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### 5.1. Introduction

Gender is a primary marker of social and economic stratification and, as a result, of exclusion. Regardless of one's socioeconomic class, there are systematic gender differences in material well-being, although the degree of inequality varies across countries and over time. As a result, gender inequality is a characteristic of most societies, with males on average better positioned in social, economic, and political hierarchies. For more than two decades, the goal of reducing gender inequality has held a prominent place in international organizations and in national strategy statements. Millennium Development Goal 3 reflects the global attention to the issue of gender inequality and has been providing the impetus for governments to eliminate gender inequality in primary and secondary education by 2005 and in all levels by 2015.

Where do we stand today with regard to gender parity in well-being? This paper explores that question. There is growing recognition that well-being is a multi-dimensional concept and, as noted in chapter 2, goes beyond income, educational attainment and health (the material dimensions) to include agency and empowerment as well as subjective well-being. That framework is reflected in the following gender analysis that evaluates gender differences in three key domains: *capabilities, livelihoods*, and *agency*.<sup>1</sup> The first of these categories — capabilities — is of intrinsic value and it also generates the preconditions for securing one's economic well-

Well-being is a multi-dimensional concept and, as noted in chapter 2, goes beyond income, educational attainment and health (the material dimensions) to include agency and empowerment as well as subjective well-being. being via engagement in production and economic decision-making. The second domain — livelihoods — is comprised of conditions that enable individuals to adequately provide for themselves and their families and includes access to work, wages, access to credit and asset ownership.<sup>2</sup> The third domain — agency (or empowerment) — can be understood as the ability of individuals and the groups to which they belong to shape their environment. Thus, gender equality in this domain would imply that women are equally *agentic* as men.<sup>3</sup> Women's share of managerial positions and trade union membership and of leadership positions in cooperatives, businesses and governing bodies are useful indicators in this domain.

This framework for analysing global trends in inequality is based on the following premises. Equality of capabilities — that is, that women and men be on equal footing in terms of core functionings (education, health, and nutrition) — is a key condition for gender equality in other domains. Further, in order to achieve economic equality, women should be on par with men in their ability to convert capabilities into the ability to generate livelihoods, that is, there should be progress towards gender equity in economic well-being. While we lack gender-disaggregated data on income, we should be able to assess equality in this domain via data on gender gaps in access to jobs, credit and property ownership rights. The third domain, agency, is related to empowerment and voice in decision-making in the major sites of resource allocation in society: the household, the workplace and in governing bodies. With voice in these arenas, women might be able to influence the factors that lead to inequality in the capabilities or livelihoods domain. Unequal investments in girls' education at the household level, for example, can be rectified with increased voice that ensures that government resources are allocated to improve girls' access to schooling.

These three domains, therefore, are interrelated. Progress in one domain can leverage change in another. Further, progress in any one of these domains without progress in the others is inadequate to achieving the overall goal of gender equality.



Gender inequality is not perpetuated exclusively through differential access to and control over material resources. Gender norms and stereotypes reinforce gendered identities and constrain the behaviour of women and men in ways that lead to inequality (Ridgeway, 2011). We therefore also explore trends in some key indicators of gender inequality in norms, using data from four waves of the World Values Survey.

Any approach to analysing global trends in gender equality must be cognizant of the fact that not all gender disparities favour men. For example, trends in educational attainment in recent years indicate gender reversals in some countries, with women's educational attainment exceeding men's. Evidence of male disadvantage is important to identify for intrinsic reasons and also because declines in men's absolute well-being could

lead to resistance to policies that promote gender equality. In promoting greater equality, whether by class, race or gender, the most politically feasible strategy is to achieve this goal without lowering the standard of living of the dominant (i.e., male) group. This suggests that, in evaluating gender trends in inequality, we also want to know whether greater gender equality has occurred in an environment of stagnating, declining or rising male well-being. As noted in the consultation on the Post-2015 Development Agenda, "gender equality is not about transferring opportunities from men to women, but about realizing the rights of everyone, and creating conditions where both all have the right and ability to realise their full human potential" (UNICEF and UN Women, 2013:35).

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# 5.2. Trends in gender equality of capabilities

The *capabilities* domain captures gender differences in the preconditions necessary for living a good life. Intergroup gender differences in capabilities condition the probabilities that females and males at the individual level will achieve particular levels of economic well-being. Here we focus on two indicators of capabilities education and health — both considered essential prerequisites to well-being, laying the foundation for the ability to provision for self and family and thus to achieve economic security.

Intergroup inequality in capabilities is important beyond the individual impacts that it embodies. That is the case because intergroup inequality contributes to the formation and perpetuation of norms and stereotypes that influence access to resources, livelihoods and agency. Underinvestment in female education, for example, contributes to stereotypes about women's relative intelligence and skills, regardless of those possessed by the individual woman. A large time-series of global data is available to examine trends in three variables in the capabilities domain: 1) total years of education of those 15 and older, 2) gross secondary school enrolment rates, and 3) life expectancy (relative to the maximum achievable by gender).<sup>4</sup>

Average total years of education is a stock variable that captures the cumulative societal effect of gender inequality in education. In contrast, (gross) secondary school enrolment rates are a flow variable, indicative of gender differences in the particular year in which the data are measured. This contrasts with previous studies that emphasize gender differences in literacy and primary school enrolment rates. This paper focuses on secondary school enrolment rates for two reasons. First, substantial progress has been made in closing gender gaps in literacy and primary education, making it useful to shift focus to higher levels of education. Second,

# Figure 5.1. Trends in female and male average total years of education, 1990 and 2010

Panel A. Distributions of F/M ratios



Panel B. Change in F/M ratio and initial F/M ratio total average years education



Panel C. Regional trends in F/M educational attainment ratios, 1990 to 2010



Source: Author's calculations based on Barro and Lee (2010) dataset.

as economies change and move up the industrial ladder, secondary education is more likely than primary education to determine ability to participate in the paid economy rather than in earlier stages of economic development.

With regard to the health domain, gender differences in life expectancy reveal information about physical well-being and duration of life. Although some studies also examine data on maternal mortality rates, this analysis maintains a focus on variables that explicitly measure gender gaps (Permanyer, 2013).

### 5.2a. Education

This section examines total years of education of those 15 and older as a broad measure of educational achievement, using data from Barro and Lee (2010) for 1990 to 2010. It also examines gender differences in gross secondary enrolment rates for the same time period.

The data in Figure 5.1 exhibit trends in the ratio of average total years of femaleto-male education for those 15 and older from 1990 to 2010 for 146 countries. This variable reflects the cumulative effect of educational inequality in a society. Panel A plots the distribution of the ratio of female-to-male (F/M) total years of education using a kernel density estimation procedure.<sup>5</sup> The x-axis represents the F/M ratio of total average years of education in a country while the y-axis indicates the number of countries with a particular F/M ratio. As Panel A demonstrates, gender disparities in average total years of education have diminished over the past 20 years. The entire distribution has moved to the right, indicating that the average (at the country level) F/M ratio has risen.



The average F/M ratio of total years of education increased from 82 percent in 1990 to 91 percent in 2010. The share of countries with F/M ratios at or above 95 percent has risen from 33 percent in 1990 to 52 percent in 2010. Further, a large number of countries have achieved or are close to parity (countries are clustered around a value of 1, indicating equality in total years of education). At the other extreme, the percentage of countries in which the F/M ratio exceeds 1 has fallen. Overall, it is visually apparent that global gender inequality in total years of education is not only falling, but that we are moving toward global convergence with a large number of countries at or close to parity.

Panel B plots the change in the F/M ratio of total years of education from 1990 to 2010 against the 1990 ratio. The negative correlation of these two variables shows that the greatest gains in narrowing educational gaps are countries that started out with the widest gaps. This can be seen clearly in Panel C. The two regions with the lowest F/M ratios in 1990 — the Africa and Arab regions — have made the largest advances toward gender equality in total educational attainment.

Figure 5.2 shows gross secondary enrolment rates with a comparison of gender trends from 1990 to 2010 for the 107 countries for which data are available. Panel A in Figure 5.2 shows the shift in the distribution of the F/M ratio of gross secondary enrolment rates from 1990 to 2010. The left tail has shifted to the right, indicating progress in the more unequal countries. Also, countries where the ratio had been greater than one in 1990 (in favour of females) have reverted to more gender equal outcomes (the right tail has shifted left). In fact, a large number of countries (almost 75 percent, compared to 60 percent in 1990) are now centred on a ratio of 1, indicating much greater global equality in secondary educational attainment.

There is both greater gender equality in secondary school enrolment rates within countries and a global convergence of gender equality in secondary school enrolment rates of 0.99 in 2010, up from 0.93 in 1990. This is good news and reflects solid progress as we move beyond parity in literacy and primary education.

