

## ADB Economics Working Paper Series



### Gender Equality and Inclusive Growth in Developing Asia

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Yoko Niimi

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# **Gender Equality and Inclusive Growth in Developing Asia**

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## Contents

Abstract	v
I. Introduction	1
II. Gender Equality and Inclusive Growth: Concepts and Measurement	2
A. Conceptual Framework	2
B. Gender Inequality Indicators	4
III. Progress toward Gender Equality in Asia and the Pacific	6
A. Capabilities: Education	6
B. Capabilities: Health	11
C. Access to Resources and Opportunity: Employment	15
D. Access to Resources and Opportunity: Political Participation	19
IV. Review of Empirical Studies on Gender Inequality	21
A. Gender Bias in Intrahousehold Resource Allocation	21
B. Gender Inequality in the Labor Market	25
V. Conclusions	31
References	34



## **Abstract**

This paper reviews the recent progress toward gender equality in developing Asia by examining a number of indicators proposed under the Millennium Development Goal 3 plus approach, focusing on gender inequalities in education and health outcomes (capability) and in labor market and political participation (access to resources and opportunities). Despite the improvement observed in education and, to a lesser extent, in health, the paper finds that women's improved capabilities do not seem to have been translated into an equal participation between men and women in economic and political activities. Further, it finds that gender gaps in almost all aspects reviewed remain significant, particularly in South Asia with some exceptions. A survey of empirical literature suggests that prevalence and persistence of gender inequality are often caused and reinforced by interlinked cultural, social, and economic factors. Empirical evidence also suggests that gender inequality is greater when a country's economic opportunities are more limited or households are in greater economic hardship. In conclusion, the paper argues that along with efforts in removing cultural, social, and institutional obstacles by educating the public and introducing/enforcing antidiscrimination legislations, promoting economic development to generate economic opportunities and improving women's capabilities and access to the opportunities are the key ingredients of a policy package for greater progress toward gender equality and inclusive growth in developing Asia.





## I. Introduction

The importance of pursuing gender equality has long been recognized across the world, including Asia and the Pacific. Virtually all countries in the region are parties to the Convention on the Elimination of All Forms of Discrimination against Women, and gender equality is explicitly guaranteed in many constitutions and statutes (ADB et al. 2006). Indeed the region has made impressive progress in reducing gender inequality over the last few decades. Nevertheless, women remain disadvantaged in access to economic opportunities and resources, basic human rights, and political voice (World Bank 2007). Gender discrimination directly affects the well-being of women, thus, gender equality is a legitimate policy goal in its own right. At the same time, development partners of developing countries increasingly acknowledge the role of gender equality and women's empowerment as a powerful means to foster development and poverty reduction (e.g., ADB 2007 and 2008, World Bank 2008).

Inequality can result from differences in either *efforts*, which are under the control of an individual, or *circumstances* such as gender, religious background, geographical location, and parental education, which are outside the control of the individual (Roemer 2006). Inequality related to individual circumstances reflects inequality of opportunity, of which gender inequality is a prominent example. Inclusive growth is growth that not only generates economic opportunity, but also ensures equal access to opportunity by all segments of society (Ali and Zhuang 2007). Hence, inclusive growth can only be achieved if, among other things, gender disparity is properly addressed.

Inequalities due to differences in circumstances often reflect social exclusion, and should be tackled through public policy interventions (Ali 2007). However, gender inequality is the archetypical "inequality trap" (World Bank 2006), which has been caused and reinforced by interlinked cultural, social, and economic factors within and outside the household. There is certainly no single panacea to eliminate gender inequality. To assist policy makers in designing effective policy measures to reduce gender disparity, this paper aims to contribute to the understanding of gender inequality in Asia and the Pacific by reviewing the current status of progress in achieving gender equality and surveying existing empirical studies.

In the next section, the paper provides a conceptual framework for understanding gender equality and why gender inequality needs to be addressed to achieve economic growth and poverty reduction. It also introduces a set of indicators, through which gender inequality can be measured. Based on these indicators, Section III assesses recent

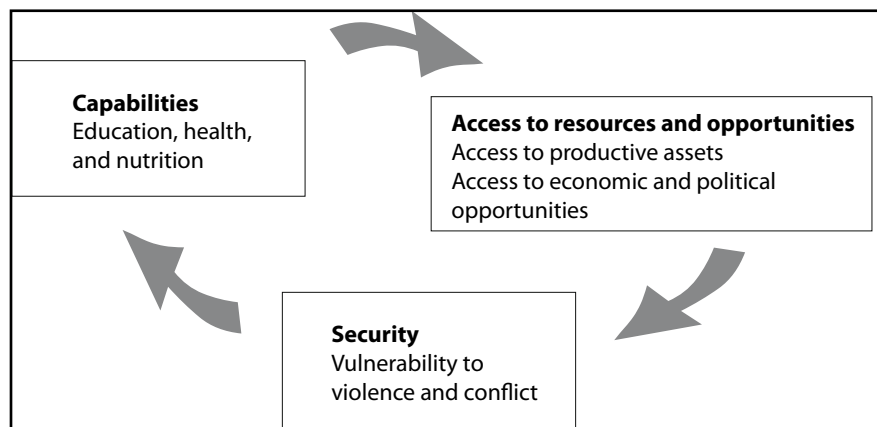
progress toward gender equality in Asia and the Pacific and highlights gender gaps that remain significant in different parts of women’s lives. Section IV reviews the existing literature of empirical studies on the key dimensions of gender inequality. Section V summarizes the key findings and possible measures to improve gender equality as an important dimension of inclusive growth.

## II. Gender Equality and Inclusive Growth: Concepts and Measurement

### A. Conceptual Framework

This paper has adopted the operational framework developed by the United Nations Millennium Project Task Force on Education and Gender Equality (UN Millennium Project 2005) for the definition of gender equality. The framework conceptualizes gender equality as having three dimensions: (i) capabilities domain, (ii) access to resources and opportunities domain, and (iii) security domain (see Figure 1). The capabilities domain refers to basic human abilities as measured by education, health, and nutrition, which are all fundamental to individual well-being and are an important means to gaining access to opportunities. The access to resources and opportunities domain refers primarily to equality in the opportunity to use or apply basic capabilities through access to economic assets (e.g., land, housing, and infrastructure); resources (e.g., income and employment); and political decision-making (e.g., representation in parliaments and other political bodies). Finally, the security domain refers to reduced vulnerability to violence and conflict, which can result in physical and psychological harm and lessen the ability of individuals, households, and communities to fulfill their potential (UN Millennium Project 2005).

**Figure 1: Gender Equality in Three Domains**



Source: Based on the operational framework developed by the UN Millennium Project Task Force on Education and Gender Equality (UN Millennium Project 2005).

These three domains of gender equality are interrelated. For instance, improvement in capabilities will increase the likelihood that women will gain access to economic and/or political opportunities. Similarly, access to opportunity decreases the likelihood that women will experience violence (UN Millennium Project 2005). It is therefore important to ensure improvements in all the three domains to achieve overall gender equality. Note also that gender equality is not equality of outcomes between men and women, but rather it is equality in the determinants of these outcomes (World Bank 2001) and should be recognized as an important dimension of inclusive growth.

When assessing the role of gender equality in promoting inclusive growth, its intrinsic value and instrumental value may be distinguished (Klasen 2002). The intrinsic value is based on the belief that equal access to opportunity is a basic right of a human being, and it is unethical and immoral to treat individuals differently in access to opportunity (Ali and Zhuang 2007). Gender equality should thus be considered as a development goal in its own right, as evidenced by the Convention on the Elimination of All Forms of Discrimination against Women and by the existence of the Third Millennium Development Goal (MDG3) on gender equality and women's empowerment. The instrumental value comes from the recognition that inequality in access to opportunity diminishes growth potential and its sustainability. Gender inequality can also undermine other development goals which, in turn, affects growth.

A number of empirical studies have examined the impact of gender inequality, particularly in education, on economic growth.<sup>1</sup> The available empirical evidence often suggests a negative relationship between the two, that is, higher gender inequality leads to lower growth (e.g., Klasen 2002, UNESCAP 2007). An important question to ask is what is the underlying mechanism of such a relationship. One of the consequences of gender inequality in access to economic opportunity is the inefficient allocation and/or underutilization of resources. If a woman with appropriate capabilities is excluded from the labor market because of her gender, she cannot maximize her abilities, which can lead to loss of output for the society and impose costs on economic development. Restrictions on women in access to opportunity can also indirectly affect the power relationship between men and women within the household. This can result in the misallocation of resources even at the household level. Meanwhile, gender inequality in capabilities lowers the average level of human capital and productivity, which can subsequently hinder economic growth. Moreover, gender-based violence can have a lasting psychological impact on its victims, lowering women's self-esteem and productivity, and destroying marriages, with all the costs that children will eventually have to bear (UNESCAP 2007).

Another important link between gender inequality and economic growth is through its effect on child well-being (Morrison et al. 2007). A mother's health or well-being affects her pregnancy and ability to nurse her infant (e.g., Galloway and Anderson 1994, Thomas

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<sup>1</sup> See Klasen (2002) and Morrison et al. (2007) for a review of the existing literature on the effect of gender inequality on economic growth.

and Strauss 1992). Mothers with better educational attainment are also found to be associated with better child development outcomes through, for example, better use of available health care services and programs (e.g., Cebu Study Team 1991). Women with greater control over resources within the household are also likely to allocate more for children's health and education (e.g., Hoddinott and Haddad 1995, Quisumbing and Maluccio 2003). Through these effects, improvements toward gender equality can improve the capabilities and productivity of future generations, and, ultimately, a country's long-term prospects for economic growth and poverty reduction.

## B. Gender Inequality Indicators

There are many ways to measure gender inequality. Morisson et al. (2008) distinguish between two broad approaches: (i) using composite or aggregate indexes, and (ii) using discrete or individual indicators. The most well-known composite indexes of gender inequality are the gender empowerment measure (GEM) and the gender-related development index (GDI) introduced by the United Nations Development Programme (UNDP). The GEM is principally a measure of female empowerment in three dimensions—political participation, economic participation, and power over economic resources. The GDI is an adjusted Human Development Index according to the degree of aversion to gender inequality and gaps in three dimensions—a long and healthy life, knowledge, and a decent standard of living (UNDP 2007).<sup>2</sup> Such indexes provide a useful summary statistic or measure of gender inequality that captures media and policy attention. However, in addition to the problems related to the choice of weights and methods of aggregation, the interpretation of indexes is often not straightforward and they may not provide sufficient information for policy makers to make judgments about policies, programs, and resource allocations (Grown 2008).

Individual indicators most frequently used to assess gender inequality are those defined in the Millennium Declaration to monitor MDG3 on promoting gender equality and empowering women. These include (i) the ratio of girls' to boys' enrollment in primary, secondary, and tertiary education; (ii) the ratio of literate females to males in the 15–25 age group; (iii) the share of women in wage employment in the nonagricultural sector; and (iv) the percentage of seats held by women in national parliaments.

While these individual indicators are useful for monitoring progress toward gender equality, they only give a partial picture (e.g., UN Millennium Project 2005, World Bank

<sup>2</sup> The GEM is constructed based on four individual indicators: (i) male and female shares of parliamentary seats (for the political participation dimension); (ii) male and female shares of positions as legislators, senior officials, and managers; (iii) male and female shares of professional and technical positions (both of which are for the economic participation dimension); and (iv) male and female estimated earned income (for the power over economic resources dimension). On the other hand, the GDI adjusts the Human Development Index to reflect the inequalities between men and women using the following four indicators: (i) male and female life expectancy at birth (for the long and healthy life dimension); (ii) male and female adult literacy rate; (iii) male and female combined primary, secondary, and tertiary gross enrollment ratio (both of which are for the knowledge dimension); and (iv) male and female estimated earned income (for the decent standard of living dimension). See *Technical Note 1* of UNDP (2007) for further details.

