

## KEY MESSAGES

- In Asia, female labor force participation ranges from 16% in Afghanistan to 83% in Nepal, while male labor force participation ranges from 52% in Timor-Leste to 89% in Nepal. Women's participation in the labor force has remained low despite significant economic growth, declining fertility rates, and improved female education.
- Patterns in the data suggest several prominent constraints to increasing female labor force participation. Social norms emphasize women's domestic responsibilities, limit mobility, restrict the subset of jobs considered appropriate for women, and impede their access to information.
- Evidence suggests that job quotas, expanding access to information, creating higher returns to labor, and putting free trade policies in place can improve female labor force participation. Further research on vocational training, better matching of jobs to skills, the granting of parental leave or flexible working hours, and facilitating mobility will shed light on these promising interventions for increasing labor force participation of women.
- More rigorous evaluation of existing and proposed policies is needed, and further research, access to better data, and pilot testing of new policies will help to ensure identification of clear and effective channels for increasing women's participation in the labor force.

## FEMALE LABOR FORCE PARTICIPATION IN ASIA: KEY TRENDS, CONSTRAINTS, AND OPPORTUNITIES<sup>1</sup>

### INTRODUCTION

This brief reports on findings from four country studies and a companion macroeconomic study calibrated using an average Asian economy. Almost 28% of the world's working-age women are accounted for in the four selected countries:<sup>2</sup> Pakistan, where female labor force participation is rising but remains very low at 25%; Indonesia, where it is relatively high for Asia but still stagnant at 51%; the People's Republic of China (PRC), where women's participation in the labor force has fallen in recent years to about 64% from 73% in 1990; and the Republic of Korea, where female labor force participation remains low at 50% despite high levels of economic growth and per capita income.<sup>3</sup> In all these countries, male labor force participation hovers around 80% for individuals 15 years and older, except for the Republic of Korea, where male labor force participation was 72% in 2013. For males of prime working age (25–54), these figures are all very close to 100% (Figure 1).

The study investigates trends among women in the workforce, the implications of higher female labor force participation for economic growth, the obstacles in achieving it, and potential policies for reducing these obstacles. We observe five important patterns in the data:

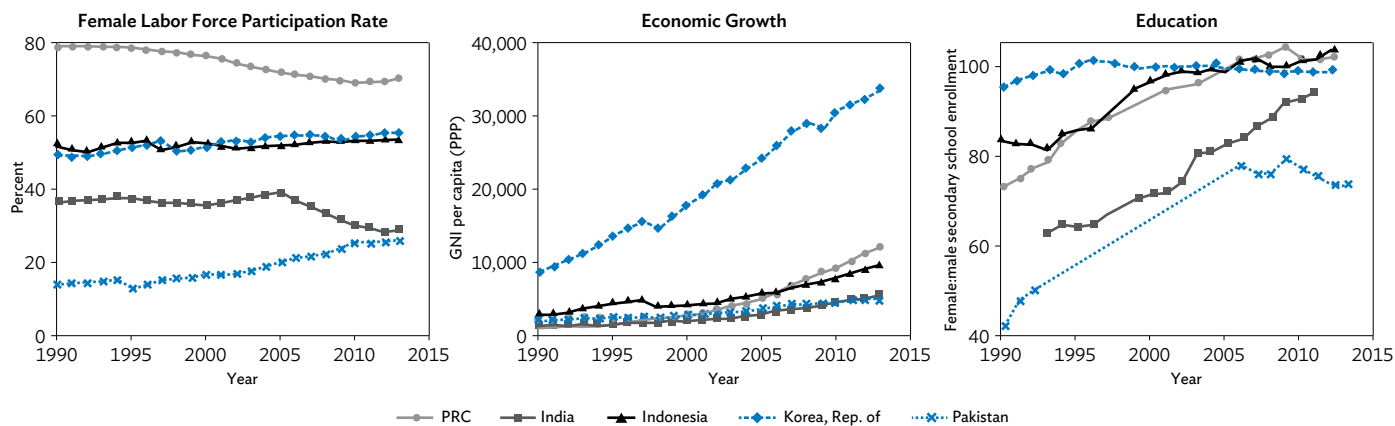
- (i) A large proportion of women currently out of the workforce state a desire to work, but are constrained by various social and cultural norms.

