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ILO Asia-Pacific Working Paper Series

Female labour force participation in India and beyond

Ruchika Chaudhary and Sher Verick
October 2014



DWT for South Asia and Country Office for India

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First published 2014

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Chaudhary, Ruchika; Verick, Sher

Female labour force participation in India and beyond / Ruchika Chaudhary and Sher Verick ; International Labour Organization, ILO DWT for South Asia and Country Office for India. - New Delhi: ILO, 2014

ILO Asia-Pacific working paper series, ISSN 2227-4391; 2227-4405 (web pdf)

International Labour Organization; ILO DWT for South Asia and ILO Country Office for India

labour force participation / women workers / womens empowerment / labour market segmentation / India / South Asia

13.01.2

ILO Cataloguing in Publication Data

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Printed in India

Preface

The International Labour Organization (ILO) is devoted to advancing opportunities for women and men to obtain decent and productive work. It aims to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue in handling work-related issues. As countries in the Asia and the Pacific region continue to recover from the global economic crisis, the ILO's Decent Work Agenda and the Global Jobs Pact provide critical policy frameworks to strengthen the foundations for a more inclusive and sustainable future.

As part of an ILO project on Female Employment Trends in South Asia, this paper by Ruchika Chaudhary and Sher Verick reviews the literature on female labour force participation and women's employment, with the aim of better understanding the drivers of labour market outcomes. This paper also attempts to explore the situation of women globally and in South Asia, through an examination of long-term trends of female employment. It goes further, explaining the reasons for the falling participation of women in the Indian labour market. In doing so, an econometric analysis has been carried out to understand the most important factors that may affect their probability of being in any of the various labour market outcomes, separately for the rural and urban labour markets in India. The findings reveal the importance of education, especially of post-secondary schooling.

This paper is part of the ILO Asia-Pacific Working Paper Series, which is intended to enhance the body of knowledge, stimulate discussion and encourage knowledge-sharing and further research for the promotion of decent work in Asia and the Pacific.

Tine Staermose

Director, ILO DWT for South Asia and
Country Office for India

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Acknowledgements

An earlier version of the paper was presented at the 55th Annual Labour Conference of the Indian Society of Labour Economics, held at the Jawaharlal Nehru University, New Delhi, December 2013 and at a meeting of the Feminist Economist Group on 6 September 2014. Many helpful suggestions were received from participants in these events. The authors are thankful to late Professor G.K. Chaddha, Dr. Preet Rustagi and Steven Kapsos for insightful and constructive comments.

Abstract

The participation of women in the labour market varies greatly across countries, reflecting differences in economic development, education levels, fertility rates, access to childcare and other supportive services and, ultimately, social norms. For this reason, participation rates vary considerably across the world with some of the lowest rates witnessed in South Asia. The trends in the female labour force participation rate in South Asia reveal a number of puzzles. Most notable is the falling participation of women in the Indian labour force, especially in rural areas, which occurred despite strong economic growth and rising wages/incomes. Understanding these issues is critical because: (i) female labour force participation is a driver of growth and thus participation rates indicate the potential for a country to grow more rapidly; (ii) in many developing countries, participation of women is a coping mechanism which arises in response to economic shocks that hit the household; and (iii) participation is an (imperfect) indicator of women's economic empowerment. To improve labour market outcomes in countries like India, policy interventions should consider both supply and demand, including improving access to and relevance of education and training programmes, promoting childcare and other institutions/legal measures to ease the burden of domestic duties, enhancing safety for women, and encouraging private sector development in industries and regions that would increase job opportunities for women in developing countries.

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1. Introduction

The stylized process of development, as witnessed during the Industrial Revolution and more recently in East and South-East Asia, has consisted of two key, related transitions: (i) the movement of workers out of agriculture and into manufacturing (and, more recently, services) and (ii) the migration of people from rural to urban areas (i.e. urbanization). These transitions are associated with increasing education, falling fertility rates and other shifting socio-economic drivers of participation and, hence, have had major implications for the role of women in society, especially in the context of the labour market.

Given the prominence of this issue in the development process, a sizable literature has emerged over recent decades, addressing the different dimensions of this complex issue. Boserup's (1970) pioneering work on women's role in economic development reflected on the contribution of women to key economic sectors and also highlighted the biased nature of development policies and processes. Reducing gender discrimination in the labour market, thereby promoting women's participation in large numbers, is likely to positively affect the economic growth of a nation (Esteve-Volart, 2004; Tansel, 2001). Women's participation in employment can help reduce gender inequality, thereby empowering women and contributing to their capacity to exert choice and decision-making power and agency in key domains of their lives (Desai and Jain, 1994; Kabeer, 2012; Mammen and Paxson, 2000).

However, the relationship between women's engagement in the labour market and broader development outcomes is complex. In this regard, women's employment may be driven by necessity on the one hand, or be the result of increasing educational attainment, changing societal norms and available employment opportunities on the other. In terms of the first perspective, increased participation of women is often observed during times of economic crisis, mainly in response to a declining household income on account of unemployment in the household (the so-called "added-worker effect") (Abraham, 2009; Attanasio et al., 2005; Bhalotra and Umana-Aponte, 2010). In general, when women do work, they tend to be engaged in low-paid and low productivity jobs (ILO, 2011). Thus, the widespread entry of women into the labour market is not always a desired situation, as it may be distress-driven and does not reflect an increased access to decent jobs.¹ Another key issue in this arena is measurement. It is widely recognized that women's work in the developing world is overlooked, undervalued and underreported because women are often home based and contributing to non-market activities, such as caregiving, which have economic benefits for households (Beneria, 1982; Boserup, 1970; Donahoe, 1999).

Given the complexity of the factors driving female labour force participation (namely growth, education, fertility, and the cultural and normative context of society), an expansive literature has grown around the nature of female labour force participation and its connection with development and economic growth. Among the most discussed phenomena is the U-shaped relationship between economic development and women's labour force participation rates (Boserup, 1970; Fatima and Sultana, 2009; Goldin, 1994; Mammen and Paxson, 2000; Pampel and Tanaka, 1986; Schultz, 1990; Tansel, 2001). However, the evidence for such a relationship has been widely debated (see, for example, Gaddis and Klasen, 2014) and the finding is more robust for cross-country (static) comparisons, while individual countries display great heterogeneity in how female labour force participation rates change over time, in response to both short and long-term movements in economic growth and other factors.

¹ High levels of labour force participation rates among women in a developing country can be a reflection of growing levels of poverty in that country. Almost all persons in the labour force are working rather than unemployed but remain poor, a phenomenon known as working poverty (Gaddis and Klasen, 2014).

Globally, women's participation in the labour force has remained relatively stable in the two decades from 1990 to 2010, at approximately 52 per cent (ILO, 2014). At a more disaggregated level, participation of women varies considerably across developing countries and emerging economies, far more than in the case of men. In the Middle East, North Africa and South Asia, less than one-third of women of working age participate, while the proportion reaches around two-thirds in East Asia and sub-Saharan Africa. In contrast, the global labour force participation rate for men has declined steadily over the same period, from 81 per cent to 77 per cent, reflecting mainly an increase in education enrolment rates among younger men. Nonetheless, the gender gaps in labour force participation persist at all ages except the early adult years in South Asia (UN, 2010).

A number of countries in South Asia display puzzling trends in the participation rates of women, with India being most notable for its falling rates in recent years. India's economic growth has rapidly increased over the past two decades, reaching an average of 8 per cent (growth has since slowed down considerably since 2011). At the same time, fertility has been falling quite rapidly (Bhalla and Kaur, 2011), while educational attainment has improved considerably in recent decades. In this context, the fall in the female labour force participation rate, due to a decline in the number of women working in rural areas, emerged as a major surprise to academics and policy-makers. In contrast, female participation rates in Bangladesh (and to a lesser extent in Pakistan) have risen, while women's participation has been rather static in Sri Lanka despite high levels of human development and more success at growing rapidly.

Ultimately, understanding the complex nature of female labour force participation requires taking into account a range of socio-economic factors at the macro, local and household levels. This includes macroeconomic conditions along with local job opportunities and cost of job search. Within the household, critical factors include educational attainment, social status, income levels, presence of children, and spousal labour market status.

To provide insights on this critical economic and development challenge, this paper provides a comparative review of the literature and situation in South Asia, notably in India, which will complement existing country studies. The remainder of this paper is structured as follows: section 2 reviews the literature on female labour force participation and associated factors. Section 3 presents a statistical analysis of global trends and drivers of female labour force participation rates. Section 4 focuses on the situation in South Asia in general, while section 5 deals with the Indian case more specifically. Section 6 concludes.

2. Review of the literature

The literature on female labour supply or participation can be reviewed in terms of both theoretical predictions as well as empirical findings. Labour force participation is usually regarded as an issue of labour supply, reflecting the decision to participate in paid labour market activities as opposed to remaining inactive (for example, domestic duties, education, etc.). There is, in particular, an extensive literature on the different determinants of female labour force participation (such as individual and household characteristics, societal norms, cultural attitudes, level of education and urbanization) and on the relationship between economic development and female labour force participation. This section reviews both comparative and country-specific studies.

In the basic static labour supply model, labour markets are assumed to be competitive (although it is hard to argue that this is the case in developing nations) and labour supply decisions depend on the relative strength of the income and substitution effects. The expected wage of women is the opportunity cost of her time, once she is in paid employment. A higher wage has a substitution effect

and also has a countervailing income effect (if it outweighs the substitution effect). On the other hand, increased unearned income (for example, by spouse or through social transfers) will only exercise an income effect on women's labour supply decisions, resulting in a potential withdrawal from the labour market. Mammen and Paxson (2000) mention that increases in the wage for women who are initially out of the labour force, can exert only substitution effects and thereby causing an increase in labour force participation.

Beyond the basic labour supply model, the "unitary" household models and "collective" household models have also been used to explain the labour supply behaviour of households and its implications for woman's participation in economic activities. In the standard "unitary" model, the household is regarded as a decision-making unit. The model assumes that there exists a single utility function for the household and it does not take into account the underlying preferences of the household members. Pooled household income plays a role in the decision-making process, while its distribution across household members does not matter (Becker, 1965). Many empirical studies rejected the hypothesis of income pooling in unitary models and there is also considerable evidence for refuting unitary models in favour of collective models which accounts for intra-household bargaining (Duflo and Udry, 2004; Luke and Munshi, 2011; Schultz, 1990).

The "collective" household labour supply model is explicitly based on individual preferences and control over resources influences the bargaining within the household (Chiappori, 1992). This model implies that women's increased control over household resources may increase women's welfare by fortifying their bargaining position within the household. But ample empirical evidence on collective models suggests that women in developing countries generally receive fewer productive resources within households and therefore have less bargaining power (Mammen and Paxson, 2000).

A large number of empirical studies based on the historical experiences of developed countries² and other multiple country studies (including Boserup, 1970; Durand, 1975; Goldin, 1990; Mammen and Paxson, 2000; Mincer, 1985; Pampel and Tanaka, 1986; Schultz, 1991; Tam, 2011) document the much-discussed U-shaped relationship (although the U-shape is not a necessary outcome of the basic static labour supply model) between female labour force participation and economic development. This hypothesis proposes that female labour force participation first declines during the initial stages of economic development and then increases later as the country develops further. This relationship is the result of a combination of factors such as sectoral shifts in the economy, urbanization and socio-economic transformation, for example, changes in education and fertility, and income and substitution effects.³

In support of the hypothesis, a number of studies argue that high-income and low-income countries report highest women's participation in the labour market, while middle-income countries report the lowest. On the one hand, empirical evidence for the U-shaped hypothesis⁴ is predominantly grounded on cross-country analysis, where a direct link is observed between economic growth and women's

² The research on the issue of female labour force participation has been quite frequent in developed countries, but it has not been explored so widely from perspective of developing countries (see Eckstein and Lifshitz, 2009). The relevance of the neoclassical labour supply model in developing countries is also questionable.

³ An excellent discussion is given in Boserup (1970), Cagatay and Ozler (1995), Goldin (1990), and Tam (2011) on how these various forces work together and contribute to labour market participation.

⁴ Goldin (1994), using cross-section data for more than 100 countries, finds that women's labour force participation rate exhibits a quadratic relationship with respect to the log of per capita gross domestic product (GDP). Pampel and Tanaka (1986), using data for 70 countries, have found that women's labour force participation falls and then rises with economic development. Mammen and Paxson (2000), using data for 90 countries, from 1970 to 1985, also trace the "U-shape", with participation rates high at very low and very high incomes. Tam (2011) and Luci (2009) analysed the U-shaped relationship between female labour participation rate and economic development using both static and dynamic panel methods, and note the presence of feminization U hypothesis within countries over time.

participation in the labour market (Cagatay and Ozler, 1995; Goldin, 1994; Mammen and Paxson, 2000; Pampel and Tanaka, 1986). On the other hand, panel data analysis has produced ambiguous results (Gaddis and Klasen, 2014; Luci, 2009; Tam, 2011). Other studies noted a linear or no direct relationship.⁵

Empirical studies at the individual level show that in the case of India the U-shaped relationship is not (yet) evident (Bhalla and Kaur, 2011; Lahoti and Swaminathan, 2013; Rao et al., 2010), while others find such a relationship in the case of Pakistan (Mujahid et al., 2013). Though the fall in participation rates in India is puzzling, such trends have been witnessed elsewhere too, notably in Turkey, which experienced declining participation rates among women, from 36.1 per cent in 1989 to 23.3 per cent in 2005. This downward trend has been explained by the process of urbanization and structural transformation: as households moved to urban areas and husbands shifted out of agriculture, resulting in a withdrawal of women from the labour force (reflecting an increased engagement in domestic duties) (World Bank, 2009).