2007). To provide a more complete and nuanced description of gender equality, the World Bank (2007) proposed five additional indicators, chosen on the basis of three criteria: data availability (i.e., wide country coverage), a strong link to poverty reduction and growth, and amenability to policy interventions.<sup>3</sup> These additional indicators include: (i) primary school completion rate of girls and boys; (ii) under-five mortality rate for girls and boys; (iii) percentage of reproductive-age women and their sexual partners using modern contraception; (iv) percentage of 15 to 19 year-old girls who are mothers or pregnant with their first child; and (v) labor force participation rates among women aged 20–24 and 25–49 (World Bank 2007).<sup>4</sup> Morisson et al. (2008) call this set of indicators, including one additional indicator of their own recommendation that measures the ratio of female to male hourly earnings in primary, secondary, and tertiary sectors, an “MDG3 plus approach” and is summarized in Table 1. These indicators cover two of the three domains of gender equality—the capabilities domain and the access to resources and opportunities domain—at different levels of aggregation (household, economy and markets, and society).

**Table 1: Indicators of Gender Equality under the MDG3 Plus Approach**

Domain	Indicators	Level of Aggregation	
Capabilities			
Education	Ratio of girls’ to boys’ enrollment in primary, secondary, and tertiary education Ratio of literate females to males among 15–24 years old	Household	
Health	Primary completion rate of girls and boys Under-five mortality rate for girls and boys Percentage of reproductive-age women and their sexual partners using modern contraception Percentage of girls aged 15–19 who are mothers or pregnant with their first child		
Access to resources and opportunities			
Employment	Share of women in nonagricultural wage employment Labor force participation rates among women aged 20–24 and 25–49 Ratio of female to male hourly earnings in primary, secondary, and tertiary sectors		Economy and market
Political participation	Percentage of seats held by women in national parliaments		Society

MDG3 = Third Millennium Development Goal.  
Source: Morrison et al. (2008).

<sup>3</sup> The UN Millennium Project Task Force also suggested a number of indicators to overcome the shortcomings of the official MDG3 indicators (UN Millennium Project 2005). However, data are not widely available for many of their recommended indicators (Morrison et al. 2008).

<sup>4</sup> See World Bank (2007) for a detailed discussion on the selection of these additional indicators.

The MDG3 plus approach is certainly not without limitation. It does not, for instance, cover security-related gender equality. The security domain is a critical aspect of gender equality, and the available evidence suggests that women in many parts of the world are often subject to violence by their male partners (Heise et al. 1999). However, due to the unavailability of comparable cross-country data for violence-related indicators, it is not included in this set of indicators (World Bank 2007). In addition, the MDG3 plus approach does not cover other important aspects of gender equality, including access to productive assets (e.g., land and credit) and infrastructure. Such indicators would be useful particularly for identifying constraints to women's economic empowerment. Furthermore, the proposed indicator for measuring gender inequality in accessing political opportunities cannot assess women's actual influence in the political decision-making process or their political representation at local or regional levels (Grown et al. 2005).

In spite of these limitations, this set of indicators allows for monitoring of a wider scope of gender equality than do the MDG3 official indicators. This paper adopts this MDG3 plus approach to review the recent progress in achieving gender equality in Asia and the Pacific.<sup>5</sup>

### **III. Progress toward Gender Equality in Asia and the Pacific**

A number of studies have reviewed the recent progress toward gender equality (e.g., ADB et al. 2006, Morisson et al. 2008, UNESCAP 2007, World Bank 2007). Morisson et al. (2008) provide, to the author's best knowledge, the most recent review of the progress toward gender equality in the world. While Morisson et al. report the progress largely at the regional level, the main contribution of this paper is to provide evidence on gender equality at the individual country level, with particular attention to developing countries in the region using the MDG3 plus approach. The indicators are provided for all developing countries in the region whenever data are available.<sup>6</sup> The corresponding average figures for the world and other regions are also reported for comparison purposes.

#### **A. Capabilities: Education**

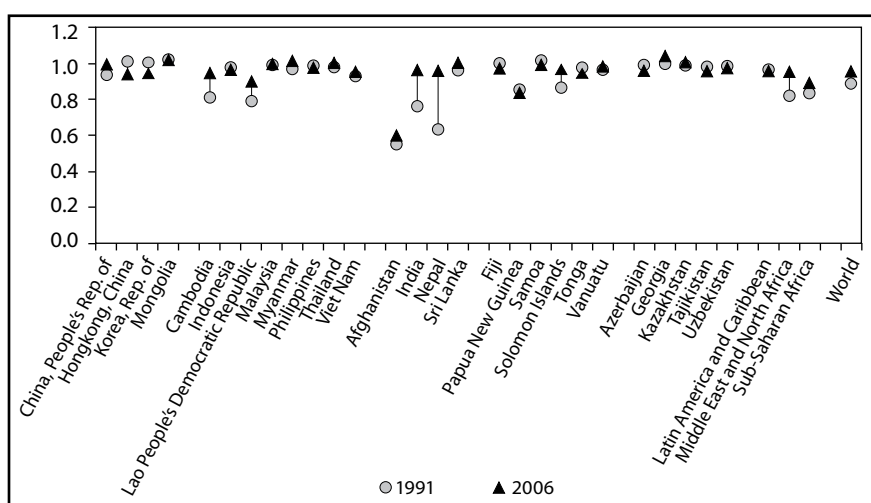
Achieving gender equality in capabilities such as education and health is a viable avenue to improving women's access to opportunity and children's well-being, and eventually to economic growth. Figures 2 and 3 illustrate the progress toward gender equality in primary and secondary enrollment rates between 1991 and 2006. Figure 4 shows the

<sup>5</sup> The author would like to acknowledge A. R. Morrison, S. Sabarwal, and M. Sjöblom from the World Bank for sharing valuable data for the indicators of monitoring progress toward gender equality.

<sup>6</sup> Note that a slightly different indicator was used for measuring adolescent fertility, use of contraception, and gender wage gaps to maintain wide country coverage.

ratio of girls' to boys' enrollment rates in tertiary education for 2006.<sup>7</sup> In the case of primary education, gender parity was achieved or almost achieved in most countries in Asia and the Pacific by the latter period (see Figure 2). The significant progress in countries that started with a relatively high level of gender inequality in 1991—namely India and Nepal and, to a lesser extent, Cambodia, Lao People's Democratic Republic (Lao PDR), and Solomon Islands—is encouraging. In contrast, further effort is needed in Afghanistan and Papua New Guinea, where there was little or no progress to achieve gender parity during this period. With the exception of these two countries, all the countries in the region fare better than sub-Saharan Africa, which has achieved the least gender parity among the world's regions.

**Figure 2: Ratio of Girls' to Boys' Gross Enrollment in Primary Education, 1991 and 2006**



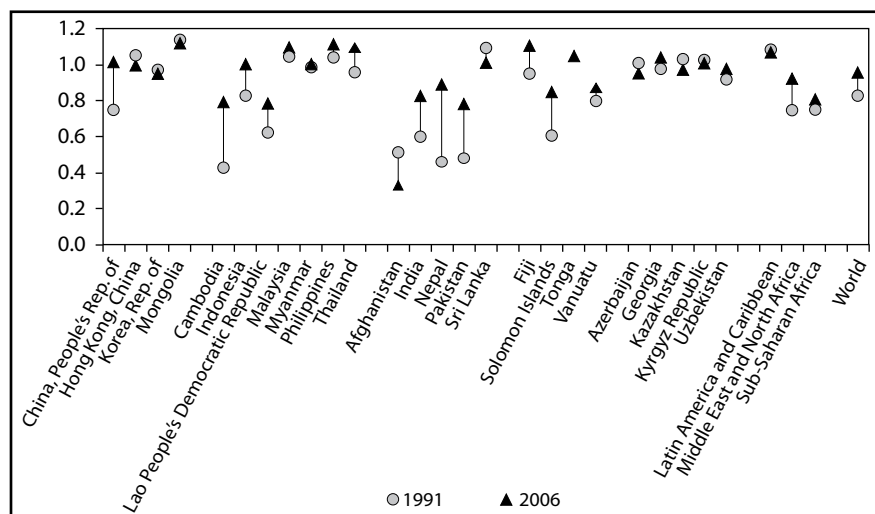
Note: The figure is based on 1991 data and the latest available data between 2000 and 2006 for each country and region.  
Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

As for secondary education, while the level of gender equality is less uniform than that for primary education, great progress was also made in many countries in the region (see Figure 3). Gender parity has been achieved in East Asia, Central Asia, and most countries in Southeast Asia. But, gender gaps remain large in South Asian countries, with the exception of Sri Lanka, and a number of countries in Southeast Asia and the Pacific. While some of these countries score better than sub-Saharan Africa, they all lag Latin America and the Caribbean as well as the Middle East and North Africa. It is rather

<sup>7</sup> Due to the limited data availability on tertiary enrollment rates for the earlier period, the ratio of girls' to boys' enrollment rates in tertiary education is reported only for 2006 or the latest year for which data are available.

worrying to observe a reduction in the ratio of girls' to boys' secondary school enrollment rates in Afghanistan. The underlying data suggest that a relatively large increase in boys' enrollment rates has driven the widening gap. Measures should be undertaken to ensure that girls are not left behind in the improvement of the country's education system.

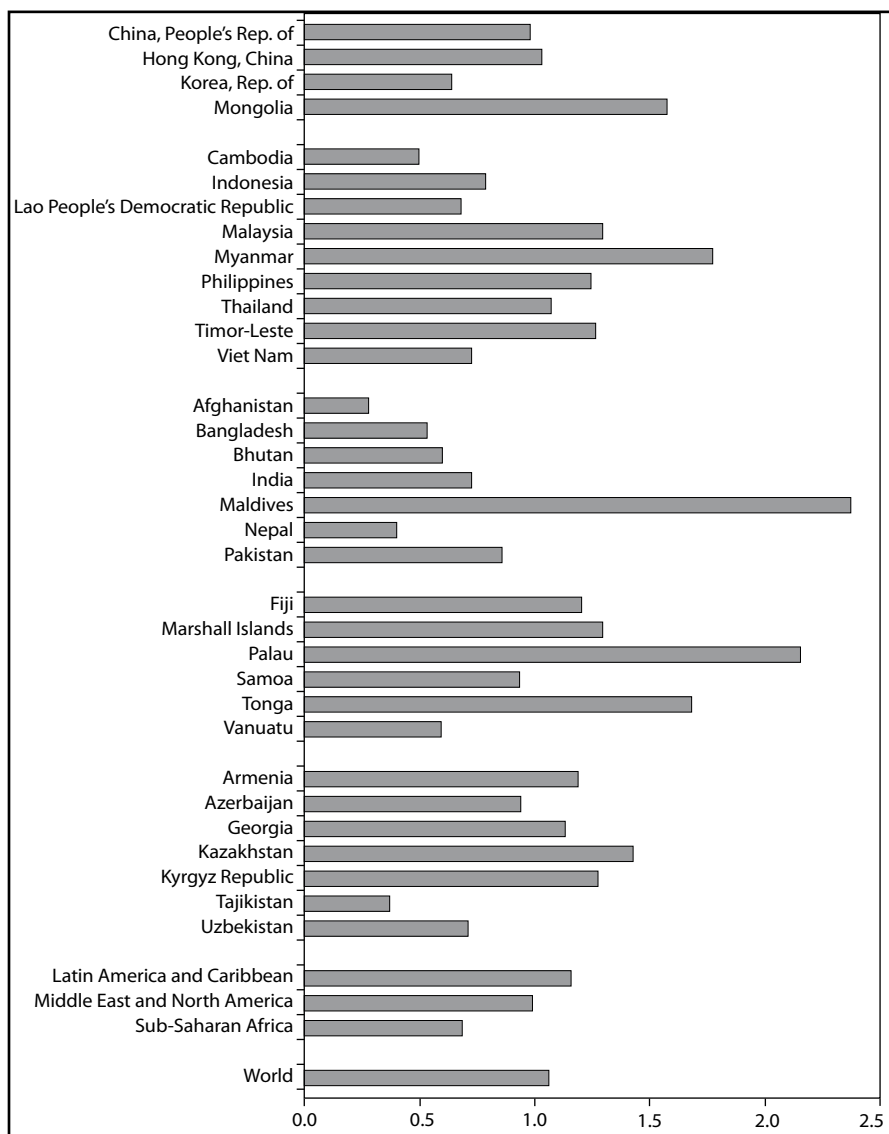
**Figure 3: Ratio of Girls' to Boys' Gross Enrollment in Secondary Education, 1991 and 2006**