<sup>1</sup> This brief, prepared by Sakiko Tanaka and Maricor Muzones, summarizes the synthesis report, *Female Labor Force Participation in Asia: Constraints and Challenges*, prepared by R. Pande, E. Fletcher, and D. Ford of Evidence for Policy Design, Harvard Kennedy School under the Asian Development Bank's Research and Development Technical Assistance 8620 on Economic Analysis for Gender and Development. The full synthesis report is available at <https://www.adb.org/projects/documents/female-labor-force-participation-in-asia-constraints-and-challenges-tacr>

<sup>2</sup> Here referred to as women aged 15 to 64.

<sup>3</sup> Figures are based on the modeled estimates by authors for 1990 and 2013.

Figure 1. Trends in Labor, Income, and Education



PRC = People’s Republic of China, GNI = gross national income, PPP = purchasing power parity. Source: International Labour Organization (2014); World Bank (2014); and United Nations Educational, Scientific and Cultural Organization (2014).

- (ii) Proportionately less women enter the labor force than men and retire earlier.
- (iii) Higher or intermediate education levels are associated with lower female labor force participation on average, except in the Republic of Korea, as a woman’s choice to work may be related to income level, other household income, and social stigma and norms.
- (iv) Female labor force participation is higher in rural areas than in urban areas, and the difference is partially attributed to participation in unpaid work on family-run farms.
- (v) Working women experience occupational segregation and lower pay when doing the same work as men.

## BENEFITS OF GETTING MORE WOMEN INTO THE WORKFORCE

### Increased Growth

Current gender disparities in labor force participation suggest a misallocation of talent that impedes the achievement of maximum productivity and curbs economic growth. In the United States, the past 50 years of alleviating the misallocation of talent due to discrimination (gender and race) has been responsible for 15%–20% of growth in aggregate output per worker (Hsieh et al. 2013).

Women in developing countries tend to handle most of the housework and childcare (World Bank 2012; Berneilli and Sánchez-

Paramo 2011). This is an inefficient allocation of talent because the women engaged in household activities could be more productive workers than some of the men in the labor force.

The removal of gender bias in education, the labor market, and the household would increase per capita income by 30.6%, and aggregate income by 6.6% over a generation in a typical Asian economy (Kim, Lee, and Shin 2016b).<sup>4</sup> In the Republic of Korea, the removal of gender bias would increase female labor force participation from 54.4% to 67.5% and boost per capita income by 4% over a generation (Kim, Lee, and Shin 2016a).

### Improved Individual Welfare

Work gives women control over assets, which is positively correlated with greater decision-making power and freedom of mobility, lower domestic violence, and improved nutritional outcomes for children (Panda and Agarwal 2005; Swaminathan, Lahoti, and Suchitra 2012). Women’s control over assets also has spillover effects for daughters and sisters (Sivasankaran 2014). Information about job opportunities has been shown to increase education and delay the age of marriage and having children (Jensen 2012). However, welfare may not improve alongside female labor force participation if the quality of jobs is low, such as for unpaid family workers in Indonesia.

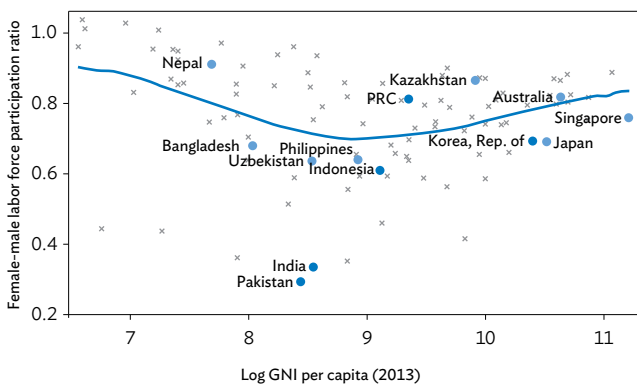
<sup>4</sup> One generation is equivalent to 30 years in this model.

## Yet Women Are Not Working as Much as They Would Like

Of the nonworking women in Indonesia and the ever-married women in Pakistan, 25% in each of these groups state an interest in working. Many have a high-school education or higher. If these women were to gain jobs, the number of women in work would increase by 21% in Indonesia and 100% in Pakistan. Women are not staying out of the labor force purely because they do not want to work.