Education is one of the most important factors influencing female labour force participation. Human capital theories underline the importance of education in employment outcomes. Overall, educational attainment has an important effect on an individual's decision to participate in the labour market (Tansel, 2001). The literature on human capital postulates that greater educational attainment leads to higher participation in the labour force and also increased productivity (Ejaz, 2007; Psacharopoulos and Tzannatos, 1989; Tansel, 2001). In the static labour supply model, the effect of education on female labour force participation is dependent on the relative strength of the substitution effect and the income effect. First, education increases the potential earnings and, therefore, the opportunity cost of not working also rises. Second, as a result of higher income, an individual prefers leisure to work and reduces his/her working hours. The net effect depends on which force prevails. A number of studies have shown higher returns to education for women than for men (Duraisamy, 2000; Psacharopoulos, 1994; Schultz, 1994). It is well established in literature that higher levels of human capital lead to higher wages, thereby increasing women's participation in market work.

However, the relationship between educational attainment and female labour force participation is by no means straightforward. A general observation is that in developing countries the relationship between education and female labour force participation is often U-shaped. Similar to the arguments tabled above in the broader context of economic development, studies documenting this U-shaped relationship with education reveal that poorly educated women's employment is distress driven, and they are compelled to work to support themselves and their families. In contrast, attractive job opportunities with higher wages induce better-educated women to work and stigmas attached to taking up employment may be lower for these women (Klasen and Pieters, 2012). Several studies in South Asia document such a relationship (Das, 2006; Olsen and Mehta, 2006), while others record a positive relationship (Bhalla and Kaur, 2011; Faridi, Malik and Basit, 2009; Hafeez and Ahmad, 2002). Some earlier studies even find a negative relationship between the two (Das and Desai, 2003; Dasgupta and Goldar, 2005; Kingdon and Unni, 1997; Kottis, 1990).⁶

⁵ The World Bank (1995) report on demographics and labour supply in Latin American and the Caribbean notes that while no direct link exists between economic development and women's labour force participation, but rapid development is often followed by higher female participation in market work, lower fertility levels, and higher education levels for girls.

⁶ Klasen and Pieters (2012), using National Sample Survey Office (NSSO) data from 1987 to 2005, trace the U-shaped relationship between education and female labour force participation in urban India. Das (2006), using NSSO's data from 1983 to 2000, also confirms the U-shaped relationship, with higher labour participation by uneducated women and highly educated women staying out of the labour force due to an income effect. Olsen and Mehta (2006), using 1999–2000 NSSO data, also trace a U-shape relationship. Kingdon and Unni (1997) note a negative relationship between female education and labour market participation and thereby discourage families from educating the girl child on account of low returns on education of women.

Much of the available literature has focused on married women's decision to participate in the labour market. As a result, the relationship between fertility and female labour force participation has long been debated. Promoting female education is known to reduce the number of children born to a woman. With declining fertility levels, women place greater importance on working, which in turn raises their probability of participation in the labour market and has a positive impact on economic growth (Ejaz, 2007; Klasen and Lamanna, 2009). As noted by Cunningham (2001), unmarried women in Mexico participate in large numbers in the labour market, while married women's decision to participate depends largely on the presence of young children. Bardhan (1979) found that, in rural West Bengal in India, female labour force participation is negatively affected by the number of dependents in the household. Dasgupta and Goldar (2005), using NSSO's 1999-2000 data, revealed that women's labour force participation in rural India is negatively influenced by the number of young children (below 5 years) in households. Recent analysis by Masood and Ahmad (2009) also reported the negative impact of the number of young children on women's participation in both rural and urban India.

In general, and especially in South Asia, it is believed that cultural and societal norms have a significant influence on women's decision to participate in the labour market and choice of work and on their mobility. These norms operate at multiple levels of society, for example, religion, caste and region. It has been widely recognized that these norms discourage women to take up paid employment and that they confine women to the role of caregivers (Das and Desai, 2003; Desai and Jain, 1994; Goksel, 2012; Jaeger, 2010; Panda, 1999). Cultural factors limit women's rights in the workplace and their engagement in work. Religion still has a key role to play in determining gender norms in many countries. Turkey and Chile have registered declining rates of female participation on account of cultural and religious conservatism (O'Neil and Bilgin, 2013; Pastore and Tenaglia, 2013). This is especially the case in South Asia, where women's role in society is constrained by gender and familial relations and their activities are confined to (unpaid) care work (Das, 2006). Klasen and Pieters (2012), who focus on the situation of women in urban India, have found that higher social status has a negative impact on women's labour force participation, in line with the "Sanskritization" process.

Women also have to play the role of caregiver in the family and are, therefore, burdened with housework, a situation that is influenced by gender norms. In this context, Badgett and Folbre (1999) argue that these gender norms are strengthened by occupational segregation. Segregation is the tendency for women and men to be employed in different occupations. Such separation creates gendered occupations which are disproportionately "female" or "male". In other words, occupational segregation by gender refers to the inequality in the distribution of men and women across different occupational categories. Gender segregation of jobs has been a widely discussed issue in various studies (Anker, 1998; Swaminathan and Majumdar, 2006; Rustagi, 2010). Social, cultural, historical, and economic factors all play a role in determining the pattern of occupational segregation. As a result, women crowd into certain jobs which are low in the occupational hierarchy, payment and status, but are considered socially acceptable.

Female labour market participation may also depend on the level of household income security, especially in less developed countries, which are characterised by high levels of absolute poverty. An increase in the flexibility of the labour market has been a key response of governments to persistent unemployment, which has frequently been done at the expense of a significant reduction in the social security measures (Gobbi and Nesporova, 2005). Consequently, women are forced to participate in the labour market and engage in flexi-work arrangements such as short-term contracts and informal jobs. Identification of women as being an honest, docile, productive and cheap labour makes them the preferred workforce for many transnational corporations. This increased flexibility in the labour market is contributing to new forms of gender segregation (Standing, 1999).

This aspect, in turn, is related to household insurance mechanism in developing countries (this hypothesis is rooted in the literature on the added-worker effect), where generally there is no unemployment insurance and women's labour supply is counter cyclical in nature and rises in response to economic downturns as women move from being out of the labour force into paid employment activities. On the other hand, women's labour supply in more advanced economies is pro-cyclical (Bhalotra and Umana-Aponte, 2012).

Indonesia, a country with a lower rate of female labour force participation than other South-East Asian countries, is often cited as an example of the added-worker effect (Manning, 2000). In the wake of the East Asian financial crisis in 1997–98, many male workers lost their jobs in the formal sector. In order to smooth household consumption, women's labour supply increased, though mostly resulting in jobs in the informal sector and agriculture. As a consequence, the female labour force participation rate in Indonesia went up from 49.9 per cent in 1997 to 51.2 per cent in 1999 (Cazes and Verick, 2013).

The degree of urbanization is another important potential determinant of the female labour force participation rate. Increasing with industrialization, the growth of urban centres results in an increase in job opportunities outside agriculture, which are more accessible for women in a context of changing family norms (Kemal and Naci, 2009; King, 1978; McCabe and Rosenzweig, 1976). Urban areas typically offer more paid employment opportunities than rural areas. Thus, the higher the proportion of the population living in urban areas, the higher will be the participation of women in employment, especially in regular wage and salaried work, though this may only happen after a time lag as witnessed in the case of Turkey (World Bank, 2009).

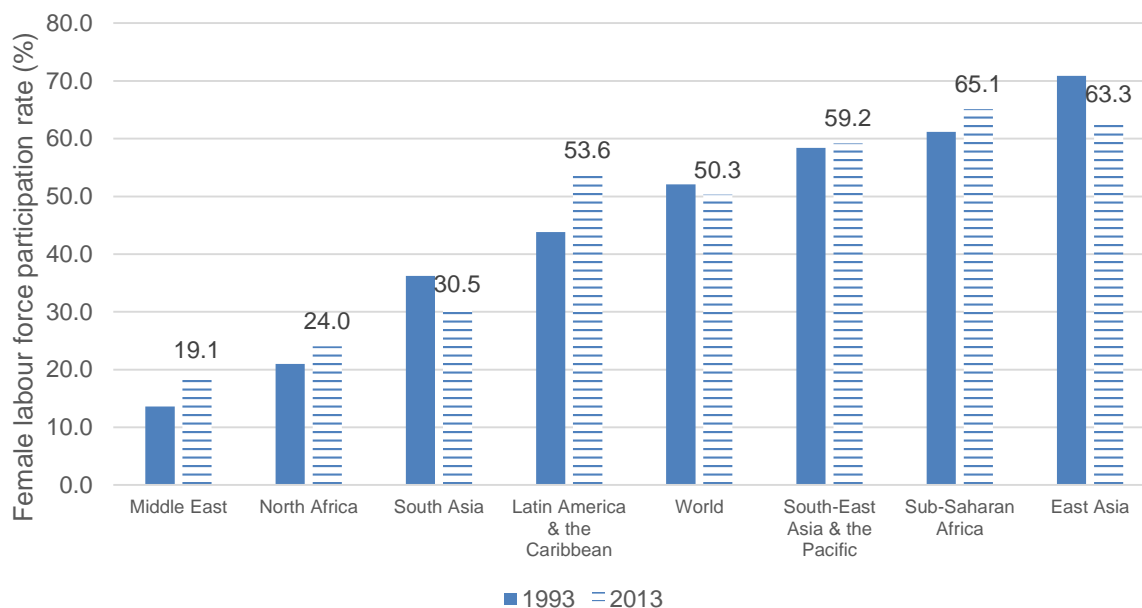
The effects of unemployment on women's labour force participation are equivocal and depend on the relative strengths of the "discouraged-worker effect" and the "added-worker effect" (Tansel, 2001). Unemployment levels in the region affect the probability of women finding a job in the labour market. The higher this rate is, the lower is the likelihood of getting a job while the associated economic costs will be higher. On account of these reasons, women may feel discouraged from looking for paid work and thus, remain out of the labour force. The "discouraged-worker" hypothesis implies, therefore, that unemployment has a negative effect on female labour force participation.

The "added-worker" hypothesis implies that local unemployment has a positive effect on female labour force participation, as when men lose their jobs, women tend to increase their participation in order to compensate for the loss of family income. However, the paucity of jobs for women implies that the "added-worker" effect is likely to be small. In practice, this means that the "discouraged-worker" effect will probably prevail over the "added-worker" effect, ensuring that unemployment has a negative effect on female labour force participation.

3. Explaining global trends in female labour force participation

Globally, women's participation in the labour market has remained relatively stable from 1993 to 2013, whereas the participation rate for men has declined steadily over the same period. Though 345 million women have joined the labour force in the past 20 years, women still only account for approximately 40 per cent of the global labour force. In 2013, the regional estimates for the female labour force participation rate varied from 19.1 per cent in the Middle East to 65.5 per cent in Sub-Saharan Africa (figure 1). The participation rate in South Asia was just 30.5 per cent in 2013. The rate has increased the most over this two-decade period in the Middle East and Latin America and the Caribbean. In contrast, the rate has fallen in South Asia (driven by the situation in India) and in East Asia (but from a high initial condition).

Figure 1. The labour force participation rate of women (%), selected regions, 1993 and 2013

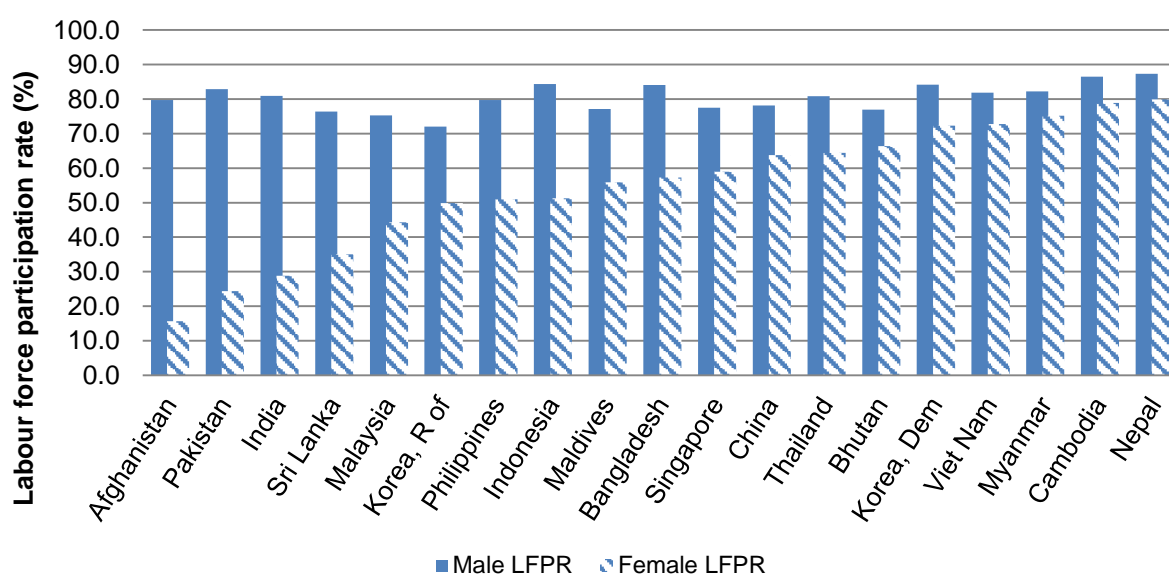


Note: ILO regional estimates from the TRENDS Model.