Note: The figure is based on 1991 data and the latest available data between 2000 and 2006 for each country and region.  
Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

In tertiary education, it is interesting that in some countries that have already achieved gender parity, girls' enrollment rates exceed boys', notably Maldives and Palau, where girls' rates are more than twice as high (Figure 4). Many of these countries also perform better than Latin America and the Caribbean, whose average ratio is higher than the world average. In contrast, the rest of South Asia appears to be far behind other regions (some are even behind sub-Saharan Africa) in achieving gender equality in tertiary education enrollment.



**Figure 4: Ratio of Girls' to Boys' Gross Enrollment in Tertiary Education, 2006**

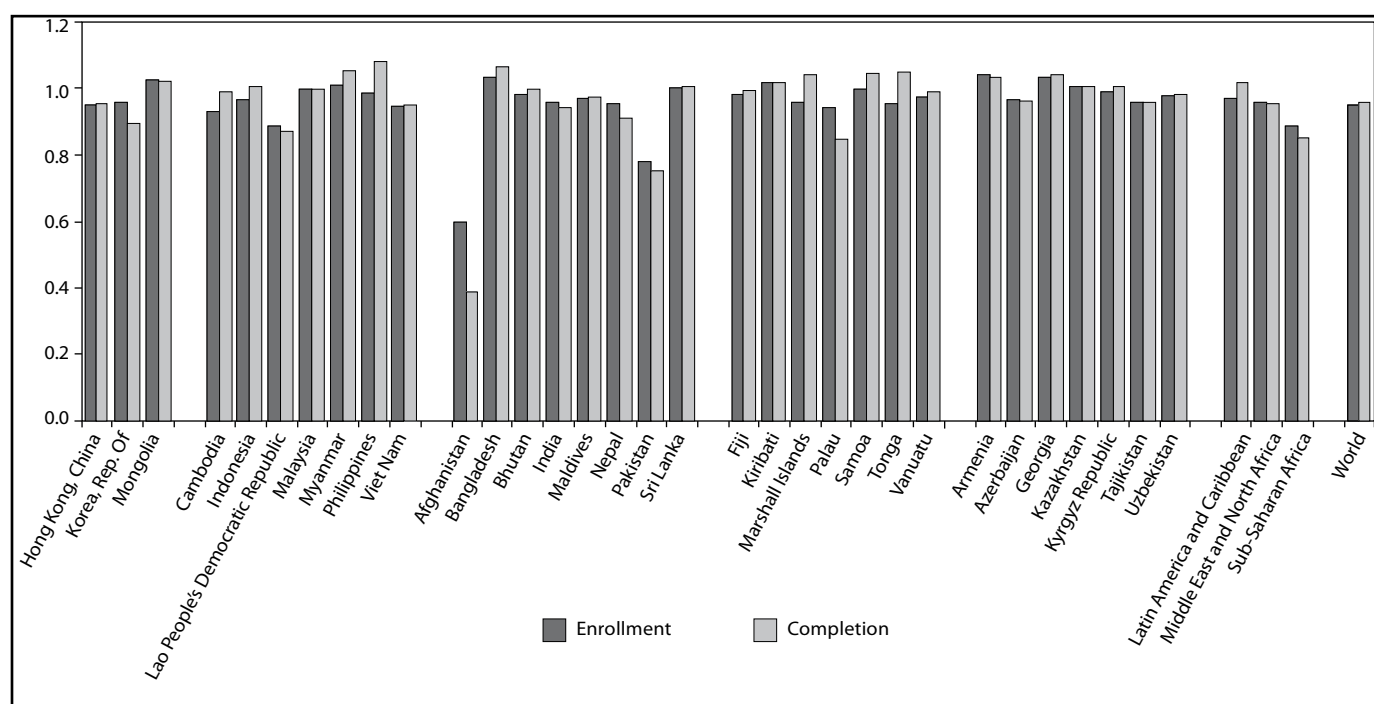
Note: The figure is based on the latest available data between 2000 and 2006 for each country and region.

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

Measuring gender equality in education tends to emphasize differences in school enrollment rates, providing only a crude picture of the gender gap in education. Outcome variables, including completion rates or measures of skills, are arguably more relevant for economic development (Morisson et al. 2008). Figure 5 provides the ratio of girls' to boys' primary enrollment and completion rates. Although completion rates seem to reflect enrollment rates relatively well, there is a wider gender gap in completion rates than in enrollment rates for a number of countries, most notably Afghanistan. The underlying causes for the higher dropout rates for girls in these countries need to be identified and addressed to ensure that girls are able to complete their primary education.

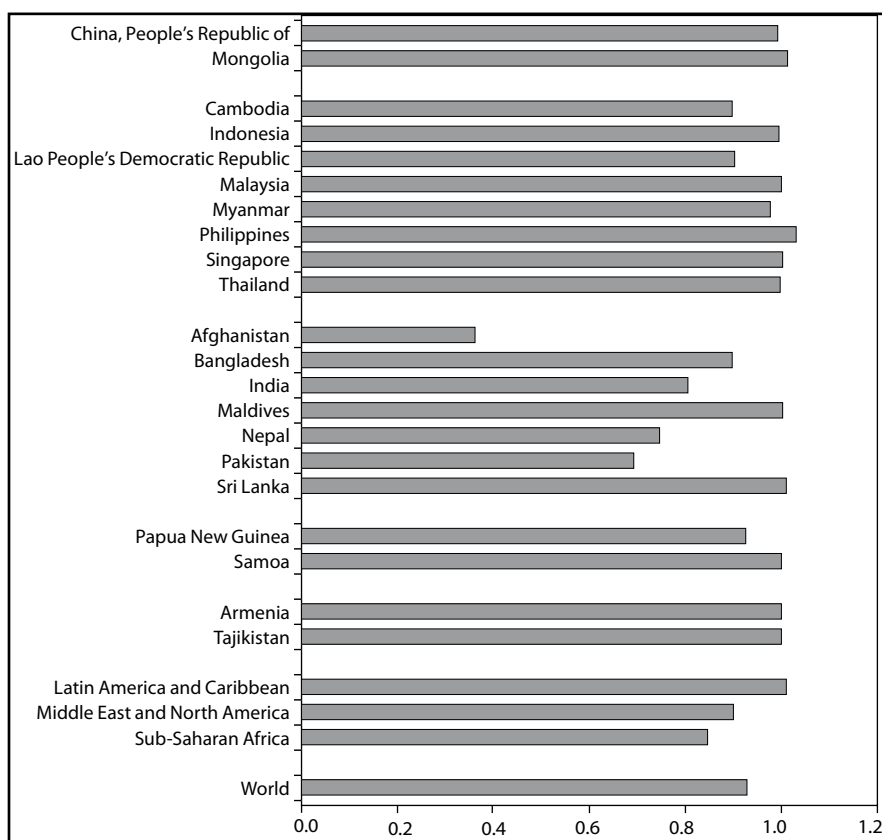
Another way of measuring gender gaps in educational outcomes is to compare literacy rates between men and women. The most recent available data on the ratio of literate women to men aged 15–24 are presented in Figure 6. The figure clearly shows that South Asian countries, with the exception of Maldives and Sri Lanka, lag other parts of the world in eliminating gender gaps in literacy rates. The recent progress in school enrollment in this region will hopefully contribute to narrowing the gap in the near future.

**Figure 5: Ratio of Girls' to Boys' Primary Enrollment and Completion Rates, 2006**



Note: The figure is based on the latest available data between 2000 and 2006 for each country and region.

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

**Figure 6: Ratio of Literate Females to Males Aged 15–24, 2006**

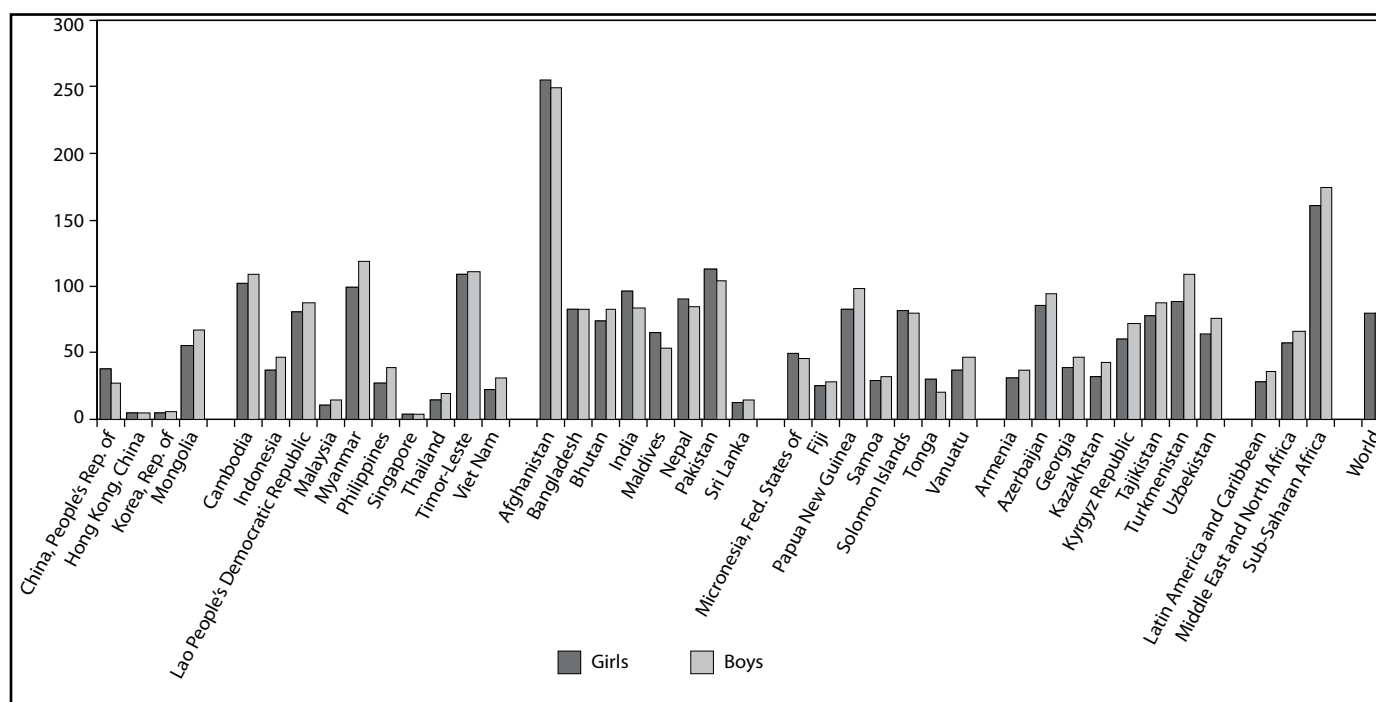
Note: The figure is based on the latest available data between 2000 and 2006 for each country and region.