Panel B describes in more detail the unevenness with which countries at the lower end of the distribution have improved gender outcomes. It is noteworthy that cases of retrogression (declines in the F/M ratio) are concentrated among countries that started out with ratios close to or greater than 1 in 1990.<sup>6</sup> In sum, just as with total years of education, there is both greater gender equality in secondary school enrolment rates within countries and a global convergence of gender equality in secondary school enrolment rates of 0.99 in 2010, up from 0.93 in 1990. This is good news and reflects solid progress as we move beyond parity in literacy and primary education. As with total educational attainment, regional gains (shown in Panel C) are greatest for those that had the lowest ratios in 1990.

### 5.2b. Health outcomes

Measurements of gender gaps in health should control for biological differences so as to isolate the effect of societal influences on gender inequality. To that end, life expectancy measures used here reflect how far away a country is from the female and male 'goalposts' as reflected by the gender-specific maximum life expectancies achieved in a given year among the countries in the sample.<sup>7</sup>

Data for 185 countries are presented in Figure 5.3 for 1990 and 2010. Panel A presents the global distributions for each of these years and indicates a modest improvement in gender ratios at the low end of the distribution (the left tail moves right). For example, in Afghanistan, the ratio rose from 0.49 to 0.53 from 1990 to 2010. The

### Figure 5.2. Female and male gross secondary school enrolment rates, 1990 and 2010

Panel A. Distributions of F/M ratios



Panel C. Regional trends in F/M secondary enrolment



**Note:** 1990 and 2010 represent averages for 1989-91 and 2009-11, respectively.

Source: World Bank (2013).

Panel B. Countries ranked by 1990 F/M ratio





Panel A. Distributions of F/M life expectancy



Panel B. Regional trends in F/M life ratios expectancy, 1990 to 2010



Source: World Bank (2013).

global mean of the life expectancy ratio is 1.002 in 2010, virtually unchanged from 1990 to 2010. Further, the global mean obscures significant country-level regional differences. For instance, in 33 countries, the F/M life expectancy ratio was below 95 percent in 1990 and there was no decrease in that number by 2010.

Panel B plots regional F/M life expectancy ratios for 1990 and 2010 to the change in the F/M ratio over the time period 1990 to 2010 (see the right axis). The greatest improvements are observable in the Arab region and in Asia and the Pacific, although these changes are very modest, with the ratio below gender parity even by 2010.

In sum, the analysis shows mixed results with regard to global trends in gender equality in capabilities. Educational gaps are closing and there appears to be global convergence in gender educational equality. Results are less positive in the area of health, with life expectancy ratios making uneven progress and demonstrating greater global divergence.

## 5.3. Gender trends in livelihoods

Gender inequality in livelihoods can contribute to inequality in other domains (Collins et al., 1993; Seguino, 2013b). Women's lower incomes and more limited access to other resources required to secure a livelihood such as land, credit and assets reduce bargaining power within households. As such, women experience restricted ability to exercise their preferences in the gender division of unpaid/paid labour, the allocation of household income and their ability to exit harmful relationships.

Numerous studies find that employment is a key mechanism for promoting gender equity and that gender equality in this domain can leverage change in other domains (Seguino, 2007; Ridgeway, 2011; Kabeer et al., 2013). Of course, it is not just access to employment or livelihoods, but also the relative quality of jobs that matters for economic empowerment. Segregation of women in low-wage insecure jobs will do little to improve their bargaining power if male household members have disproportionate control over good jobs. Data are, however, too sparse to precisely measure women's access to and control over material resources.

Results are less positive in the area of health, with life expectancy ratios making uneven progress and demonstrating greater global divergence. Wage data tend to be available primarily for higher-income countries and there is little globally comparable time-series data on the quality and security of employment. Moreover, ownership and control over assets influence bargaining power, but accurate time-series genderdisaggregated measures of wealth and other assets are even less widely available than employment data. And, despite advances made in measuring time use that could shed some light on the household division of labour and leisure, we are a long way from having a global time-series on this variable.

Therefore, the bulk of the analysis is confined to an examination of gender differences in four variables: 1) employment-to-population ratios, 15 and older; 2) unemployment rates; 3) wages; and 4) shares of females and males employed in the industrial sector to capture gender job segregation in the productive sector of the economy.<sup>8</sup> Most data extend from 1990 to 2009 or 2010, but unemployment data are available as a global dataset only up to 2007. This is not deeply problematic, since this date precedes the onset of the most recent financial crisis, avoiding a distortion in the assessment of long-term trends.

### 5.3a. Labour force participation and employment ratios

Labour force participation rates measure the proportion of a country's working-age population that is active in the productive sphere<sup>9</sup> of the economy, either by working or looking for work. Because the desire for paid work is not always fulfilled, it is useful to consider employment-to-population ratios for those 15 and older. Caution should be used in making inferences about well-being from these data, since the definition of employment is broad. Specifically, persons who have performed any work at all in the reference period for pay (of any kind) or profit, or who were temporarily absent from a job for reasons of illness, parental leave, holiday, training or industrial dispute, are counted as employed. This implies that the economic effect of employment in terms of

access to a livelihood varies widely, depending on pay, hours of work, volatility of income and other forms of non-wage compensation.

Figure 5.4 provides data on F/M employment-to-population ratios for 177 countries for 1991 to 2010. As the data in Figure 5.4 demonstrate, gender gaps are closing. The global ratio of F/M employment rates rose from 0.62 in 1990 to 0.70 in 2010. In Panel A, the left tail of the distribution of the ratio of F/M employment rates has shifted to the right, that is, the lowest F/M employment ratio in 1990 was a mere 9.8 percent (in Jordan). By 2010, the lowest ratio was 14.8 percent (in Syria). That being said, in the overwhelming majority of countries, this ratio was still well below parity in 2010. Only four countries had reached parity by 2010: Malawi, Rwanda, Burundi, and Mozambique. Most gains have been made in countries that started out with low ratios, which suggests that progress has stalled in countries that already had greater gender equality in employment in 1991.

Very few countries have achieved parity in employment in contrast to the concentration of most secondary education ratios around 1 (where the global mean in 2010 was 0.976 compared to 0.693 for F/M employment ratios). Clearly, educational equality is not sufficient for securing gender parity in employment.

It is useful to know whether gains in the F/M ratio come at the cost of male employment, an outcome that can be gender-conflictive at the household level and society-wide. Panel B plots changes in the F/M employment rate ratio against changes in male employment rates for 1991 to 2010. In 70 percent of the 140 countries in which the F/M employment ratios have risen over this period of time, male employment rates have fallen. This can be observed in the northwest quadrant of Panel B, which identifies countries in which male rates have fallen and female-to-male ratios have risen.

There are important reasons to be concerned about this phenomenon as an impediment to gender equality. Research indicates that, in recessions, male job loss triggers increased incidence of domestic violence (Manheim and Manheim, 2012).<sup>10</sup> Duvvury et al. (2012) have demonstrated the non-trivial cost of domestic violence in Viet Nam for individuals and as a share of GDP. Out-of-pocket costs (such as earnings and medical and legal costs) amounted to 1.4 percent of GDP in 2010, while productivity losses (abused women earn 35 percent less than women who do not experience partner violence) totalled 1.78 percent of GDP in that same year. It would therefore be hard to characterize the higher F/M ratios in those countries in which male employment rates have declined as an unqualified success or movement toward gender equality. To the extent that such trends are in fact gender-conflictive, they are unsustainable, at least in the medium term and until norms of masculinity about male breadwinner roles change and adapt.

It is clear that gender equality in livelihoods, as measured by employment rates, substantially lags achievements in education. Figure 5.4, Panel C, plots the distribution of the F/M ratio of secondary school enrolment rates in 2010 and compares that with the F/M ratio of employment rates for the same year. Very few countries have achieved parity in employment in contrast to the concentration of most secondary education ratios around 1 (where the global mean in 2010 was 0.976 compared to 0.693 for F/M employment ratios). Clearly, educational equality is not sufficient for securing gender parity in employment. This is confirmed in Panel D, which plots countries' change in the F/M ratio of secondary enrolment against the change in the F/M employment rate. There is no evidence of a positive correlation between greater gender equality in education and employment. In fact, as the trend line in Panel D shows, there is a (weak) negative relationship.

## Figure 5.4. Trends in F/M ratio of employment-to-population ratios, 1991 to 2010



Panel A. Distributions of F/M ratios

Panel B. Change in female-to-male and male employment rates, 1991 to 2010



Panel C. A Comparison of capabilities and livelihoods equality: female/male gross secondary enrolment and employment, 2010



Panel D. Changes in F/M employment and secondary enrolment



Source: World Bank (2013).

#### 5.3b. Unemployment rates

Unemployment rates are measured relative to the size of the labour force (while employment rates are measured relative to the population above a certain age). A person is defined as unemployed if out of work, available for work and actively seeking work in the past period. Gendered trends in unemployment rates are measured as the male-to-female (M/F) ratio of unemployment, such that a higher ratio indicates greater gender equality (in favour of women). This is done for consistency with other indicators in this study where increases in variables can also be interpreted as greater gender equality.