Female-to-male ratios allow for cross-country comparison of gender disparities in the labor force. This ratio in Asia ranges from 0.20 in Afghanistan and 0.96 in the Lao People’s Democratic Republic (World Bank 2015). Figure 2 uses cross-country data to show a U-shaped relationship between the ratio of female-to-male labor force participation and per capita income. Among poorer countries, income growth is associated with women leaving work, possibly due to low-quality job opportunities or greater pressure to perform domestic responsibilities (Goldin 1995). This trend is seen in the negative slope of the curve at low incomes. As countries become richer, the returns to working increase and more women join the labor force, as shown by the upward sloping curve at higher incomes. However, except for the PRC, female labor force participation in our study countries remains below that predicted by country income.

**Figure 2. Female Labor Force Participation and Gross National Income per Capita Worldwide**



PRC = People’s Republic of China, GNI = gross national income.  
 Note: Labor data for ages 15+ excludes the Middle East.  
 Source: For gross national income: World Bank (2014); for labor force participation rate: International Labour Organization (2014).

## CONSTRAINTS TO HIGHER FEMALE PARTICIPATION

### Social and Cultural Norms and Attitudes

By defining what is appropriate behavior for genders, social norms limit women’s choice of whether to work and where they work. We find strong evidence of the perception that women hold prime responsibility for housework and childcare. For instance, women in Pakistan spend five times more time on housework than men do, irrespective of whether they are working (Vyborny and Field 2015). In the Republic of Korea, women are significantly more likely than men to leave the labor force when they start a family. In Indonesia, participation in wage work falls while self-employment increases when women have young children.

Policies on maternity leave may amplify the impact of social norms on women’s labor force participation. Moreover, policies often require employers to pay for this leave, which may constrain the labor demand for women in the formal sector (Addati, Cassier, and Gilchrist 2014).

In the Republic of Korea, the age of entry into the labor force among young men and women appears to be about equal, but with higher rates of exit among women of childbearing age. Over the life cycle, the female labor force participation curve is M-shaped, with women leaving the labor force during childbearing years and reentering later as their children age.

On average, women in the PRC marry around age 25, compared with 22 in Indonesia. Delaying a first marriage may contribute to higher female labor force participation for women of all ages in the PRC. Owing to autonomy and geographic mobility, these women have been able to gain wage employment in the coastal cities. Indeed, internal migration sustains high employment for both men and women and eases labor supply bottlenecks (Edlund 2015).

### Safety and Mobility

Social norms can influence views on women’s safety and presence in public spaces, limiting mobility and inhibiting available education and work opportunities. In Indonesia and Pakistan, a quarter of ever-married women (ages 15–49) believe that wife beating is justified if a wife goes out without her husband’s permission (Sivasankaran 2014). In Pakistan, among those who stated that they were available for work, only 35% were available for work outside the home, and mobility constraints appeared to be stronger in rural areas.

## Information

Women may face greater employment challenges than men, such as longer job search times (Schaner and Das 2015) and smaller networks of working individuals, which may inhibit knowledge of available options, connections often required to obtain jobs, and the availability of role models. As migration for women in the PRC is often marriage based (Edlund 2015), the loss of networks after marriage inhibits their knowledge of available work. The loss of networks could increase labor force dropout rates after marriage.

## Human Capital

Female labor force participation does not necessarily increase with education, so narrowing education gaps are not sufficient to bring more women into work. In the PRC, more educated women are less likely to work, and in Pakistan and Indonesia, women with intermediate education are less likely to work than women with low or advanced education.

In the PRC, female labor force participation and education do not have a U-shaped relationship. Geography dictates how they move together. In rural areas, both male and female labor force participation rates decrease with educational attainment, although more steeply for women. However, in urban areas, participation rises with educational attainment, particularly for women.

In the case of Pakistan, the U-shaped curve in education is apparent in rural areas, but mostly absent in urban areas where 19% of highly educated women work, compared with only 4% for women in less-educated groups. In rural areas, female labor force participation is higher overall, but still those most likely to be working are highly educated women, at 24%, followed by those with primary school education, at 19%. In Indonesia, diagnostics suggest demand is higher for educated and skilled female workers, particularly in urban areas.

In the Republic of Korea and the PRC, better-educated women are more likely to leave the workforce as they age. For some subsets, this suggests a mismatch between educational investments and job opportunities.

