested a “three Rs” approach to close the gender gap. Time use surveys show that women spend substantially more time in unpaid home-based work than men, and consequently less time in market work. Reducing unpaid work for women would free time for market work or other activities. Various types of policies can help in that regard. This includes providing better access to basic infrastructure services (water, electricity, energy) as well as child and elderly care services; enhancing women’s mobility through better and safer modes of transportation and ICT; and expanding programs such as parental leave, flexible schedules, and appropriate legislation on retirement ages while minimizing potential downsides for women in terms of slower career progression or occupational segregation. Among those interventions, quality care services are especially important as a shift in the proportions of market work, non-market work, and leisure time for women requires a double redistribution of care work, not only within households to adult male members but also between households and public and private service providers.
Facilitating access to productive assets: Especially in low income countries, women’s employment tends to be informal and concentrated in agriculture (and to some extent services). Women farmers often generate less income than men due to unequal access to inputs and lower returns to these inputs. Improving ownership of, secure access to, and control over good quality land requires strengthening women’s land rights in legislation and property registries (for a review with a focus on Africa, see O’Sullivan, 2017). Also important is the acquisition of soft technical and managerial skills and access to finance among others through micro-credit and the promotion of alternative collateral. Bundled services including (in-kind) capital transfer, asset-specific training, technical assistance, stipends for one to two years, and health information and insurance as well as life skills training can help push very poor women out of poverty traps with positive economic outcomes and increased savings. High-quality business management training of significant duration can benefit female entrepreneurs, as can demand-driven job services tackling barriers to employment.

Solving market and institutional failures: Both types of failures can be pervasive with serious implications for gender inequality. Access to information to address occupational segregation and pay gaps can help improve gender equality. Access to social capital (networks, role models, and mentorship) also matters. Self-help groups foster increased solidarity between peers, independent financial decision-making, and greater respect for the women within their households and communities. Group approaches may be especially effective, for instance in agriculture as illustrated by production cooperatives, but also in finance and entrepreneurship. Another area for reform is legal and fiscal frameworks including labor market policies ensuring equal opportunities, laws about access to capital and justice, and policies targeted at advancing women to top positions. In OECD countries that have more developed tax systems, policies should avoid penalties for women as “second earner”, while earned income tax credits can provide an income subsidy for low-earner families and encourages women to enter the labor force. Finally, encourage safety and preventing gender-based violence at home, at work, and in public spaces is also essential (this requires interventions beyond solving market and institutional failures).

• Targeting. Finally, the study makes the case for targeting geographic areas when implementing interventions and preparing cross-sectoral strategies to reduce gender inequality. Ideally, interventions should have universal coverage, but in practice, resources are often limited. Given the importance of achieving change at the community level, including in terms of social norms, targeting interventions in priority areas can help to create tipping points. In addition, although this is a generic point, it is worth noting that preparing a country diagnostic of gender inequality and drafting an evidence-based strategy towards gender equality can help conduct the dialogue needed to achieve consensus and commitment.

CONCLUSION

Gender inequality has negative impacts for girls and women throughout their lives and these impacts result in large costs to economies. These impacts were documented in this study in five main areas: (1) earnings and standards of living; (2) educational attainment, child marriage and early childbearing; (3) fertility and population growth; (4) health, nutrition, well-being, and violence; and (5) agency, decision-making, and social capital. The potential economic costs of gender inequality in terms of lost wealth for countries are substantial. But solutions are available to achieve gender equality. Along a simple life cycle model, the study considered three main types of interventions: (1) Investments in early childhood development to reduce the impact of gender inequality on young children; (2) Investments in adolescent girls to delay marriage and childbearing while also improving education opportunities; and (3) Investments in adult women to improve employment and earnings opportunities and increase human capital wealth. In addition, the study also suggested to target high prevalence areas for gender inequality or some of its manifestations through interventions and prepare strategies to reduce gender inequality. This is not only the right thing to do, it also makes sense from an economic point of view.
REFERENCES


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