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

## B. Capabilities: Health

Health—an important element of human capability—enables women to access opportunity and to take better care of their children. Indeed, good health is a basic human right. Yet the official MDG3 indicators do not contain any measurement of women's and girls' health conditions. This section applies the MDG3 plus approach and looks at three indicators that measure gender equality in health.

Figure 7 plots under-five mortality rates for girls and boys for each country. These rates reflect gender equality in nutrition and health care during early childhood (Morrison et al. 2008). The significantly high mortality rate for both boys and girls in Afghanistan is alarming. A number of countries in Asia and the Pacific also record relatively high under-five mortality rates compared to the world average, though lower than the average rate for sub-Saharan Africa. While boys' under-five mortality rates are higher than girls' in

**Figure 7: Under-Five Mortality Rate for Girls and Boys, 2000–2005 (deaths per 1,000 births)**

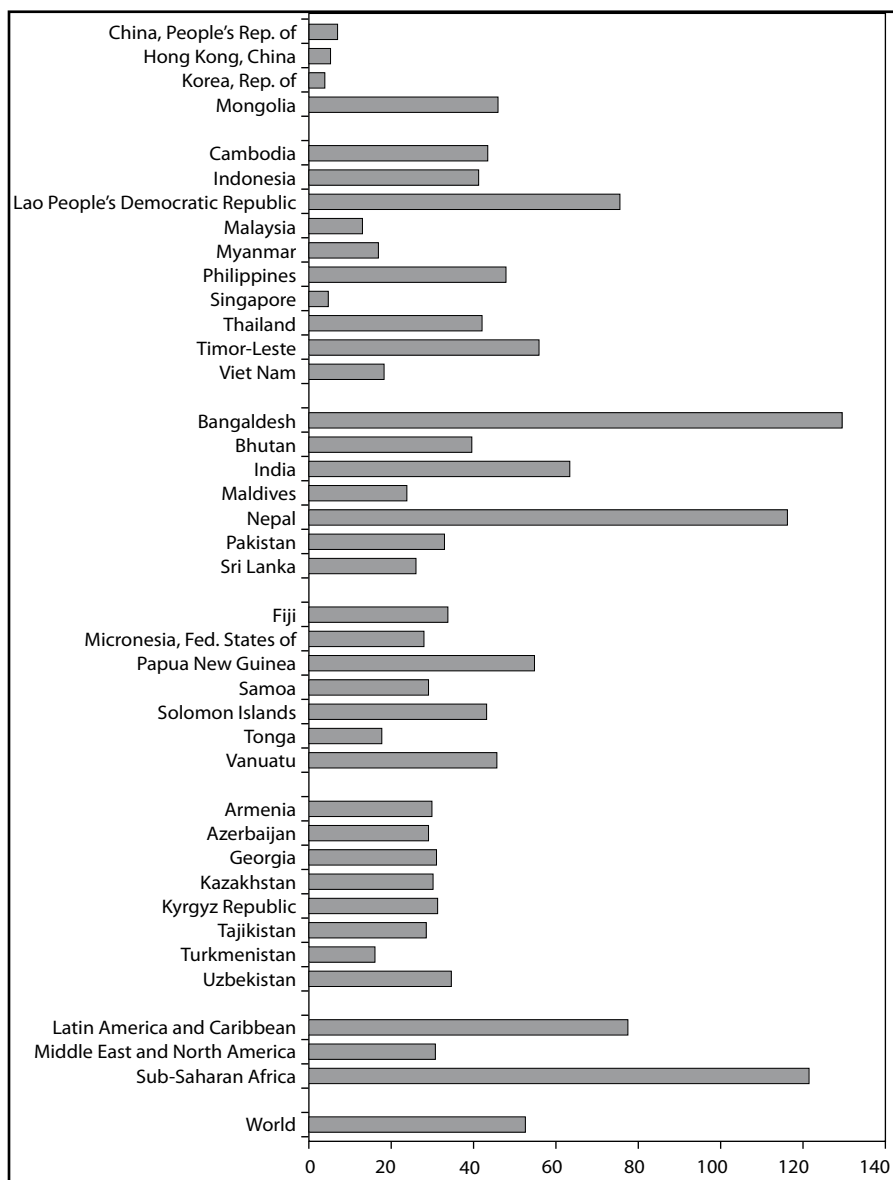
Source: United Nations, World Population Prospects Database, available: <http://esa.un.org/unpp/>, downloaded 16 October 2008.

most of the countries in the region and in other parts of the world, girls' rates exceed those of boys' in the People's Republic of China (PRC), most of South Asia, and some Pacific islands. It has been argued that the "son preference" in these countries may be a causal factor of the higher girls' under-five mortality rate, which makes the opportunity to life itself dependent on a predetermined characteristic—gender (World Bank 2006). Son preference practices have resulted in what Sen (1992) called "missing women". The observed greater number of male than female infants in these countries is not only due to the differential care after birth, but also partly due to sex-selective abortion (World Bank 2006), though this cannot be captured by mortality rates.

The second health indicator considered in this paper is adolescent fertility rates. Morisson et al. (2008) point out three reasons why this indicator is of special interest: (i) adolescent pregnancy tends to have a higher probability of being unplanned and untimely, and hence carries a higher risk of mortality for both mother and child; (ii) early motherhood often results in early departure from school and lower human capital accumulation, which is ultimately likely to undermine women's empowerment; and (iii) adolescent motherhood is associated with poorer development outcomes for children, perpetuating the vicious circle of poverty. Figure 8 reports adolescent fertility rates expressed as a number of births per 1,000 women aged 15–19. It shows that the fertility rate among young girls in Bangladesh

and Nepal, and to a lesser extent, Lao PDR and India, is relatively high. The rate for Bangladesh is even higher than the average rate for sub-Saharan Africa. Unlike the other indicators examined so far, adolescent fertility in Latin America and the Caribbean is relatively high; indeed higher than in most Asian and Pacific countries.

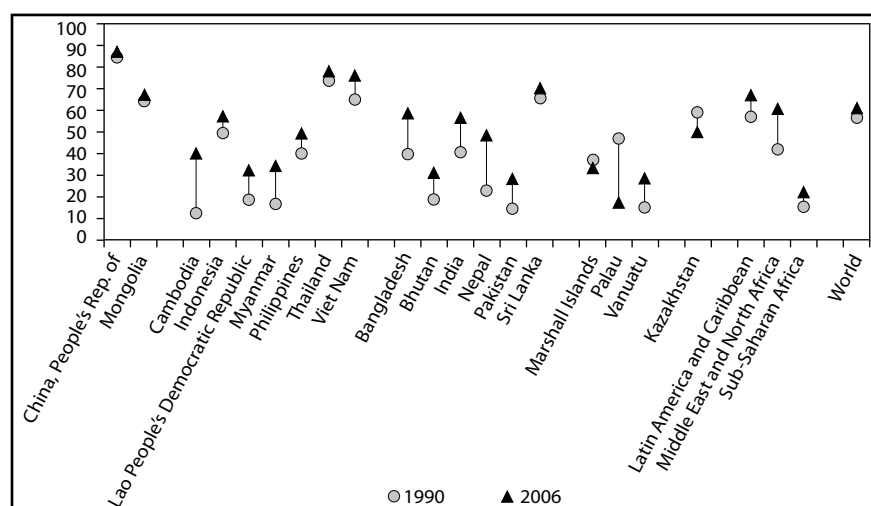
**Figure 8: Adolescent Fertility Rate, 2006 (births per 1,000 women aged 15–19)**



Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

The third health-related indicator is the prevalence rate of contraceptive use, which is measured as the percentage of married women aged 15–49 who use contraception. The use of contraception increases women’s control over fertility decisions (e.g., on the spacing of pregnancies or how many children to bear). It therefore likely enables women to control economic activities. According to Figure 9, a relatively large number of countries have made significant progress in increasing the use of contraception since the early 1990s. Nevertheless, the prevalence rate remains below the world average—about 60%—in most countries in Asia and the Pacific, though higher than sub-Saharan Africa. To guarantee women’s reproductive rights, continuous effort is needed to promote the use of contraception in the region.

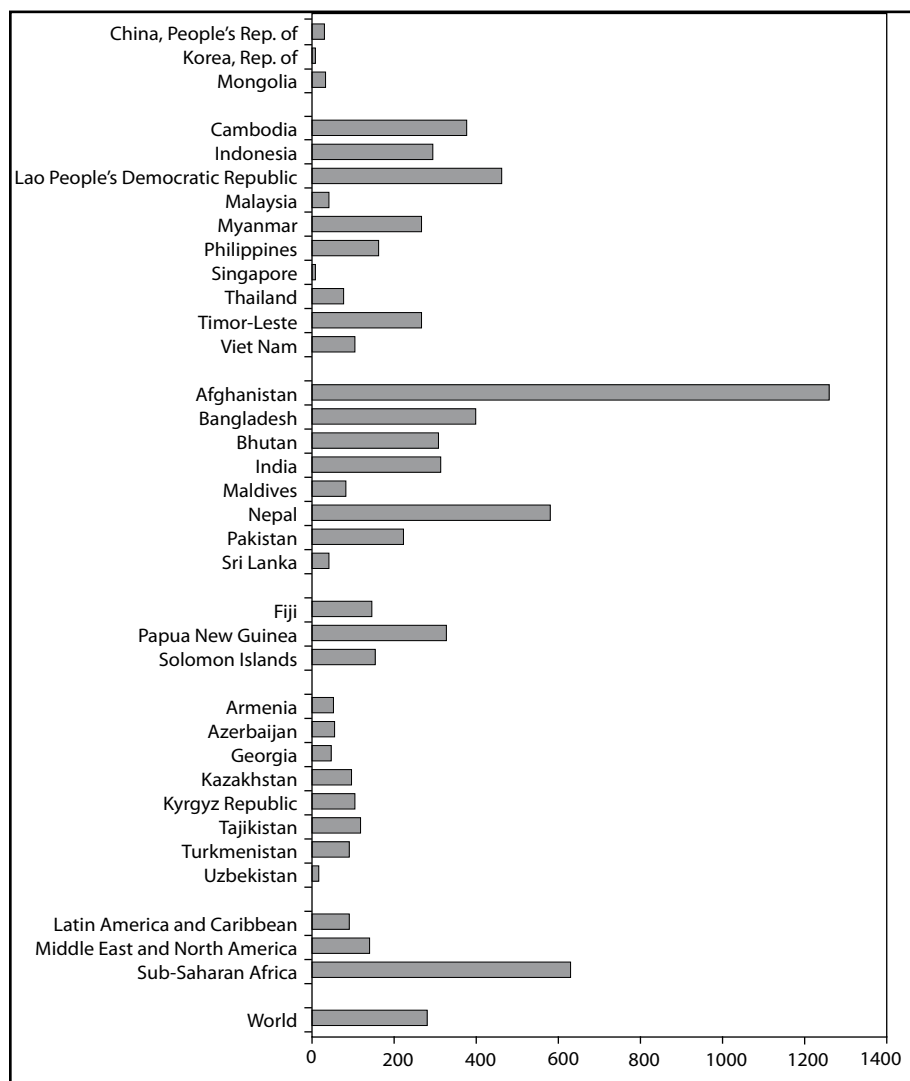
**Figure 9: Contraceptive Prevalence Rate, 1990 and 2006 (percent of married women aged 15–49)**



Note: The figure is based on the earliest available data between 1990 and 1995 and the latest available data between 2000 and 2006 for each country and region.