Source: ILO, 2014.

Beyond the global picture, the participation of women in the labour force varies considerably across developing countries and emerging economies, far more than in the case of men (figure 2). The gender disparity is highest in South Asian countries, notably Afghanistan, Pakistan and India, and lowest in Nepal (the exception for South Asia) and South-East Asia (Cambodia and Myanmar). In the latter set of countries, there is virtually no gender gap, reflecting that women and men participating equally in the labour force, at least in numerical terms. However, the quality of employment and opportunities for better jobs continue to be unequally distributed between men and women, even in countries where there is close to parity in the labour force participation rate.

Figure 2. Gender disparities in labour force participation rates in selected Asia and Pacific countries, 2012



Note: LFPR = labour force participation rate.

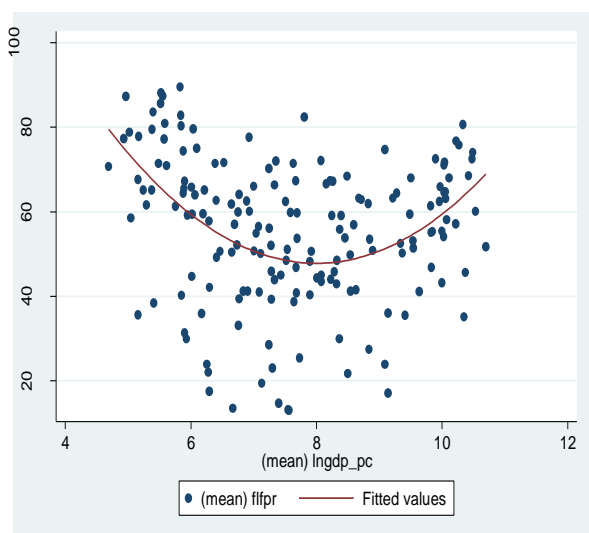
Source: ILO, 2014.

In order to highlight some of the stylized facts and relationships highlighted in section 2, this section presents a simple analysis of pooled cross-country data on female labour force participation rates since 1990, along with key factors associated with participation of women, notably the fertility rate, a measure of educational attainment, the urbanization rate and per capita income (i.e. the U-shaped hypothesis).

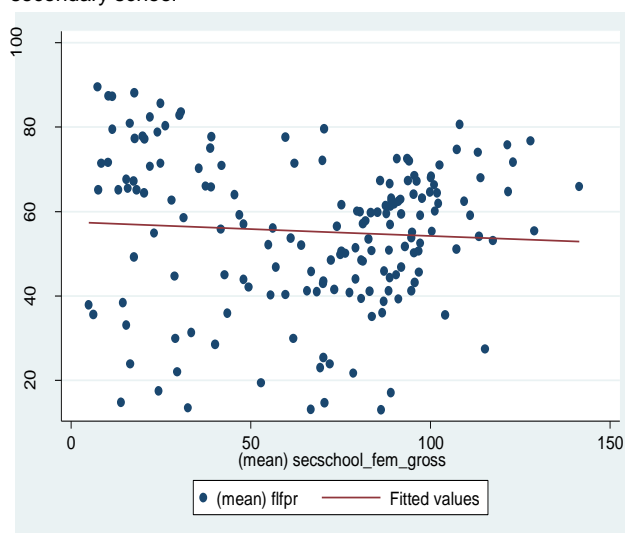
The main correlations have been reported in figure 3, which confirm the following: (i) the (weak) U-shape relationship between the log of per capita GDP and female labour force participation rate, at least in the context of cross-sectional data; (ii) the lack of a significant correlation between participation rates and the female gross enrolment ratio in secondary school (though there is also a weak U-shape evident) and the fertility rate; and (iii) a positive association between the proportion of women in parliament and participation in the labour force.

Figure 3. Correlations of key factors associated with women’s participation rate

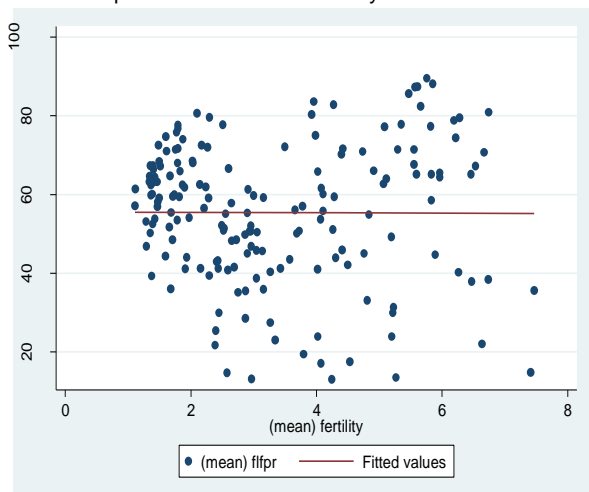
Relationship between FLFP and log of per capita GDP



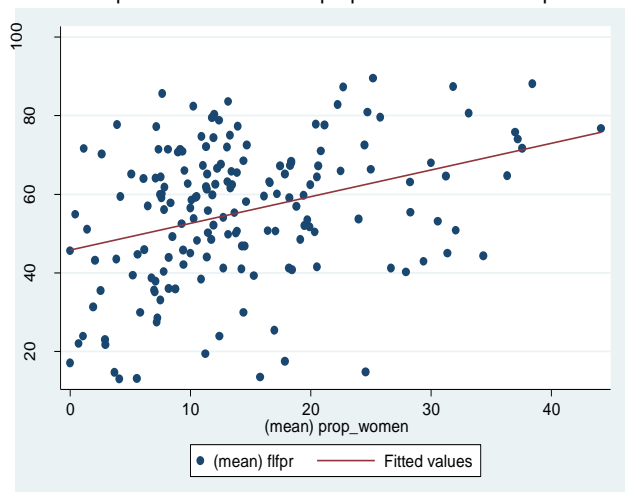
Relationship between FLFP and female gross enrolment ratio in secondary school



Relationship between FLFP and fertility rate



Relationship between FLFP and proportion of women in parliament



Note: FLFP = female labour force participation.

Source: World Bank, World Development Indicators; ILO, 2014.

As a next step, the main correlates are used as regressors to explain the variation in participation rates. As reported in table 1, all the variables in the regression are statistically significant (robust regression methodology is used, which takes into account outliers). The regression results indicate that the female labour force participation rate is positively associated with the proportion of women in parliament, which is a reflection of the degree of women’s political empowerment and recognition of their contribution to the public sphere. There is an even stronger positive correlation with the share of women in non-agricultural employment, which indicates that female labour force participation is higher in countries with higher levels of structural transformation. Contrary to expectations, the participation rate increases with the fertility rate. There is also a positive correlation with the duration of secondary schooling for girls; participation rates are higher in countries where girls stay longer in school.

The results reveal a U-shaped relationship between the female labour force participation rate and both the log of per capita GDP and the urbanization rate, though the relationship is much stronger in the case of per capita GDP. Both indicators capture the development process, though, as noted above in section 2, such a non-linear relationship is evident mostly in cross-sectional analyses and not in the case of individual countries over time.

Finally, the results presented in table 1 show that, even when controlling for a host of key factors, countries in South Asia have a much lower participation rate for women (more than 8 percentage points lower). These results indicate that the nature of female labour force participation is a complex phenomenon in general, and in the case of South Asia there are clearly other factors that are not captured in the above regression, but which nonetheless result in the very low participation rates observed in the region.

Table 1. Factors behind the variation in female labour force participation rates across the globe, results from a cross-sectional robust regression (1990–2011)

Dependent variable: Female labour force participation rate (%)			
	<i>Coefficient</i>	<i>Std. Err.</i>	<i>t</i>
Proportion of women in parliament (%)	0.11	0.03	4.14
Share of women in non-agricultural employment (%)	1.18	0.03	40.85
Fertility rate (%)	2.58	0.33	7.87
Urbanization rate (%)	-0.54	0.07	-8.22
Urbanization rate squared	0.00	0.00	6.23
Duration of female secondary schooling	0.89	0.25	3.58
Log of GDP per capita	-26.33	2.12	-12.41
Log of GDP per capita squared	1.72	0.13	13.72
South Asia dummy	-8.67	1.51	-5.73
Constant	110.35	9.54	11.57
No. of observations	1302		
F(9, 1292)	420.03		

Source: World Bank, World Development Indicators; ILO, 2014.

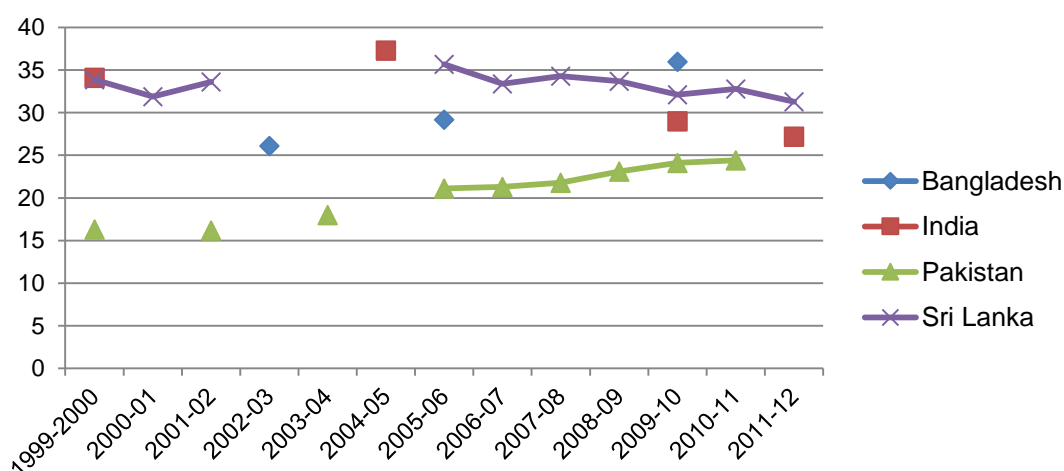
4. Labour market situation in South Asia: Explaining the low rates of female participation

South Asia is a region which comprises diverse sociocultural and ethnic populations, religious beliefs, and economic and political forces, all of which impact upon the lives of women. It is a highly populated, predominantly agriculture-dependent and tradition-bound region, where gender issues represent a complex challenge. At the same time, education levels have improved among girls, while fertility rates have fallen. Moreover, since the 1990s, a number of countries, notably India and Bangladesh, have been able to attain sustained high rates of economic growth. Sri Lanka has also benefited from a peace dividend with growth averaging 7.5 per cent per annum from 2010 to 2013. However, despite these growth trajectories, the creation of productive employment opportunities continues to be a major challenge in all countries. Taking an economic perspective, it is important to reflect on whether women have benefited from these developments in terms of participating in the labour force and employment outcomes.

In South Asian countries, historical gender roles, spaces and stereotypes continue to affect outcomes, even in the context of a rapidly changing society. As illustrated by the cross-country results presented in section 3, women in South Asia are far less likely to have a job or to be looking for one. The rate of female labour force participation in South Asia was just 31.8 per cent in 2012, while the rate for males was 81.4 per cent. The rate for women in South Asia was much lower than the global average of 51.1 per cent, and it was much lower than the rate for women in East Asia, which was 66.4 per cent. As highlighted above, these low rates are largely due to cultural attitudes and social norms, which work against women in the workplace.

Beyond these generalizations of the situation in South Asia, country-specific trends are far more puzzling (figure 4). Most notable is the falling engagement of women in the Indian labour force, which occurred despite strong economic growth. In comparison to India, women in Bangladesh have increased their participation in the labour market, which is due to the growth of the ready-made garment sector and an increase in rural female employment. Apart from Nepal, where the participation rate for women reached 79.4 per cent in 2010–11 (not shown in figure 4) and the Maldives (54 per cent in 2009–10), Bangladesh now has the highest rate in the region. The rate has also increased in Pakistan, albeit from a very low starting point, while participation has remained relatively stable in Sri Lanka, though the latter has witnessed robust economic growth in recent years.

Figure 4. Trends in female labour force participation rates across South Asia (%)



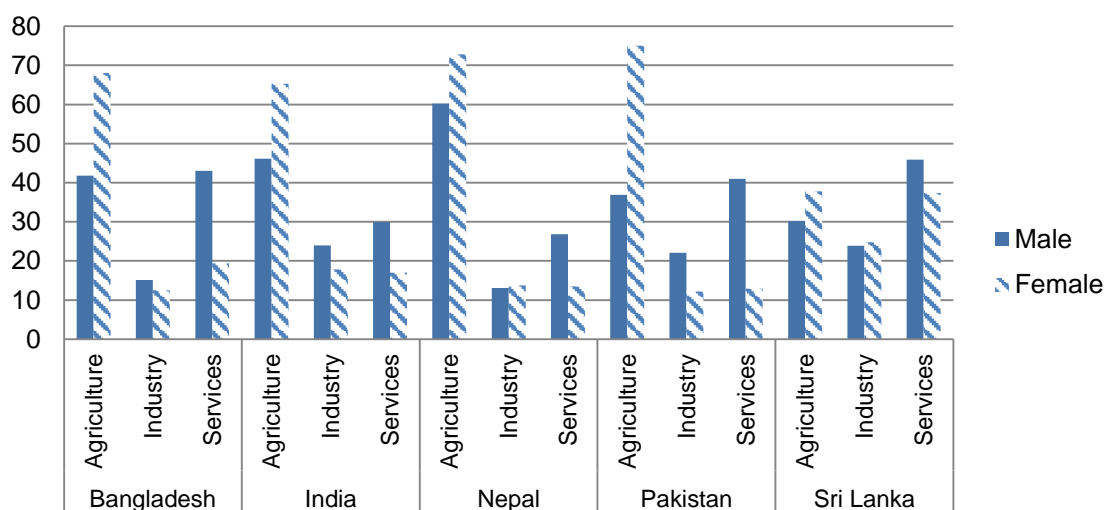
Note: Sri Lanka: 10+, excluding Northern and Eastern provinces.