Gender-disaggregated data are available for only 67 countries for the period 1990 to 2007.<sup>11</sup> The mean global ratio of M/F unemployment rates was 0.861 in 1990, compared to 0.808 in 2007. Panel A of Figure 5.5 compares each country's M/F unemployment ratio in 1990 to the ratio in 2007. Despite some progress in countries with already high M/F unemployment ratios, the majority of countries have ratios below 1, indicating persistent gender inequality in access to work. Moreover, in those countries with greater gender equality in M/F unemployment rates in 1990, there is evidence of reduced gender equality in most of these countries by 2007. Panel B examines the percentage point change in female and male unemployment rates and the M/F ratio by region. (The Africa region is excluded because data for 1997 and 2007 are available for only one country, Namibia). The Asia region stands out as making the most progress in reducing gender gaps in unemployment rates. In Arab countries, the male and female rates have fallen proportionately so that there is virtually no change in the M/F ratio. Female unemployment rates are higher in the ECIS region in 2007 than in 1990, although the increase in male unemployment has been greater so that the M/F ratio has fallen. In Latin America and the Caribbean, men and women have lower unemployment rates, but men's rates have fallen more than women's, reducing the M/F ratio.<sup>12</sup>

### Figure 5.5. Trends in M/F unemployment rates

Panel A. Countries ranked by 1990 F/M ratio



Source: Author's calculations using World Bank (2013).



### Figure 5.5. Trends in M/F unemployment rates (contd.)

**Note:** In Panel B, the change in the M/F Ratio is shown on the right axis. **Source:** Author's calculations World Bank (2013).

### 5.3c. Gender wage differentials

Income is perhaps one of the most basic indicators of gender inequality. Household bargaining over the allocation of resources, for example, tends to favour the preferences of the adult with the strongest fallback position (that is, the best range of options available to an adult, should the household dissolve). Fallback positions are influenced by a person's income, ownership of assets, and education, among other factors (Doss, 2013).

Despite the importance of wage data in assessing gender inequality, the data available is often not comparable across countries and trend data are severely lacking. Some gender-disaggregated income estimates are published in *Human Development Reports*, but the availability of wage data is a limiting factor in these calculations. Because wages are such a key factor in gender equality and mirror societal differences in the valuation of men and women, we report here available data on gender wage gaps for the most recent year as well as trend data on gender gaps in median wages of full-time workers for 21 OECD countries, using one of the few sources of comparable cross-country earnings data.

We report raw gender wage differentials, that is, the simple ratio of average female and male earnings. Raw wage gaps are sometimes criticized because they do not control for 'productivity' as measured by job tenure and education, for example, where the residual is a measure of gender pay discrimination originating within labour markets. However, there is a broader goal in comparing raw wage gaps. Rather than focusing only on whether employers fairly pay employees, raw wage gaps offer an estimate of the structural barriers to gender equality in paid labour, via pre-market discrimination in education and training, as well as within labour markets via job segregation and wage discrimination.<sup>13</sup>

Panel A in Figure 5.6 shows the economy-wide gender earnings gap in percent for the most recent year for 54 countries.<sup>14</sup> The narrowest gap (2.9 percent) is found in Slovenia, while the widest gap is in Zambia (45.6 percent). It should be noted, however, that cross-country gaps are not strictly comparable, since wage data may be for hourly or monthly earnings or may be restricted to just full-time workers. These data are simply



# Figure 5.6. Trends in gender wage gaps in OECD countries

40%

50%

30%

Panel A. Economy-wide gender wage gaps for most recent year, various measures

20%

10%

0%

Slovenia Paraguay Venezuela Hungary New Zealand Romania Norway Costa Rica Belgium Panel B. Regional gender wage gaps

| Region              | No. of<br>countries | Gender<br>wage gap |
|---------------------|---------------------|--------------------|
| Africa              | 3                   | 36.1%              |
| Arab States         | 2                   | 27.5%              |
| A&P                 | 2                   | 15.3%              |
| ECIS                | 8                   | 21.1%              |
| LAC                 | 7                   | 14.3%              |
| Developed Countries | 32                  | 16.4%              |
|                     |                     |                    |

Panel C. Annual average change in the gender wage gap, 1980 to 2010



Note: The data in Panels A and B are for 2009 or closest year. The change in the gender gap in Panel C is the percentage points by which female earnings have improved relative to female earnings, from 1980 to 2010, or nearest year. The number of years to eliminate the gap is estimated, based on the annual average decline in the gender wage gap for the period 1980 to 2010 for which there are data. To arrive at an estimate of the years to eliminate the gap, the growth rate of the gender wage gap is calculated and, from this, an estimate of the years to reach wage parity is estimated. Because Portugal and Poland experienced wider gender earnings gaps, the years to eliminate the gap were not calculated.

**Source:** Author's calculations from data sources listed in Annex 5.A.

illustrative of the persistence of gender wage gaps, despite the declines we observe in educational inequality. In the majority of the countries shown here, male wages exceed women's by more than 15 percent.

As the data in Panel B show, the widest gender wage gaps are found in the Africa region (36.1 percent), while the narrowest are in Latin America and the Caribbean (14.3 percent). These data should be read with some caution, since we have data on only three African countries and two Arab and Asian countries. Further, the Asian group excludes advanced economies of the region (Japan, the Republic of Korea, Singapore, and Hong Kong, SAR of China). If they were included in the Asia region, the Asian gender wage gap would rise to 25.7 percent (and the gap for developed countries would fall to 14.3 percent).

Of particular note is the Republic of Korea's continued wide gap of 38.9 percent. South Korea's rapid economic growth since the 1960s has been fuelled by labour-intensive exports that have employed mainly women. Theory would predict that sustained high demand for female labour, coupled with narrowing gender educational gaps, would lead to much more progress towards achieving wage parity than has been observed over the last 40 years. Progress, however, has been very slow in South Korea (as it has been in other Asian economies, including Japan, Hong Kong, SAR of China, and Singapore).

Panel C shows the annual average rate of change in gender wage gaps in a smaller sample of OECD countries. The data are for 1980 (or earliest year) to 2010 (or latest year), and depending on the country, are for hourly, weekly or monthly earnings. These wage results should be considered a lower-bound estimate of gender earnings differentials, since the data are only for full-time workers. Women tend to be more concentrated in part-time or contingent labour and evidence indicates that hourly earnings for this group are lower than those for full-time workers.

Based on wage trends, an estimate of the number of years to eliminate gender earnings gaps is shown on the right axis. The estimate is obtained by calculating the annual rate of change of the F/M wage ratio from 1980 to present. The rate of change is used to extrapolate the number of years it would take to reach parity. Estimates range from a low of 6.9 years in Hungary to a high of 83.7 years in Finland. The length of time it will take for gender earnings differentials to be eliminated if trends over the last 30 years continue is in fact very high for Scandinavian countries because progress has been slow, despite gaps that are more modest than in other OECD countries.

### 5.3d. Job segregation: shares of females and males employed in the industrial sector

Gender inequality in wages and earnings is in part attributable to gender job segregation. That segregation may be the result of explicit job discrimination by employers or it may be a function of gendered norms that shape the educational and job decisions of women and men. Whatever the source, women and men workers tend to be concentrated in different sectors of the economy (such as in paid vs. unpaid work or industry vs. services). This segregation has palpable material effects. Ideally, over time there will be changes in gender norms and stereotypes, as well as in the overt discriminatory practices on the part of employers, leading to greater gender job integration with men and women more equally concentrated across sectors of the economy.

One way to evaluate trends in job segregation is to consider the shares of females and males employed in the industrial sector. This sector tends to be better paid than the services sector. The latter sector in many developing countries is largely informal work with low wages or profits and can often be considered residual unemployment. Industrial employment may also be more remunerative than work in the agricultural sector,

where incomes can be unstable and social insurance unavailable. This contrasts with industrial employment, where, in addition to greater likelihood of forms of non-wage compensation, more opportunity exists for training over the worker's lifetime that could raise earnings.

Data are available for 62 countries for 1990 and 2009 (or nearest year within one year). Not surprisingly, most countries for which there are data are middle- or high-income. Many of the poorest countries are not represented in this analysis. Panel A in Figure 5.7 shows that the distribution of the F/M shares employed in the industrial sector has shifted to the left, with the F/M ratio of shares employed in the industrial sector falling from 0.62 in 1990 to 0.42 in 2010. Men are even more likely to be employed in the industrial sector than women, to be precise. Among the countries with the lowest F/M ratios in 1990 and 2010 are several developed economies: Luxembourg, Norway, Sweden, Canada and Australia.

Panel B ranks countries from lowest to highest shares in 1990 and compares this with ratios in 2009. Here, too, we observe that the 2009 ranking shifts downward, indicating less concentration of women in industry relative to men, especially in those countries where the ratio had been higher in 1990 (and in some cases, in favour of women).