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

Before moving on to the discussion on gender inequality in the access to opportunities domain, it is worth noting maternal mortality rates, even though they are not part of MDG3 (they are under the Fifth Millennium Development Goal) or the MDG3 plus approach. Maternal mortality is often related to women’s access to health services. Figure 10 illustrates a disturbing picture of relatively high mortality rates for many countries in Asia and the Pacific, particularly in South Asia. While they (with the exception of Afghanistan) are below the average rate for sub-Saharan Africa, many countries in Southeast Asia, South Asia, and the Pacific record higher rates than those for Latin America and the Caribbean as well as Middle East and North Africa. This clearly calls for improvement in women’s access to pre- and post-natal care and assisted birth in countries that lag behind in reducing maternal mortality.

**Figure 10: Maternal Mortality Rate, 2005 (deaths per 100,000 live births)**

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

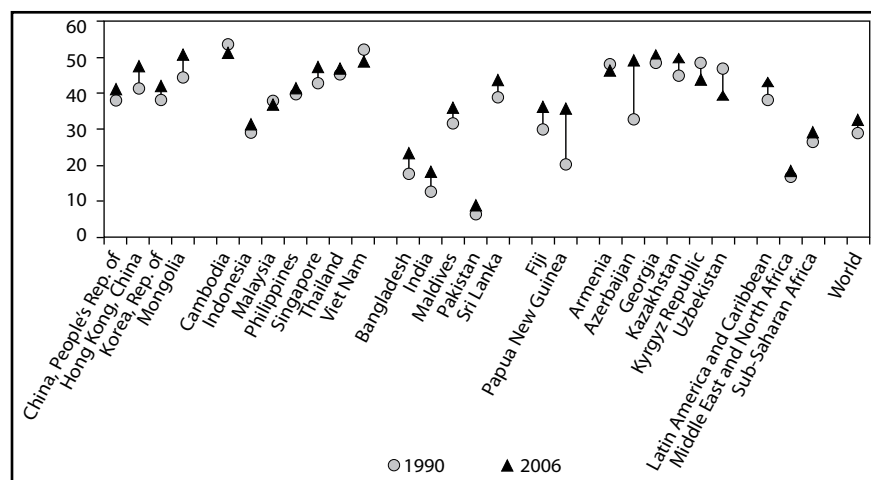
### C. Access to Resources and Opportunity: Employment

Even if countries advance in achieving gender parity in basic human capabilities, the instrumental effects of gender equality on economic development would be limited unless women have as much access as men to economic and political opportunity to apply their capabilities. As the next section illustrates, economic empowerment, in particular, is crucial to reducing gender disparity within and outside the household.

Figure 11 shows changes in the percentage of women in nonagricultural wage employment between 1990 and 2006. There seems to be a general upward trend in the share of women in wage employment in the nonagricultural sector. However, women's shares remain low, particularly in South Asia (with the exception of Maldives and Sri Lanka), which are well below the world average, even below sub-Saharan Africa. Note that women in the Middle East and North Africa are also found to have very limited engagement in nonagricultural wage employment. This seems to reflect the limited mobility of women, constrained, at least partly, by cultural and social factors as well as their limited access to education and health in these countries.

One of the main criticisms concerning this official MDG3 indicator is that it does not describe the complete status of women's access to economic opportunity. In many developing countries, the majority of the poor, including women, are employed in the agricultural sector. As a result, the share of women in nonagricultural wage employment is inadequate to measure gender equality in accessing economic opportunity. Additional indicators incorporated in the MDG3 plus approach are thus intended to overcome some of these shortcomings.

**Figure 11: Share of Women in Nonagricultural Wage Employment, 1990 and 2006 (percent)**



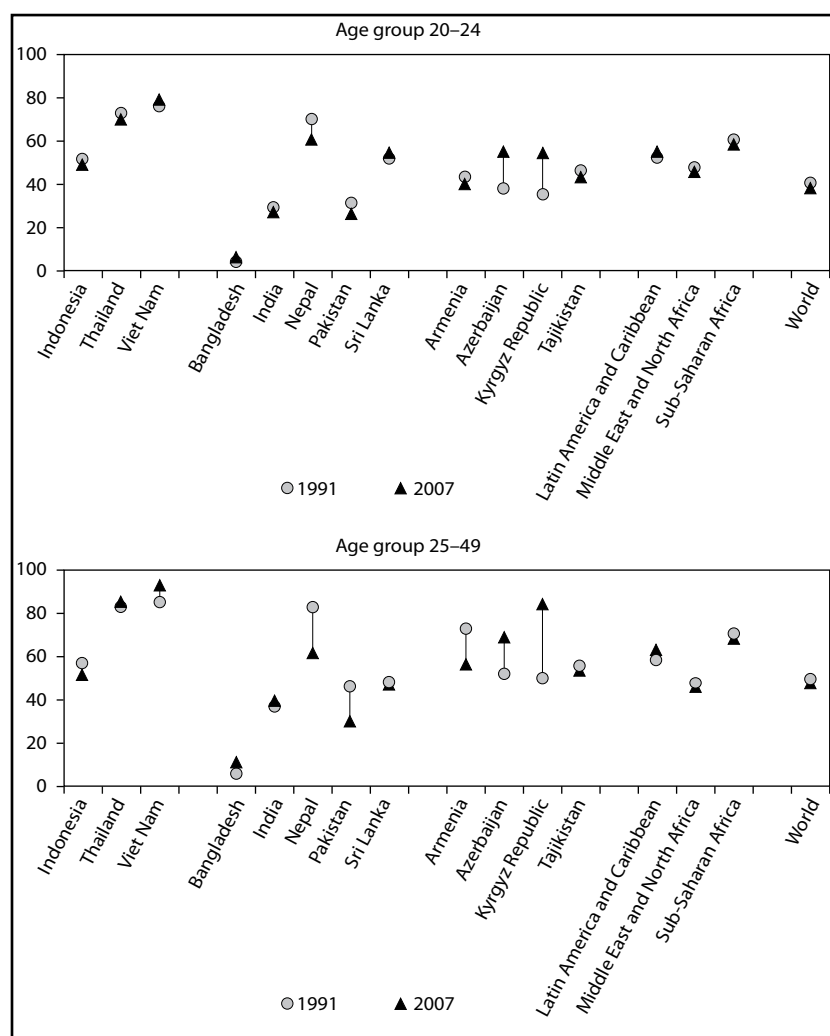
Note: The figure is based on the earliest available data between 1990 and 1995 and the latest available data between 2000 and 2006.  
Source: Morisson et al. (2008).



Figure 12 presents labor force participation rates among women aged 20–24 and 25–49, based on data from various household and labor force surveys, with efforts to broaden and standardize the definitions of female economic activities (Morisson et al. 2008). A number of observations can be made. First, with few exceptions, there was a lack of progress in women’s labor force participation between 1991 and 2007. In some countries, including Armenia, Indonesia, Nepal, and Pakistan, female labor force participation actually declined, substantially for the latter two countries, for both age groups. Second, women’s participation in the labor market seemed particularly low in South Asia, as in the case of the nonagricultural sector. In contrast, taking into account women’s labor force participation in both the agricultural and nonagricultural sectors, the participation rates for sub-Saharan Africa are found to be higher than the world average. This indicates a relatively high representation of women in the agricultural sector in sub-Saharan Africa.

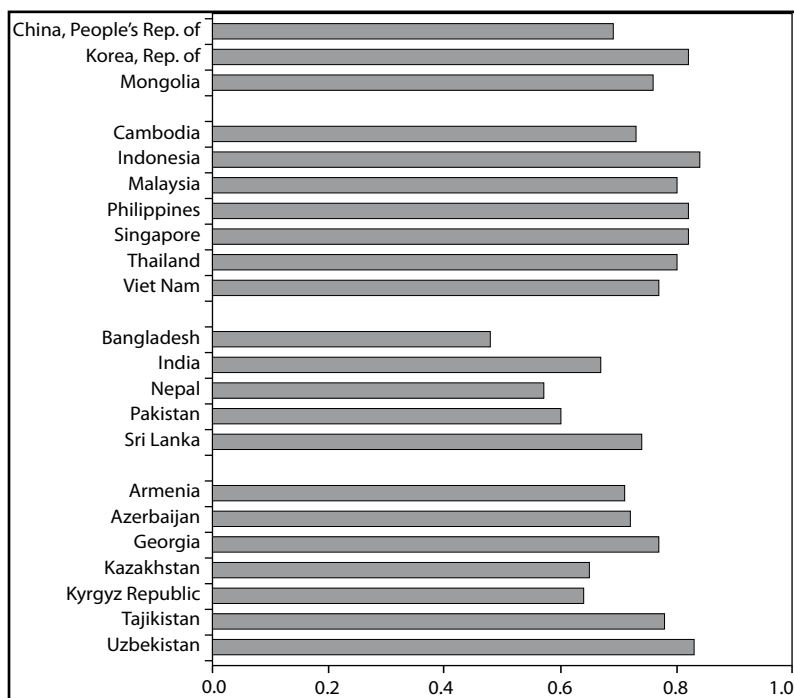
Even when women enter the labor market, this does not necessarily mean that the returns to their work, women’s opportunity to gain skills, or their working conditions are equal to those of men’s. Indeed women, particularly in developing countries, are more likely to be engaged in the informal sector, which offers low wages, no formal social protection, and limited opportunity to gain skills (UNESCAP 2007). Unfortunately, gender-disaggregated wage data are scarce, and to keep relatively wide country coverage, the wage-related indicator in terms of the ratio of female to male wage for similar work—based on data from the World Economic Forum’s Executive Opinion Survey (World Economic Forum 2007)—is presented (Figure 13). While this ratio only captures a limited group of workers in the formal sector, the figure still illustrates that there is a wide gender wage gap in all regions, particularly in South Asia.

**Figure 12: Labor Force Participation Rates among Women Aged 20–24 and 25–49, 1991 and 2007 (percent)**



Note: The figure is based on the earliest available data between 1991 and 1998 and the latest available data between 2000 and 2007.  
Source: Morisson et al. (2008).