Source: Based on data from national statistical offices.

Turning to the industrial composition of the female workforce in south Asian countries, it is clearly visible that except in Sri Lanka all other countries are primarily agrarian in nature and women’s share in the agricultural sector is higher in comparison to men in this sector (figure 5).

Given the different trends in South Asia, it is useful to summarize some of the key factors driving these outcomes, before turning to India in more detail in section 5. The economy of Bangladesh has witnessed an acceleration of economic growth since the early 1990s, with the average annual GDP growth exceeding 6 per cent since 2004. The incidence of absolute poverty declined from 59 per cent in 1991–92 to 31.5 per cent in 2010 (Rahman and Islam, 2013). From 1996 to 2010, female employment in Bangladesh expanded strongly (as evident in figure 4), which in turn has been due to rapid growth of the ready-made garment sector and increased participation in poultry and livestock and a variety of rural non-farm activities, mainly on account of the spread of microcredit. The performance on the employment front has been less impressive in the sense that large proportions of the employed labour force remain in vulnerable employment, and are still found in sectors and activities which are characterized by low productivity and returns (Islam 2009; Rahman et al., 2011). In Bangladesh, women’s informal employment as a percentage of their non-agricultural employment is as high as 91.3 per cent.

Figure 5. Industrial composition of employment by gender in selected south Asian countries (various years)



Notes: Bangladesh and India data for 15+ population; Nepal, Pakistan & Sri Lanka data for 10+ population. Nepal data is for the year 2001; Bangladesh data is for 2005; Pakistan data is for 2008; India & Sri Lanka data is for 2010; ISIC-Rev.3, 1990.

Source: Based on data from national statistical offices.

Labour force participation rates of women in Sri Lanka, among the lowest in South Asia, stand at 34 per cent, in contrast to the male participation rate of 75 per cent. These low rates are even more surprising given the relatively reasonable rates of economic growth at approximately 5 per cent annually that have been achieved since liberalization started in 1977 (UNDP, 2012). The annual GDP growth rate has averaged 7.5 per cent since the end of the civil war (2010-2013). While female labour force participation rates are low, women who do decide to participate face a different set of disadvantages. Finding employment is difficult even for those women who want to work. This may be because job opportunities for women are scarce and are limited to only a few sectors, whereas males have a wider range to choose from. Women are over-represented in agriculture and export manufacturing. Rapidly growing sectors such as construction, trade and transport are largely male dominated. Social attitudes and issues of personal safety, transport and housing may be constraining women from taking up certain types of jobs (Gunatilaka, 2013). Second, there are large gender wage gaps.

The women of Pakistan have always experienced disadvantages relative to men of the same status. Social and cultural factors have historically kept most women from entering the job market. Out of 173 million, the working-age population stands at 55.3 per cent. More than 82 per cent of men and only 28 per cent of women participate in the labour force, which is particularly low in the urban areas. Household duties and lack of education are considered by more than 80 per cent of Pakistani women as the major reasons for their non-participation in the labour force, according to the *World Development Report 2013* (World Bank, 2013). Further, wage employment represents a much lower share of total employment among women than among men. The unemployment rate is around 5 per cent; however, the unemployment rate among men is 4 per cent, while it is 8.7 per cent among women. The employment structure in Pakistan is in favour of the farming sector, which has a share of 39.8 per cent, while the shares for wage employment and self-employment are 37.1 per cent and 23.1 per cent, respectively (ibid.).

5. Labour market outcomes for women in India

5.1 Trends in women's employment

According to Lewis (1954), the transfer of women's work from household to commercial employment is one of the most notable features of economic development. However, this is one aspect in which India's record has been dramatically dismal. A low female labour force participation rate is indeed the factor that keeps India's overall labour force participation rate low. As stated in the ILO's *Global Employment Trends 2013* report, out of 131 countries with available data, India ranks 11th from the bottom in female labour force participation (ILO, 2013).

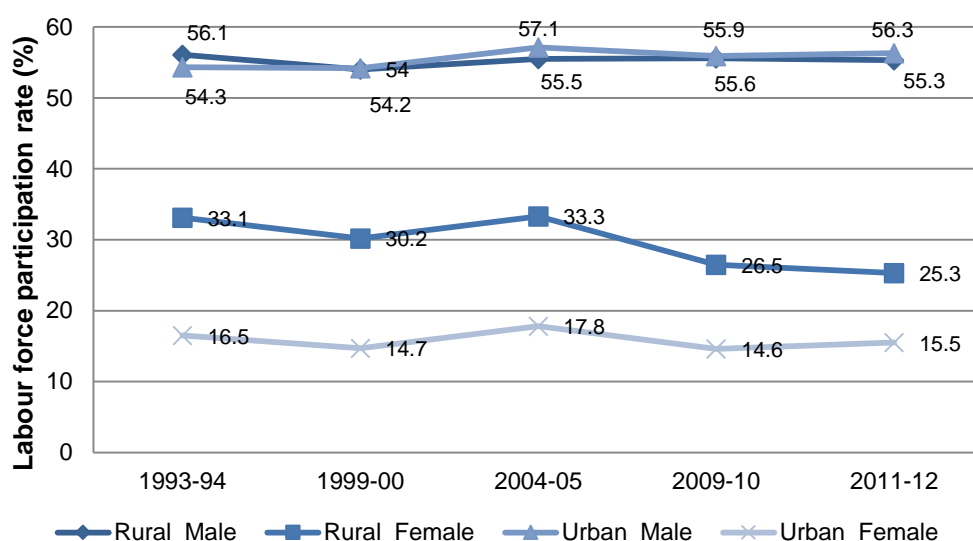
Since the 1980s, there has been a near consistent decline in the workforce participation rate (WPR) (also known as the employment–population ratio) of women. Despite this trend, the release of the 66th NSS Round of the Employment and Unemployment Survey (EUS) (2009–10) resulted in considerable surprise and debate surrounding the trends that emerged from the data. Most notably, these figures revealed sluggish growth in employment and a steep fall in female labour force participation between 2004–05 and 2009–10. The recently released results of the 68th Round of the EUS (2011–12) indicates a return to stronger employment growth but a continuation in the decline of women working in rural areas. Overall, the unemployment rate has remained relatively stable. The transformation of the labour market, nonetheless, progresses with a fall in the share of workers in agriculture and a rise in the share of workers in regular/salaried employment. In this context, understanding the gender dimensions of employment trends in India is critical.

Despite strong growth in the 2000s, labour force participation of women, therefore, remains low in India, though there is considerable variation between urban and rural areas. Besides, wide gender differences in participation rate also persist (see maps 1 and 2 in the appendix). Longer-term trends suggest that female labour force participation declined from approximately 40 per cent in the 1990s to 29.4 per cent in 2004–05. Evidence from the 68th Round indicates no overall reversal in the female labour force participation rate, which is estimated to be 22.5 per cent (for all ages), a further slump from the 23.3 per cent reported in 2009–10.

However, there is a clear divergence in urban areas. In this regard, the female labour force participation rate in rural areas is showing a continuous declining trend, while there was an increase in the urban areas (figure 6). In India, the participation rate of rural women decreased from 26.5 per cent in 2009–10 to 25.3 per cent in 2011–12 (usual status definition), while the rate for urban women increased from 14.6 per cent to 15.5 per cent over the same period. This trend can be partly explained by the increasing numbers of women of working age enrolling in secondary schools, and by rising

household incomes, as women in wealthier households tend to have lower participation rates. Other potential causes include measurement issues, and a general decline of employment opportunities for women (Kapsos et al., 2014; Lahoti and Swaminathan, 2013; Mazumdar and Neetha, 2011).

Figure 6. Trends in labour force participation rates for all ages, India (UPSS)



Note: UPSS = usual principal and subsidiary status.

Source: National Sample Survey (NSS), various rounds.

In India, the other side of a low female labour force participation rate is a substantially high proportion of females reporting their activity status as attending to domestic duties. In 2011–12, 35.3 per cent of all rural females and 46.1 per cent of all urban females in India were attending to domestic duties (table 2).

Table 2. Females who attend to domestic duties as a percentage of all females in India (UPSS)

Various years	Rural females	Urban females
1993–94	29.1	41.7
1999–2000	29.2	43.3
2004–05	27.2	42.8
2009–10	34.7	46.5
2011–12	35.3	46.1

Source: NSS, various rounds.

Although most women in India work and contribute to the economy in one form or another, much of their work is not documented or accounted for in official statistics. Women’s role in reproduction and in a range of activities within households, such as caring for the young and old, cooking and other household chores, do not find recognition in the system of national accounts or other economic statistics. Mazumdar and Neetha (2011) submit that this is a potential reason for the reportedly low labour force participation rates of women.

Another issue is whether the decision of women to be engaged in domestic duties is entirely voluntary. In this regard, of the total women usually engaged in domestic duties, 34 per cent in rural areas and about 28 per cent in urban areas reported their willingness to accept work if the work was made available at their household premises. Tailoring was the most preferred work in both rural and urban areas. Among the women who were willing to accept work at their household premises, about 95 per cent in both rural and urban areas preferred work on a regular basis. About 74 per cent in rural areas and about 70 per cent in urban areas preferred “part-time” work on a regular basis, while 21 per cent in rural areas and 25 per cent in urban areas wanted regular “full-time” work.

According to the latest data, the total workforce in India increased by 13.9 million – from 459 million in 2009–10 to 472.9 million in 2011–12. In comparison, the increase in employment from 2004–05 to 2009–10 was just 1.1 million. The NSS trends indicate that urban areas have dominated employment growth in India, with rural areas remaining relatively stagnant (tables 3 and 4). According to the usual principal and subsidiary status (UPSS) definition, 101.8 million women in rural areas and 27.3 million in urban areas were in the workforce in 2011–12. Women workers in rural India registered a significant decline from 2004–05, whereas reverse trends are traceable in the case of urban India. From 2004–05 to 2009–10, the number of women workers dropped by 21.3 million, of which 19.5 million were in rural areas. Based on ILO’s research, explanations include increasing educational enrolment, improvement in earnings of male workers that discourages women’s economic participation, and the lack of employment opportunities at certain levels of skills and qualifications discouraging women to seek work.

Table 3. Number of workers in India (UPSS) (in millions) (all ages)

Category	1983	1993–94	1999–2000	2004–05	2009–10	2011–12
Rural male	153.9	187.7	198.6	218.9	231.9	234.6
Rural female	90.7	104.7	105.7	124.0	104.5	101.8
Urban male	46.7	64.6	75.4	90.4	99.8	109.2
Urban female	12.1	17.2	18.2	24.6	22.8	27.3
Rural persons	244.6	292.4	304.3	342.9	336.4	336.4
Urban persons	58.8	81.8	93.6	115	122.6	136.5
All persons	303.4	374.2	397.9	457.9	459	472.9

Source: NSS, various rounds.

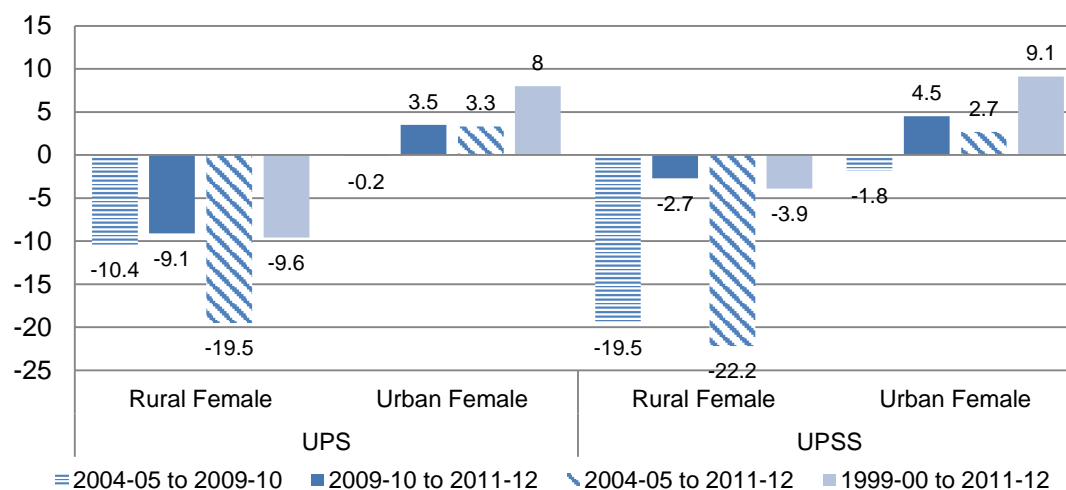
Table 4. Net increase in the number of workers in India (UPSS) (in millions) (all ages)

Period	Rural male	Rural female	Urban male	Urban female	All persons
1983 to 1993–94	33.8	14	17.9	5.1	70.8
1993–94 to 1999–2000	10.9	1	10.8	1	23.7
1999–2000 to 2004–05	20.3	18.3	15	6.4	60
2004–05 to 2009–10	13	-19.5	9.4	-1.8	1.1
2009–10 to 2011–12	2.7	-2.7	9.4	4.5	13.9
1993–94 to 2011–12	46.9	-2.9	44.6	10.1	98.7

Source: NSS, various rounds.