It is especially notable that the declining ratio of female-to-male shares employed in the industrial sector is taking place in those countries where manufacturing employment had become 'feminized' in the 1980s and 1990s — Mauritius, Hong Kong, SAR of China, Morocco, and the Dominican Republic, for example. The trend identified here is consistent Tejani's and Milberg's (2010) research highlighting the possible trend of 'defeminization' in the manufacturing sector in middle-income countries as the capital intensity of production rises; in other words, as this group of countries has moved up the industrial ladder, Tejani and Milberg observe that women are increasingly excluded from manufacturing employment.

This occurs despite narrowing of gender educational gaps in these countries and may reflect a phenomenon, dubbed 'family responsibility discrimination', that has been noted in industrialized countries such as the U.S. Those with greater family responsibility, particularly women, find themselves less likely to obtain jobs than those who do not signal such care responsibilities, i.e., men and childless women. It may also relate to employers' greater investment in the firm-specific skills of their workers. Employers in capital-intensive firms may inaccurately (or accurately) predict that men are the major breadwinners and therefore be unwilling to hire women workers who are predicted to leave the labour market at higher rates due to care responsibilities. This is more likely to occur in more capital-intensive firms, since the firm's sunk costs in worker training will yield a lower return than investments in men. The binding constraint is an absence of gender-equitable care policies, although there are other barriers as well, including gender norms and stereotypes.

Panel C provides a regional summary of trends in the ratio of female-to-male shares employed in the industrial sector from 1990 to 2009. In all regions, female shares employed in the industrial sector have declined, except in Africa. Moreover, male shares have risen only in the Arab and Asia regions. Across all regions, women's losses are greater than men's, as evidenced by the negative direction of the F/M ratio (Panel C, shown on right axis).

Taken as a group, trends in outcome indicators explored in this section are much less positive than gender progress in education in the capabilities domain. Very few countries have reached parity in employment and unemployment gaps have widened in a number of countries. Of particular concern is the fact that relative female employment gains coincide with a decline in male employment rates in a number of countries, although men appear to be able to disproportionately hold onto jobs in the industrial sector.

# Figure 5.7. Shares of females and males employed in the industrial sector, 1990 and 2009



Panel A. Distributions of F/M shares

#### Panel B. Countries ranked by 1990 F/M ratio



Panel C. Changes in regional female and male shares employed in industrial sector, 1990 to 2009



Source: Author's calculations from data sources listed in Annex 5.A.

Employment gains, in other words, could be gender-conflictive. Employment is a particularly salient domain for the fulfilment of norms of masculinity. If improvements in women's employment do indeed come at the expense of men's, this should be cause for concern. (Gender improvements in favour of women in education, for example, while troubling, are less gender-conflictive). Moreover, the reduction in women's concentration in the industrial sector as compared to men's is suggestive of a process of defeminization in that sector. Because industrial-sector jobs tend to be of higher quality than those in other sectors (they are less likely to be informal and more likely to offer benefits and a job ladder than jobs in services and agriculture), this outcome indicates a decline in gender equality. Trends in this sector are also indicative of persistent job segregation by gender.

Given the importance of access to and control over material resources for well-being, persistent and in some cases widening gender gaps in this domain are indicative of real challenges to gender equality in well-being. It should be noted that the data presented here emphasize labour market outcomes. Other data on livelihoods that would be useful include are assets,<sup>15</sup> access to credit, the level of social insurance (such as pensions, unemployment insurance) and other entitlements to commodities. Thus, it should be acknowledged that this analysis presents only a partial picture. The data gap might not be problematic if the labour market data presented here are a close proxy for these other indicators. Although we lack global data to assess this possibility, it is likely that the labour market data provide a lower bound estimate of gender inequality. We know from some country-level studies that the gender distribution of wealth, land and credit is more unequal than income, for example.<sup>16</sup>

## 5.4. Agency, empowerment, and relative political representation

Gender equality in agency and empowerment can theoretically be measured in a number of ways: political representation, trade union membership, managerial and supervisory positions held, corporate leadership and board representation. Were we to possess comprehensive time-series data in each of these categories, we would be able to provide a global picture of trends in gender equality in this domain. Because we do not, the fe-

male share of parliamentary seats is a commonly used measure of gendered political agency for the purposes of global comparisons.<sup>17</sup> For consistency with other indicators, the data are converted to female/male ratios. For example, a country with a 25 percent female share of parliamentary seats is assigned a ratio of 25 (for women) to 75 (for men) or 0.333. Figure 5.8 gives these data for 156 countries from 1997 (the earliest year available) to 2011. As can be seen in Panel A, the entire distribution has shifted to the right, indicating that women held a larger relative share of parliamentary seats in 2011

### Figure 5.8. Female/male shares of parliamentary seats





*Source:* Author's calculations using data obtained from World Bank (2013a).

than in 1997. (The outlier in 2011 is Rwanda, where women held a majority of parliamentary seats.)

The global ratio has risen from 12.7 percent in 1997 to 26.2 percent by 2011. Unlike the other indicators in this study, the greatest gains have been made in those countries already closer to gender parity in 1997. Panel B provides a regional representation of trends, with the percentage point change in the female/male ratio plotted on the left axis and the female/male ratio in 2011 on the right axis. The smallest gains are in Asia and the Pacific. This and the Arab regions have the lowest shares of females in parliament (15.7 percent and 16.1 percent, respectively). The gender gap is remarkably large as compared to the ratio of F/M educational attainment (Figures 5.1 and 5.2).

# Figure 5.8. Female/male shares of parliamentary seats (contd.)

Panel B. Regional Trends in Female/Male Shares, 1997 to 2011



Source: Author's calculations using data obtained from World Bank (2013a).

### 5.5. Trends in subjective well-being and attitudes

In addition to measures of objective well-being, it is useful to examine trends in subjective measures to gain further insight into trends in gender equality. To do this, we examine data from two waves of the World Values Survey (WVS): Wave 3 (1994-1999) and Wave 5 (2005-2008). The WVS can also be used to explore trends in gender norms and stereotypes that influence gender outcomes in material well-being. We also examine how responses to several prompts indicating attitudes towards gender equality have changed over time.

The WVS is a large-scale survey that has been carried out in a series of five waves, beginning in 1981. It provides coverage of 90 percent of the world's population, generating representative national data for 97 countries and regions. The number of countries surveyed has expanded and, as a result, the country sample changes in each wave. We confine ourselves to a comparison of responses to Waves 3 and 5 because of the expanded country coverage of these waves and because several variables of interest were first asked only in Wave 3. For consistency, we confine the analysis to those countries for which data are available on each question for Wave 3 and Wave 5. This limits the number of countries on which the results are based, but allows one to isolate changes in subjective well-being and attitudes from changes in survey coverage. The WVS summary of results is shown in Table 5.1.

We first examine results for two subjective measures of well-being: health and life satisfaction. When asked about their state of health, men rate their well-being marginally higher than women in both waves. For example, in Wave 5, the percentage of men responding that their health is either very good or good is 70.3 percent as compared to 63.6 percent for women. While women's and men's self-reported health assessments improved since Wave 1, the gender gap is virtually unchanged. This mirrors trends in life expectancy ratios (Figure 5.3).

When men and when were asked how satisfied they were with their lives, they gave assessments that are very similar in both waves, with some improvement over time. For example, on a 10-point scale (where 1 is the highest), the percentage of women responding 1, 2, or 3 is 49.3 percent in Wave 5, compared to 49.2 percent for men. One of the challenges with subjective measures of life satisfaction is that responses are conditioned by aspirations. With regard to gender differences, Amartya Sen (2000) has noted that women's assessments may reflect their assessments of the well-being of family members rather than their own. That being said, it is instructive that the male-female gap in subjective well-being is virtually unchanged between Waves 3 and 5.<sup>18</sup>

When asked how much control they feel they have over their own lives, women report a greater sense of control than men in both waves. But for men and women, their sense of control declines. That women's self-assessment of control is greater than men's is surprising. This may be related to aspirational factors as well. If, for example, men have higher aspirations for control over their lives that are not being met, they may rate their control lower than women do, even if women have less control over their lives. The downward assessment from Wave 3 to Wave 5 for men and women suggests, however,

The widest gender gaps are in the agency/empowerment domain, following by the livelihoods domain, with the greatest degree of gender equality in the capabilities domain.

deterioration in external economic, political and social circumstances. This result appears to contradict life satisfaction assessments, unless people value control over their lives less than other direct changes to their well-being.

Gender norms and stereotypes are revealed in Questions 4-9 (Table 5.1). In general, these results show improvement in gender equality of attitudes among men and women over the two waves. For example, Question 4 asks whether men are more deserving of jobs when jobs are scarce. More men than women held this view in Wave 1 (38.5 percent compared to 30.8 percent), but those percentages fell to 32.0 percent and 24.1 percent, respectively, in Wave 5. The male-female gap in responses is virtually unchanged. Son preference (Question 5) has also modestly declined for women and even more so for men. This has led to a narrower gender gap in son preference, since women's son preference was roughly only half that of men in Wave 3.