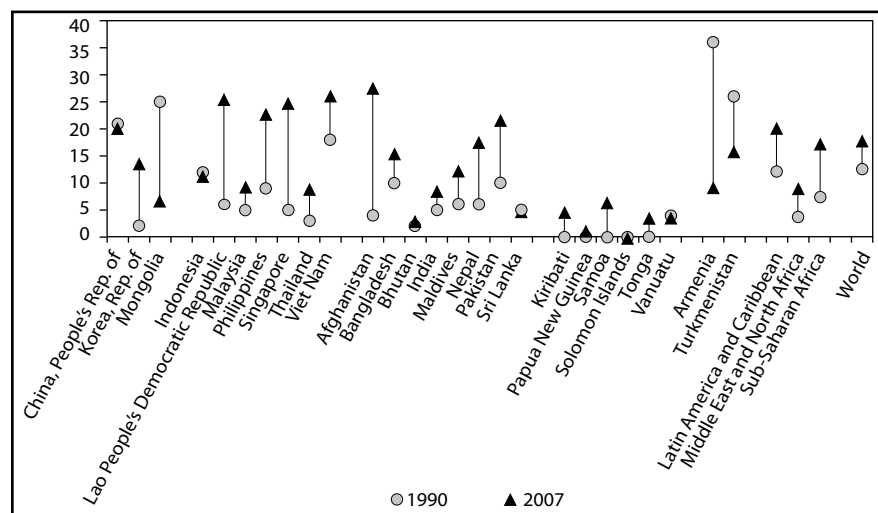
In sum, contrary to significant progress in reducing gender gaps in education enrollment, the overall improvement in women's access to economic opportunity has turned out to be very limited. As the literature review in the following section shows, incompatibility with their childbearing role as well as the traditional division of labor between men and women, reinforced by cultural norms and people's attitudes, seem to be the main obstacles preventing women from participating in the labor market.

**Figure 13: Ratio of Female to Male Wage for Similar Work, 2007**

Source: World Economic Forum (2007).

#### **D. Access to Resources and Opportunity: Political Participation**

Women's participation in public decision making is an important indicator of their empowerment. This is often measured in terms of the percentage of seats held by women in national parliaments, as presented in Figure 14. In spite of the still low share of women, it is encouraging to observe significant progress between 1990 and 2007 in a great number of countries. In contrast, many countries in the Pacific still have no or very few women in parliament. Another exception is Armenia, Mongolia, and Turkmenistan where women's share of seats fell significantly during this period. Former centrally planned economies in Central Asia used to reserve a certain share of parliamentary seats for women and, as a result, women in these countries had fared much better than women in other parts of the world. But, with the removal of this reserve, the share of women in parliaments has fallen sharply in some of these countries (UNESCAP 2007).

**Figure 14: Share of Seats held by Women in National Parliaments, 1990 and 2007 (percent)**

Note: The figure is based on the 1990 data and the latest available data between 2006 and 2007 for each country and region.

Source: World Bank, World Development Indicators Online, downloaded 16 October 2008.

By comparison, representation of women in national parliaments in Southeast Asia and South Asia is relatively high, though most countries in Asia and the Pacific are below the world average. Note that this indicator provides only a partial level of women's political participation as it does not measure women's actual influence in the political decision-making process or their political representation at local or regional levels (Grown et al. 2005). Furthermore, improvements in women's representation in parliaments do not automatically guarantee empowerment or an elimination of gender inequality. Bangladesh, India, and Pakistan had female heads of state in the past, but these countries lag in narrowing gender gaps in many dimensions (UNESCAP 2007).

This section's review of the progress toward gender equality in the capabilities and access to opportunities domains reveals significant progress in achieving gender parity in education, particularly primary education, in Asia and the Pacific as in the rest of the world. But, gender gaps in secondary education remain large in a number of countries in Southeast Asia, South Asia, and the Pacific. Some of these countries even report a wider gap than sub-Saharan Africa, which has made relatively little progress in reducing gender disparity in secondary enrollment rates. In tertiary education, while girls' enrollment rates exceed boys' in some countries that have already achieved gender parity, there remains a significant gender gap, particularly in South Asia.

In health, progress in reducing gender inequality is less impressive. Under-five mortality rates for girls still exceed those for boys in the PRC, most of South Asia, and some Pacific islands, while boys' rates tend to be higher than girls' in the rest of the

world. Adolescent fertility rates also remain high for a number of countries, including Bangladesh, India, Lao PDR, and Nepal. Yet most in the region have lower fertility rates than Latin America and the Caribbean or sub-Saharan Africa. In all countries in the region, with the exception of Afghanistan, maternal mortality is below the average figure for sub-Saharan Africa, but a large number in Southeast Asia, South Asia, and the Pacific record higher rates than other regions in the world.

A more alarming issue is that very little progress has been made in achieving gender equality in access to economic opportunity. Women's labor force participation remains limited, particularly in South Asia, where some countries even observed a decline in female labor force participation over the years. In addition to continuing efforts at reducing gender inequality in the capabilities domain, measures need to be undertaken to remove the constraints on enhancing women's economic activities.

## **IV. Review of Empirical Studies on Gender Inequality**

Despite progress toward gender equality over the years, gender gaps remain in many parts of women's lives, as illustrated in the previous section. In order to formulate effective policy measures to reduce the gaps, it is important to understand the fundamental causes of gender inequality. The main purpose of this section is, therefore, to uncover some of the underlying causal factors behind gender disparities by reviewing relevant empirical studies. The section will focus its discussion on the following two areas: (i) intrahousehold resource allocation, and (ii) labor market. While the former will provide important insights into why girls continue to fare worse than boys in basic capabilities attainment, such as education and health, the latter will help in understanding the primary factors that constrain women from accessing employment opportunities.

### **A. Gender Bias in Intrahousehold Resource Allocation**

Intrahousehold resource allocation has been an area of focus in explaining the observed inequality in basic capabilities attainment between boys and girls. It has received increasing attention from policy makers and academics since the early 1990s. This is mainly due to the growing recognition of its importance for the design, implementation, and outcomes of development policies, given that many decisions that affect individuals' well-being are undertaken within the household (Quisumbing 2003b). It had been traditionally assumed that individual household members pooled their resources and shared the same preferences for the allocation—the so-called unitary model (Becker 1965 and 1981). Under the unitary model, the household was thus characterized as one and the equal distribution of household resources was assumed.

However, a growing body of literature challenges the key assumptions underlying the unitary model.<sup>8</sup> Alternative models, such as collective models, assume that individual household members have different preferences and view intrahousehold resource allocation as the outcome of a bargaining process among household members (e.g., McElroy and Horney 1981, Manser and Brown 1980) or as Pareto-efficient outcomes reached through a collective decision-making process (e.g., Chiappori 1988). Empirical work has increasingly provided evidence against the assumptions that individual household members share the same preferences for resource allocation in the household and resources are shared equally among household members. One of the most commonly claimed findings is that when women have greater control over household resources, they tend to allocate a larger share of household resources on nutrition, health, and education of their children, than men do.<sup>9</sup> An important implication of such findings is that changes in individual-specific control of resources can translate into changes in the patterns of the way resources are allocated within the household (Chiappori 1992 and 1997).

Control over household resource allocation is said to be determined by the bargaining power of individual household members (e.g., McElroy and Horney 1981, Manser and Brown 1980, Pollak 1994). Researchers often have difficulty measuring relative power empirically because it is derived from multiple sources. There are a number of possible determinants of bargaining power: (i) individual-specific control of resources such as unearned income, premarital assets brought to the marriage, transfer payments, and welfare receipts; (ii) factors influencing the bargaining process including legal rights (e.g., divorce law and laws regarding the disposition of property upon divorce) and education; (iii) personal networks of individuals such as support from family; and (iv) basic attitudinal attributes including self-esteem, self-confidence, and emotional satisfaction (Quisumbing 2003c). Unfortunately, the distribution of power and thus the control over resources within the household tends to favor men (Quisumbing 2003b).

Another important empirical question to ask is how household resources are allocated between sons and daughters within the household, if the assumption that resources are not allocated equally among household members is rejected. As the previous section has highlighted, there are apparent disparities in the outcomes between boys and girls, such as school enrollment rates and health status. One of the possible explanations for these disparities is that household resources are allocated differently between boys and girls.

There are mainly two approaches for detecting any discrimination in such allocation through expenditure analysis. Given that data on expenditure of individual household members are generally absent in household surveys, the attractiveness of these methodologies is that they can be applied using readily available household-level expenditure data. The first is the Rothbarth approach, which is based on the argument that expenditure on adult goods (e.g., alcohol and tobacco) can be considered a measure of parental welfare (Rothbarth 1943). Given that the household faces a fixed budget,

<sup>8</sup> See Haddad et al. (1997) for a review of the literature.

<sup>9</sup> See Haddad et al. (1997) and Quisumbing (2003a) for a review of the literature.

the addition of children can be modeled as a negative income effect, with expenditure on children displacing adult goods consumption, leading to a reduction in adult goods expenditure and welfare (Deaton 1997). Under the Rothbarth approach, if the presence of boys reduces adult goods consumption more than girls, this can indicate greater valuation of boys than girls. This methodology can, however, be applied only when a set of goods consumed only by adults and for which there are no substitution effects of children can be identified.

The second approach, commonly referred to as the Engel method, seeks to detect differential treatment within the household by examining how household expenditure on a particular good, such as schooling and health care, changes with household age-gender composition (Deaton 1989). The Engel method has been particularly popular for examining gender bias in intrahousehold resource allocation and has been widely applied to data from various countries.

Using these indirect household expenditure methodologies, some studies find gender bias against girls in the allocation of household resources; see for example, Burgess and Zhuang (2002) for the PRC, and Gibson and Rozelle (2004) for Papua New Guinea. Nevertheless, most studies—based on either the Rothbarth approach or the Engel method—have failed to detect discrimination against girls in household consumption patterns. For example, various studies find no systematic gender differential in the allocation of household expenditures on children.<sup>10</sup> This is puzzling given the observed disparities in the outcomes between boys and girls. This issue has also been acknowledged by Deaton who notes “it is a puzzle that expenditure patterns so consistently fail to show strong gender effects even when measures of outcomes show differences between boys and girls” (Deaton 1997, 240).

Several explanations have been put forward to explain the failure to detect a bias.<sup>11</sup> Kingdon (2005), for instance, points out the limitations of the Engel method. Based on individual data<sup>12</sup> on educational outcomes and expenditure of each household member aged 35 or younger, Kingdon (2005) investigates gender bias in the allocation of education expenditure, both by directly examining individual educational spending on boys and girls and by the indirect Engel approach. She finds that while the Engel method fails to find biased resource allocation against girls, the individual-level data on educational expenditures confirm that in the Indian states where there is evidence of significantly worse educational outcomes for girls than boys, household expenditure on girls’ education is significantly lower than on boys’.

Kingdon (2005) provides two reasons for the failure of the Engel method. First, in the case of rural Indian households, gender bias mainly occurs through zero educational

<sup>10</sup> Deaton (1989) on Côte d’Ivoire and Thailand, Haddad and Hoddinott (1991) on Côte d’Ivoire, Subramanian and Deaton (1991) on India, Ahmad and Morduch (1993) on Bangladesh, Haddad and Reardon (1993) on Burkina Faso, and Bhalotra and Attfield (1998) on Pakistan.

<sup>11</sup> See Gibson and Rozelle (2004) and Kingdon (2005) for a review.

<sup>12</sup> Collected through the 1994 National Council of Applied Economic Research Rural Household Survey of 16 major states in India.

spending for girls (i.e., no enrollment) rather than lower expenditure for girls than for boys—conditional on both being enrolled in school. However, the Engel method simply estimates a single budget share equation, ignoring the two-stage decision process (i.e., the binary decision of whether to send a child to school and the decision of how much to spend on the child's education—conditional on sending him/her to school). Averaging across the two mechanisms can offset the main discriminatory process of not sending girls to school and lead to the conclusion of no pro-boy bias. Second, household-level expenditure data are a poor substitute for individual-level data for measuring the extent of gender discrimination in household resource allocation.