## Discrimination

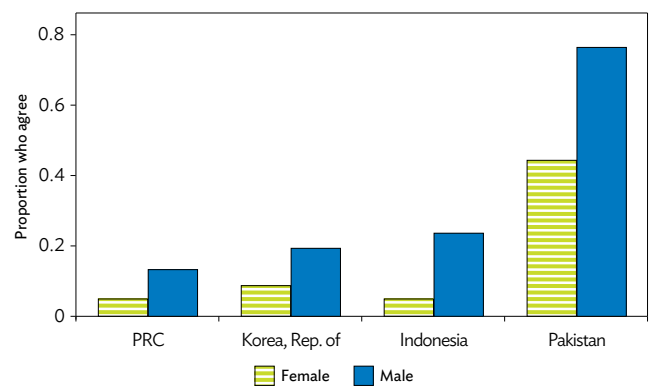
Wage discrimination, industry and occupational segregation, workplace harassment, and lower prospects for promotion may inhibit labor market entry and retention of women. In our study countries, women earn between 50% and 70% of men for the same work. Figure 3 shows the results of perception surveys, which suggest that men are often considered more productive. These factors imply gender discrimination in formal labor markets.

Low rates of female entry into high-power professions, such as legislators or managers, and the swift rise in these rates once quotas are introduced are also consistent with women facing entry barriers (Beaman, Keleher, and Magruder 2013). As of 2008, women accounted for less than 10% of legislators, senior officials, and managers in Pakistan and the Republic of Korea. Finally, discriminatory policies in the PRC require women to retire 5 to 10 years earlier than men.

In Indonesia, women are much more likely than men to be employed as teachers in urban areas and as market salespersons in rural areas. In Pakistan, women are more represented in low-pay occupations, such as skilled agriculture and technical work, and are relatively underrepresented in better-paid occupations like management.

In the PRC, taste-based discrimination in hiring by export-oriented firms has been greatly reduced through competition (Chen et al. 2013), and wage discrimination has also been effectively reduced in manufacturing and other export-related jobs, though the gender pay gap is still substantial (Rickne 2012).<sup>5</sup>

**Figure 3. Attitudes Toward Women at Work: Do Men Make Better Business Executives?**



Source: Author by using data from the World Values Survey Association. World Values Survey 2004–2014. Vienna: Institute for Comparative Survey Research.

<sup>5</sup> Taste-based discrimination is an economic concept referring to a situation when employers have a preference for employing workers of a certain type. They will employ workers of other types at lower wage rates to compensate for their distaste for having the nonpreferred type employed. This is opposed to statistical discrimination, which occurs when employers have a belief about the productivity of a particular type of worker.

### WHAT WE KNOW AND WHAT WE NEED TO KNOW

#### Existing Evidence

Relatively few studies have rigorously ascertained the sources of female labor force participation change. The literature shows that more women will join the labor force in the presence of female role models, when awareness and accessibility of job opportunities are improved, and where returns to education are increased.

- In Indonesia, increases in minimum wage affected a larger proportion of women than men. Thus, higher returns to labor could attract women to the labor market (Alatas and Cameron 2013).
- In the PRC and Bangladesh, trade and openness increased competition from foreign firms and made discrimination more costly, improving job opportunities for women (Chen, Ge, and Lai 2011).
- In Bangladesh, women who lived near garment factories were more likely to be employed (Heath and Mobarak 2014).
- In the United States, the availability of low-cost childcare was found to increase the proportion of married women in work as it freed up time (Furtado 2014). Temporary demand shocks and increases in demand for skilled workers induced higher female labor force participation more permanently (Acemoglu, Autor, and Lyle 2004).

### OPPORTUNITIES TO IMPROVE FEMALE LABOR FORCE PARTICIPATION

There is credible evidence that policy can influence female labor force participation and that raising this can substantively increase economic growth and help achieve other important policy objectives for women. Our diagnostic analyses suggest particularly promising policies for increasing labor force participation of women, but these need to undergo pilot testing and rigorous evaluation to ensure that they achieve desired outcomes effectively. These policies are highlighted here.

#### Job Quotas

Employment quotas for women can counteract the negative effects of discrimination, provide incentives for them to acquire skills, and allow them to act as examples that will challenge beliefs about their productivity and suitability for certain kinds of work. Pilots of employment quotas in public sector jobs and in schemes funded

by international agencies could provide valuable insights into the potential of quotas to change female labor force participation rates.