The degree of support for the view that men and women should contribute to household income (Question 6) was already high in Wave 3 (68.7 percent for men and 74.8 percent for women). But, while the percentage of men agreeing with this prompt rose in Wave 5 (very modestly), women's share fell by almost 5 percentage points. During this period, female labour force participation rates rose in many regions of the world and men's participation rates fell. Women's attitudes reflected in responses to Question 6 may suggest a dissatisfaction with the increased responsibility born by women and declining economic support of men. It is thus very interesting to observe responses to the prompt that women's earning more than men creates problems at home (Question 7). A quarter of all men held this view in Wave 1. Women, on the other hand, more strongly held the view that, if women earn more income than men, troubles at home ensue (37.4 percent in Wave 3

| No. | Question/Prompt   | Wave                     | Males | Females | Total | M-F gap | Analysis of<br>Change                            | Scale of<br>Responses                         |  |
|-----|---|--------------------------|-------|---------|-------|---------|--|---|--|
| 1   | How would you<br>describe your state                              | Wave Three:<br>1994–1999 | 64.5% | 57.2%   | 60.7% | 7.3%    | Greater gender<br>health equality;               | Percentage responding very                    |  |
|     | of health these<br>days?  | Wave Five:<br>2005–2008  | 70.3% | 63.6%   | 66.8% | 6.7%    | overall health<br>improved.                      | yood or good.                                 |  |
| 2   | How satisfied are you with your life as                           | Wave Three:<br>1994–1999 | 45.1% | 44.4%   | 44.7% | 0.7%    | Men and women both more                          | 1=satisfied,<br>10=dissatisfied:              |  |
|     | a whole these days?   | Wave Five:<br>2005–2008  | 49.2% | 49.3%   | 49.2% | -0.2%   | satisfied; gender<br>gap narrows.                | percentage<br>responding 1, 2,<br>or 3.       |  |
| 3   | How much freedom<br>of choice and                                 | Wave Three:<br>1994–1999 | 4.17  | 4.42    | 4.30  | -0.25   | Both men and<br>women feel less                  | 1=None at all,<br>10=A great deal.            |  |
|     | control you feel you<br>have over the way<br>your life turns out? | Wave Five:<br>2005–2008  | 3.60  | 3.76    | 3.68  | -0.16   | control; gender<br>gap narrows.                  |   |  |
| 4   | When jobs are scarce, men have                                    | Wave Three:<br>1994–1999 | 38.5% | 30.8%   | 34.5% | 7.8%    | Men and women<br>shift to more                   | Percentage of respondents                     |  |
|     | more right to a job<br>than women.                                | Wave Five:<br>2005–2008  | 32.0% | 24.1%   | 27.8% | 7.9%    | gender equal<br>attitudes; gender<br>gap widens. | who agree with prompt.                        |  |
| 5   | lf you were to have only one child,                               | Wave Three:<br>1994–1999 | 15.1% | 6.9%    | 10.6% | 8.2%    | Men and women<br>shift to more                   | Percentage of respondents                     |  |
|     | would you rather<br>have it be a boy or<br>a girl?                | Wave Five:<br>2005–2008  | 12.3% | 6.4%    | 9.0%  | 5.9%    | gender equal<br>attitude; gender<br>gap narrows. | who prefer a<br>boy.                          |  |
| 6   | Both the husband<br>and wife should                               | Wave Three:<br>1994–1999 | 68.7% | 74.8%   | 72.1% | -6.1%   | Men and women shift to more                      | Percentage who<br>agree strongly<br>or agree. |  |
|     | both contribute to household income.                              | Wave Five:<br>2005–2008  | 70.0% | 69.3%   | 69.6% | 0.6%    | gender equal<br>attitudes; gender<br>gap widens. |   |  |
| 7   | If a woman earns<br>more money than                               | Wave Three:<br>1994–1999 | 26.6% | 37.4%   | 32.7% | -10.8%  | Men and women<br>shift to more                   | Percentage who agree strongly                 |  |
|     | her husband, it's<br>almost certain to<br>cause problems.         | Wave Five:<br>2005–2008  | 22.4% | 33.9%   | 28.7% | -11.5%  | gender equal<br>attitudes; gender<br>gap widens. | or agree.                                     |  |
| 8   | 8 Men make better<br>political leaders                            | Wave Three:<br>1994–1999 | 50.0% | 40.1%   | 44.9% | 9.8%    | Men and women shift to more                      | Percentage who agree strongly                 |  |
|     | than women do.  | Wave Five: 2005–2008     | 46.4% | 32.2%   | 39.0% | 14.2%   | gender equal<br>attitudes; gender<br>gap widens. | or agree.                                     |  |

# Table 5.1. Trends in gender attitudes and perceived well-being, 1994-2008

Source: World Values Survey.



| No.                  | Question/Prompt                          | Wave                     | Males | Females | Total  | M-F gap   | Analysis of<br>Change          | Scale of<br>Responses         |
|----------------------|--|--------------------------|-------|---------|--------|---|--------------------------------|-------------------------------|
| 9                    | 9 University is more important for a boy | Wave Three:<br>1994–1999 | 25.8% | 20.4%   | 23.0%  | 5.3%  | Men and women<br>shift to more | Percentage who agree strongly |
| than for a girl.     | Wave Five:<br>2005–2008                  | 21.0%                    | 13.9% | 17.3%   | 7.1%   | gender equal<br>attitude; gender<br>gap widens. | or agree.                      |                               |
| 10 Employment status | Wave Three:<br>1994–1999                 | 9.9%                     | 34.0% | 22.4%   | -24.1% | Women almost 4<br>times more likely to          | Percentage<br>unemployed or    |                               |
|                      | Wave Five:<br>2005–2008                  | 9.3%                     | 29.3% | 19.8%   | -19.9% | homemaker than<br>men; gender gap<br>narrows.   | nomemaker.                     |                               |

## Table 5.1. Trends in gender attitudes and perceived well-being, 1994-2008

Source: World Values Survey.

compared to 26.6 percent for men). For women and men, the share holding that view fell by about 4 percentage points by Wave 5.

In Wave 3 (Question 8), a majority of men held the view that men make better political leaders. Women were less likely to hold this view (40.1 percent agreed with this prompt). Over time, the share of men and women holding this view has fallen. The gender gap is wider in Wave 5, with the share of women disagreeing with this prompt falling to 32.2 percent as compared to 46.4 percent for men. Similarly, the percentage holding the view that boys are more deserving of a university education than girls (Question 9) has fallen and, again, the decline is greater for females than males.

Overall, the responses to this set of prompts indicate movement toward more gender-equitable attitudes by men and women. Although women's attitudes have become more gender-equitable than men's in some instances, the overall shift in attitudes is significant, particularly since these surveys span a maximum of 14 years.

### 5.6. Is there progress toward global gender equality?

Prior to reviewing the results presented here, it is useful to note that the time period that this assessment of global trends in gender inequality covers is one in which global inequality in income, measured at the household level and between labour and profits, is on the rise. It is therefore instructive to compare how gender, as a type of intergroup inequality, compares.

This exploration of gender trends in material well-being is shaped by theory as well as data availability. The analysis reflects a broader theoretical framework than economists have typically explored, extending beyond gender gaps in income to capabilities and agency/empowerment inequality. It reflects the multi-dimensional nature of gender inequality in livelihoods that have been highlighted in the research, including job segregation and measures of agency. Other aspects of well-being that theory identifies as useful to study include stability of income, access to social supports and social protection, healthy days of life, physical security (such as absence of domestic violence) and leisure time. The limited availability of global datasets constrains the analysis of

trends over time. The extent to which the analysis presented here is accurate rests on the construct validity of the variables on which we do have data, that is, the extent to which the variables employed are adequate proxies for overall gender differences in well-being for which data are unavailable.

Despite progress, we observe worrying gender reversals in some countries, with males' average years of education and secondary enrolment rates now falling below that of females. To review, trends in inequality were analysed in three domains: capabilities, livelihoods, and agency/empowerment. Within the domain of capabilities, results show that we are closer to global gender equality in education today than in 1990 and, in many countries, gender gaps have been eliminated. Moreover, we have moved toward global convergence in gender equality in secondary education, with the largest gains made in the countries with the lowest gender ratios in 1990. Still, of 108 countries in this sample, over 50 percent have not yet achieved parity.

Despite this progress, we observe worrying gender reversals in some

countries, with males' average years of education and secondary enrolment rates now falling below that of females. There has been little systematic global analysis of the causes for this. To understand this phenomenon, a shift in analysis from women's to men's behaviour is more necessary than ever. In particular, it requires an investigation of norms of masculinity and their response to changes in women's outcomes. For example, the male decline in relative educational achievement in some countries and at some levels may be due to males' unwillingness to compete with females in a space males had previously dominated. In other words, men may perform more poorly or withdraw altogether as schools become perceived as a 'feminized' space.<sup>19</sup>

While gender educational gaps have narrowed, there has been little change in the F/M ratio of life expectancy. Here, too, the causes of this trend are not well understood. Further, it contradicts the prediction that women's life chances improve as they become more economically valuable, as evidenced by their higher rates of labour force participation and employment shares. Thus, in terms of capabilities, progress is mixed.