There are also a number of explanations for the failure to detect gender bias in household resource allocation, which are not related to methodological issues. One of them is that girls have been so discriminated against that they have already died, i.e., there exists gender bias in mortality selection instead (Rose 1999, Udry 1997). This can be supported by the observation of “missing women” in certain regions in East Asia and South Asia where both sex ratios at birth and child survival rates are highly skewed toward boys (e.g., Sen 1992). Alternatively, if couples have a strong desire for a male offspring, they will continue childbearing until they have at least one boy. As a result of such fertility behavior, a situation arises where girls tend to have more siblings and larger households than boys. Given the fewer resources for each child in larger households, girls are found to be worse off than boys in their outcomes even when there is no observed differential treatment by parents in intrahousehold resource allocation (Jensen 2002).

Another possible explanation for the absence of discrimination against girls in the allocation of household resources is that in certain countries, women are actually economically productive and girls are treated relatively equally by their parents. In the Philippines, no bias against girls in intergenerational transfers of land, investment in schooling, and the allocation of household expenditures is found. Although there is a tendency for daughters to receive less land than sons, they are compensated by more schooling. This may partly reflect the fact that Filipino women have historically enjoyed a relatively equal position to their male counterparts, including in the labor market. The earnings gap between men and women in the Philippines is, in fact, narrower than in the United States, Japan, or many other countries (Estudillo et al. 2001). Hence it may be argued that discrimination against girls is likely to decline as economic opportunities for women increase (Haddad and Reardon 1993).

Similarly, based on data from Pakistan, Mansuri (2007) finds that migration-induced resource flows have a positive and significant impact on height for age and educational attainment for girls, while the effects are much smaller for boys. This suggests that boys may get preference in education, nutrition, and health care when resources are stretched, whereas girls are treated better only when additional resources are available. These findings seem to demonstrate that the son preference is not only due to embedded cultural norms, but also because of economic factors. Some studies do show that



medical care or education for girls is more income elastic than for boys—e.g., medical care in Pakistan (Alderman and Gertler 1997), and education in Malaysia (DeTray 1988) and Viet Nam (Behrman and Knowles 1999). By using data from both a rich (Jiangsu) and a poor (Sichuan) province in the PRC, Burgess and Zhuang (2002) also find that biases against girls in health and education spending occur predominantly in poor, rural households that are highly dependent on agriculture. Moreover, Sawada and Lokshin (2001) show, in rural Pakistan, that while there are some gender-specific, birth-order effects on household allocation patterns (i.e., suggesting resource competition among siblings), the schooling progression rates become comparable between boys and girls at a high level of education. These observations indicate that parents might pick the “winners”, which would be consistent with the theoretical implications of the optimal educational investment behavior under binding credit constraints.

The findings from existing studies on gender bias in intrahousehold resource allocation are mixed, perhaps due to one of the reasons outlined above. Nonetheless, this section has also provided empirical evidence that suggests gender inequality in capabilities can, at least partly, be attributed to how parents allocate household resources between sons and daughters. It also suggests that gender bias in the allocation of household resources is caused not only by cultural and social factors, but also by economic hardships faced by households. This implies that, in addition to further efforts in improving access to education and health services for girls and women as well as in raising public awareness of gender equality, policy makers can also strengthen the capabilities of girls and women by promoting economic development.

## **B. Gender Inequality in the Labor Market**

Gender inequality in access to economic opportunity, particularly related to the labor market, is a much debated issue. The disparity between men and women is generally observed in labor force participation, occupational segregation, and gender wage gaps. Although there have been improvements—such as women’s increased educational attainments and the introduction of anti-discrimination and equal opportunity laws—progress toward gender equality in the labor market has not been satisfactory, even in developed countries, as illustrated in Section III.

Gender inequality in the labor market does not only result in the inefficient use of resources and slower economic growth, but also has repercussions on the power relationship between men and women within the household. It is, therefore, important for policy makers to ensure equal treatment for men and women in accessing economic opportunity. The purpose of this section is to understand the causal factors for the persistence of gender inequality in the labor market. More specifically, it will try to identify (i) constraints that prevent women from entering labor markets, and (ii) factors that cause gender inequality in the labor market.

## 1. Labor Force Participation

Section III has highlighted that significant differences exist between men and women in labor force participation in many countries in Asia and the Pacific, particularly in South Asia. The available empirical studies suggest a number of important factors that restrict women's entry into the labor market, including: (i) women's limited educational attainment; (ii) lower wage levels for female workers; and (iii) the incompatibility of labor market participation with women's childbearing role and the traditional division of labor between men and women. It should, however, be noted that improvement in education and wage levels does not necessarily increase the female labor force participation rate in developing countries, particularly among poor households, as discussed below.

Education is a key determinant of female labor force participation. Although it is commonly assumed that women with better educational attainment are more likely to enter the labor market, this may not necessarily be the case for women in developing countries. By comparing five Asian countries, Cameron et al. (2001) illustrate that in countries where traditional gender roles are rigidly defined, such as the Republic of Korea (Korea) and Sri Lanka (in comparison with the Philippines and Thailand), an increase in women's education is less likely to bolster women's labor force participation rates. These findings seem to underline the important influence of cultural and social norms on female labor force participation.<sup>13</sup> However, based on data from Egypt, El-Hamidi (2004) shows that while, in addition to economic factors, social and traditional gender roles govern women's participation in the labor market, only economic factors matter in decision making when household income falls below a certain level. In other words, at low income levels or below some threshold, economic hardships are likely to press women to work outside the home to meet the household's economic needs.

Another important determinant of labor force participation is the wage rate. Women's labor supply has often been found more sensitive to wages than men's.<sup>14</sup> This is mainly due to their responsibility for housework. However, the traditional labor supply model is sometimes criticized for failing to capture the behavior of poor workers who, especially in developing countries, tend to work longer hours to cover their basic needs with a fall in wages (e.g., Dessing 2002). Based on data from the Philippines, Dessing (2002) finds negative wage elasticity for women at low wage rates. Similarly, Dasgupta and Goldar (2006) show that for women from households below the poverty line in rural India, women's labor supply is inversely related to the wage rate and the number of earning members in the family. These findings suggest that a positive effect of wage increases on female labor force participation among women from poor households cannot simply be assumed.

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<sup>13</sup> Fernandez (2007) also examines the possible relationship between culture and women's labor supply based on data for second-generation women in the United States to separate the effect of market and institutional factors from culture. Using both female labor force participation rates and attitudes in the women's country of ancestry as cultural proxies, she finds that these cultural proxies have quantitatively significant effects on women's labor supply.

<sup>14</sup> See Blundell and MaCurdy (1999) for a survey of the studies.

While the education and wage levels of women certainly affect their labor force participation, the main underlying causes of women's limited participation are arguably the incompatibility of labor market participation with their childbearing role and the traditional division of labor between men and women reinforced by cultural norms and people's attitudes. While increased economic demands from larger family size could push women into the labor force, the majority of empirical work suggests a negative effect of childbearing on women's labor force participation (e.g., Angrist and Evans 1998, Chevalier and Viitanen 2002, Chun and Oh 2002, Narayan and Smyth 2006). Limited female labor force participation is also closely linked with the traditional role played by men and women within the household. Indeed the traditional division of labor—father goes to work, mother stays at home to look after the children—is still the prevalent domestic arrangement, particularly in developing countries (Cigno 2007). Even in developed countries where there has been a steady increase in female labor force participation, there remains a significant difference in participation rates between men and women. While there has been a more egalitarian trend over the last few decades in people's attitudes toward gender division of labor—including attitudes about women's rights to a career—a couple's actual behavior is much less egalitarian and women continue to be primarily responsible for housework and childcare (Alvarez and Miles 2003).

One of the main explanations for the unequal division of housework between husbands and wives is based on the comparative advantage framework, whereby each spouse performs various tasks in which the spouse has a comparative advantage (Becker 1981). Hence the spouse with the lowest opportunity cost (i.e., the lowest human capital or the highest home productivity) contributes the most to housework. It could, however, also be argued that women's lower bargaining power, mainly due to the lower earnings they could bring to the household, results in the unequal allocation of housework between men and women (McElroy and Horney 1981, Lundberg and Pollak 1993). What is common between these two explanations is that an increase in women's education and earnings could lead to a more equal share of work within the household. Further, a more equal allocation of housework between men and women is likely to have a positive impact on women's living standards as well as on their labor market outcomes (Blau et al. 1998, Hersch and Stratton 1997 and 2002), leading to a potentially self-fulfilling feedback mechanism (Olivetti and Albanesi 2006).

Nevertheless, the available empirical evidence suggests a more complicated picture of the relationship between gender inequality in domestic work and labor market outcomes (e.g., Aguiar and Hurst 2006, Alvarez and Miles 2003, Chen et al. 2007, Fernandez and Sevilla-Sanz 2006). For instance, improvements in women's labor market outcomes do not automatically translate into a more equal allocation of housework between men and women, partly due to social norms. It could, instead, increase women's market efforts without releasing them from their household duties, resulting in a "double burden" on women (Chen et al. 2007).

Although much of the above empirical evidence on the gender division of labor comes from developed countries, there are a number of studies that look at gender differences in time allocation in developing countries (e.g., Ilahi 2001, Khandker 1988, Skoufias 1993). One of the most important issues is whether this is governed by local social norms and customs or whether women also respond to economic incentives and constraints to alter their time use at home. Using data from rural Bangladesh, Khandker (1988) finds that a woman's time-use pattern is not fixed exclusively by society, but is also partially influenced by individual- and household-level economic constraints. Given that women do respond to market opportunities, if economic development proceeds in rural Bangladesh, more women are likely to participate in market-oriented production even if "patriarchy" exists. In other words, there is room for policy interventions to enhance female labor force participation, through, for example, anti-discrimination policy against gender wage differentials, improving access to education for girls, and, above all, modernization programs that will increase market opportunities for women (Khandker 1988).

## 2. Gender Inequality in the Labor Market

Unfortunately, when women enter the labor market, they are likely to face gender inequality. This has been extensively examined in the last few decades and almost all studies confirm its persistent existence.<sup>15</sup> The most apparent forms of gender disparity are gender wage gap and occupational segregation, though the latter is often considered one of the possible causes of gender pay differentials. In developing countries, in addition to occupational segregation, a relatively large representation of women in the informal sector is another manifestation of gender inequality in the labor market.<sup>16</sup> Hence, in addition to examining the causal factors for the gender wage gaps, the issues related to the informal sector will be discussed here.

Many studies have attempted to explain gender pay differentials by a variety of factors.<sup>17</sup> The main causes of gender wage gaps suggested by the existing literature include (i) women's lower human capital relative to men, (ii) occupational segregation, and (iii) discrimination against women.

One of the most frequently noted explanations for gender pay differentials is that women invest less in their human capital, typically in education and work experience (Becker

<sup>15</sup> See Altonji and Blank (1999) for a review of the literature.

<sup>16</sup> Note that the term "informal sector" itself is often used to refer to a heterogeneous group of economic arrangements ranging from self-employed producers and traders to wage workers such as casual workers and subcontractors. In addition, unpaid housework is sometimes regarded as one of the categories of the informal sector.

<sup>17</sup> One of the most popular ways of analyzing gender wage differentials has been to decompose them into two components—differences in observable characteristics including qualifications, and differences in treatment of otherwise equally qualified men and women. The latter is sometimes interpreted as a measure of discrimination. This type of analysis is commonly done through the application of a decomposition methodology proposed by Oaxaca (1973).

1964, Mincer 1974). Many empirical studies support this argument.<sup>18</sup> The weaker human capabilities of women in developing countries, as noted in Section III, are likely to constrain their acquiring the same level of earnings as men.