Turning to the findings from the NSS 68th Round, women's employment has increased in urban areas and declined in rural areas (figure 7). There were 9.1 million fewer women working in rural areas according to usual principal status (UPS), whereby the number of urban women working increased by 3.5 million from 2009–10 to 2011–12. According to the UPSS definition, the 68th Round data also shows a large decline of 2.7 million in case of rural women and an increase of 4.5 million in case of urban women workers since 2009–10. This indicates that women in rural areas are working less; if they are working, they are more likely to be in subsidiary employment (in comparison to 2009–10).

Figure 7. Net increase in the number of women workers in India (in millions)



Source: NSS, various rounds.

Table 5. Percentage distribution of workers by industry of work and status in employment in India (UPSS) (all ages) (1999–2000 to 2011–12)

Years		Sectors of economy (%)			Status in employment (%)		
		Primary	Secondary	Tertiary	Self-employed	Regular salaried	Casual labour
2011–12	Total	48.9	24.3	26.8	52.2	17.9	29.9
	Male	43.6	25.9	30.5	50.7	19.8	29.4
	Female	62.8	20.0	17.2	56.1	12.7	31.2
2009–10	Total	53.2	21.5	25.3	51.0	15.6	33.5
	Male	47.1	23.6	29.3	50.0	17.7	32.2
	Female	68.7	16.3	15.0	53.3	10.1	36.6
2004–05	Total	58.5	18.1	23.4	56.9	14.3	28.9
	Male	50.8	20.5	28.6	54.7	17.2	28.1
	Female	73.9	13.3	12.8	61.4	8.3	30.3
1999–00	Total	61.7	15.8	22.5	52.8	14.0	33.2
	Male	54.9	17.7	27.3	51.5	17.2	31.3
	Female	76.3	11.7	12.0	55.8	7.1	37.1

Source: NSS, various rounds.

Finally, the results of the NSS 68th Round data indicate that, for the first time, the share of the primary sector in total employment has dipped below the halfway mark (48.9 per cent), while the shares of the secondary and service sectors have witnessed noteworthy increases compared to the earlier rounds (table 5). Another significant trend in the labour market is the increasing share of regular/salaried workers who now constitute 18 per cent of total employment. The occupational structure of female work participation shows that a larger share of women workers is still engaged in the primary sector in India, which is characterized by low productivity activities (63 per cent versus 44 per cent of males); low share of women in regular employment (13 per cent, as against 20 per cent of males); and significant share of urban women in service sector as domestic workers. Such trends highlight the paramount need to promote the participation of women, on the one hand, and eliminate the barriers in accessing quality and remunerative jobs, on the other.

5.2 Determinants of employment status

Although important from a development perspective, female labour force participation has not been extensively studied in India until recently. Understanding women's work is a complex task in India and indeed anywhere else in the world, as the issues relating to women's work and employment are qualitatively different from those of male workers (Beneria, 1982). Women's labour market participation is determined to a large extent by caste, religion, marital status, and other sociocultural norms, which operate at multiple levels in society and restrict women's mobility and access to wage employment in the formal labour market (the other reasons are their lack of adequate education and skills, and forms of discrimination in the labour market, including occupational segregation). These constraints often push women to take up non-wage employment, or remain out of the labour force (Thomas, 2012; Das, 2006; Sethuraman, 1998; Ghosh, 2009; Desai and Jain, 1994). Besides, women are primarily responsible for household duties and reproduction. Due to the unpaid nature of women's work and the definition of economic activity, women's labour force participation remains statistically under-reported. The role played by women in care activities, predominantly their reproductive work and household maintenance, falls outside the system of national accounts in India, whereas the international definitions include production of goods for self-consumption within the production boundary of the System of National Accounts (SNA). The broader the definition used, the greater will be women's economic contribution. As traditional surveys are quite inadequate in measuring women's employment, time-use surveys can play a very important role in capturing women's "invisible work" as it gives information on SNA, Extended-SNA and also Non-SNA activities (Hirway, 2002; Hirway and Jose, 2011). Further, male members of the household generally decide on what type of job women should take up. This poses a major constraint to women's labour market choice.

Women's marital status also influences their participation rates significantly. Single women are seen to participate more than married women (Panda, 1999). Sudarshan and Bhattacharya (2009) noted in their study on female labour in urban Delhi that the decision to work outside the home is usually a household decision and women's household workload, asymmetric information and safety concerns are key factors influencing their participation in the labour market. They noted that the role of family and kinship structures in determining women's work-life choices is important.

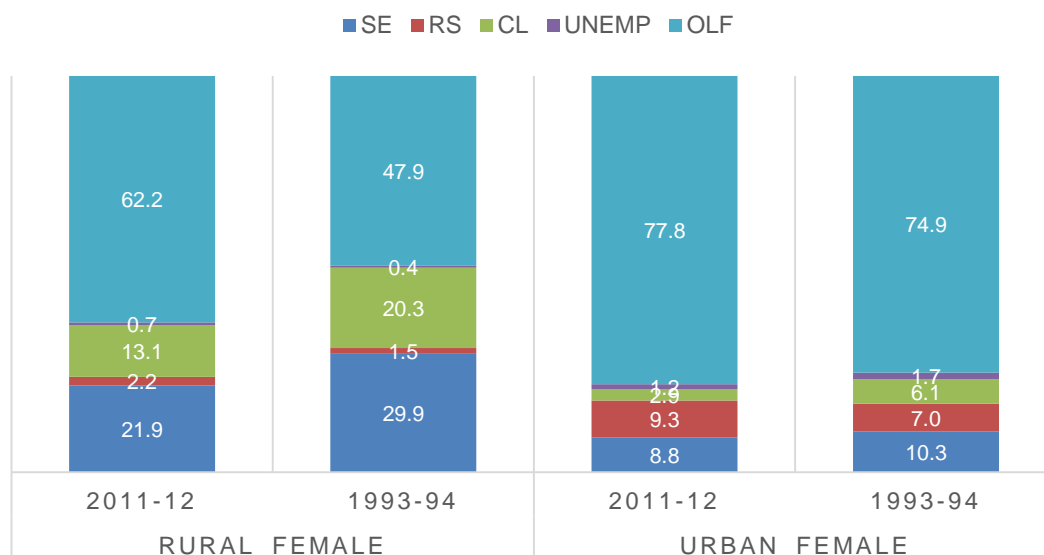
Social factors play a very significant role in repressing women's labour force participation in India. These include the restrictions imposed on women's movements outside the household as discouraged by the husband and in-laws. However, it is striking that the proportion of females attending to domestic duties is relatively high in urban areas and among the better educated – the very segments of the female population that are likely to face less social constraints on labour participation. In 2009–10, among urban females with graduate degrees, those who were reported to be attending to domestic duties were close to 60 per cent, which was almost twice the corresponding proportion for rural females with primary or middle-school education (Thomas, 2012).

There are other important economic factors also that tend to reduce the rate of female labour force participation. In India, as elsewhere, women face various forms of discrimination at the workplace, particularly in terms of wages (Srivastava and Srivastava, 2010). In addition, occupational segregation appears to play an important role in holding women back: women in India tend to be grouped in certain industries and occupations such as basic agriculture, sales and elementary services, and handicraft manufacturing. The problem is that these industries/occupations have not seen employment growth in recent years, which has put a brake on female employment growth. Female employment in India grew by 8.7 million between 1994 and 2010, but estimates suggest that it could have increased more than three times that figure if women had equal access to employment in the same industries and occupations as their male counterparts (Kapsos et al., 2014). The complete absence of paid employment opportunities is likely to be the most important factor constraining women’s participation in the labour market in India (Thomas, 2012).

Fostering economic growth is an important factor but it is not sufficient to address the problem of female labour in India. As discussed earlier, India has experienced a period of “jobless growth”. This, in turn, is reflected in lower participation rates of women in the labour market. Besides, there are other factors also which affect their participation. As such, in order to generate jobs that will be available to women, the country will need policies aimed to improve female employment outcomes.

With this in mind, the remainder of the paper focuses on the findings of an econometric analysis of the probability of finding employment in rural and urban areas. The aim of the exercise is to explore the impact of the key individual and household variables on the probability of women being self-employed, regular salaried, casual labour, and unemployed. Most of the literature highlighted above concentrates on the issue of labour force participation. This paper argues that it is far more important to go beyond this binary variable and analyse the factors driving employment outcomes. As shown in Figure 8, the majority of women working in rural areas are self-employed or engaged in casual labour, while working women in urban areas are more likely to be in regular wage and salaried jobs.

Figure 8. Distribution of females across various labour market outcomes, India (15–59 age group)



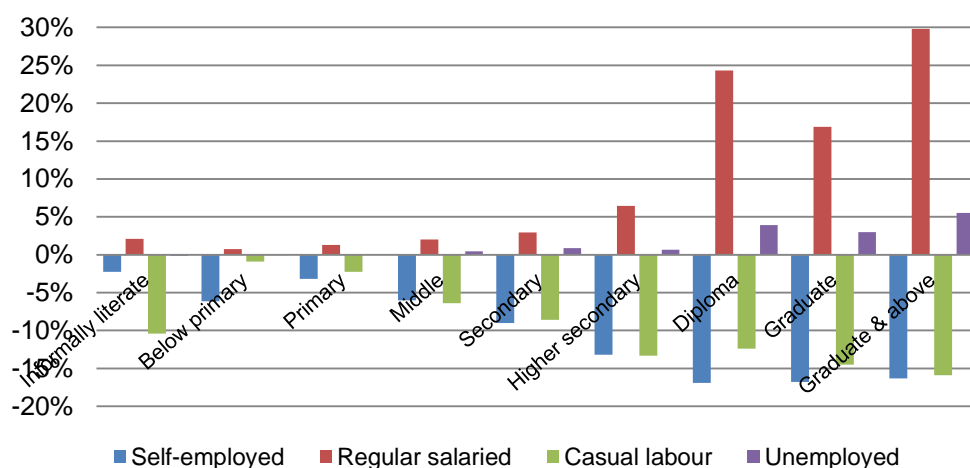
Note: SE: Self-employed; RS: Regular salaried; CL: Casual labour; UNEMP: Unemployed; OLF: Out of labour force.
Source: NSS, various rounds.

To achieve this goal, the analysis draws on unit-level data of the NSS 68th Round. To analyse the determinants of women’s employment status, a multinomial logit model has been estimated with a five-level dependent variable adopting the values: 1 for females in self-employed category during the

reference period; 2 for regular salaried; 3 for casual labour; 4 for unemployed; and 5 if out of the labour force. Following from the literature discussed above, a range of explanatory variables were used for this exercise. The marginal effects obtained from the multinomial logit model are presented in the appendices (tables A1 and A2). The estimation is statistically significant, and most coefficients are highly significant (at the 1 per cent level).

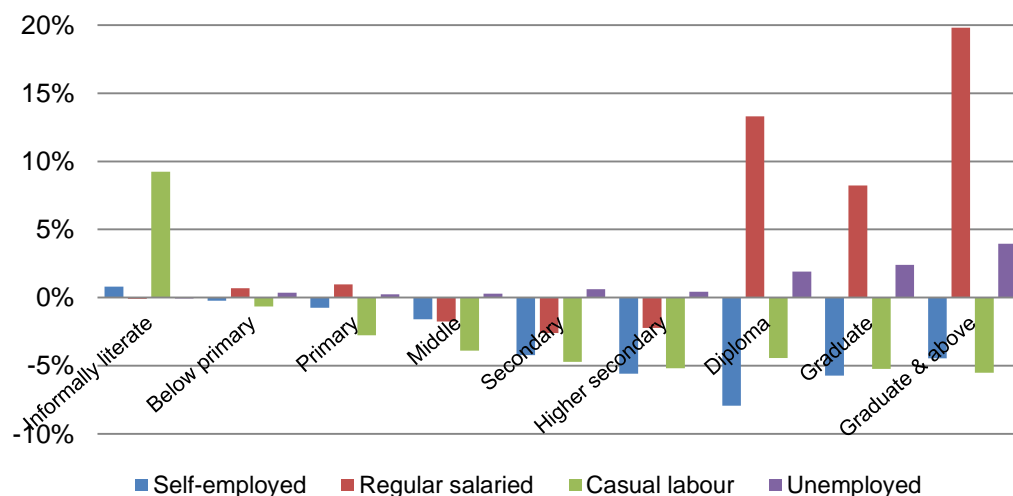
A number of factors significantly affect the probability of women's labour market outcomes. Human capital endowments of women, particularly higher secondary and university education, play a crucial role. Indeed, as the level of education goes up, the likelihood of being in regular employment also increases. For a graduate and above educated women, there is a 30 per cent more chance of being in regular salaried work in rural areas and 20 per cent higher probability in the case of urban areas (figures 9 and 10). Furthermore, as the level of education rises, the probability of being self-employed and casual labour decreases. The results confirm that poorly-educated (illiterate) women are more likely to be in the labour force and working.

Figure 9. Marginal effects of rural women's labour market outcomes with respect to educational attainment



Source: NSS and authors' own calculations based on the results of a multinomial logit model.

Figure 10. Marginal effects of urban women's labour market outcomes with respect to educational attainment



Source: NSS and authors' own calculations based on the results of a multinomial logit model.