In the livelihoods domain, although progress is evident, gender gaps are persistent and parity is far from achieved in any of the indicators we examined. In some countries, female relative employment gains have occurred in the context of declines in male employment rates and, thus, the narrowing of gaps is gender-conflictive, with potentially negative feedback effects on relationships at the household level, such as family dissolution and domestic violence.

Of particular significance is the fact that employment equality lags behind educational improvements. Figure 5.4 (Panel C) exemplifies the wide gap in progress between educational and employment equality. As that figure shows, by 2010, while most countries were concentrated around a secondary enrolment ratio of 1, the F/M employment ratio was much more unequal across countries and much lower on average than F/M secondary enrolment rates. It is apparent that educational equality is not sufficient for achieving equality of well-being in livelihoods. Theories of gender stratification indicate that a key factor in gender inequality is unequal bargaining power at the household level. In that context, income under women's control relative to men's (or gender equality in livelihoods) improves their fallback position and thus their ability to negotiate for resources at the household level. Gender equality in this domain, then, is key to leveraging change in other domains due to its effect on gender unequal norms and stereotypes and inequality in other domains (Collins et al., 1993). Slow progress in closing employment gaps, then, is cause for concern.

We also looked at gender wage gaps today for a diverse set of countries and trends in gender wage inequality for a smaller sample of OECD countries. The overwhelming majority of countries continue to have gender wage gaps that exceed 15 percent. Further, in many OECD countries, progress in closing gender wage gaps has been very slow despite the virtual elimination of educational gaps. If gaps continue to narrow at the same rate since 1980 in

those countries, it will be decades before gender wage equality is achieved. This is particularly salient since it is sometimes assumed that closing gender gaps in education will be sufficient for overcoming gender inequality in labour markets. The argument is often made that, especially in a globalized economy, where firms are under a great deal of pressure to hire least-cost workers, demand for female labour will be sustained and, eventually, upward pressure on female wages will lead to wage convergence between the wages of male and female workers.<sup>20</sup> The data do not support this optimism.

unequal bargaining power at the household level. In that context, income under women's control relative to men's (or gender equality in livelihoods) improves their fallback position and thus their ability to negotiate for resources at the household level.

A key factor in gender inequality is

Moreover, women's access to employment in the industrial sector has declined relative to men's. This trend holds in all regions of the world with the exception of Africa.<sup>21</sup> It would appear that

a global defeminization of industrial employment is underway. The share of men employed in this sector has declined, too, but women's more limited access to jobs in this sector, despite narrowing educational gaps, suggests other factors are influencing intergroup inequality in who gets or keeps jobs in this sector. This is significant, since jobs in this sector tend to be of higher quality than those in services and agriculture on average. One factor affecting the widening gender gap may be insufficient public support for care work or policies that enable men to shoulder a larger portion of care activities. Employers, observing that women have primary responsibility for care of the family, may be unwilling to hire and retain women in the industrial sector, where skills are obtained on the job and firms tend to invest more in the acquisition of worker skills than other sectors.

Finally, in the domain of agency, women's share of parliamentary seats has risen, but only modestly so. A number of countries continue to have no female political representation and, among the remainder, few have achieved parity. Some research suggests that women in political office tend to support public investment that reduces women's care burden and to support policies that promote economic security (Chattopadhay and Duflo, 2004; Besley and Case, 2003). If so, progress in political representation could be a mechanism to promote gender equality in other domains. The slow progress in this area then should elicit the attention of policy makers as a target to leverage change in other measures of gender inequality.

Table 5.2 summarizes where gender gaps now stand by region and across indicators, as compared to 1990 (or nearest year). In all regions, the widest gender gaps are in the agency/empowerment domain, following by the livelihoods domain, with the greatest degree of gender equality in the capabilities domain. (The one exception is unemployment rates in the Asia region, where men's unemployment rates are higher than women's, although women's employment disadvantage is substantial, with women's employment rates averaging only 60 percent of men's.)

Figure 5.9 offers a visual representation of these results for each region for 2010 (or nearest year). Regional differences are much narrower for capabilities than for livelihoods and agency. Progress towards gender equality is uneven, depending on the indicator, across all regions. Wide gender gaps in all regions are especially pronounced

|                                   | Total Years of<br>Educational Attainment<br>(2010, 1990) | Secondary Enrolment<br>Rates (2010, 1990) | Life Expectancy<br>(2010, 1990) | Employment-to-<br>Population Rates<br>(2010, 1991) | Unemployment Rates<br>(2007, 1990) | Shares Employed in<br>Industrial Sector<br>(2009, 1990) | Parliamentary Seats<br>(2011, 1990) |
|-----------------------------------|--|---|---------------------------------|--|------------------------------------|---|-------------------------------------|
| World 2010 or most recent<br>year | 0.91   | 0.98                                      | 1.00                            | 0.70   | 0.81                               | 0.42  | 0.26                                |
| Africa                            | 0.79   | 0.89                                      | 0.98                            | 0.82   | 0.76                               | 0.54  | 0.18                                |
| Arab States                       | 0.89   | 0.98                                      | 0.96                            | 0.32   | 0.60                               | 0.35  | 0.15                                |
| A&P                               | 0.86   | 0.96                                      | 0.94                            | 0.65   | 1.11                               | 0.62  | 0.13                                |
| ECIS                              | 0.98   | 0.97                                      | 1.07                            | 0.74   | 0.96                               | 0.46  | 0.17                                |
| LAC                               | 0.96   | 1.07                                      | 1.02                            | 0.64   | 0.83                               | 0.46  | 0.18                                |
| Developed Countries               | 0.98   | 1.00                                      | 1.05                            | 0.78   | 0.87                               | 0.33  | 0.26                                |
| World 1990 or most recent<br>year | 0.82   | 0.91                                      | 1.00                            | 0.62   | 0.86                               | 0.62  | 0.13                                |
| Africa                            | 0.69   | 0.72                                      | 0.98                            | 0.76   | 1.05                               | 0.82  | 0.10                                |
| Arab States                       | 0.71   | 0.86                                      | 0.96                            | 0.25   | 0.61                               | 1.05  | 0.03                                |
| A&P                               | 0.75   | 0.82                                      | 0.93                            | 0.61   | 0.73                               | 0.92  | 0.07                                |
| ECIS                              | 0.90   | 0.97                                      | 1.07                            | 0.72   | 0.87                               | 0.66  | 0.07                                |
| LAC                               | 0.92   | 1.15                                      | 1.02                            | 0.52   | 0.79                               | 0.59  | 0.11                                |
| Developed Countries               | 0.94   | 1.01                                      | 1.05                            | 0.67   | 0.85                               | 0.50  | 0.17                                |

### Table 5.2. Summary of trends in gender equality indicators by region

in access to work (employment rates), relative shares of women and men employed in the industrial sector, and in parliamentary seats. We reiterate here that addressing only gender inequality in capabilities is insufficient for closing gender gaps in other domains.

# 5.7. Conclusion

Economists and policy makers have begun to pay more attention to intergroup inequality as a result of the coincidence of several phenomena. There has been a remarkable growth of income inequality within and between countries since 1975, regardless of whether this is measured at the household level, between countries, or between wages and profits. The research emerging from the renewed interest in this topic has revealed that inequality may not be costless in terms of its effects on society-wide well-being and economic growth.<sup>22</sup> Moreover, we know that inequality contributes to social exclusion and disproportionate economic power of those at the top of the distribution that can spill over to political institutions. The poor life chances of those at the bottom of the distribution can be worsened by inequality if those at the top with disproportionate political power skew public resources toward their own group and away from middle- and low-income groups.



# Figure 5.9. Regional summaries of gender indicators 2010





LAC 1.20 1.07 1.02 0.96 1.00 0.83 0.80 0.64 0.60 0.46 0.40 0.18 0.20 0.00 Total Education Secondary Education Industrial Employment Life Expectancy Employment Unemployment Parliament





**Developed Countries** 



Source: World Bank (2013).