Given the existence of a significant wage variation across occupations, another strand of the literature suggests the importance of gender occupational segregation in explaining the gender wage gap (e.g., Breunig and Rospabe 2007, Brown et al. 1980, Ilkkaracan and Selim 2007, Meng and Miller 1995). A relatively significant role of occupational segregation in gender pay disparity implies that pay structures within occupations are equitable while women tend to be more concentrated in poorly paid occupations due to reasons including physical constraints, incompatibility with their responsibilities at home, and lower level of education. Yet other studies show that most gender wage gaps are actually found within occupations, for example, in Hong Kong, China (Sung et al. 2001) and Taipei, China (Zveglic and Van der Meulen Rodgers 2004). These findings suggest that women are not receiving equal pay for work of equal value.

Another, and perhaps more prominent, factor contributing to gender wage gaps is the discrimination against women in the labor market. Employers sometimes use observable characteristics of potential workers such as race and gender as a proxy for unobservable ones such as ability, attitudes, or signals of their future productivity (e.g., Arrow 1973, Phelps 1972). Given their greater responsibilities at home, women are sometimes thought to be less productive at work and they tend to be offered lower wages (e.g., Becker 1985, Bryan and Sanz 2007, Hughes and Maurer-Fazio 2002). In the PRC, for instance, married women are found to experience a larger absolute gender wage gap than their unmarried counterparts (Hughes and Maurer-Fazio 2002). The same analysis also shows that the proportion of the gap due to discrimination is higher for married women than single women. An encouraging finding is that education may have a discrimination-reducing effect as it signals women's strong commitment to a job and career (e.g., Monk-Turner and Turner 2001, Montgomery and Powell 2003, Son 2007). Monk-Turner and Turner (2001) find that more educated women tend to face a relatively smaller wage disparity in Korea. Son (2007) also finds the discrimination-reducing effect of education in Thailand and Viet Nam.

On the other hand, gender pay differentials may also result from the sociocultural habit of employers to discriminate against women despite their capabilities (e.g., Becker 1957, Liu 2004, Antecol 2001). Liu (2004) examines the case of Viet Nam, a transitional economy where—with the abolition of a centrally determined wage system—employers enjoy increased autonomy to reward workers according to their productivity, but also in accordance with their taste for discrimination. Her analysis illustrates the importance of discrimination as an obstacle to gender wage convergence in Viet Nam. She suggests that such discrimination arises from Viet Nam's underlying cultural beliefs and traditions based on Confucianism, which tends to discriminate against women.

<sup>18</sup> For example, Brown and Corcoran (1997), Ilkkaracan and Selim (2007), Light and Ureta (1995), Loury (1997), Machin and Puhani (2003), Myck and Paull (2004), O'Neill and Polachek (1993).

It has, however, been argued that discriminating employers may be driven out of the market place if the cost to discriminate becomes too high (e.g., Arrow 1973, Becker 1957, Phelps 1972). In an open economy, for example, trade is likely to increase competition, which makes it more costly for employers to discriminate (e.g., Black and Brainerd 2004, Liu et al. 2000, Weichselbaumer and Winter-Ebmer 2007). In the PRC, while economic liberalization and decentralization have increased gender wage differentials, market competition is found to have reduced the relative magnitude of gender discrimination and its contribution to the overall differential (Liu et al. 2000). It should be noted though that competition can also hurt the bargaining power of women if they are engaged in declining industries due to international competition. Berik et al. (2003) provide findings for Korea and Taipei, China that support this view.

Another important aspect of gender equality in the labor market for developing economies is informal sector employment. In the developing world, a large proportion of economically active people are engaged in the informal sector. Such employment is generally perceived as a survival activity of the very poor (Sudarshan and Unni 2003), and women, in particular, are disproportionately represented in this sector (Beneria and Roldan 1987, Carr et al. 2000, Mitra 2005, Standing 1999). Even in the once rapidly growing economies of East Asia and Southeast Asia that experienced substantial growth of modern sector employment, a significant share of female workers used to be outside the formal sector (Carr et al. 2000).

The existing literature on women's engagement in the informal sector can be divided broadly into two strands (Gallaway and Bernasek 2002). One takes a relatively positive view of the sector and considers it as a provider of opportunities to earn an income for the poorest and most marginalized people. For women, informal sector employment is thought to be a choice because of its compatibility with their household work. According to this argument, public policy should support women in their choice by improving opportunities in the informal sector and improving working conditions (e.g., Adair et al. 2002, Berger and Buvinic 1989, Dignard and Havet 1995). In contrast, others take a more negative view of the sector, and regard informal sector employment as further marginalizing the poorest and most vulnerable people in society, including women. In order to address this, public policy should make formal sector employment more available to women by removing the constraints that prevent them from entering the formal labor market (Beneria and Roldan 1987, Mitra 2005, Moser 1984).

Despite the opposing views, both perspectives agree that women tend to work in the informal sector, at least partly, as a consequence of their household responsibilities. Moreover, it cannot be denied that the informal sector is an inferior alternative to formal sector employment in terms of earnings, security, and protection from exploitation (Gallaway and Bernasek 2002). In light of these facts, there are a number of important issues that should be noted regarding informal employment. First, a relatively large percentage of women engaged in the informal sector indicates women's vulnerable

employment status without any formal social protection. Second, given that the informal economy is not generally accounted for in national account systems, women's contribution to the economy is likely to be underestimated. Finally, gender wage gaps are often measured based on data from the formal sector. Given the lower average earnings in the informal sector than in the formal sector and a relatively large representation of women in the informal sector, reported gender wage differentials are likely to be an underestimation of the overall gender pay disparity. While policy makers should address the constraints that prevent women from acquiring formal sector employment—by enhancing women's educational and vocational skill attainments, and implementing and enforcing equal opportunity and anti-discrimination legislation—they should also take measures to improve the working conditions of the informal sector including the provision of social protection.

This section has reviewed the existing literature on gender bias in intrahousehold resource allocation and in access to economic opportunity in order to identify the underlying causes of gender inequality in capabilities attainments and in the labor market. While social and cultural norms play an important role in gender disparity in these areas, economic factors also seem to influence the behavior of men and women. The section has also highlighted the significance of women's economic empowerment in achieving gender parity in various aspects of their lives, as it can have a positive effect on the share of domestic work between husbands and wives, women's control over household resources, and the allocation of resources between boys and girls. Improving women's capabilities as well as their access to economic opportunity, therefore, seem to be key to enhancing progress toward gender equality within and outside the household.

## **V. Conclusions**

This paper has reviewed the progress toward gender equality in Asia and the Pacific over the last few decades. By examining a number of indicators proposed under the MDG3 plus approach, it has found that most countries in the region have made some progress in achieving gender parity. However, the rate of progress varies across the different dimensions of gender equality and also across countries. While improvement in the area of education has been notable, advancement has been less impressive in health status and even more disappointing in labor market outcomes. Women's improved capabilities do not seem to have been translated into an equal participation between men and women in economic and political activities. In addition, gender gaps in almost all aspects reviewed remain significant, particularly in South Asia. Often with the exception of Maldives and Sri Lanka, South Asian countries tend to perform worse than sub-Saharan Africa, which made the least progress toward gender parity in many dimensions. Concerted action is thus very much needed to foster progress toward gender equality in South Asia to catch up with the rest of the world.

More efforts are also required to improve the collection of data on indicators in order to effectively monitor progress toward gender equality. Despite the importance of the security aspect of gender equality, the limited availability of data prevented the examination of the status of gender equality in this dimension. The scarcity of gender-disaggregated data on access to productive assets (e.g., land and credit) as well as to infrastructure should also be overcome. This would not only allow measurement of gender equality in these aspects, but also help identify barriers to women's economic empowerment. Similarly, to get a better picture of women's economic activities, particularly in developing countries, data on the informal sector including subsistence agricultural and home-based activities are necessary. Another challenge is to monitor gender inequality at a more disaggregated level within each country. MDG progress reports of several countries in the region show that women in disadvantaged or socially excluded groups (due to their race, ethnicity, caste, income, location, disability, or other factors) tend to lag the national average in achieving gender equality (ADB et al. 2006). To ensure that girls and women from disadvantaged groups would not be left behind in the progress toward gender equality, data monitoring must be undertaken at a more disaggregated level so that policy makers can formulate targeted policies.

The paper also tried to explain the underlying causes of the prevalence and persistence of gender disparity by surveying the relevant literature. Empirical studies show that gender inequality is caused and reinforced by interlinked cultural, social, and economic factors. The importance of cultural and social norms in the prevalence of anti-female bias poses serious challenges to policy makers. These obstacles cannot be removed overnight, but they have to be overcome gradually in order to eliminate gender disparity within and outside the household. Policy makers can enhance such a movement by introducing and enforcing anti-discrimination legislation and educating the public.

Empirical findings also underline the potential role of economic factors in gender disparity. Some studies show that the son preference in certain parts of the region is not only due to embedded cultural norms, but also caused by economic hardships. Economic growth can, therefore, ease the economic constraints of parents and allow them to treat sons and daughters equally. Such findings suggest room for public policies to play an important role in improving the standing of girls relative to boys by promoting economic growth and modernization. Moreover, relatively lower returns to investment in education and health for girls than for boys (due to limited employment opportunities and lower wage levels for women) are also partly responsible for the observed differences in capabilities attainment between boys and girls. Hence improving women's access to employment opportunities and more equal treatment between men and women in the labor market are likely to reduce gender bias in household resource allocation.

In addition, the existing literature suggests that gender disparity in one aspect can reinforce gender inequality in another, forming a self-fulfilling mechanism. Women's improved labor outcomes can, for example, increase the bargaining power of women



over the share of domestic work as well as intrahousehold resource allocation. On the other hand, a more equal burden of domestic work between men and women can allow women to work outside the household as long as they are equipped with appropriate capabilities and have equal access to economic opportunity. However, the available evidence also shows that despite the close links among different dimensions of gender inequality, progress in equality in one aspect does not always translate into progress in other areas. The most obvious example is that women are often not released from domestic responsibilities even when they work outside the home, resulting in a double burden on women.

Nevertheless, the paper has highlighted the importance of women's economic empowerment in achieving gender parity in various aspects of women's lives. Unfortunately, progress toward gender equality in the labor market has been limited so far, and further efforts are much needed to reduce gender disparities in labor market outcomes. Policy makers should not only introduce anti-discrimination legislation, but also ensure that they are implemented and enforced effectively. Moreover, public effort in improving women's educational attainments must continue so that women can take advantage of available economic opportunity. In sum, along with efforts at removing cultural and social obstacles through public awareness, enhancing economic development and improving women's capabilities as well as their access to economic opportunity appear to be the key to enhancing progress toward gender equality, and ultimately to inclusive growth.

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## **About the Paper**

Yoko Niimi reviews the recent progress toward gender equality in developing Asia by examining a number of indicators proposed under the Millennium Development Goal 3 plus approach. Despite the improvement observed in education and health outcomes, women's improved capabilities do not seem to have been translated into an equal participation between men and women in economic and political activities. A survey of empirical literature suggests that prevalence and persistence of gender inequality are often caused and reinforced by interlinked cultural, social, and economic factors. The author argues that along with efforts in removing cultural, social, and institutional obstacles by educating the public and introducing/enforcing antidiscrimination legislations, promoting economic development to generate economic opportunities and improving women's capabilities and access to the opportunities are the key ingredients of a policy package for greater progress toward gender equality and inclusive growth in developing Asia.

## **About the Asian Development Bank**

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.