Religion and social status also play an important role in determining outcomes. The likelihood of Muslim women being in the labour force and in various possible outcomes is lower in both rural and urban areas. In contrast, being a woman from a Scheduled Tribe (ST) increases the probability of being self-employed by about 12 per cent in rural areas and by 3 per cent in urban areas. In addition, being widowed/divorced increases the probability of being in one of the employment status (self-employed, regular salaried and casual labour) in both urban and rural areas. In urban areas, being married reduces the probability to be employed in regular salaried work by 10 per cent.

Vocational training seems to be an important factor, as it increases the likelihood of being self-employed for women (though causality is an issue). Hereditary training increases the likelihood of self-employment by 38 per cent in rural areas and by 35 per cent in urban areas. On-the-job training appears to be beneficial as it raises the probability of self-employment by 35 per cent in rural areas and by 31 per cent in urban areas.

6. Conclusion

Women's labour force participation and access to decent work are important and necessary elements of an inclusive and sustainable development process. Considerable research has shown that investing in women's full economic potential is critical to increasing productivity and economic growth. Moreover, reducing gender barriers to decent work is fundamental to promoting women's economic empowerment.

Gender inequalities are not only rooted in the sociocultural norms of countries, they are also entrenched in the policy and institutional frameworks that shape the employment opportunities of South Asia's female labour force. Yet it remains a persistent phenomenon, albeit to varying degrees depending on regional, national and local contexts. Women continue to face many barriers to entering the labour market and accessing decent work, including care responsibilities, lack of skills, limited mobility and safety issues, among others. Women experience a range of multiple challenges relating to access to employment, choice of work, working conditions, employment security, wage parity, discrimination, and balancing the competing burdens of work and family responsibilities. Labour market gender gaps are more pronounced in developing countries, and are often exacerbated by gendered patterns in occupational segregation, with the majority of women's work typically concentrated in a narrow range of sectors, many of which are vulnerable and insecure. In addition, women are heavily represented in the informal economy where their exposure to risk of exploitation is usually greatest and they have the least formal protection. The informal economy provides a vital source of livelihoods for masses of women in these countries. At the same time, their work is not captured accurately in national surveys and is subsequently under-reported.

In terms of the female labour force participation rates across South Asia, Pakistan and Bangladesh saw increased female labour participation rates over the last decade, while the rate remained stable in Sri Lanka. However, there has been a declining trend in the female labour participation rate in India despite strong economic growth (until the most recent data from 2011–12, which shows a surge in participation rates in urban areas but a continuing fall in rural areas). The econometric analysis of factors associated with employment outcomes reveals that higher education is critical if women are to access regular wage and salaried jobs.

Moving beyond standard labour force participation rates, policy-makers should be more concerned about whether women are able to access better jobs or start a business, and take advantage of new labour market opportunities as a country grows (and hence contribute to the development process itself). For this reason, policy interventions should tackle a range of issues, including improving

access to and relevance of education and training programmes, promoting childcare and other institutional/legal measures to ease the burden of domestic duties, enhancing safety for women and encouraging private sector development in industries and regions that would increase job opportunities for women in developing countries.

References

- Abraham, V. 2009. "Employment growth in rural India: Distress driven?", *Economic and Political Weekly*, Vol. 44, No. 16, pp. 97–104.
- Anker, R. 1998. *Gender and jobs: Sex segregation of occupations in the World* (Geneva, ILO).
- Attanasio, O.; Low, H.; Sanchez-Marcos, V. 2005. "Female labour supply as insurance against idiosyncratic risk", *Journal of the European Economic Association*, Vol. 3, No. (2/3), pp. 755–764.
- Badgett, M.V.L.; Folbre, N. 1999. "Assigning care: Gender norms and economic outcomes", *International Labour Review*, Vol. 138, No. 3, pp. 311–326.
- Bardhan, P.K. 1979. "Labour supply functions in a poor agrarian economy", *American Economic Review*, Vol. 69, No.1, pp. 73–83.
- Becker, G.S. 1965. "A theory of the allocation of time", *The Economic Journal*, Vol. 75, No. 299, pp. 493-517.
- Beneria, L. 1982. "Accounting for women's work", in Lourdes Beneria (ed.): *Women and development: The sexual division of labor in rural societies* (New York, Praeger), pp. 119–147.
- Bhalla, S.; Kaur, R. 2011. *Labour force participation of women in India: Some facts, some queries*, Working Paper No. 40 (London, Asia Research Centre, London School of Economics and Political Science).
- Bhalotra, S.; Umana-Aponte, M. 2010. *The Dynamics of women's labour supply in developing countries*, IZA Discussion Paper Series, Working Paper No. 4879 (Bonn, Institute for the Study of Labor).
- . 2012. *Women's labour supply and household insurance in Africa*, WIDER Working Paper No. 66 (United Nations University, UNU-WIDER).
- Boserup, E. 1970. *Women's Role in Economic Development* (New York, St Martin's Press).
- Cagatay, N.; Ozler, S. 1995. "Feminization of the labor force: The effects of long-term development and structural adjustment", *World Development*, Vol. 23, No. 11, pp. 1883–1894.
- Cazes, S.; Verick, S. 2013. *The labour markets of emerging economies: Has growth translated into more and better jobs?* (Geneva and UK, ILO, Palgrave Macmillan).
- Chiappori, P.A. 1992. "Collective labour supply and welfare", *Journal of Political Economy*, Vol. 100, No. 3, pp. 437-467.
- Cunningham, W.V. 2001. "Breadwinner versus caregiver: Labour force participation and sectoral choice over the Mexican business cycle", in E.G. Katz and M.C. Correia (eds): *The economics of gender in Mexico: Work, family, state, and market* (Washington DC, World Bank), pp. 85–132.
- Das, M.B. 2006. *Do traditional axes of exclusion affect labour market outcomes in India?*, Social Development Papers, South Asia Series, No. 97 (Washington DC, World Bank).
- Das, M.B.; Desai, S. 2003. *Why are educated women less likely to be employed in India? Testing competing hypotheses*, Social Protection Discussion Paper Series, No. 313 (Washington DC, World Bank).
- Dasgupta, P.; Goldar, B. 2005. *Female labour supply in rural India: An econometric analysis*, Working Paper (New Delhi, Institute of Economic Growth).

- Desai, S.; Jain, D. 1994. "Maternal employment and changes in family dynamics: The social context of women's work in rural South India", *Population and Development Review*, Vol. 20, No. 1, pp. 115–136.
- Donahoe, D.A. 1999. "Measuring women's work in developing countries", *Population and Development Review*, Vol. 25, No. 3, pp. 543–576.
- Duflo, E.; Udry, C. 2004. *Intra household resource allocation in Cote d'Ivoire: Social norms, separate accounts and consumption choices*, NBER Working Paper Series, Working Paper No. 10498 (Cambridge, National Bureau of Economic Research).
- Duraisamy, P. 2000. *Changes in returns to education in India, 1983–94: By Gender, age-cohort and location*, Centre Discussion Paper, No. 815 (Connecticut, Economic Growth Centre, Yale University).
- Durand, J. 1975. *The labour force in economic development* (Princeton, Princeton University Press), pp. 131–138.
- Eckstein, Z.; Lifshitz, O. 2009. *Dynamic female labour supply*, IZA Discussion Paper Series, Working Paper No. 4550 (Bonn, Institute for the Study of Labor).
- Ejaz, M. 2007. "Determinants of female labor force participation in Pakistan: An empirical analysis of PSLM (2004-05) Micro Data", *The Lahore Journal of Economics*, Vol. 2, Special Edition, pp. 204–235.
- Esteve-Volart, B. 2004. *Gender discrimination and growth: Theory and evidence from India* (London, London School of Economics and Political Science).
- Faridi, M.Z.; Malik, S.; Basit, A.B. 2009. "Impact of education on female labour force participation in Pakistan: Empirical evidence from primary data analysis", *Pakistan Journal of Social Sciences*, Vol. 29, No. 1, pp. 127–140.
- Fatima, A.; Sultana, H. 2009. "Tracing out the U-shape relationship between female labor force participation rate and economic development for Pakistan", *International Journal of Social Economics*, Vol. 36, No. 1/2, pp.182–198.
- Gaddis, I.; Klasen, S. 2014. "Economic development, structural change, and women's labor force participation", *Journal of Population Economics*, Vol. 27, Issue 3, pp. 639–681.
- Ghosh, J. 2009. *Never done and poorly paid: Women's work in globalizing India* (New Delhi, Women Unlimited Press).
- Gobbi, M.S.D.; Nesporova, A. 2005. *Towards a new balance between labour market flexibility and employment security for Egypt*, Employment Strategy Papers (Geneva, ILO, Employment Policies Unit, Employment Strategy Department).
- Goksel, I. 2012. *The reasons of decreasing trend of female labour force participation in Turkey: The role of conservatism*, Working Paper No. 5 (Balçova Izmir, Izmir University of Economics).
- Goldin, C. 1990. *Understanding the gender gap and economic history of American women* (New York, Oxford University Press).
- . 1994. *The U-shaped female labour force functions in economic development and economic history*, NBER Working Paper No. 4707 (Cambridge, National Bureau of Economic Research).
- Gunatilaka, R. 2013. *To work or not to work? Factors holding women back from market work in Sri Lanka*, ILO Asia-Pacific Working Paper Series (New Delhi, ILO).
- Hafeez, A.; Ahmad, E. 2002. "Factors determining the labour force participation decision of educated married women in a district of Punjab", *Pakistan Economic and Social Review*, Vol. 40, No. 1, pp. 75–88.

- Hirway, I. 2002. "Employment and unemployment situation in the 1990s: How good is the NSS data?", *Economic and Political Weekly*, Vol. 37, No. 21, pp. 2027–2036.
- Hirway, I.; Jose, S. 2011. "Understanding women's work using time use statistics: The case of India", *Feminist Economics*, Vol. 17, No. 4, pp. 67–92.
- International Labour Organization (ILO), Asian Development Bank (ADB). 2011. *Women and labour markets in Asia: Rebalancing for gender equality* (Bangkok, ILO Regional office for Asia and the Pacific and ADB).
- International Labour Organization (ILO). 2013. *Global Employment Trends 2013: Recovering from a second jobs dip* (Geneva).
- . 2014. *Key Indicators of the Labour Market, Eighth Edition* (Geneva).
- Islam, R. 2009. "What kind of economic growth is Bangladesh attaining?", in Q. Shahabuddin and R.I. Rahman (eds): *Development experience and emerging challenges Bangladesh* (Dhaka, BIDS and UPL).
- Jaeger, U. 2010. *Working or stay-at-home mum? The influence of family benefits and religiosity*, Working Paper No. 84 (Munich, Ifo Institute, Leibniz institute for Economic Research, University of Munich).
- Kabeer, N. 2012. *Women's economic empowerment and inclusive growth: Labour markets and enterprise development*, SIG Working Paper No. 1 (Ottawa, IDRC and DFID).
- Kapsos, S.; Silberman, A.; Bourmpoula, E. 2014. *Why is female labour force participation declining so sharply in India?*, ILO Research Paper, No. 10. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_250977.pdf [16 Oct 2014]
- Kemal, B.M.; Naci, G. 2009. *Female labor force participation in urbanization process: The case of Turkey*, MPRA Paper No. 18249. Munich Personal RePEc Archive (Turkey, Anadolu University). Available at: <http://mpira.ub.uni-muenchen.de/18249/1/Gundogan.pdf> [15 Oct 2014]
- King, A.G. 1978. "Industrial structure, the flexibility of working hours and women's labour force participation", *Review of Economics and Statistics*, Vol. 60, No. 4, pp. 399–407.
- Kingdon, G.G.; Unni, J. 1997. *How much does education affect women's labour market outcomes in India? An analysis using NSS household data*, Working Paper No. 92 (Ahmedabad, Gujarat Institute of Development Research).
- Klasen, S.; Lamanna, F. 2009. "The impact of gender inequality in education and employment on economic growth: New evidence for a panel of countries", *Feminist Economics*, Vol. 15, No. 3, pp. 91–132.
- Klasen, S.; Pieters, J. 2012. *Push or pull? Drivers of female labor force participation during India's economic boom*, IZA Discussion Paper Series, Working Paper No. 6395 (Bonn, Institute for the Study of Labor).
- Kottis, A.P. 1990. "Shifts over time and regional variation in women's labour force participation rates in a developing economy: The case of Greece", *Journal of Development Economics*, Vol. 33, No. 1, pp. 117–132.
- Lahoti, R.; Swaminathan, H. 2013. *Economic growth and female labour force participation in India*, Working Paper No. 414 (Bangalore, Indian Institute of Management).
- Lewis, W.A. 1954. "Economic development with unlimited supplies of labour", *The Manchester School*, Vol. 22, No. 2, pp. 139–191.