Gender inequality is not a new phenomenon. It has instead been a ubiquitous characteristic of societies in evidence for millennia, though to varying degrees across countries and over time. Nevertheless, the emergence of a human rights agenda in the mid-20th century and women's movements across the world since the 1960s has contributed to increased global attention to this form of inequality. Here, too, research shows that some forms of gender inequality can slow economic growth and development. In other words, in addition to the negative effects of gender stratification on women's relative capabilities and well-being more generally, there are societal costs to continued gender inequality.<sup>23</sup>

The data analysed in this chapter show, in contrast to trends in global income inequality, that gender gaps in education, employment and political representation have narrowed, i.e., there is evidence of a reduction in gender stratification in most countries of the world for some (though not all) indicators, a shift that has been accompanied by more equitable gender attitudes. Nevertheless, there are two reasons to be concerned about trends since 1990. We continue to observe wide gaps in labour market outcomes and, in a number of countries where women's employment increased, men's has declined. We also see persistent and, indeed, worsening job segregation in industrial sector employment. Finally, although gains in political representation of women have been positive, gaps in representation remain wide. This is an important impediment to gender progress. The reason for this is that the public sector plays an important role in promoting gender equality via labour market regulations, family law, social protection programmes and public investments in infrastructure that can reduce women's care burden. The failure to make substantial advances in women's representation means that their life conditions and needs are not fully reflected at the national level in the distribution and allocation of public goods and expenditures.



| Category     | Variable                                   | Years     | Nunmber of<br>countries | Source  |
|--------------|--|-----------|-------------------------|---|
| Capabilities | Total years educational attainment, 15+    | 1990-2010 | 145                     | Barro and Lee (2010)  |
|              | Secondary school<br>enrolment rate (gross) | 1990-2010 | 112                     | World Development<br>Indicators   |
|              | Life expectancy                            | 1990-2011 | 182                     | World Development<br>Indicators   |
| Livelihoods  | Employment-to-population ratio, 15 +       | 1991-2010 | 177                     | International Labour<br>Organization<br>(published in World<br>Development<br>Indicators) |
|              | Unemployment rate                          | 1991-2007 | 67                      |   |
|              | Wages                                      | 1980-2010 | 54                      | OECD Earnings<br>Database, ILO ILOSTAT<br>Tijdens and van<br>Klaveren (2012)              |
|              | Share employed in<br>industrial sector     | 1990-2009 | 167                     | World Development<br>Indicators   |
| Agency       | Female share parliamentary seats           | 1997-2010 | 64                      | World Bank, Gender<br>Statistics Database   |
| Subjective   | Health status                              | 1994-2008 | 31                      | World Values Survey   |
| Well-Being   | Life satisfaction                          | 1994-2009 | 31                      | World Values Survey   |
|              | Freedom of choice                          | 1994-2010 | 29                      | World Values Survey   |
| Attitudes    | Men more deserving of job                  | 1994-2008 | 31                      | World Values Survey   |
|              | Son preference                             | 1994-2009 | 31                      | World Values Survey   |
|              | Problem if wife earns more                 | 1994-2010 | 29                      | World Values Survey   |
|              | Men better political leaders               | 1994-2008 | 29                      | World Values Survey   |
|              | University more important for boys         | 1994-2009 | 31                      | World Values Survey   |

# Annex 5.A. Data and sources

# Annex 5.B. Economy-wide gender wage gaps

| Category             | Gender<br>Wage Gap | Year    | Wage Measure                    | Source                             |
|----------------------|--------------------|---------|---------------------------------|------------------------------------|
| Argentina            | 22.2%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Armenia              | 39.2%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Australia            | 14.0%              | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| Austria              | 19.4%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |
| Azerbaijan           | 41.4%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Belgium              | 8.9%               | 2008    | Median wages, full-time workers | OECD Earnings Database             |
| Botswana             | 19.0%              | 2005-06 | Average monthly earnings        | Tijdens and van Klaveren<br>(2012) |
| Brazil               | 21.8%              | 2007    | Average hourly earnings         | Tijdens and van Klaveren<br>(2012) |
| Bulgaria             | 19.2%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Canada               | 18.8%              | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| Costa Rica           | 8.7%               | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Croatia              | 10.6%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Cyprus               | 19.8%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Czech Republic       | 18.1%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |
| Denmark              | 12.1%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |
| Egypt                | 25.1%              | 2007    | Average hourly earnings         | Tijdens and van Klaveren<br>(2012) |
| Ethiopia             | 43.7%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Finland              | 19.7%              | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| France               | 13.1%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |
| Germany              | 21.6%              | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| Greece               | 9.6%               | 2008    | Median wages, full-time workers | OECD Earnings Database             |
| Hong Kong SAR, China | 29.2%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Hungary              | 6.4%               | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| Iceland              | 13.5%              | 2008    | Median wages, full-time workers | OECD Earnings Database             |
| Indonesia            | 13.7%              | 2008    | Average hourly earnings         | Tijdens and van Klaveren<br>(2012) |
| Ireland              | 10.4%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |
| Italy                | 11.8%              | 2008    | Median wages, full-time workers | OECD Earnings Database             |
| Japan                | 28.7%              | 2010    | Median wages, full-time workers | OECD Earnings Database             |
| Kazakhstan           | 33.8%              | 2009    | Average monthly earnings        | ILO, ILOSTAT                       |
| Korea, Republic of   | 38.9%              | 2009    | Median wages, full-time workers | OECD Earnings Database             |

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| Category       | Gender<br>Wage Gap | Year | Wage Measure                    | Source                             |
|----------------|--------------------|------|---------------------------------|------------------------------------|
| Latvia         | 15.9%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Luxembourg     | 13.3%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Malta          | 24.5%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Mexico         | 17.4%              | 2008 | Average monthly earnings        | Tijdens and van Klaveren<br>(2012) |
| Netherlands    | 16.7%              | 2005 | Median wages, full-time workers | OECD Earnings Database             |
| New Zealand    | 6.8%               | 2010 | Median wages, full-time workers | OECD Earnings Database             |
| Norway         | 8.1%               | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Paraguay       | 5.3%               | 2008 | Average monthly earnings        | Tijdens and van Klaveren<br>(2012) |
| Peru           | 19.4%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Philippines    | 16.8%              | 2008 | Average hourly earnings         | Tijdens and van Klaveren<br>(2012) |
| Poland         | 10.0%              | 2008 | Median wages, full-time workers | OECD Earnings Database             |
| Portugal       | 15.6%              | 2008 | Average monthly earnings        | ILO, ILOSTAT                       |
| Romania        | 6.9%               | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Singapore      | 26.8%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Slovakia       | 22.7%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Slovenia       | 2.9%               | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Spain          | 11.8%              | 2008 | Median wages, full-time workers | OECD Earnings Database             |
| Sweden         | 14.9%              | 2009 | Median wages, full-time workers | OECD Earnings Database             |
| Switzerland    | 19.5%              | 2008 | Median wages, full-time workers | OECD Earnings Database             |
| UAE            | 29.9%              | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| United Kingdom | 18.4%              | 2010 | Median wages, full-time workers | OECD Earnings Database             |
| United States  | 18.8%              | 2010 | Median wages, full-time workers | OECD Earnings Database             |
| Venezuela      | 5.6%               | 2009 | Average monthly earnings        | ILO, ILOSTAT                       |
| Zambia         | 45.6%              | 2005 | Average hourly earnings         | Tijdens and van Klaveren<br>(2012) |

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#### Notes

- 1. This framework is similar to and draws from Grown (2008). See also Grown et al. (2003). An important difference is that, while Grown proposes measures of security in the third domain, here we emphasize agency.
- 2. Equally important for livelihoods is public sector support, such as social insurance and protection, publicly funded education and health care, and infrastructure investments. Regulatory policies matter also, including gender balance in parental leave policies and other supports for care work. We lack, however, global data on gender budgeting at the national level and therefore may fail to fully capture well-being in the livelihood domain. That being said, some of the effects of public spending and regulatory policies will be observed in the three domains explored here. For example, employment patterns will reflect care policies, affirmative action and infrastructure investments that make it easier for women to engage in paid work. Other factors such as women's 'distress' sales of labour in response to a fall in male income also influence employment, however, and so this proxy for well-being has its own weaknesses. As a result, the absence of data on public sector spending and regulation limits our ability to fully assess global trends in gender equality.
- 3. The term *agentic* comes from social cognition theory and implies that individuals and groups are producers and products of their social systems, i.e., that agents react to social norms, but can, in turn, shape norms and the gender system.
- See Annex 5.A for a description of these and all other variables on which data are reported in this paper, as well as sources.
- 5. Kernel density functions, such as the one shown here, are closely related to histograms, but differ in that the data are modified to achieve a smooth density function (curve).
- 6. Some countries started with female enrolment much larger than male enrolment, including a number of Caribbean countries. For example, St. Lucia's F/M enrolment ratio was 1.49 in 1990. This may be due to structures of production with men leaving school to work in agriculture or mines (in Lesotho, for example).
- 7. The method adopted follows that used in the UNDP's *Human Development Reports*. A country's female (male) life expectancy is measured as follows, where *LE* is life expectancy, *F* is female in country *i* at time *t*, and *MAX* and *MIN* are maximum and minimum life expectancy values in the sample in a particular year:

$$Index_{it}^{F} = \frac{LE_{it}^{F} - LE_{t}^{MIN_{F}}}{LE_{t}^{MAX_{F}} - LE_{t}^{MIN_{F}}}$$

- 8. Global trends in labour force participation rates, in contrast, capture gender job segregation between paid and unpaid work. Trends in labour force participation, though not reported here due to space limitations, are very similar to global trends in employment-to-population ratios.
- 9. This does not imply that unpaid work in the care sector is 'unproductive.' See also Folbre (2012).
- 10. See also Macmillan and Kruttschnitt (2004) on the relationship between male job loss and intimate partner violence in the US.
- 11. For 1990 or 2007, if data are not available, the analysis uses unemployment rates within one year of each of those years (that is, 1989 or 1991, and 2006 or 2008).
- 12. For an exploration of causes of improvement in women's relative access to work in that region since the 1990s, see Braunstein and Seguino (2012). It is less the result of macroeconomic phenomena than state-level policies, including social expenditures and minimum wage increases.
- 13. Weischelbaumer and Winter-Ebmer (2007) conducted a meta-analysis of gender wage gaps in 60 countries, based on more than 260 studies, which control for worker productivity characteristics in order to isolate the unexplained or

discriminatory portion of wage gaps. They find that most of the decline over time in gender wage gaps is due to better labour market characteristics of workers and that, in some countries, the discriminatory portion of wage gaps is rising.