#### Vocational Training

Data from Indonesia reveal that women who undertake vocational training are more likely to join the labor force. However, as the women who pursue certification may be more likely to join the workforce regardless of the training itself, a pilot intervention may be required to clarify the efficacy of vocational education in improving skills and leveraging them to overcome discrimination in hiring.

#### Job Matching

Job matching services may overcome information constraints, increase employability and social networks, provide career counseling, and help women bargain for better working conditions or wages. Research on a well-designed matching intervention could clarify the causal impact of information, expectation, flexible hours, wage, and location on participation.

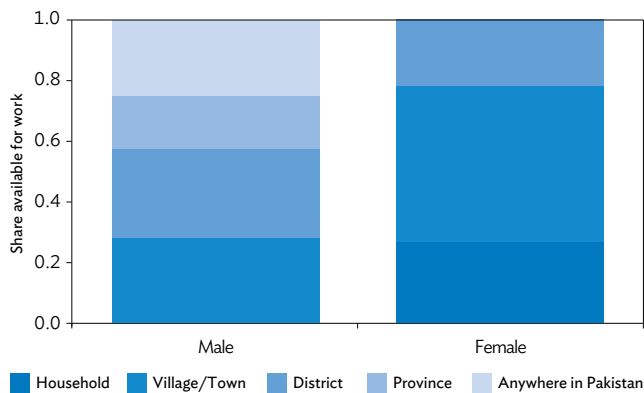
#### Parental Leave or Flexible hours

To reduce the limitations that domestic responsibilities place on female labor force participation, several countries have attempted to put in place policies that promote lower costs for childcare, parental leave, contraception, and flexible work hours. However, the strength of social norms and the quality of available jobs may inhibit the ability of these policies to affect female labor force participation. In the Republic of Korea, policies that target women with child-rearing responsibilities (rather than housework) appear to be more effective at promoting labor force reentry (Kim 2015). Experimentation with such policies will reveal the relative strength of housework and childcare responsibilities as female labor force participation constraints.

#### Facilitating Mobility

Limits on women's mobility inhibit their presence in both education and the labor force (Figure 4). Female-only transportation would reduce the risk of harassment in existing forms of public transport and provide a socially acceptable way to travel between work and home. The efficacy of such an intervention on improving women's opportunity to work depends on the location of available jobs, consistency of service, and remaining stigma around work itself. Thus, a rigorous study of female-only transportation could clarify the causal impact of social norms and security on female labor force participation.

**Figure 4. Locations of Men and Women Available for Work in Pakistan (2000)**



Source: Pakistan Bureau of Statistics. Various years. Pakistan Labor Force Surveys. Islamabad.

## Facilitating Trade and Safe Migration

In the PRC, more women are migrating in pursuit of manufacturing jobs, and evidence has demonstrated the importance of trade in improving competition and reducing wage discrimination (Chen, Ge, and Lai 2011). The transformation in the manufacturing sector is one reason among many for the PRC's relatively high female labor force participation. However, many women are vulnerable to trafficking and the current government system of household registration “*hukou*” discourages women from bringing their children with them when migrating for work. Therefore, it is not clear if work implies empowerment in this context. Enabling safer and more permanent migration by keeping family networks intact may increase women's attachment to the labor force, allowing for longer work tenure and for employers to make a correspondingly greater investment in their female workers. Research on the quality and turnover for jobs obtained through migration will suggest policies on mitigating the risks from relocating, and improving the quality of work opportunities available to women.

## Next Steps

Further research on these topics is urgent, as several of these policies are already being considered by regional and national governments, but benefits are not known. We therefore recommend a multifaceted policy-research agenda to achieve gender parity in labor force participation that—as suggested by

the macroeconomic model presented in the synthesis report—can fully and efficiently utilize human capital in promoting economic growth. We recommend pilots to test the policies highlighted above, in addition to better access to data for researchers, greater harmonization of available data, increased implementation of time-use surveys, more gender-specific questions in these surveys, and questions about leave policies and nonremunerative daily activities.

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<sup>6</sup> The Asian Development Bank recognizes “China” as the People's Republic of China; and “Korea” as the Republic of Korea.

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