- Luci, A. 2009. "Female labour market participation and economic growth", *International Journal of Innovation and Sustainable Development*, Vol. 4, No. 23, pp. 97–108.
- Luke, N.; Munshi, K. 2011. "Women as agents of change: Female income and mobility in India", *Journal of Development Economics*, Vol. 94, No. 1, pp.1–17.
- Mammen, K.; Paxson, C. 2000. "Women's work and economic development", *Journal of Economic Perspectives*, Vol. 14, No. 4, pp. 141–164.
- Manning, C. 2000. "Labour market adjustment to Indonesia's economic crisis: Context, trends and implication", *Bulletin of Indonesian Economic Studies*, Vol. 36, No. 1, pp. 105–136.
- Masood, T.; Ahmad, I. 2009. *An econometric analysis of inter-state variation in women's labour force participation in India*, MPRA Paper No. 19297. Munich Personal RePEc Archive (Aligarh, Aligarh Muslim University). Available at: http://mpra.ub.uni-muenchen.de/19376/1/MPRA_paper_19376.pdf [15 Oct 2014]
- Mazumdar, I.; Neetha, N. 2011. "Gender dimensions: employment trends in India, 1993–94 to 2009–10", *Economic and Political Weekly*, Vol. 46, No. 43, pp. 118-126.
- McCabe, J.L.; Rosenzweig, M.R. 1976. "Female labor-force participation, occupational choice, and fertility in Developing countries", *Journal of Development Economics*, Vol. 3, No. 2, pp.141-160.
- Mincer, J. 1985. "Inter country comparisons of labour force trends and of related developments: An overview", *Journal of Labour Economics*, Vol. 3, No. 1, pp. 1–32.
- Mujahid, N.; Muhammed, S.D.; Norman, M. 2013. "Economic growth-women labour force participation nexus: An empirical evidence for Pakistan", *Developing Country Studies*, Vol. 3, No. 3, pp. 16-24.
- O'Neil, M.L.; Bilgin, M.H. 2013. "Religion as a factor influencing Turkish women's decisions to work", *Journal of International Women's Studies*, Vol. 14, No. 3, pp.163-173.
- Olsen, W.; Mehta, S. 2006. *A pluralist account of labour participation in India*, Working Paper (Global Poverty Research Group). Available at: <http://economics.ouls.ox.ac.uk/14041/1/gprg-wps-042.pdf> [14 Oct 2014]
- Pampel, F.C.; Tanaka, K. 1986. "Economic development and female labour force participation: A reconsideration", *Social Forces*, Vol. 64, No. 3, pp. 599–619.
- Panda, P.K. 1999. *Poverty and young women's employment: Linkages in Kerala*, Working Paper (Thiruvananthapuram, Centre for Development Studies).
- Pastore, F.; Tenaglia, S. 2013. *Ora et non labora? A test of the impact of religion on female labor supply*, IZA Discussion Paper Series, Working Paper No. 7356 (Bonn, Institute for the Study of Labor).
- Psacharopoulos, G. 1994. "Returns to investment in education: A global update", *World Development*, Vol. 22, No. 9, pp. 1325–1343.
- Psacharopoulos, G.; Tzannatos, Z. 1989 "Female labour force participation: An international perspective", *World Bank Research Observer*, Vol. 4, No. 2, pp. 187–201.
- Rahman, R. I.; Islam, R. 2013. *Female labour force participation in Bangladesh: trends, drivers and barriers*, ILO Asia-Pacific Working Paper Series (New Delhi, ILO)
- Rahman, R.I.; Mondal, A.H.; Iqbal, Z. 2011. *Employment and the labour market: Recent changes and policy options for Bangladesh*, Paper prepared for the Planning Commission, Government of Bangladesh, Dhaka.

Rao, N.; Verschoor, A.; Deshpande, A.; Dubey, A. 2010. *Gender, caste and growth assessment – India*, Report to Department for International Development, DEV Reports and Policy Paper Series (Norwich, The School of International Development, University of East Anglia).

Rustagi, P. 2010. “Continuing gender stereotypes or signs of change: Occupational pattern of women workers”, *Indian Journal of Labour Economics*, Vol. 53, No. 3, pp. 481-500.

Schultz, T.P. 1990. “Women’s changing participation in the labour force: A world perspective”, *Economic Development and Cultural Change*, Vol. 38, No. 3, pp. 457-488.

—. 1991. *International differences in labour force participation in families and firms*, Economic Growth Centre, Working Paper, No. 634 (New Haven, Connecticut, Yale University).

—. 1994. *Human capital investment in women and men: Micro and macro evidence of economic returns*, Occasional Papers, No. 44 (San Francisco, International Centre for Economic Growth).

Sethuraman, S.V. 1998. *Gender, informality and poverty: A global review*, ILO Working Paper (Geneva, ILO).

Srivastava, N.; Srivastava, R. 2010. “Women, work and employment outcomes in rural India”, *Economic and Political Weekly*, Vol. 45, No. 28, pp. 49-63.

Standing, G. 1999. “Global feminization through flexible labour: A theme revisited”, *World Development*, Vol. 27, No. 3, pp. 583-602.

Sudarshan, R.M.; Bhattacharya, S. 2009. “Through the magnifying glass: Women’s work and labour force participation in urban Delhi”, *Economic and Political Weekly*, Vol. 44, No. 48, pp. 59-66.

Swaminathan, M.; Majumdar, S. 2006. “Workers in urban India: Changes in gender segregation of occupations 1983-2000”, *The Indian Journal of Labour Economics*, Vol. 42, No. 2, pp. 273-292.

Tam, H. 2011. “U-shaped female labour participation with economic development: Some panel data evidence”, *Economics Letters*, Vol. 110, No. 2, pp. 140-142.

Tansel, A. 2001. *Economic development and female labor force participation in Turkey: Time-series evidence and cross-province estimates*, ERC Working Papers in Economics, Economic Research Centre (Ankara, Middle East Technical University).

Thomas, J.J. 2012. “India’s labour market during the 2000s: Surveying the changes”, *Economic and Political Weekly*, Vol. 47, No. 51, pp. 39-51.

United Nations Development Programme (UNDP). 2012. *Sri Lanka human development report 2012: Bridging regional disparities for human development* (Colombo).

United Nations (UN). 2010. *The world's women 2010: Trends and statistics* (New York, Department of Economic and Social Affairs).

World Bank. 1995. *Regional Perspectives on World Development Report: Labour and Economic Reforms in Latin America and the Caribbean* (Washington DC).

—. 2009. *Female labour force participation in Turkey: Trends, determinants and policy framework*, Report No. 48508, Human development sector unit, Europe and Central Asian region (Washington DC).

—. 2013. *World development report 2013: Jobs* (Washington DC).

Appendix

Table A1. Marginal effects from the multinomial logit model for women in rural areas

	Women (15–59)			
	Self-employed	Regular salaried	Casual labour	Unemployed
Age	0.00293*** (0.0000)	0.00117*** (0.0000)	0.00116*** (0.0000)	0.000392*** (0.0000)
Land possessed	0.0528*** (0.0000)	-0.00451*** (0.0000)	-0.0834*** (0.0000)	-0.00183*** (0.0000)
Log (MPCE)	0.0374*** (0.0001)	0.00643*** (0.0000)	-0.0349*** (0.0001)	0.00131*** (0.0000)
Household size	-0.00415*** (0.0000)	0.00353*** (0.0000)	-0.0163*** (0.0000)	0.00173*** (0.0000)
Child (0–4)	0.0192*** (0.0000)	-0.00393*** (0.0000)	-0.00585*** (0.0000)	-0.000464*** (0.0000)
Children (5–15)	0.0133*** (0.0000)	-0.00306*** (0.0000)	0.00158*** (0.0000)	-0.00272*** (0.0000)
No. of elderly in the HH	0.00409*** (0.0000)	-0.00362*** (0.0000)	0.0155*** (0.0000)	-0.000628*** (0.0000)
No. of employed males in HH	-0.00612*** (0.0000)	-0.00732*** (0.0000)	0.00241*** (0.0000)	-0.00226*** (0.0000)
Religion: Others (Ref)				
Hindu	-0.0149*** (0.0001)	-0.000587*** (0.0000)	0.0250*** (0.0001)	-0.00294*** (0.0000)
Muslim	-0.0705*** (0.0002)	-0.000732*** (0.0000)	-0.0409*** (0.0001)	0.00487*** (0.0000)
Social status: General (Ref)				
ST	0.0739*** (0.0001)	0.0113*** (0.0000)	0.115*** (0.0001)	0.00645*** (0.0000)
SC	-0.0364*** (0.0001)	0.00976*** (0.0000)	0.0760*** (0.0001)	0.00179*** (0.0000)
OBC	-0.00213*** (0.0001)	0.00391*** (0.0000)	0.0481*** (0.0001)	0.00171*** (0.0000)
Marital status of woman: Single (Ref)				
Married	0.0215*** (0.0001)	-0.0168*** (0.0001)	-0.0342*** (0.0001)	-0.00947*** (0.0000)
Widowed/Divorced	0.0161*** (0.0002)	0.0370*** (0.0001)	0.0923*** (0.0002)	-0.00162*** (0.0001)
Educational attainment of woman: Illiterate (Ref)				
Informally literate	-0.0226*** (0.0004)	0.0208*** (0.0002)	-0.104*** (0.0002)	-0.00149*** (0.0000)
Below primary	-0.0615*** (0.0001)	0.00726*** (0.0000)	-0.00917*** (0.0001)	-0.000341*** (0.0000)
Primary	-0.0318*** (0.0001)	0.0130*** (0.0000)	-0.0226*** (0.0001)	0.000185*** (0.0000)
Middle	-0.0602*** (0.0001)	0.0203*** (0.0000)	-0.0641*** (0.0001)	0.00430*** (0.0000)
Secondary	-0.0903*** (0.0001)	0.0295*** (0.0000)	-0.0860*** (0.0001)	0.00866*** (0.0000)
Higher secondary	-0.132*** (0.0001)	0.0645*** (0.0001)	-0.133*** (0.0001)	0.00678*** (0.0000)

	Women (15–59)			
	Self-employed	Regular salaried	Casual labour	Unemployed
Diploma	-0.169*** (0.0003)	0.243*** (0.0004)	-0.124*** (0.0002)	0.0392*** (0.0001)
Graduate	-0.168*** (0.0001)	0.169*** (0.0002)	-0.145*** (0.0001)	0.0298*** (0.0001)
Graduate & above	-0.163*** (0.0003)	0.298*** (0.0004)	-0.159*** (0.0000)	0.0551*** (0.0002)
Vocational Training: No training (Ref)				
Formal vocational training	0.162*** (0.0003)	0.00901*** (0.0001)	0.00379*** (0.0003)	0.00719*** (0.0000)
Hereditary	0.378*** (0.0002)	0.00242*** (0.0001)	0.0303*** (0.0002)	-0.00207*** (0.0000)
Self-learning	0.287*** (0.0003)	-0.00868*** (0.0001)	-0.0232*** (0.0002)	-0.00132*** (0.0000)
On-the-job training	0.352*** (0.0003)	0.0607*** (0.0001)	0.0993*** (0.0002)	-0.00410*** (0.0000)
Others	0.199*** (0.0005)	0.00709*** (0.0001)	-0.0199*** (0.0003)	-0.00119*** (0.0001)
<i>N</i>				83676

Notes: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Ref: reference category, HH: household; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backwards Class.

Source: Estimated using NSS 68th Round (2011–12) unit-level data.

Table A2: Marginal effects from the multinomial logit model for women in urban areas

	Women (15–59)			
	Self-employed	Regular salaried	Casual labour	Unemployed
Age	0.00167*** (0.0000)	0.00235*** (0.0000)	0.0000672*** (0.0000)	0.000486*** (0.0000)
Land possessed	0.0127*** (0.0000)	-0.0124*** (0.0001)	-0.00382*** (0.0000)	-0.00193*** (0.0000)
Log (MPCE)	-0.0235*** (0.0001)	0.0121*** (0.0001)	-0.0300*** (0.0000)	-0.00615*** (0.0000)
Household size	-0.00300*** (0.0000)	-0.00372*** (0.0000)	-0.00519*** (0.0000)	0.00119*** (0.0000)
Child (0–4)	-0.0102*** (0.0001)	-0.00455*** (0.0001)	-0.00181*** (0.0000)	-0.00107*** (0.0000)
Children (5–15)	0.00543*** (0.0000)	-0.00118*** (0.0000)	0.000590*** (0.0000)	-0.00373*** (0.0000)
No. of elderly in the HH	0.00541*** (0.0001)	0.00934*** (0.0001)	0.00593*** (0.0000)	0.00115*** (0.0000)
No. of employed males in HH	0.00256*** (0.0000)	-0.0171*** (0.0001)	-0.00123*** (0.0000)	-0.000580*** (0.0000)
Religion: Others (Ref)				
Hindu	0.00420*** (0.0001)	-0.0347*** (0.0001)	0.00178*** (0.0001)	-0.00453*** (0.0000)
Muslim	-0.000580*** (0.0001)	-0.0698*** (0.0001)	-0.0116*** (0.0001)	-0.00583*** (0.0001)
Social status: General (Ref)				
ST	-0.00437*** (0.0002)	0.0240*** (0.0002)	0.0323*** (0.0001)	0.00353*** (0.0001)
SC	-0.0158*** (0.0001)	0.0514*** (0.0001)	0.00565*** (0.0000)	-0.000569*** (0.0000)
OBC	0.0137*** (0.0001)	0.00764*** (0.0001)	0.00725*** (0.0000)	0.000830*** (0.0000)
Marital status of woman: Single (Ref)				
Married	-0.0216*** (0.0001)	-0.0977*** (0.0002)	-0.0137*** (0.0001)	-0.0174*** (0.0000)
Widowed/Divorced	0.0100*** (0.0002)	0.0497*** (0.0002)	0.0232*** (0.0001)	-0.000817*** (0.0001)
Educational attainment of woman: Illiterate (Ref)				
Informally literate	0.00806*** (0.0005)	-0.000996*** (0.0005)	0.0923*** (0.0005)	-0.000778*** (0.0001)
Below primary	-0.00222*** (0.0001)	0.00681*** (0.0001)	-0.00658*** (0.0001)	0.00358*** (0.0000)
Primary	-0.00755*** (0.0001)	0.00975*** (0.0001)	-0.0276*** (0.0001)	0.00242*** (0.0000)
Middle	-0.0158*** (0.0001)	-0.0175*** (0.0001)	-0.0390*** (0.0001)	0.00283*** (0.0000)
Secondary	-0.0422*** (0.0001)	-0.0259*** (0.0001)	-0.0472*** (0.0001)	0.00618*** (0.0000)
Higher secondary	-0.0557*** (0.0001)	-0.0222*** (0.0001)	-0.0517*** (0.0001)	0.00423*** (0.0000)
Diploma	-0.0793*** (0.0002)	0.133*** (0.0003)	-0.0444*** (0.0001)	0.0190*** (0.0001)

	Women (15–59)			
	Self-employed	Regular salaried	Casual labour	Unemployed
Graduate	-0.0573*** (0.0001)	0.0822*** (0.0001)	-0.0523*** (0.0001)	0.0241*** (0.0001)
Graduate & above	-0.0445*** (0.0002)	0.198*** (0.0002)	-0.0551*** (0.0001)	0.0395*** (0.0001)
Vocational training: No training (Ref)				
Formal vocational training	0.155*** (0.0002)	0.0657*** (0.0001)	0.0114*** (0.0002)	0.00857*** (0.0000)
Hereditary	0.360*** (0.0005)	-0.0383*** (0.0002)	-0.0134*** (0.0001)	-0.0115*** (0.0000)
Self-learning	0.308*** (0.0004)	-0.0353*** (0.0002)	0.00477*** (0.0001)	-0.00318*** (0.0001)
On-the-job training	0.254*** (0.0004)	0.238*** (0.0003)	0.0460*** (0.0002)	-0.00765*** (0.0001)
Others	0.178*** (0.0006)	0.0464*** (0.0004)	0.0377*** (0.0004)	0.00963*** (0.0002)
<i>N</i>				53753

Notes: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Ref: reference category; HH: household; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backwards Class.