- 14. Annex 5.B provides the raw data on which this graph is based.
- 15. The Global Gender Asset Gap Project, which was launched in 2009 to collect data on gender gaps in assets and to demonstrate the feasibility of collecting such data, is an important step in the right direction. See Oduro, Baah-Boateng and Boakye-Yiadom (2011) for an analysis of gender-disaggregated asset data for Ghana coming from this project.
- 16. See, for example, Blackden et al. (2006) on land and credit in sub-Saharan Africa and Oduro et al. (2011) on the distribution of assets in Ghana.
- 17. Female representation among legislators, senior officials and managers between 1999 and 2007 is greater than the female share of parliamentary seats in 2011 (28.3 percent compared to 19.3 percent for parliamentary seats, using countries for which both sets of data are available) (UNDP, 2009). This is a problematic comparison insofar as the years of coverage differ, although it does give an additional dimension to our understanding of empowerment differences. Trade union membership data compiled by the ILO show stronger female representation than in political bodies. Data from the ILO and Cobble (2012) for 39 countries show that the female share of trade union membership was 42.8 percent for the most recent year available.
- 18. Using survey data for the United Kingdom, Anand et al. (2010) find that the capabilities correlated with life satisfaction are very different for men and women. Women and men may, therefore, weight various well-being outcomes differently.
- 19. See also Diprete and Buchanan (2013).
- 20. This reasoning flows from neo-classical human capital theory, which assumes that wages accurately reflect differences in skill and experience, with any discrimination ultimately competed away by profit-maximizing firms.
- 21. This point should be qualified with the observation that, in Africa, industrial employment is a small share of all employment.
- 22. For references to this broad body of work, see articles in *Journal of Human Development and Capabilities*, Volume 13, Issue 1 (2012), a special issue of on macroeconomics, human development and inequality.
- 23. The effect of gender inequality depends on its particular form. In general, capabilities inequality may have negative growth effects, but wage inequality may be a stimulus to growth, especially in labour-intensive, export-oriented economies. For a summary of this research, see Seguino (2010, 2013b).

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### References

- Anand, P., G. Hunter, I. Carter, K. Dowding, F. Guala, and M. van Hee (2010). "The Development of Capability Indicators", *Journal of Human Development and Capabilities* 10(1): 125–152.
- Barro, R. and J.-W. Lee (2010). "A New Data Set of Educational Attainment in the World, 1950–2010." NBER Working Paper No. 15902. www.barrolee.com/data/dataexp.htm.
- Besley, T. and A. Case (2003). "Political Institutions and Policy Choices: Empirical Evidence from the United States", *Journal of Economic Literature* 41: 7-73.
- Blackden, M., S. Canagarajah, S. Klasen, and D. Lawson (2006). "Gender and Growth in Sub-Saharan Africa: Issues and Evidence." UNU-WIDER Research Paper No. 2006/37.
- Braunstein, E. and S. Seguino (2012). "The Impact of Economic Policy and Structural Change on Gender Inequality in Economic Opportunity in Latin America, 1990-2010." Working paper, Department of Economics, Colorado State University and University of Vermont.
- Chattopadhyay, R. and E. Duflo (2004). "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India", *Econometrica* 87: 115-143.
- Cobble, D. (2012). "Gender Equality and Labor Movements: Toward A Global Perspective." Department of Labor Studies and Employment Relations, Rutgers University.
- Collins, R., J. Chafetz, R. L. Blumberg, S. Coltrane, and J. Turner (1993). "Toward an Integrated Theory of Gender Stratification", *Sociological Perspectives* 36(3): 185-216.
- Cook, S. and S. Razavi (2012). "Work and Welfare. Revisiting the Linkages from a Gender Perspective". UNRISD Research Paper No.2012-7.
- Diprete, T. and C. Buchanan (2013). *The Rise of Women: The Growing Gender Gap in Education and What It Means for American Schools*. New York: Russell Sage Foundation.
- Doss, C. (2013). "Intrahousehold Bargaining and Resource Allocation in Developing Countries." World Bank, Policy Research Working Paper 6337.
- Duvvury, N., P. Carney, and N. Huu Minh (2012). *Estimating The Costs of Domestic Violence Against Women in Viet Nam*. New York: UN Women.
- Folbre, N. (2012). "The Political Economy of Human Capital", Review of Radical Political Economics 44: 281-292.
- Grown, C., G. R. Gupta and Z. Khan (2003). "Promises to Keep: Achieving Gender Equality and the Empowerment of Women." Background Paper for the Task Force on Education and Gender Equality of The Millennium Project. Washington, DC: International Center for Research on Women.
- Grown, C. (2008). "Indicators and Indexes of Gender Equality: What Do They Measure and What Do They Miss?" In M. Buvinic, A. Morrison, A. W. Ofosu-Amaah, and M. Sjoblom (eds.), *Equality for Women: Where Do We Stand on Millennium Development Goal 3?* Washington, DC: World Bank.
- Tijdens, K. G. and M. Van Kalveren (2012). "Frozen in Time: Gender Pay Gap Unchanged for 10 Years." Brussels: International Trade Union Congress (ITUC).
- Kabeer, N., R. Assaad, A. Darkwah, S. Mahmud, H. Sholkamy, S. Tasneem, and D. Tsikata (2013). *Paid Work, Women's Empowerment and Inclusive Growth: Transforming the Structures of Constraint*. New York: UN Women.

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- Macmillan, R. and C. Kruttschnitt (2004). "Patterns of Violence Against Women: Risk Factors and Consequences." National Institute of Justice Grant # 2002-IJ-CX-001, Final Report.
- Oduro, A., W. Baah-Boateng, and L. Boakye-Yiadom (2011). "Measuring the Gender Asset Gap in Ghana". Department of Economics, University of Ghana.
- Permanyer, I. (2013). "A Critical Assessment of the UNDP's Gender Inequality Index", *Feminist Economics* 19(2): 1-32.
- Ridgeway, C. (2011). Framed by Gender: How Gender Inequality Persists in the Modern World. Oxford University Press.
- Seguino, S. (2007). "Plus Ça Change? Evidence on Global Trends in Gender Norms and Stereotypes", *Feminist Economics* 13(2): 1-28.
- Seguino, S. (2010). "Gender, Distribution, and Balance of Payments Constrained Growth in Developing Countries", *Review of Political Economy* 22(3): 373–404.
- Seguino, S. (2013a). "From Micro-level Gender Relations to the Macro Economy and Back Again: Theory and Policy." In Deborah Figart and Tonia Warnecke (eds), *Handbook of Research on Gender and Economic Life*, Edward Elgar.
- Seguino, S. (2013b). "Toward Gender Justice: Confronting Stratification and Power", Géneros 2(1): 1-36.
- Sen, A. (1990). "More Than 100 Million Missing Women", New York Review of Books 37 (December 20).
- Sen, A. (2000). Development as Freedom. New York: Anchor Books.
- Tejani, S. and W. Milberg (2010). "Global Defeminization? Industrial Upgrading, Occupational Segmentation and Manufacturing Employment in Middle-Income Countries." SCEP Working Paper 2010-1, Schwartz Center for Economic Policy Analysis and Department of Economics. New York: New School for Social Research.
- Tertilt, M. and G. van den Berg (2012). "Family Violence Over the Business Cycle." Mimeo. University of Mannheim.
- UNICEF and UN Women (2013). "Global Thematic Consultation on the Post-2015 Development Agenda: Addressing Inequalities Synthesis Report of Global Public Consultation". New York.
- Weichselbaumer, D. and R. Winter-Ebmer (2007). "A Meta-analysis of the International Gender Wage Gap", Journal of Economic Survey 19 (3): 479-511.
- World Bank (2013). World Development Indicators (WDI). Data retrieved January, 2013.

World Bank (2013a). Gender Statisitcs. Data retrieved January, 2013.