Source: Estimated using NSSO 68th round (2011–12) unit-level data.

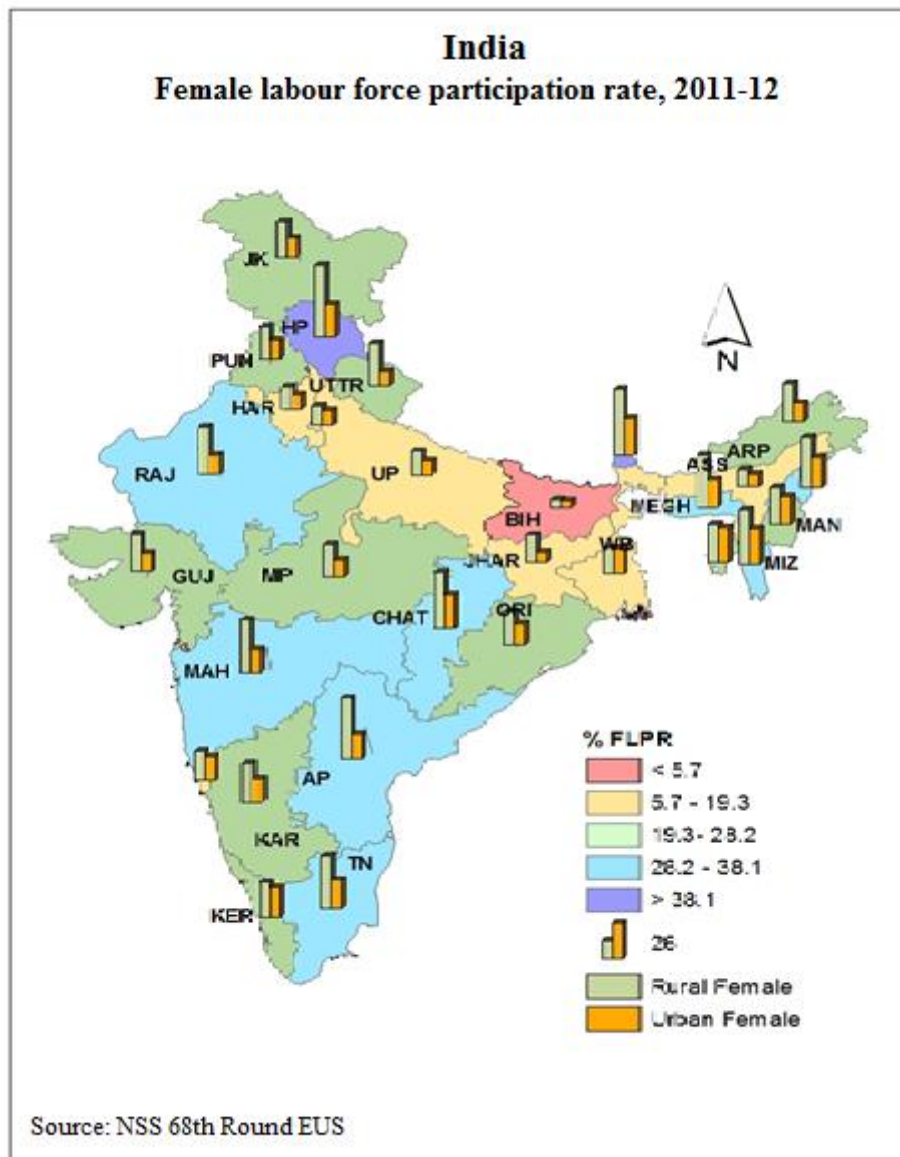
Table A3. Mean or proportions of key independent variables

Variables	Rural India					Urban India				
	SE	RS	CL	UNE	OLF	SE	RS	CL	UNE	OLF
Age	36.3	35.7	36.2	24.7	31.5	36.4	35.9	36.5	25.8	32.8
Land possessed	1.4	0.6	0.3	1.0	1.0	0.3	0.1	0.1	0.2	0.2
HH size	5.6	4.7	4.7	5.6	5.8	5.1	4.5	4.6	5.3	5.3
child (0–4)	0.5	0.3	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.4
child (5–15)	1.3	0.9	1.2	0.6	1.2	1.1	0.8	1.2	0.5	1.0
MPCE	1450	2135	1174	1895	1454	1960	3047	1328	2419	2254
Social Status										
General	0.26	0.3	0.11	0.27	0.3	0.31	0.41	0.19	0.43	0.41
ST	0.23	0.19	0.2	0.28	0.13	0.14	0.11	0.13	0.14	0.08
SC	0.13	0.15	0.28	0.11	0.16	0.12	0.16	0.24	0.12	0.13
OBC	0.37	0.36	0.41	0.34	0.41	0.43	0.32	0.45	0.32	0.38
Marital status of women										
Single	0.1	0.18	0.08	0.61	0.25	0.16	0.24	0.11	0.65	0.24
Married	0.83	0.66	0.8	0.38	0.72	0.73	0.59	0.66	0.34	0.72
Widowed/divorced	0.06	0.16	0.13	0.01	0.03	0.11	0.16	0.23	0.02	0.04
Education level of women										
Illiterate	0.42	0.1	0.53	0.03	0.27	0.25	0.14	0.52	0.02	0.16
Informally literate	0.01	0	0	0	0	0.01	0	0.01	0	0
Below primary	0.1	0.05	0.13	0.01	0.09	0.09	0.05	0.14	0.02	0.06
Primary	0.15	0.06	0.14	0.03	0.12	0.14	0.07	0.13	0.02	0.1
Middle	0.16	0.12	0.13	0.17	0.2	0.2	0.08	0.11	0.09	0.19
Secondary	0.1	0.15	0.05	0.17	0.16	0.13	0.09	0.05	0.11	0.2
Higher secondary	0.05	0.16	0.02	0.18	0.1	0.08	0.1	0.02	0.15	0.15
Diploma	0	0.07	0	0.06	0.01	0.01	0.05	0.01	0.04	0.01
Graduate	0.02	0.19	0	0.26	0.04	0.07	0.25	0.01	0.37	0.1
Graduate & above	0	0.09	0	0.1	0.01	0.02	0.17	0	0.17	0.03
Vocational training of women										
No vocational training	0.86	0.83	0.92	0.87	0.96	0.74	0.81	0.89	0.82	0.95
Formal vocational training	0.02	0.1	0.01	0.1	0.01	0.07	0.13	0.02	0.15	0.03
Hereditary	0.06	0.01	0.03	0	0.01	0.06	0.01	0.01		0.01
Self-learning	0.03	0.01	0.02	0.02	0.01	0.05	0.01	0.02	0.01	0.01
On-the-job training	0.03	0.03	0.03	0	0	0.06	0.04	0.06	0	0
Others	0.01	0.01	0	0.01	0	0.02	0.01	0.01	0.01	0

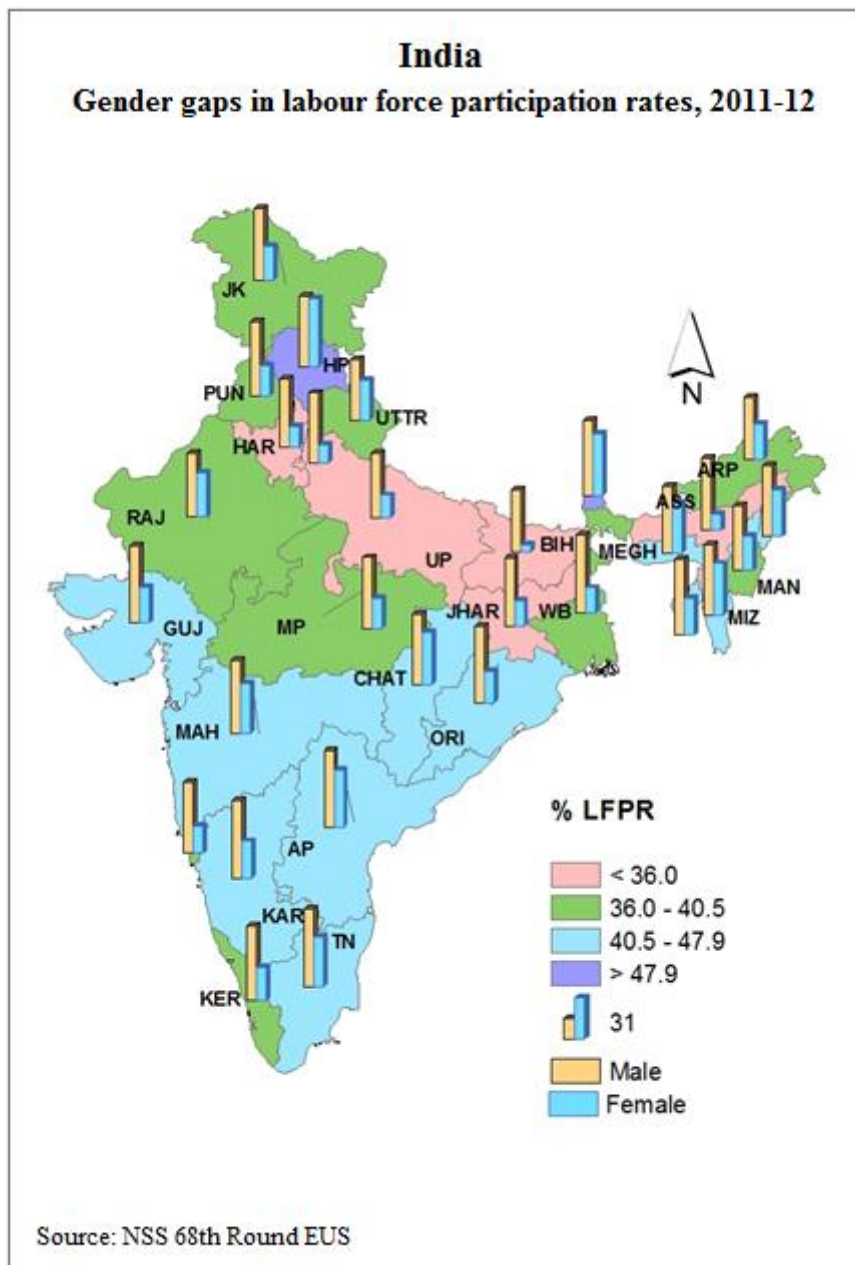
Notes: SE: Self-employed; RS: Regular salaried; CL: Casual labour; UNE: Unemployed; OLF: Out of labour force; HH: household; SC: Scheduled Caste; ST: Scheduled Tribe; OBC: Other Backwards Class.

Source: Estimated using NSS 68th Round (2011–12) unit-level data.

Map 1



Map 2



Female labour force participation in India and beyond

The participation of women in the labour market varies greatly across countries, reflecting differences in economic development, education levels, fertility rates, access to childcare and other supportive services and, ultimately, social norms. For this reason, participation rates vary considerably across the world with some of the lowest rates witnessed in South Asia. The trends in the female labour force participation rate in South Asia reveal a number of puzzles. Most notable is the falling participation of women in the Indian labour force, especially in rural areas, which occurred despite strong economic growth and rising wages/incomes. Understanding these issues is critical because: (i) female labour force participation is a driver of growth and thus participation rates indicate the potential for a country to grow more rapidly; (ii) in many developing countries, participation of women is a coping mechanism which arises in response to economic shocks that hit the household; and (iii) participation is an (imperfect) indicator of women's economic empowerment. To improve labour market outcomes in countries like India, policy interventions should consider both supply and demand, including improving access to and relevance of education and training programmes, promoting childcare and other institutions/legal measures to ease the burden of domestic duties, enhancing safety for women, and encouraging private sector development in industries and regions that would increase job opportunities for women in developing countries.

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ISSN: 2227-4391 (print)
2227-4405 (web pdf)